# Table of Contents

Temple Bulletins 2015-2016 .................................................. 12
Undergraduate ........................................................................ 13
About This Bulletin .............................................................. 14
Academic Calendar .............................................................. 15
About Temple University ........................................................ 17
   General Admissions Information ........................................ 19
      Freshmen ....................................................................... 19
   International Students ...................................................... 21
   Special Admissions Programs ............................................. 21
   Transfer Students ............................................................ 23
Special Programs .................................................................... 28
   Credit-Bearing Certificate Programs .................................. 29
   Non-Credit Programs ....................................................... 30
   Off-Campus/Corporate Programs ...................................... 31
   Programs with Academic Credit ........................................ 31
Registration ............................................................................. 33
Student Responsibilities ....................................................... 36
Student Rights ........................................................................ 39
Academic Opportunities ....................................................... 42
Accelerated Degree Programs ................................................. 53
Honor Societies ...................................................................... 57
Student Leadership & Development Opportunities ...................... 58
Academic Support ................................................................... 61
Student Services ..................................................................... 69
University Housing & Dining Services ..................................... 77
University Services ................................................................ 78
Academic Policies ................................................................... 81
   Academic Course Load ..................................................... 82
      Academic Forgiveness .................................................. 82
   Academic Progress for Undergraduate Courses .................... 83
      Academic Residency Requirements ................................ 83
   Academic Rights and Responsibilities ................................ 83
   Academic Standing .......................................................... 83
   Assessment of Student Learning ....................................... 87
   Athletic Policies .............................................................. 88
   Attendance ........................................................................ 88
   Audit ................................................................................ 88
   Code of Conduct ................................................................ 89
   Continuing Degree Seeking Students .................................. 89
Course Numbering System ..................................................... 89
Courses Inapplicable to Graduation ......................................... 90
Courses Over Ten Years Old .................................................. 90
Credit Hours .......................................................................... 90
Credit for Prior Learning ...................................................... 92
Credit/No Credit Courses ..................................................... 92
Dean's List ........................................................................... 92
Declaration of Major ............................................................ 93
Disciplinary Action ............................................................... 93
Double Major Across Colleges .............................................. 93
Family Educational Rights & Privacy Act (FERPA) .................... 93
Final Examinations ............................................................... 93
Grade Change ....................................................................... 94
Grade Point Average (GPA) .................................................. 94
Grades and Grading ............................................................. 94
Graduation Procedures ........................................................ 95
Grievances ........................................................................... 95
Honors for Academic Achievement ......................................... 95
Incomplete Coursework ......................................................... 97
Leave of Absence .................................................................. 97
Non-Degree Seeking Students ............................................... 97
Permission to Complete a Course at another Institution after Matriculation ........................................... 98
Placement Testing ................................................................ 99
Plagiarism and Academic Cheating ......................................... 99
Prerequisites and Co-requisites .............................................. 99
Probation and Dismissal ....................................................... 99
Registration ........................................................................... 99
Repeating a Course ............................................................. 99
Reverse Transfer ................................................................. 101
Satisfactory Academic Progress ............................................ 101
Schedule Revision (Drop/Add) ............................................... 101
Second Degrees ................................................................. 101
Simultaneous Enrollment ..................................................... 101
Study Abroad Approval Procedures for External Programs ........ 101
Transcripts ........................................................................... 102
Transfer Between Schools/Colleges Within the University (Change of Program) ................................ 102
Transfer Credit ..................................................................... 102
Undergraduate Credit for Graduate Level Courses .................. 102
Withdrawal Policies ............................................................. 102
Campuses ............................................................................ 104
<table>
<thead>
<tr>
<th>College/Campus</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ambler Campus</td>
<td>105</td>
</tr>
<tr>
<td>Fort Washington</td>
<td>116</td>
</tr>
<tr>
<td>Health Sciences Center</td>
<td>117</td>
</tr>
<tr>
<td>Main Campus</td>
<td>119</td>
</tr>
<tr>
<td>Temple University Center City</td>
<td>121</td>
</tr>
<tr>
<td>Temple University Harrisburg</td>
<td>123</td>
</tr>
<tr>
<td>Tuition and Fees</td>
<td>125</td>
</tr>
<tr>
<td>Financial Aid</td>
<td>137</td>
</tr>
<tr>
<td>Academic Programs</td>
<td>142</td>
</tr>
<tr>
<td>Writing Intensive Courses</td>
<td>142</td>
</tr>
<tr>
<td>General Education</td>
<td>143</td>
</tr>
<tr>
<td>Analytical Reading &amp; Writing (GW)</td>
<td>149</td>
</tr>
<tr>
<td>Arts (GA)</td>
<td>149</td>
</tr>
<tr>
<td>Global/World Society (GG)</td>
<td>151</td>
</tr>
<tr>
<td>Human Behavior (GB)</td>
<td>152</td>
</tr>
<tr>
<td>Mosaic (GY &amp; GZ)</td>
<td>154</td>
</tr>
<tr>
<td>Quantitative Literacy (GQ)</td>
<td>154</td>
</tr>
<tr>
<td>Race &amp; Diversity (GD)</td>
<td>155</td>
</tr>
<tr>
<td>Science &amp; Technology (GS)</td>
<td>156</td>
</tr>
<tr>
<td>U.S. Society (GU)</td>
<td>158</td>
</tr>
<tr>
<td>Intercollegial Programs</td>
<td>160</td>
</tr>
<tr>
<td>Digital Media Technologies</td>
<td>160</td>
</tr>
<tr>
<td>Environmental Programs</td>
<td>161</td>
</tr>
<tr>
<td>Mathematical Economics</td>
<td>161</td>
</tr>
<tr>
<td>Temple University, Japan Campus</td>
<td>165</td>
</tr>
<tr>
<td>Associate in Arts in General Program</td>
<td>165</td>
</tr>
<tr>
<td>Bachelor of Arts in General Program</td>
<td>166</td>
</tr>
<tr>
<td>Bachelor of Arts in International Affairs</td>
<td>168</td>
</tr>
<tr>
<td>Bachelor of Arts in Japanese</td>
<td>171</td>
</tr>
<tr>
<td>Bachelor of Arts in Psychological Studies</td>
<td>173</td>
</tr>
<tr>
<td>Bachelor of Science in International Business Studies</td>
<td>175</td>
</tr>
<tr>
<td>Schools, Colleges, and Divisions</td>
<td>179</td>
</tr>
<tr>
<td>Tyler School of Art</td>
<td>180</td>
</tr>
<tr>
<td>Architecture</td>
<td>201</td>
</tr>
<tr>
<td>Bachelor of Science in Architectural Preservation</td>
<td>203</td>
</tr>
<tr>
<td>Bachelor of Science in Architecture</td>
<td>206</td>
</tr>
<tr>
<td>Bachelor of Science in Facilities Management</td>
<td>209</td>
</tr>
<tr>
<td>Art</td>
<td>212</td>
</tr>
<tr>
<td>Art Minor</td>
<td>212</td>
</tr>
<tr>
<td>Bachelor of Arts in Art, Digital Media Concentration</td>
<td>212</td>
</tr>
<tr>
<td>Art Education &amp; Community Arts Practices</td>
<td>215</td>
</tr>
<tr>
<td>Bachelor of Science in Education in Art Education</td>
<td>216</td>
</tr>
<tr>
<td>Certificate in Arts in Community</td>
<td>219</td>
</tr>
<tr>
<td>Art History</td>
<td>219</td>
</tr>
<tr>
<td>Art History Minor</td>
<td>220</td>
</tr>
<tr>
<td>Bachelor of Arts in Art History</td>
<td>220</td>
</tr>
<tr>
<td>Bachelor of Fine Arts</td>
<td>224</td>
</tr>
<tr>
<td>B.F.A. Foundation Program</td>
<td>225</td>
</tr>
<tr>
<td>Bachelor of Fine Arts</td>
<td>226</td>
</tr>
<tr>
<td>Bachelor of Fine Arts with Art Education Concentration</td>
<td>228</td>
</tr>
<tr>
<td>Crafts</td>
<td>231</td>
</tr>
<tr>
<td>Bachelor of Fine Arts in Ceramics</td>
<td>231</td>
</tr>
<tr>
<td>Bachelor of Fine Arts in Fibers &amp; Material Studies</td>
<td>234</td>
</tr>
<tr>
<td>Bachelor of Fine Arts in Glass</td>
<td>237</td>
</tr>
<tr>
<td>Bachelor of Fine Arts in Metals/Jewelry/CAD-CAM</td>
<td>240</td>
</tr>
<tr>
<td>Graphic Arts &amp; Design</td>
<td>243</td>
</tr>
<tr>
<td>Bachelor of Fine Arts in Graphic &amp; Interactive Design</td>
<td>243</td>
</tr>
<tr>
<td>Bachelor of Fine Arts in Photography</td>
<td>248</td>
</tr>
<tr>
<td>Bachelor of Fine Arts in Printmaking</td>
<td>250</td>
</tr>
<tr>
<td>Painting/Drawing/Sculpture</td>
<td>253</td>
</tr>
<tr>
<td>Bachelor of Fine Arts in Painting</td>
<td>254</td>
</tr>
<tr>
<td>Bachelor of Fine Arts in Sculpture</td>
<td>257</td>
</tr>
<tr>
<td>Visual Studies</td>
<td>261</td>
</tr>
<tr>
<td>Center for the Performing and Cinematic Arts</td>
<td>264</td>
</tr>
<tr>
<td>Boyer College of Music &amp; Dance</td>
<td>265</td>
</tr>
<tr>
<td>Certificates</td>
<td>285</td>
</tr>
<tr>
<td>Certificate in Chamber Music</td>
<td>286</td>
</tr>
<tr>
<td>Certificate in Classical Piano</td>
<td>286</td>
</tr>
<tr>
<td>Certificate in Classical Voice</td>
<td>287</td>
</tr>
<tr>
<td>Certificate in Dance</td>
<td>287</td>
</tr>
<tr>
<td>Certificate in Jazz Arranging</td>
<td>287</td>
</tr>
<tr>
<td>Certificate in Jazz Improvisation</td>
<td>288</td>
</tr>
<tr>
<td>Certificate in Jazz Piano</td>
<td>288</td>
</tr>
<tr>
<td>Certificate in Jazz Studies Composition</td>
<td>288</td>
</tr>
<tr>
<td>Certificate in Jazz Voice</td>
<td>289</td>
</tr>
<tr>
<td>Certificate in Music</td>
<td>289</td>
</tr>
<tr>
<td>Certificate in Music Composition</td>
<td>290</td>
</tr>
<tr>
<td>Certificate in Music History</td>
<td>290</td>
</tr>
<tr>
<td>Certificate in Music Technology</td>
<td>290</td>
</tr>
<tr>
<td>Certificate in Music Theory (Jazz)</td>
<td>290</td>
</tr>
<tr>
<td>Certificate in Music Theory (Traditional)</td>
<td>291</td>
</tr>
<tr>
<td>Certificate in Orchestral Music</td>
<td>291</td>
</tr>
<tr>
<td>Certificate in Performing Arts</td>
<td>291</td>
</tr>
</tbody>
</table>
International Economics Concentration .......................... 616
International Entrepreneurship Concentration ............... 618
International Finance Concentration .......................... 621
International Marketing Concentration ......................... 623
International Sales & Business Development Concentration .................................................. 626
International Supply Chain Management, Transportation & Logistics Concentration ........... 628
Legal Studies ................................................................ 631
Management Information Systems ............................... 635
Marketing ..................................................................... 640
Real Estate ..................................................................... 645
Risk Management & Insurance ....................................... 647
Employee Benefits Track .............................................. 648
Healthcare Risk Management Track ............................... 650
Property-Liability/Corporate Risk Management Track .... 652
Supply Chain Management ........................................... 654
School of Environmental Design .................................... 658
   Community & Regional Planning ................................ 666
      Bachelor of Science in Community Development .......... 667
      Minor in Community Development ............................ 672
      Minor in Community and Regional Planning .............. 672
   Landscape Architecture & Horticulture ....................... 673
      Bachelor of Science in Horticulture .......................... 674
      Associate in Science in Horticulture ....................... 677
      Bachelor of Science in Landscape Architecture .......... 679
      Minor in Environmental Horticulture ....................... 681
      Minor in Landscape Studies .................................... 682
      Certificate in Horticultural Therapy ....................... 683
      Certificate in Landscape Plants ............................... 683
      Certificate in Native Perennial Garden Design .......... 684
   Certificate in Environmental Sustainability .................. 684
   Certificate in Sustainable Food Systems ...................... 685
   Minor in Ecological Planning & Design ....................... 686
   Minor in Sustainable Food Systems ............................ 687
College of Public Health ............................................. 689
   Communication Sciences & Disorders ......................... 697
      American Sign Language Certificate ....................... 697
      Bachelor of Arts in Linguistics ............................... 698
      Bachelor of Arts in Speech, Language & Hearing Science .................................................. 700
   Communication Sciences & Disorders Minor ................ 703
   Health Information Management ............................... 703
Kinesiology .................................................................. 707
   Bachelor of Science in Athletic Training ...................... 709
   Bachelor of Science in Kinesiology: Exercise & Sport Science Concentration ....................... 712
   Bachelor of Science in Kinesiology: Physical & Health Education Teacher Education Concentration .................................................. 714
   Bachelor of Science in Kinesiology: Pre-Health Professions Concentration .................................................. 717
   Bachelor of Science in Kinesiology: Pre-Health Professions Concentration 3+3 Program .................... 720
Nursing ........................................................................ 724
   Bachelor of Science in Nursing (B.S.N.) ....................... 725
   Bachelor of Science in Nursing (B.S.N.): Registered Nurse Option .................................................. 727
Rehabilitation Sciences ................................................ 728
   Bachelor of Science in Therapeutic Recreation ............... 729
Social and Behavioral Sciences ..................................... 734
   Bachelor of Science in Public Health ............................ 734
   Certificate in Emergency Management with Special Populations .................................................. 737
   Minor in Public Health .............................................. 738
School of Social Work .................................................. 740
   Bachelor of Social Work (B.S.W.) ............................... 743
   Social Work Minor .................................................. 748
College of Liberal Arts .................................................. 749
   African American Studies ........................................... 774
      Bachelor of Arts in African American Studies .......... 775
      Minor in African American Studies ......................... 778
American Studies ....................................................... 778
   Bachelor of Arts in American Studies ......................... 779
   Minor in Asian American Studies ............................... 782
   Minor in American Studies ....................................... 783
Anthropology .............................................................. 784
   Bachelor of Arts in Anthropology ............................... 784
   Bachelor of Arts in Anthropology: Human Biology Concentration .................................................. 788
   Bachelor of Arts in Anthropology: Visual Anthropology Track .................................................. 791
   Minor in Anthropology ............................................. 794
   Minor in Visual Anthropology ................................. 794
Arabic ........................................................................ 795
   Certificate of Specialization in Arabic ......................... 795
   Minor in Arabic ....................................................... 795
Asian & Middle Eastern Languages & Studies ................. 796
<table>
<thead>
<tr>
<th>Program</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian Studies</td>
<td>796</td>
</tr>
<tr>
<td>Bachelor of Arts in Asian Studies</td>
<td>797</td>
</tr>
<tr>
<td>Certificate in Asian Business &amp; Society</td>
<td>800</td>
</tr>
<tr>
<td>Minor in Asian American Studies</td>
<td>801</td>
</tr>
<tr>
<td>Minor in Asian Studies</td>
<td>802</td>
</tr>
<tr>
<td>Chinese</td>
<td>802</td>
</tr>
<tr>
<td>Certificate of Specialization in Chinese</td>
<td>802</td>
</tr>
<tr>
<td>Minor in Chinese</td>
<td>803</td>
</tr>
<tr>
<td>Classics</td>
<td>803</td>
</tr>
<tr>
<td>Bachelor of Arts in Classics with a Concentration in Classical Civilizations</td>
<td>804</td>
</tr>
<tr>
<td>Bachelor of Arts in Classics with a Concentration in Classical Languages and Literature</td>
<td>807</td>
</tr>
<tr>
<td>Minor in Ancient Mediterranean Studies</td>
<td>809</td>
</tr>
<tr>
<td>Minor in Classical Languages and Literature</td>
<td>810</td>
</tr>
<tr>
<td>Criminal Justice</td>
<td>810</td>
</tr>
<tr>
<td>Bachelor of Arts in Criminal Justice</td>
<td>812</td>
</tr>
<tr>
<td>Minor in Criminal Justice</td>
<td>814</td>
</tr>
<tr>
<td>Economics</td>
<td>815</td>
</tr>
<tr>
<td>Bachelor of Arts in Economics</td>
<td>815</td>
</tr>
<tr>
<td>Bachelor of Arts in Mathematical Economics</td>
<td>818</td>
</tr>
<tr>
<td>Certificate in Political Economy</td>
<td>819</td>
</tr>
<tr>
<td>Management Career Certificate</td>
<td>820</td>
</tr>
<tr>
<td>Minor in Economics</td>
<td>821</td>
</tr>
<tr>
<td>English</td>
<td>821</td>
</tr>
<tr>
<td>Bachelor of Arts in English</td>
<td>822</td>
</tr>
<tr>
<td>Bachelor of Arts in English with a Concentration in Creative Writing</td>
<td>825</td>
</tr>
<tr>
<td>Certificate in Writing</td>
<td>827</td>
</tr>
<tr>
<td>Minor in English</td>
<td>828</td>
</tr>
<tr>
<td>Environmental Studies</td>
<td>828</td>
</tr>
<tr>
<td>Bachelor of Arts in Environmental Studies</td>
<td>830</td>
</tr>
<tr>
<td>Minor in Environmental Studies</td>
<td>835</td>
</tr>
<tr>
<td>French</td>
<td>835</td>
</tr>
<tr>
<td>Bachelor of Arts in French</td>
<td>835</td>
</tr>
<tr>
<td>Certificate in French</td>
<td>838</td>
</tr>
<tr>
<td>Minor in French</td>
<td>838</td>
</tr>
<tr>
<td>Geography &amp; Urban Studies</td>
<td>839</td>
</tr>
<tr>
<td>Bachelor of Arts in Geography and Urban Studies</td>
<td>841</td>
</tr>
<tr>
<td>Certificate in Geographic Information Systems</td>
<td>844</td>
</tr>
<tr>
<td>Minor in Geography and Urban Studies</td>
<td>844</td>
</tr>
<tr>
<td>German</td>
<td>845</td>
</tr>
<tr>
<td>Bachelor of Arts in German</td>
<td>846</td>
</tr>
<tr>
<td>Certificate in German</td>
<td>848</td>
</tr>
<tr>
<td>Minor in German</td>
<td>848</td>
</tr>
<tr>
<td>Global Studies</td>
<td>849</td>
</tr>
<tr>
<td>Bachelor of Arts in Global Studies</td>
<td>849</td>
</tr>
<tr>
<td>Minor in Global Studies</td>
<td>857</td>
</tr>
<tr>
<td>History</td>
<td>859</td>
</tr>
<tr>
<td>Bachelor of Arts in History</td>
<td>860</td>
</tr>
<tr>
<td>Minor in History</td>
<td>863</td>
</tr>
<tr>
<td>Italian</td>
<td>863</td>
</tr>
<tr>
<td>Bachelor of Arts in Italian</td>
<td>864</td>
</tr>
<tr>
<td>Certificate in Italian</td>
<td>867</td>
</tr>
<tr>
<td>Minor in Italian</td>
<td>867</td>
</tr>
<tr>
<td>Japanese</td>
<td>867</td>
</tr>
<tr>
<td>Certificate of Specialization in Japanese</td>
<td>868</td>
</tr>
<tr>
<td>Minor in Japanese</td>
<td>868</td>
</tr>
<tr>
<td>Jewish Studies</td>
<td>868</td>
</tr>
<tr>
<td>Bachelor of Arts in Jewish Studies</td>
<td>869</td>
</tr>
<tr>
<td>Certificate in Jewish Secular Studies</td>
<td>872</td>
</tr>
<tr>
<td>Minor in Jewish Studies</td>
<td>872</td>
</tr>
<tr>
<td>Latin American Studies</td>
<td>873</td>
</tr>
<tr>
<td>Bachelor of Arts in Latin American Studies</td>
<td>874</td>
</tr>
<tr>
<td>Minor in Latin American Studies</td>
<td>877</td>
</tr>
<tr>
<td>Lesbian, Gay, Bisexual &amp; Transgender (LGBT)</td>
<td>878</td>
</tr>
<tr>
<td>Liberal Studies</td>
<td>878</td>
</tr>
<tr>
<td>Bachelor of Arts in Liberal Studies</td>
<td>878</td>
</tr>
<tr>
<td>Neuroscience: Systems, Behavior &amp; Plasticity</td>
<td>883</td>
</tr>
<tr>
<td>Bachelor of Science in Neuroscience: Systems, Behavior &amp; Plasticity</td>
<td>883</td>
</tr>
<tr>
<td>Minor in Neuroscience Research</td>
<td>887</td>
</tr>
<tr>
<td>Philosophy</td>
<td>887</td>
</tr>
<tr>
<td>Bachelor of Arts in Philosophy</td>
<td>888</td>
</tr>
<tr>
<td>Minor in Philosophy</td>
<td>892</td>
</tr>
<tr>
<td>Political Science</td>
<td>892</td>
</tr>
<tr>
<td>Bachelor of Arts in Political Science</td>
<td>895</td>
</tr>
<tr>
<td>Minor in Political Science</td>
<td>897</td>
</tr>
<tr>
<td>Psychology</td>
<td>898</td>
</tr>
<tr>
<td>Bachelor of Arts in Psychology</td>
<td>899</td>
</tr>
<tr>
<td>Minor in Clinical and Health Psychology</td>
<td>904</td>
</tr>
<tr>
<td>Minor in Cognitive Neuroscience</td>
<td>905</td>
</tr>
<tr>
<td>Minor in Psychology</td>
<td>905</td>
</tr>
<tr>
<td>Religion</td>
<td>906</td>
</tr>
<tr>
<td>Bachelor of Arts in Religion</td>
<td>907</td>
</tr>
<tr>
<td>Minor in Religion</td>
<td>910</td>
</tr>
<tr>
<td>------------------------------------------</td>
<td>-----</td>
</tr>
<tr>
<td>Sociology</td>
<td>910</td>
</tr>
<tr>
<td>Bachelor of Arts in Sociology</td>
<td>911</td>
</tr>
<tr>
<td>Bachelor of Arts in Sociology: Health Track</td>
<td>913</td>
</tr>
<tr>
<td>Certificate in Health Research</td>
<td>916</td>
</tr>
<tr>
<td>Minor in Sociology</td>
<td>917</td>
</tr>
<tr>
<td>Minor in Sociology: Health</td>
<td>917</td>
</tr>
<tr>
<td>Spanish &amp; Portuguese</td>
<td>918</td>
</tr>
<tr>
<td>Bachelor of Arts in Spanish: Language, Literature, Linguistics Option</td>
<td>920</td>
</tr>
<tr>
<td>Bachelor of Arts in Spanish: Language &amp; Professional Studies Option</td>
<td>922</td>
</tr>
<tr>
<td>Bachelor of Arts in Spanish: Spanish for Education Option</td>
<td>924</td>
</tr>
<tr>
<td>Minor in Spanish</td>
<td>927</td>
</tr>
<tr>
<td>Minor in Portuguese</td>
<td>928</td>
</tr>
<tr>
<td>Certificate of Specialization in Spanish</td>
<td>928</td>
</tr>
<tr>
<td>Certificate of Specialization in Spanish and Latin American Studies for Business</td>
<td>928</td>
</tr>
<tr>
<td>Certificate of Specialization in Spanish and Latino Studies for the Health and Human Services Professions</td>
<td>929</td>
</tr>
<tr>
<td>Latin American Studies Semester Certificate and Program</td>
<td>930</td>
</tr>
<tr>
<td>Women's Studies</td>
<td>930</td>
</tr>
<tr>
<td>Bachelor of Arts in Women's Studies</td>
<td>930</td>
</tr>
<tr>
<td>Certificate in Women's Studies</td>
<td>933</td>
</tr>
<tr>
<td>Minor in Women's Studies</td>
<td>933</td>
</tr>
<tr>
<td>School of Media &amp; Communication</td>
<td>935</td>
</tr>
<tr>
<td>Advertising</td>
<td>941</td>
</tr>
<tr>
<td>Bachelor of Arts in Advertising: Account Management Concentration</td>
<td>941</td>
</tr>
<tr>
<td>Bachelor of Arts in Advertising: Art Direction Concentration</td>
<td>944</td>
</tr>
<tr>
<td>Bachelor of Arts in Advertising: Copywriting Concentration</td>
<td>947</td>
</tr>
<tr>
<td>Bachelor of Arts in Advertising: Media Planning Concentration</td>
<td>950</td>
</tr>
<tr>
<td>Bachelor of Arts in Advertising: Research &amp; Strategy Concentration</td>
<td>953</td>
</tr>
<tr>
<td>Communication Studies</td>
<td>956</td>
</tr>
<tr>
<td>Bachelor of Arts in Communication Studies: Major of Distinction (Thesis Track)</td>
<td>957</td>
</tr>
<tr>
<td>Bachelor of Arts in Communication Studies: Communication and Entrepreneurship Track</td>
<td>960</td>
</tr>
<tr>
<td>Bachelor of Arts in Communication Studies: Contemporary Media Environments Track</td>
<td>963</td>
</tr>
<tr>
<td>Bachelor of Arts in Communication Studies: Global Civil Society Track</td>
<td>966</td>
</tr>
<tr>
<td>Bachelor of Arts in Communication Studies: Policy, Regulation and Advocacy Track</td>
<td>969</td>
</tr>
<tr>
<td>Minor in Communication Studies</td>
<td>973</td>
</tr>
<tr>
<td>International Communication Concentration</td>
<td>973</td>
</tr>
<tr>
<td>Journalism</td>
<td>977</td>
</tr>
<tr>
<td>Bachelor of Arts in Journalism</td>
<td>978</td>
</tr>
<tr>
<td>Media Studies &amp; Production</td>
<td>981</td>
</tr>
<tr>
<td>Bachelor of Arts in Media Studies and Production: Emergent Media Track</td>
<td>981</td>
</tr>
<tr>
<td>Bachelor of Arts in Media Studies and Production: Media Analysis Track</td>
<td>985</td>
</tr>
<tr>
<td>Bachelor of Arts in Media Studies and Production: Media Business and Entrepreneurship Track</td>
<td>988</td>
</tr>
<tr>
<td>Bachelor of Arts in Media Studies and Production: Media Production Track</td>
<td>992</td>
</tr>
<tr>
<td>Digital Media Technologies</td>
<td>160</td>
</tr>
<tr>
<td>Strategic Communication</td>
<td>996</td>
</tr>
<tr>
<td>Bachelor of Arts in Strategic Communication</td>
<td>996</td>
</tr>
<tr>
<td>Bachelor of Arts in Strategic Communication: Concentration in Organizational Leadership</td>
<td>998</td>
</tr>
<tr>
<td>Bachelor of Arts in Strategic Communication: Concentration in Public Relations</td>
<td>1000</td>
</tr>
<tr>
<td>Bachelor of Arts in Strategic Communication: Concentration in Rhetoric &amp; Public Advocacy</td>
<td>1003</td>
</tr>
<tr>
<td>Minor in Leadership</td>
<td>1005</td>
</tr>
<tr>
<td>Minor in Public Relations</td>
<td>1006</td>
</tr>
<tr>
<td>College of Science &amp; Technology</td>
<td>1007</td>
</tr>
<tr>
<td>Accelerated Programs</td>
<td>1030</td>
</tr>
<tr>
<td>Biology, B.A./M.Ed.</td>
<td>1030</td>
</tr>
<tr>
<td>Biology, B.S./M.Ed.</td>
<td>1031</td>
</tr>
<tr>
<td>Chemistry, B.A./M.A.</td>
<td>1032</td>
</tr>
<tr>
<td>Chemistry, B.A./M.Ed.</td>
<td>1032</td>
</tr>
<tr>
<td>Chemistry, B.S./M.A.</td>
<td>1033</td>
</tr>
<tr>
<td>Chemistry, B.S./M.Ed.</td>
<td>1033</td>
</tr>
<tr>
<td>Computer Science, B.A./M.S.</td>
<td>1034</td>
</tr>
<tr>
<td>Computer Science, B.A./M.S. IST</td>
<td>1035</td>
</tr>
<tr>
<td>Computer Science, B.S./M.S.</td>
<td>1035</td>
</tr>
<tr>
<td>Computer Science, B.S./M.S. IST</td>
<td>1036</td>
</tr>
<tr>
<td>Dental, 3+N Program</td>
<td>1036</td>
</tr>
<tr>
<td>Geology, B.A./M.Ed.</td>
<td>1039</td>
</tr>
<tr>
<td>Geology, B.S./M.Ed.</td>
<td>1039</td>
</tr>
<tr>
<td>Information Science &amp; Technology, B.A./M.S.</td>
<td>1040</td>
</tr>
<tr>
<td>Information Science &amp; Technology, B.S./M.S.</td>
<td>1040</td>
</tr>
<tr>
<td>Program</td>
<td>Page</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Mathematics, B.A./M.Ed.</td>
<td>1041</td>
</tr>
<tr>
<td>Mathematics, B.A./M.S.</td>
<td>1041</td>
</tr>
<tr>
<td>Mathematics, B.S./M.Ed.</td>
<td>1042</td>
</tr>
<tr>
<td>Mathematics, B.S./M.S.</td>
<td>1043</td>
</tr>
<tr>
<td>Medical, 3+N Program</td>
<td>1043</td>
</tr>
<tr>
<td>Pharmaceutical Sciences, B.S.</td>
<td>1046</td>
</tr>
<tr>
<td>Pharmacy, 3+N Program</td>
<td>1049</td>
</tr>
<tr>
<td>Physical Therapy, 3+N Program</td>
<td>1052</td>
</tr>
<tr>
<td>Physics, B.A./M.Ed.</td>
<td>1054</td>
</tr>
<tr>
<td>Physics, B.A./M.S.</td>
<td>1054</td>
</tr>
<tr>
<td>Physics, B.S./M.Ed.</td>
<td>1055</td>
</tr>
<tr>
<td>Physics, B.S./M.S.</td>
<td>1055</td>
</tr>
<tr>
<td>Podiatry, 3+N Program</td>
<td>1056</td>
</tr>
<tr>
<td>Biology</td>
<td>1058</td>
</tr>
<tr>
<td>Biochemistry, B.S.</td>
<td>1082</td>
</tr>
<tr>
<td>Biology, B.A.</td>
<td>1059</td>
</tr>
<tr>
<td>Biology, B.S.</td>
<td>1063</td>
</tr>
<tr>
<td>Biology with Teaching, B.S.</td>
<td>1162</td>
</tr>
<tr>
<td>Biology, B.A./M.Ed.</td>
<td>1030</td>
</tr>
<tr>
<td>Biology, B.S./M.Ed.</td>
<td>1031</td>
</tr>
<tr>
<td>Biology, Minor</td>
<td>1067</td>
</tr>
<tr>
<td>Biophysics, B.S.</td>
<td>1147</td>
</tr>
<tr>
<td>Environmental Science, B.S.</td>
<td>1067</td>
</tr>
<tr>
<td>General Science with Teaching, B.S.</td>
<td>1176</td>
</tr>
<tr>
<td>Natural Sciences, B.A.</td>
<td>1073</td>
</tr>
<tr>
<td>Neuroscience - Cellular &amp; Molecular, B.S.</td>
<td>1077</td>
</tr>
<tr>
<td>Chemistry</td>
<td>1081</td>
</tr>
<tr>
<td>Biochemistry, B.S.</td>
<td>1082</td>
</tr>
<tr>
<td>Chemistry with Teaching, B.S.</td>
<td>1167</td>
</tr>
<tr>
<td>Chemistry, B.A.</td>
<td>1087</td>
</tr>
<tr>
<td>Chemistry, B.A./M.Ed.</td>
<td>1032</td>
</tr>
<tr>
<td>Chemistry, B.A./M.A.</td>
<td>1032</td>
</tr>
<tr>
<td>Chemistry, B.S.</td>
<td>1091</td>
</tr>
<tr>
<td>Chemistry, B.S./M.Ed.</td>
<td>1033</td>
</tr>
<tr>
<td>Chemistry, B.S./M.A.</td>
<td>1033</td>
</tr>
<tr>
<td>General Science with Teaching, B.S.</td>
<td>1176</td>
</tr>
<tr>
<td>Natural Sciences, B.A.</td>
<td>1073</td>
</tr>
<tr>
<td>Computer &amp; Information Science</td>
<td>1096</td>
</tr>
<tr>
<td>Computer Science, B.A.</td>
<td>1097</td>
</tr>
<tr>
<td>Computer Science, B.A./M.S.</td>
<td>1034</td>
</tr>
<tr>
<td>Computer Science, B.A./M.S. IST</td>
<td>1035</td>
</tr>
<tr>
<td>Computer Science, B.S.</td>
<td>1101</td>
</tr>
<tr>
<td>Computer Science, B.S./M.S.</td>
<td>1041</td>
</tr>
<tr>
<td>Computer Science, B.A./M.S. IST</td>
<td>1035</td>
</tr>
<tr>
<td>Computer Science, Minor</td>
<td>1105</td>
</tr>
<tr>
<td>Computer Security &amp; Digital Forensics, Certificate</td>
<td>1106</td>
</tr>
<tr>
<td>Digital Media Technologies</td>
<td>160</td>
</tr>
<tr>
<td>Fundamentals of Programming, Certificate</td>
<td>1106</td>
</tr>
<tr>
<td>Information Science &amp; Technology, B.A.</td>
<td>1107</td>
</tr>
<tr>
<td>Information Science &amp; Technology, B.A./M.S.</td>
<td>1040</td>
</tr>
<tr>
<td>Information Science &amp; Technology, B.S.</td>
<td>1110</td>
</tr>
<tr>
<td>Information Science &amp; Technology, B.S./M.S.</td>
<td>1040</td>
</tr>
<tr>
<td>Information Science &amp; Technology, Minor</td>
<td>1115</td>
</tr>
<tr>
<td>Mathematics &amp; Computer Science, B.S.</td>
<td>1115</td>
</tr>
<tr>
<td>Mathematics/Computer Science with Teaching, B.S.</td>
<td>1191</td>
</tr>
</tbody>
</table>

### Earth & Environmental Science

<table>
<thead>
<tr>
<th>Program</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earth &amp; Space Science with Teaching, B.S.</td>
<td>1172</td>
</tr>
<tr>
<td>Environmental Science, B.S.</td>
<td>1067</td>
</tr>
<tr>
<td>General Science with Teaching, B.S.</td>
<td>1176</td>
</tr>
<tr>
<td>Geology, B.A.</td>
<td>1125</td>
</tr>
<tr>
<td>Geology, B.A./M.Ed.</td>
<td>1039</td>
</tr>
<tr>
<td>Geology, B.S.</td>
<td>1129</td>
</tr>
<tr>
<td>Geology, B.S./M.Ed.</td>
<td>1039</td>
</tr>
<tr>
<td>Geology, Minor</td>
<td>1133</td>
</tr>
<tr>
<td>Natural Sciences, B.A.</td>
<td>1073</td>
</tr>
<tr>
<td>Mathematics</td>
<td>1134</td>
</tr>
<tr>
<td>Applied Mathematics, B.S.</td>
<td>1135</td>
</tr>
<tr>
<td>Mathematical Economics, B.A.</td>
<td>1138</td>
</tr>
<tr>
<td>Mathematics &amp; Computer Science, B.S.</td>
<td>1115</td>
</tr>
<tr>
<td>Mathematics &amp; Physics, B.S.</td>
<td>1151</td>
</tr>
<tr>
<td>Mathematics &amp; Technology with Teaching, B.S.</td>
<td>1181</td>
</tr>
<tr>
<td>Mathematics with Teaching, B.S.</td>
<td>1186</td>
</tr>
<tr>
<td>Mathematics, B.A.</td>
<td>1138</td>
</tr>
<tr>
<td>Mathematics, B.A./M.Ed.</td>
<td>1041</td>
</tr>
<tr>
<td>Mathematics, B.A./M.S.</td>
<td>1041</td>
</tr>
<tr>
<td>Mathematics, B.S.</td>
<td>1142</td>
</tr>
<tr>
<td>Mathematics, B.S./M.Ed.</td>
<td>1042</td>
</tr>
<tr>
<td>Mathematics, B.S./M.S.</td>
<td>1043</td>
</tr>
<tr>
<td>Mathematics, Minor</td>
<td>1145</td>
</tr>
<tr>
<td>Mathematics/Computer Science with Teaching, B.S.</td>
<td>1191</td>
</tr>
<tr>
<td>Physics</td>
<td>1146</td>
</tr>
<tr>
<td>Biophysics, B.S.</td>
<td>1147</td>
</tr>
<tr>
<td>General Science with Teaching, B.S.</td>
<td>1176</td>
</tr>
<tr>
<td>Mathematics &amp; Physics, B.S.</td>
<td>1151</td>
</tr>
<tr>
<td>Course Description</td>
<td>Page</td>
</tr>
<tr>
<td>------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Natural Sciences, B.A.</td>
<td>1073</td>
</tr>
<tr>
<td>Physics with Teaching, B.S.</td>
<td>1196</td>
</tr>
<tr>
<td>Physics, B.A.</td>
<td>1154</td>
</tr>
<tr>
<td>Physics, B.A./M.Ed.</td>
<td>1054</td>
</tr>
<tr>
<td>Physics, B.A./M.S.</td>
<td>1054</td>
</tr>
<tr>
<td>Physics, B.S.</td>
<td>1158</td>
</tr>
<tr>
<td>Physics, B.S./M.Ed.</td>
<td>1055</td>
</tr>
<tr>
<td>Physics, Minor</td>
<td>1161</td>
</tr>
<tr>
<td>Tuteach Programs</td>
<td>1162</td>
</tr>
<tr>
<td>Biology with Teaching, B.S.</td>
<td>1162</td>
</tr>
<tr>
<td>Chemistry with Teaching, B.S.</td>
<td>1167</td>
</tr>
<tr>
<td>Earth &amp; Space Science with Teaching, B.S.</td>
<td>1172</td>
</tr>
<tr>
<td>General Science with Teaching, B.S.</td>
<td>1176</td>
</tr>
<tr>
<td>Mathematics &amp; Technology with Teaching, B.S.</td>
<td>1181</td>
</tr>
<tr>
<td>Mathematics with Teaching, B.S.</td>
<td>1186</td>
</tr>
<tr>
<td>Mathematics/Computer Science with Teaching, B.S.</td>
<td>1191</td>
</tr>
<tr>
<td>Physics with Teaching, B.S.</td>
<td>1196</td>
</tr>
<tr>
<td>School of Tourism &amp; Hospitality Management</td>
<td>1201</td>
</tr>
<tr>
<td>Bachelor of Science in Sport &amp; Recreation Management</td>
<td>1208</td>
</tr>
<tr>
<td>Bachelor of Science in Tourism &amp; Hospitality Management</td>
<td>1211</td>
</tr>
<tr>
<td>Pre-Business</td>
<td>1214</td>
</tr>
<tr>
<td>Certificate in Event Leadership</td>
<td>1216</td>
</tr>
<tr>
<td>Certificate in Sport Management</td>
<td>1216</td>
</tr>
<tr>
<td>Certificate in Sport Marketing</td>
<td>1217</td>
</tr>
<tr>
<td>Certificate in Tourism &amp; Hospitality Management</td>
<td>1218</td>
</tr>
<tr>
<td>Minor in Sport Management</td>
<td>1218</td>
</tr>
<tr>
<td>Minor in Tourism &amp; Hospitality Management</td>
<td>1219</td>
</tr>
<tr>
<td>University College</td>
<td>1220</td>
</tr>
<tr>
<td>ProRanger Program</td>
<td>1220</td>
</tr>
<tr>
<td>Certificate in National Park Service Management</td>
<td>1220</td>
</tr>
<tr>
<td>Post-Baccalaureate Certificate in National Park Service Management</td>
<td>1221</td>
</tr>
<tr>
<td>Certificate in Sustainability</td>
<td>1222</td>
</tr>
<tr>
<td>Division of University Studies</td>
<td>1225</td>
</tr>
<tr>
<td>Course Descriptions</td>
<td>1229</td>
</tr>
<tr>
<td>Accounting (ACCT)</td>
<td>1232</td>
</tr>
<tr>
<td>Actuarial Science (AS)</td>
<td>1237</td>
</tr>
<tr>
<td>Adult &amp; Organizational Development (AOD)</td>
<td>1239</td>
</tr>
<tr>
<td>Advertising (ADV)</td>
<td>1242</td>
</tr>
<tr>
<td>Aerospace Studies - AF ROTC (AIRF)</td>
<td>1249</td>
</tr>
<tr>
<td>African American Studies (AAS)</td>
<td>1250</td>
</tr>
<tr>
<td>American Studies (AMST)</td>
<td>1256</td>
</tr>
<tr>
<td>Anthropology (ANTH)</td>
<td>1266</td>
</tr>
<tr>
<td>Applied Behavior Analysis (ABA)</td>
<td>1283</td>
</tr>
<tr>
<td>Arabic (ARBC)</td>
<td>1283</td>
</tr>
<tr>
<td>Architecture (ARCH)</td>
<td>1285</td>
</tr>
<tr>
<td>Art (ARTU)</td>
<td>1296</td>
</tr>
<tr>
<td>Art Education (ARTE)</td>
<td>1302</td>
</tr>
<tr>
<td>Art History (ARTH)</td>
<td>1304</td>
</tr>
<tr>
<td>Asian Studies (ASST)</td>
<td>1314</td>
</tr>
<tr>
<td>Bioengineering (BIOE)</td>
<td>1324</td>
</tr>
<tr>
<td>Biology (BIOL)</td>
<td>1332</td>
</tr>
<tr>
<td>Botany (BOT)</td>
<td>1352</td>
</tr>
<tr>
<td>Business Administration (BA)</td>
<td>1353</td>
</tr>
<tr>
<td>Business Education (BSED)</td>
<td>1356</td>
</tr>
<tr>
<td>Career and Technical Education (CTE)</td>
<td>1356</td>
</tr>
<tr>
<td>Center for the Performing and Cinematic Arts (CFA)</td>
<td>1357</td>
</tr>
<tr>
<td>Chemistry (CHEM)</td>
<td>1357</td>
</tr>
<tr>
<td>Chinese (CHI)</td>
<td>1371</td>
</tr>
<tr>
<td>Civil Engineering (CEE)</td>
<td>1373</td>
</tr>
<tr>
<td>Coll Health Prof &amp; Social Work (CHP)</td>
<td>1383</td>
</tr>
<tr>
<td>College of Education (COED)</td>
<td>1383</td>
</tr>
<tr>
<td>College of Liberal Arts (CLA)</td>
<td>1383</td>
</tr>
<tr>
<td>College of Science and Technology (SCTC)</td>
<td>1386</td>
</tr>
<tr>
<td>Communication Sciences and Disorders (CSCD)</td>
<td>1390</td>
</tr>
<tr>
<td>Communication Studies (CMST)</td>
<td>1394</td>
</tr>
<tr>
<td>Communications and Theater (COMM)</td>
<td>1394</td>
</tr>
<tr>
<td>Community &amp; Regional Planning (CRP)</td>
<td>1395</td>
</tr>
<tr>
<td>Community Development (CDEV)</td>
<td>1399</td>
</tr>
<tr>
<td>Computer &amp; Information Science (CIS)</td>
<td>1401</td>
</tr>
<tr>
<td>Construction Management Tech (CMT)</td>
<td>1420</td>
</tr>
<tr>
<td>Counseling Psychology (CPSY)</td>
<td>1422</td>
</tr>
<tr>
<td>Crafts (CRFT)</td>
<td>1423</td>
</tr>
<tr>
<td>Criminal Justice (CJ)</td>
<td>1439</td>
</tr>
<tr>
<td>Critical Languages Center (CRIT)</td>
<td>1447</td>
</tr>
<tr>
<td>Dance (DANC)</td>
<td>1448</td>
</tr>
<tr>
<td>Disability Studies (DSST)</td>
<td>1459</td>
</tr>
<tr>
<td>Early Childhood Education (ECED)</td>
<td>1459</td>
</tr>
<tr>
<td>Earth &amp; Environmental Science (EES)</td>
<td>1464</td>
</tr>
<tr>
<td>Economics (ECON)</td>
<td>1470</td>
</tr>
<tr>
<td>Education (EDUC)</td>
<td>1483</td>
</tr>
<tr>
<td>Educational Administration (EDAD)</td>
<td>1491</td>
</tr>
<tr>
<td>Electrical Engineering (ECE)</td>
<td>1491</td>
</tr>
</tbody>
</table>
Electrical Engineering Tech (EET) .............................................. 1499
Elementary Education (ELED) .............................................. 1500
Engineering (ENGR) .......................................................... 1501
Engineering (General) (ENGG) ............................................. 1508
Engineering Technology (ENGT) .......................................... 1509
English (ENG) ....................................................................... 1511
English Education (Elementary) (ENEE) ................................. 1532
English Education (Secondary) (ENES) .................................. 1533
Environmental Engineering Tech (ENVT) ............................... 1533
Environmental Science (CST) (ENVS) .................................... 1535
Environmental Studies (CLA) (ENST) .................................... 1537
Film and Media Arts (FMA) ................................................... 1545
Finance (FIN) ........................................................................ 1558
Foundation Program (FDPR) .................................................. 1565
French (FREN) ....................................................................... 1566
Geography and Urban Studies (GUS) ...................................... 1571
German (GER) ....................................................................... 1584
Global Studies (GBST) ............................................................ 1589
Graphic Arts and Design (GAD) ............................................. 1590
Greek (Ancient) (GRKA) ......................................................... 1605
Greek (Modern) (GRKM) ....................................................... 1606
Greek and Roman Classics (GRC) .......................................... 1607
Health Information Management (HIM) .................................. 1613
Health Related Professions (HRPR) ........................................ 1618
Healthcare Management (HCM) ............................................. 1618
Hebrew (HEBR) ................................................................. 1619
Hindi (HIN) ........................................................................... 1621
History (HIST) ...................................................................... 1621
Horticulture (HORT) .............................................................. 1653
Human Resource Management (HRM) ................................. 1658
Intellectual Heritage (IH) ....................................................... 1663
International Business Admin (IB) ......................................... 1665
Italian (ITAL) ........................................................................ 1670
Japanese (JPNS) ................................................................. 1675
Jewish Studies (JST) ............................................................... 1681
Journalism (JRN) ................................................................. 1685
Kinesiology (KINS) ............................................................... 1695
Korean (KRN) ........................................................................ 1708
Landscape Architecture (LARC) ............................................ 1709
Latin (LAT) ........................................................................... 1713
Latin American Studies (LAS) .............................................. 1715
Law - Undergraduate Courses (LAWU) ................................. 1720
Legal Studies (LGLS) .............................................................. 1721
Lesbian Gay Bi Trans Gender St (LGBT) ............................... 1728
Management Information Systems (MIS) ............................. 1728
Management Science/Op Mgmnt (MSOM) ......................... 1733
Marketing (MKTG) ............................................................... 1734
Math Education (Elementary) (MAEE) ................................. 1740
Math Education (Secondary) (MAES) .................................... 1740
Mathematics (MATH) ............................................................ 1742
Mechanical Engineering (MEE) ............................................. 1755
Mechanical Engineering Tech (MET) ..................................... 1760
Media Studies & Production (MSP) ....................................... 1760
Medicine Undergraduate Courses (MEDU) ......................... 1772
Middle Grades Education (MGRE) ....................................... 1772
Military Science (MLSC) ....................................................... 1774
Music (MUSC) ...................................................................... 1776
Music Education (MUED) ..................................................... 1792
Music Studies (MUST) .......................................................... 1800
Naval Science - Navy ROTC (NAVS) .................................... 1812
Neuroscience - CLA (NSCI) .................................................. 1813
New Media Interdisciplinary (NMIC) ..................................... 1816
Nursing (NURS) ................................................................. 1817
Occupational Therapy (OTHR) ............................................. 1824
Organizational Studies (ORGS) ............................................. 1824
PHETE (PHTE) ................................................................. 1825
Painting, Drawing & Sculpture (PDS) ..................................... 1828
Philosophy (PHIL) ............................................................... 1839
Physics (PHYS) ................................................................... 1849
Political Science (POLS) ....................................................... 1857
Portuguese (PORT) ............................................................... 1871
ProRanger Program (PRAN) ................................................ 1873
Psychology (PSY) ............................................................... 1874
Public Health (PBHL) ........................................................... 1896
Real Estate (RE) ................................................................... 1904
Religion (REL) ...................................................................... 1905
Risk Management and Insurance (RMI) ............................... 1915
Russian (RUS) ....................................................................... 1920
School Psychology (SPSY) .................................................... 1929
School of Business and Mgmnt (SBM) ................................. 1929
School of Environmental Design (SED) ............................. 1930
School of Tourism & Hosp Mgt (STHA) ............................... 1930
Science Education (Elementary) (SCCEE) ......................... 1930
Science Education (Secondary) (SCSES) ......................... 1930
Science, Secondary Education (SCSE) ......................... 1931
Secondary Education (SECE) ..................................... 1932
Slavic Languages & Literature (SLVC) ......................... 1932
Social Studies Ed (Elementary) (SSEE) ........................ 1933
Social Studies Ed (Secondary) (SSES) ........................... 1933
Social Work - Undergraduate (SSWU) ......................... 1933
Sociology (SOC) ...................................................... 1940
Spanish (SPAN) ...................................................... 1956
Special Education (SPED) ......................................... 1968
Statistics (STAT) ...................................................... 1971
Strategic Communication (STRC) .............................. 1978
Strategic Management (SGM) ..................................... 1984
Study Away Non-TU Program (STAW) ......................... 1987
Supply Chain Management (SCM) .............................. 1987
TUJ International Bus Studies (JIBS) ......................... 1988
Theater (THTR) ...................................................... 1989
Therapeutic Recreation (THRC) ............................... 2006
Topical Studies (TS) ............................................... 2015
Tourism&Hospitality Management (STHM) .................... 2015
Tyler School of Art (TYLE) ....................................... 2025
Undergraduate Studies Merit Scholar (USMS) .............. 2027
University College (UC) .......................................... 2027
University Seminar (UNVS) ....................................... 2028
Upper Division Honors Program (HONS) ....................... 2029
Urban Education (URBE) .......................................... 2030
Vietnamese (VTNM) ............................................... 2031
Visual Studies (VS) ............................................... 2031
Women's Studies (WMST) ........................................ 2038
Academic Programs ............................................... 2047
Faculty .............................................................. 2079
Index ............................................................... 2127
Temple Bulletins 2015-2016

The Bulletin provides enrolled students with the information they need regarding their chosen academic path and helps prospective students make important enrollment decisions.

The information in this bulletin is subject to change by Temple University at any time. Neither this bulletin nor any parts of it may be relied upon as a contract between Temple University and any student, applicant, or other user of this site. All prospective and current students should consult with appropriate University Offices to verify current information and the status of policies, programs, descriptions of curricula, or other information in this bulletin.

Undergraduate Bulletin

The current Undergraduate Bulletin is for students who began school in Fall 2015.

For students who began prior to Fall 2015, see the Archives.

- 2015-2016 Undergraduate Bulletin (p. 13)
- Archived Undergraduate Bulletins (http://bulletin.temple.edu/archives)

Graduate Bulletin

The current Graduate Bulletin is for students who began school in Fall 2015.

For students who began prior to Fall 2015, see the Archives.

- 2015-2016 Graduate Bulletin (http://bulletin.temple.edu/graduate)
- Archived Graduate Bulletins (http://bulletin.temple.edu/archives)

Other Resources

Admissions (http://temple.edu/admissions)

Courses (http://bulletin.temple.edu/courses)

DARS (http://www.temple.edu/vpus/resources/dars.htm)

Fly In 4 (http://fly.temple.edu)

Class Schedule (http://www.temple.edu/apply/common/cdcheck.asp)
Welcome from the President

Welcome to the 2015-2016 Temple University Undergraduate Bulletin. Inside, you will find tools to help you map your academic plan and complete your college degree.

There are numerous resources in this bulletin, including:

• A searchable database of more than 4,000 undergraduate courses.
• Overviews of degree programs and requirements for 149 undergraduate majors, as well as minors, concentrations and certificates.
• Information on study abroad and research opportunities.
• Academic policies and procedures.
• A directory of student support services.

As Temple’s president, I strongly encourage you to take advantage of the opportunities described in this bulletin. You should make it a point to meet with your advisor regularly, participate in rewarding learning experiences, and commit to graduating on time. And if you’re an incoming freshman or transfer student, visit fly.temple.edu to learn about Fly in 4, Temple’s innovative plan to fast-track your future and limit your debt.

Our first priority is providing you with a well-rounded education that prepares you to be “real world ready.” With the tools available in this bulletin, you are well on your way to personal and professional success.

Sincerely,

Neil D. Theobald
President
About This Bulletin

The Undergraduate Bulletin is produced by the Office of the Provost to present general information about Temple University and specific information about undergraduate academic programs. The information in this bulletin is subject to change by Temple University at any time. Neither this bulletin nor any part of it may be relied upon as a contract between Temple University and any student, applicant, or other user of this site. All prospective and current students should consult with appropriate University Offices to verify current information and the status of policies, programs, descriptions of curricula, or other information in this bulletin.

If you are a new undergraduate student at Temple this year, this Bulletin contains the requirements of programs into which you will be enrolling. For that reason, your advisors may refer to Fall 2015 as "your Bulletin year."

Current students who started at Temple before Fall 2015 should visit the Archives (http://bulletin.temple.edu/archives) to find the requirements of their program of study for their Bulletin year.

All new undergraduate students are required to complete the university's General Education (GenEd (p. 143)) curriculum.

New freshmen starting in the 2015-2016 academic year are required to complete the GenEd (p. 143) curriculum. Students who have fewer than 15 transferable credits are considered freshmen. Additionally, students whose transfer credits were earned while in high school, regardless of the number of transfer credits, are considered freshmen.

New transfer students starting in the 2015-2016 academic year are required to complete the GenEd (p. 143) curriculum. Students who attempted 15 or more transferable credits after high school and prior to being admitted to Temple University are considered transfer students.

In addition to this Bulletin, you will also find several other resources that provide important information for Temple University undergraduate students. These resources include, but are not limited to, the Course Descriptions (http://bulletin.temple.edu/courses), Class Schedule (https://www.temple.edu/apply/common/cdcheck.asp), Campus Safety Services (http://www.temple.edu/safety), Disability Resources and Services (http://www.temple.edu/studentaffairs/disability), Military and Veteran Services (http://www.temple.edu/veterans), Transfer Student Information (http://www.temple.edu/vpus/transfer), and University Housing and Residential Life (http://housing.temple.edu).

We hope this Undergraduate Bulletin will prove informative and useful to you as a Temple student. Questions or suggestions regarding the content of the Undergraduate Bulletin may be directed to the Office of the Senior Vice Provost for Undergraduate Studies (phone: 215-204-2044; e-mail: ug-bulletin@temple.edu).
## Academic Calendar

### Fall 2015

<table>
<thead>
<tr>
<th>Date Range</th>
<th>Event/Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saturday, August 1 - Sunday, August 23</td>
<td>Early Term Start Courses</td>
</tr>
<tr>
<td>Monday, August 24</td>
<td>Full Term 16-week Courses and 7-week Courses (7A) begin</td>
</tr>
<tr>
<td>Monday, August 31</td>
<td>Last day to add or drop a 7-week (7A) course</td>
</tr>
<tr>
<td>Friday, September 4</td>
<td>Last day to add or drop a Full Term 16-week course</td>
</tr>
<tr>
<td>Monday, September 7</td>
<td>Labor Day (no classes held)</td>
</tr>
<tr>
<td>Friday, September 18</td>
<td>Last day to withdraw from a 7-week (7A) course</td>
</tr>
<tr>
<td>Monday, October 12</td>
<td>7-week Courses (7A) end</td>
</tr>
<tr>
<td>Tuesday, October 13</td>
<td>7-week Courses (7B) begin</td>
</tr>
<tr>
<td>Monday, October 19</td>
<td>Last day to add or drop a 7-week (7B) course</td>
</tr>
<tr>
<td>Tuesday, October 20</td>
<td>Last day to withdraw from a Full Term 16-week course</td>
</tr>
<tr>
<td>Monday, November 9</td>
<td>Last day to withdraw from a 7-week (7B) course</td>
</tr>
<tr>
<td>Monday, November 23 - Wednesday, November 25</td>
<td>Fall Break (no classes held)</td>
</tr>
<tr>
<td>Thursday, November 26 - Friday, November 29</td>
<td>Thanksgiving Holiday (no classes held)</td>
</tr>
<tr>
<td>Monday, December 7</td>
<td>Full Term 16-week Courses and 7-week Courses (7B) end</td>
</tr>
<tr>
<td>Tuesday, December 8 - Wednesday, December 9</td>
<td>Study Days</td>
</tr>
<tr>
<td>Thursday, December 10 - Wednesday, December 16</td>
<td>Final Exams</td>
</tr>
<tr>
<td>Thursday, December 17</td>
<td>Diploma Date</td>
</tr>
</tbody>
</table>

### Spring 2016

<table>
<thead>
<tr>
<th>Date Range</th>
<th>Event/Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuesday, December 8 - Sunday, January 10</td>
<td>Early Term Start Courses</td>
</tr>
<tr>
<td>Monday, January 11</td>
<td>Full Term 16-week Courses and 7-week Courses (7A) begin</td>
</tr>
<tr>
<td>Monday, January 18</td>
<td>Dr. Martin Luther King, Jr. Day (no classes held)</td>
</tr>
<tr>
<td>Tuesday, January 19</td>
<td>Last day to add or drop a 7-week (7A) course</td>
</tr>
<tr>
<td>Friday, January 22</td>
<td>Last day to add or drop a Full Term 16-week course</td>
</tr>
<tr>
<td>Monday, February 8</td>
<td>Last day to withdraw from a 7-week (7A) course</td>
</tr>
<tr>
<td>Monday, February 29 - Sunday, March 6</td>
<td>Spring Break (no classes held)</td>
</tr>
<tr>
<td>Monday, March 7</td>
<td>7-week Courses (7A) end</td>
</tr>
<tr>
<td>Tuesday, March 8</td>
<td>7-week Courses (7B) begin</td>
</tr>
<tr>
<td>Monday, March 14</td>
<td>Last day to add or drop a 7-week (7B) course</td>
</tr>
<tr>
<td>Tuesday, March 15</td>
<td>Last day to withdraw from a Full Term 16-week course</td>
</tr>
<tr>
<td>Monday, April 4</td>
<td>Last day to withdraw from a 7-week (7B) course</td>
</tr>
<tr>
<td>Monday, April 25</td>
<td>Full Term 16-week Courses and 7-week Courses (7B) end</td>
</tr>
<tr>
<td>Tuesday, April 26 - Wednesday, April 27</td>
<td>Study Days</td>
</tr>
<tr>
<td>Thursday, April 28 - Wednesday, May 4</td>
<td>Final Exams</td>
</tr>
<tr>
<td>Friday, May 6</td>
<td>Diploma Date and University Commencement</td>
</tr>
</tbody>
</table>

### Summer I 2016

<table>
<thead>
<tr>
<th>Date Range</th>
<th>Event/Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday, May 9</td>
<td>Full Term 6-week Courses, 4-week Courses (4A), and 12-week Courses (12A) begin</td>
</tr>
<tr>
<td>Thursday, May 12</td>
<td>Last day to add or drop a 4-week (4A) course</td>
</tr>
<tr>
<td>Friday, May 13</td>
<td>Last day to add or drop a Full Term 6-week course</td>
</tr>
<tr>
<td>Tuesday, May 17</td>
<td>Last day to add or drop a 12-week (12A) course</td>
</tr>
<tr>
<td>Monday, May 23</td>
<td>Last day to withdraw from a 4-week (4A) course</td>
</tr>
<tr>
<td>Monday, May 30</td>
<td>Memorial Day (no classes held)</td>
</tr>
<tr>
<td>Tuesday, May 31</td>
<td>Last day to withdraw from a Full Term 6-week course</td>
</tr>
<tr>
<td>Friday, June 3</td>
<td>4-week Courses (4A) end</td>
</tr>
<tr>
<td>Monday, June 6</td>
<td>4-week Courses (4B) begin</td>
</tr>
<tr>
<td>Thursday, June 9</td>
<td>Last day to add or drop a 4-week (4B) course</td>
</tr>
<tr>
<td>Date</td>
<td>Event</td>
</tr>
<tr>
<td>--------------------</td>
<td>--------------------------------------------</td>
</tr>
<tr>
<td>Friday, June 17</td>
<td>Full Term 6-week Courses end</td>
</tr>
<tr>
<td>Monday, June 20</td>
<td>Last day to withdraw from a 4-week (4B) course</td>
</tr>
<tr>
<td>Tuesday, June 21</td>
<td>Last day to withdraw from a 12-week (12A) course</td>
</tr>
<tr>
<td>Thursday, July 1</td>
<td>4-week Courses (4B) end</td>
</tr>
<tr>
<td>Monday, July 4</td>
<td>Independence Day holiday (no classes held)</td>
</tr>
<tr>
<td>Friday, July 29</td>
<td>12-week Courses (12A) end</td>
</tr>
</tbody>
</table>

**Summer II 2016**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday, June 20</td>
<td>Full Term 6-week Courses begin</td>
</tr>
<tr>
<td>Friday, June 24</td>
<td>Last day to add or drop a Full Term 6-week course</td>
</tr>
<tr>
<td>Monday, July 4</td>
<td>Independence Day holiday (no classes held)</td>
</tr>
<tr>
<td>Tuesday, July 5</td>
<td>4-week Courses (4A) begin</td>
</tr>
<tr>
<td>Friday, July 8</td>
<td>Last day to add or drop a 4-week (4A) course</td>
</tr>
<tr>
<td>Monday, July 11</td>
<td>Last day to withdraw from a Full Term 6-week course</td>
</tr>
<tr>
<td>Tuesday, July 19</td>
<td>Last day to withdraw from a 4-week (4A) course</td>
</tr>
<tr>
<td>Friday, July 29</td>
<td>Full Term 6-week Courses and 4-week Courses (4A) end</td>
</tr>
<tr>
<td>Friday, July 29</td>
<td>Diploma Date</td>
</tr>
</tbody>
</table>
About Temple University


Our 17 schools and colleges, nine campuses, hundreds of degree programs and nearly 38,000 students combine to create one of the nation's most comprehensive and diverse learning environments. In neighborhoods, across disciplines and on a global stage, members of the Temple community are making things happen.

Mission Statement

Temple University is a national center of excellence in teaching and research with an international presence.

Temple's talented faculty and its broad curriculum of over 300 academic programs provide superior educational opportunities for academically talented and highly motivated students, without regard to their status or station in life. Temple's richly diverse student population and the dramatic growth of Temple's residential campus community of student scholars enrich the educational and extracurricular life of all Temple's people.

While the University especially serves students from Greater Philadelphia, it is enlivened by a rapidly increasing number of students from across Pennsylvania, throughout the nation, and around the world. Temple maintains an international presence with campuses in Tokyo and Rome and prestigious programs in London, Beijing, and six other locations worldwide.

A long-time leader in professional education, Temple prepares the largest body of practitioners in Pennsylvania and is among the nation's largest educators in the combined fields of medicine, dentistry, pharmacy, podiatry and law. In addition, Temple offers more than four dozen doctoral and more than 100 master's degree programs that contribute to research and scholarship. Temple seeks to create new knowledge that improves the human condition and uplifts the human spirit. To achieve this goal, Temple maintains its commitment to recruiting, retaining, and supporting outstanding faculty that prize diversity of thought, excel in scholarly endeavors, and support the aspirations of capable students.

Temple University's Aspirations for a New Century

Striving to fulfill its mission in this new century, Temple will continue to provide access to superior education for committed and capable students of all backgrounds and to develop its main campus as a residential community of student scholars. A new generation of exceptionally qualified and talented faculty will be recruited to join the University's current roster of fine teacher-scholars.

Temple will enhance existing centers of academic excellence, advance additional targeted programs to national leadership, broaden knowledge through research and creative endeavors for the benefit of society, and expand the Honors program and other special learning opportunities for undergraduates.

The creation and renovation of facilities will support research and creative work, advance instruction and marshal knowledge to enhance the quality of life for Temple's fellow citizens in North Philadelphia. The University will develop stronger bonds with its alumni, whose success embodies the transformational power of a Temple education.

Accreditation

Temple University is accredited by the Middle States Commission on Higher Education, an institutional accrediting agency recognized by the U.S. Secretary of Education and the Council for Higher Education Accreditation. Additionally, Temple has numerous academic programs accredited or reviewed by external professional organizations, as noted in each school and college's section of this Bulletin as well as in the Temple University Fact Book (http://temple.edu/about/public-information/facts-about-temple).

President

Temple's president is the public face of the University and is responsible for supporting and managing all of its academic, administrative and financial operations. The President works closely with faculty, administrators, trustees and students to set the university's goals and uphold its mission.

Neil D. Theobald is Temple's 10th president. He began his tenure at Temple on Jan. 1, 2013.

President Theobald is a nationally recognized leader in the field of educational finance. As with so many Temple students, he was the first member of his family to attend college. Both his professional and personal experiences helped shape his primary goal for Temple: ensuring that students have access to an education that is both affordable and excellent. Learn more about Neil D. Theobald (http://president.temple.edu).

Trustees

The 36-member Board of Trustees is Temple's governing body, responsible for the educational mission and fiscal policies of the university. The trustees also are responsible for electing the university president, adopting an annual plan of financial operation and establishing degrees to be awarded. Learn more about the Board of Trustees (http://temple.edu/about/trustees).
History

In 1884, Reverend Russell Conwell began tutoring a young man who could only study at night because of his job. It wasn’t long before Conwell was teaching dozens of students in similar circumstances. He soon convinced the members of his congregation and others in the community to start “an Educational Institution intended primarily for the benefit of Working Men.” In 1888, “The Temple College” received a charter of incorporation. The university has since evolved into one of the nation’s premier institutions for higher education. Learn more about Temple’s history (http://temple.edu/about/history).

Community

Temple’s ties to its community are strong and deep, dating back to its founding in 1888 as an institution that served working people in the local community. Today, the university has not strayed from its original mission and remains a beacon of public service, social activism and community engagement. Learn more about Temple’s community (http://temple.edu/about/temple-community).

Momentum

Temple’s academic rankings ascent, top faculty recruitment and progressive enrollment paths have made the university one of the fastest up-and-coming institutions in the country. With growing research expenditures and a booming entrepreneurial culture, Temple’s surge is only beginning. Learn more about Temple’s momentum (http://temple.edu/about/temple-momentum).

Temple Health

Temple Health encompasses all of the health, education and research activities carried out by the affiliates of the nationally ranked Temple University Health System and Lewis Katz School of Medicine. Learn more about Temple Health (http://temple.edu/about/temple-health).

News and Media

Temple believes in communicating openly and often with its students, faculty, staff and community. The university offers a number of different ways to stay up to date with news and advancement from the Temple community. Learn more about Temple news and media (http://temple.edu/about/news-and-media).

Offices

Operating a large, complex institution like Temple involves many people in many fields working together. The university’s many offices and departments stand ready to help you. Learn more about Temple’s offices (http://temple.edu/about/offices).

Public Information

It is Temple’s policy to provide convenient and timely access to all public information about the university and its policies, budget, faculty and students. Through voluntary participation, you can also view our College Portrait (http://www.collegeportraits.org/PA/TU), which presents information about Temple in a standard, easy-to-read format. Find out more about Temple’s public information (http://temple.edu/about/public-information).
General Admissions Information

Temple University
Office of Undergraduate Admissions
Conwell Hall, First Floor
1801 N. Broad Street
Philadelphia, PA, 19122
phone: 215-204-7200
toll free: 888-340-2222
fax: 215-204-5694
askanow@temple.edu
admissions.temple.edu

The Office of Undergraduate Admissions processes all undergraduate applications for admission to all campuses of Temple University. Freshman applicants can opt to apply Early Action through our application or the Common Application and must have a completed application on file before November 1st to receive a decision by January 10th. All other applicants (freshman or transfer) are reviewed on a rolling basis, and candidates are usually notified of decisions four to six weeks after receipt of a completed application.

The web site to apply is admissions.temple.edu/apply.

Students must submit all application materials to the Office of Undergraduate Admissions by the stated deadlines on the undergraduate application (http://admissions.temple.edu) web site. Applications received after these dates will be considered on a space-available basis. The admissions application fee is $55.00.

Special Requirements for Admission

The following programs have additional requirements for admission: the College of Public Health (Nursing, freshmen and transfers, and Health Information Management, transfers only), Dance, Music, and the Tyler School of Art. Refer to the individual program description for the details on these special requirements. Adult applicants, those who are 22 years and older and have not attempted 15 or more college-level credits at an accredited institution, are not required to submit standardized test scores.

Tuition & Residence Hall Deposits

All students admitted to the university must pay a non-refundable tuition deposit of $200 in order to reserve a place in the incoming class. In addition, students who wish to live in the residence halls must pay a housing deposit of $250.

Applying for Re-enrollment

For further information, see Academic Policy 02.10.16 (http://policies.temple.edu/getdoc.asp?policy_no=02.10.16).

Also see the Leave of Absence, Academic Forgiveness, and Academic Standing policies in the Academic Policies (p. 81) section of this Bulletin and the Academic Policies and Regulations section of each school or college. An application for re-enrollment is submitted to the school or college of the intended major.

Freshmen

Diploma & Required High School Credits

The university requires that students hold a diploma from an accredited high school with the following recommended distribution of courses:

<table>
<thead>
<tr>
<th>Subject field</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>4</td>
</tr>
<tr>
<td>Mathematics, college preparatory</td>
<td>4</td>
</tr>
<tr>
<td>Foreign language (same language/culture)</td>
<td>2</td>
</tr>
<tr>
<td>History/Social Studies</td>
<td>3</td>
</tr>
<tr>
<td>Science (2 years lab)</td>
<td>3</td>
</tr>
<tr>
<td>The Arts</td>
<td>1</td>
</tr>
<tr>
<td>Other college preparatory courses</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>20</strong></td>
</tr>
</tbody>
</table>

Students are required to have earned a minimum of 16 units in academic subjects from the above chart. Students 18 years of age and older may submit a high school equivalency diploma earned through the General Education Development Test and the high school transcript for all grades completed.
Temple Option

Temple University offers the Temple Option for talented students whose potential for academic success is not accurately captured by standardized test scores. This change enables applicants to decide how best to present their academic strengths and potential. If submitted, standardized test results will be considered holistically along with the high-school transcript and other applications materials. Those applicants not submitting test scores will complete short-answer questions in substitution for standardized tests. All candidates will be considered for merit scholarships and our Honors Program. We recommend applicants with an 1150 SAT (on a 1600-point scale), or 25 ACT, submit their test scores as part of the application. For more information, see http://admissions.temple.edu/apply/first-year-applicant/temple-option.

College Entrance Examinations

For those applicants who submit test scores, Temple accepts either of the following tests for college entrance:

- Scholastic Aptitude Test (SAT) of the College Entrance Examination Board, Box 592, Princeton, NJ 08540
- American College Test (ACT) of the American College Testing Program, Box 168, Iowa City, IA 52250

Temple suggests that students take either test in the spring of their junior year, as well as in the fall of their senior year. Results should be forwarded directly to the Office of Undergraduate Admissions. SAT or ACT scores are recommended but not required of applicants 22 years of age or older.

Placement Testing

Most newly admitted students are required to take Placement Tests upon admission to Temple University. These tests are designed to help assess mastery of certain basic skills, to point out particular strengths and weaknesses, and to assist in designing a program of study for the student. Placement Tests are offered in English, Mathematics, and Foreign Languages. All incoming students also complete the New Student Questionnaire, a personal data collection survey used by Temple to develop programs and procedures to serve the needs and interests of its students.

Placement Testing

For incoming students, all placement tests are taken online. After students have been formally admitted and have paid their tuition deposit, incoming students will see the link to online Placement Testing in their “Next Steps” channel on TUportal. (Incoming transfer students will not see the link in their “Next Steps” channel until after they additionally complete online Transfer Orientation training, also available on the “Next Steps” channel.)

The Office of Institutional Research and Assessment (IRA) website (http://www.temple.edu/ira) includes detailed information about the Placement Tests and how to determine which tests are required (based on a student’s college, curriculum, and transfer credits), and also has sample test items. The Office of Orientation website (http://www.temple.edu/studentaffairs/orientation) also contains placement testing information, helpful hints for the test day, and sample items.

New Student Questionnaire (NSQ)

The NSQ is a personal data collection survey that must be completed by all students. Temple uses the results of this questionnaire to develop programs and procedures to serve the needs and interests of its students. All information is kept confidential.

English Placement Examination (60 minutes)

All students are required to take the English Placement Examination unless they transfer a direct equivalent of Temple’s ENG 0802 or ENG 0812. For the English Placement Examination, students write an essay and their essay score is considered along with the student’s SAT verbal score, high school GPA and other available measures to determine the appropriate English course placement.

Transfer students who completed an English placement test at their previous institution and tested out of their previous institution’s English Composition or comparable requirement can be waived from the English 0802 requirement if they have documentation of their placement and have successfully completed a higher level English/Writing course. Acceptable documentation includes an official letter from the university’s Registrar, advising unit, a faculty member, or other appropriate university official. In these instances advisors should complete a “Requirement Complete” DARS exception.

Mathematics Placement Examination

All freshmen and transfer students who are not transferring a credit-bearing QA, QB, or GQ designated Mathematics course are required to take the Mathematics Placement Examination. However, the following students, regardless of transfer credits, are required to take the Mathematics Placement Examination:

- all students within the Division of University Studies (DUS);
- all students in a major within the Colleges of Science and Technology, Engineering, Education, or the Fox School of Business and Management;
- all students considering or required to take MATH 1021 or higher;
- all students considering or required to take a Science course with a MATH 1021 or higher prerequisite.

Students can consult with their advisor concerning conditions under which they may retest.
Math scores are considered along with the student's SAT quantitative score, high school GPA and other available measures to determine the appropriate Math course placement.

**Foreign Language Placement Examination (60 minutes)**

Freshmen and transfer students who previously studied a foreign language and are not transferring a credit-bearing, college-level foreign language course are required to take the Foreign Language Placement Test if they:

- are in a B.A. program in the College of Liberal Arts, College of Science and Technology, or Tyler School of Art;
- are a Communication Sciences major within the College of Public Health;
- are an International Business Administration major within the Fox School of Business and Management;

OR

- are interested in taking a foreign language course at Temple.

Online Foreign Language Placement Tests are offered in French, German, Italian, and Spanish; a paper-and-pencil Modern Greek Test is also available. Each is a multiple choice test and consists of 62 – 97 items, depending on the test. If a student has previously studied another foreign language (other than French, German, Modern Greek, Italian, or Spanish) and wishes to be tested in that language, it may be possible to arrange testing. The Senior Vice Provost for Undergraduate Studies web site ([http://www.temple.edu/vpus/forms](http://www.temple.edu/vpus/forms)) has a Foreign Language Waiver Form and Procedures for Applying for a Foreign Language Waiver (Group 2 or Group 3 Languages).

For more information about placement testing, sample questions, and news about changes in placement tests, visit the Office of Institutional Research and Assessment's placement testing page ([http://www.temple.edu/ira/exam-services/placement-assessments.html](http://www.temple.edu/ira/exam-services/placement-assessments.html)).

**Orientation for New Students**

Following admission to the university and payment of the tuition deposit, students will receive information regarding their orientation requirements. For further information, refer to the Office of Orientation ([http://www.temple.edu/studentaffairs/orientation](http://www.temple.edu/studentaffairs/orientation)).

**Immunizations**

See Student Health and Wellness (p. 69) under Student Services for required immunizations.

**International Students**

Students come to Temple from all over the world. In fact, we have students from more than 100 countries. You're considered an international student if you hold, or will need to obtain, a non-immigrant visa, including a student visa (F-1), or an exchange visitor visa (J-1).

The best way to apply is by using Temple's online application ([http://admissions.temple.edu/apply/international-applicant](http://admissions.temple.edu/apply/international-applicant)). If you prefer, you may also submit the Common Application ([https://www.commonapp.org](https://www.commonapp.org)).

If you require a student visa, please log-in to the TPortal ([https://tuportal4.temple.edu/cp/home/displaylogin](https://tuportal4.temple.edu/cp/home/displaylogin)) to submit the I-20 application, financial documents, and passport photo page online so that we can process an I-20 for you as quickly as possible.

Questions can be directed to:

E-mail: international.admissions@temple.edu

Phone: 215-204-4900

**Orientation and Immunizations**

For requirements see International Student Services (p. 72) under Student Services.

**Special Admissions Programs**

**Dual Admissions Programs**

See Transfer Students (p. 23).

**Pre-Professional Admissions Programs**

**Pre-Medical Health Scholar Program and Accelerated Option Programs: Dentistry, Pharmacy, Podiatry, Physical Therapy**

1810 Liacouras Walk, Suite 100
Pre-Med Health Scholar Program

The Pre-Med Health Scholar Program is offered to highly talented High School Seniors interested in pursuing a career as a physician. It is designed to recruit exceptional students to Temple University by offering a Linkage Agreement with the Lewis Katz School of Medicine at Temple University. **Students entering Temple University as Pre-Med Health Scholars may consider an Accelerated BA/MD (3+4) Degree option.**

Dentistry, Pharmacy, Physical Therapy, and Podiatry Accelerated Programs

Accelerated Programs allow Pre: Dentistry, Pharmacy, and Podiatry (3+4 Tracks) as well as Physical Therapy (3+3 Track) students the option of earning both their Bachelor of Arts and Graduate Degrees in a shorter period of time after successfully passing all courses in the first year of professional school.

**Accelerated program Applications for interested entering freshman are available on the health advising web site. Completed applications are due by the end of the first semester at Temple University.** The Accelerated BA/DMD, BA/PharmD, BA/DPM, or DPT Programs are designed for high-achieving students who have distinguished themselves with impressive high school and first semester of college academic records and a demonstrated interest in their respective field.

Applying to Temple for the entering class of 2016 and beyond

**NOTE: Beginning with the Temple University entering class of 2016, applications to the Accelerated Programs for Dentistry, Pharmacy, and Podiatry (3+4 Tracks) as well as Physical Therapy (3+3 Track) will be available online and will be due before a student enters Temple University. (Due Date: 1/19/2016 for the entering class of 2016) Applicants will therefore know their accelerated option status before entering Temple University.**

Temple Law Scholars Program

[www.temple.edu/vpus/opportunities/LawScholars.htm](http://www.temple.edu/vpus/opportunities/LawScholars.htm)

Paul Crowe  
Associate Professor of Philosophy  
College of Liberal Arts  
215-204-8591  
pcrowe@temple.edu

Leora Eisenstadt  
Assistant Professor, Legal Studies Department  
Fox School of Business and Management  
215-204-6672  
leora.eisenstadt@temple.edu

The Temple Law Scholars program provides an opportunity for outstanding students in the College of Liberal Arts and the Fox School of Business and Management to gain provisional admission to Temple University School of Law at the same time they are accepted into an undergraduate program. As Temple Law Scholars, students are expected to complete the University Honors Certificate Program in conjunction with their undergraduate degree, after which they enroll in the Temple University School of Law, leading to the degree of Juris Doctor. While most Law Scholars complete their undergraduate degree before entering Beasley School of Law, Law Scholars can choose the Accelerated Option and enter Beasley School of Law after their third year of undergraduate study. This 3+3 option is currently available only to students in the College of Liberal Arts and the Fox School of Business and Management. A Law Scholar who chooses the Accelerated Option applies the first year of law school coursework toward undergraduate degree requirements and receives a Bachelor’s Degree in his or her chosen major(s) after the first year of Law School. Law Scholars interested in pursuing the 3+3 option must indicate their interest in doing so during the first semester of their first year of undergraduate study. For more information or an application, please visit the Temple Law Scholars Program ([http://www.temple.edu/vpus/opportunities/LawScholars.htm](http://www.temple.edu/vpus/opportunities/LawScholars.htm) web site.

University Honors Program

The University Honors Program is open to students enrolled in every undergraduate school and college. No special application is required for incoming first-year students. Current Temple students or transfer students who would like to be considered for the program must apply through the Honors web site ([http://honors.temple.edu/admissions](http://honors.temple.edu/admissions)). Applications are reviewed at the end of each semester after grades have been posted.

For more information on the Honors program, please visit the Honors web site ([http://honors.temple.edu](http://honors.temple.edu)).
Also see University Honors Program (p. 51) in the Academic Opportunities section of this Bulletin.
Transfer Students

Transfer Admissions

Applicants who wish to be considered for transfer admission must have maintained at least a 2.50 grade point average in 15 or more transferable credits completed after high school at an accredited two- or four-year institution of higher education, although this is no guarantee of admission. The average GPA for entering transfer students is a 3.00+. Temple requires the same high school units of transfer students as of freshmen.

Applicants must submit official transcripts from high schools and each college previously attended. The university defines “official transcript” as that which is sent directly from a high school or college to Temple’s Office of Undergraduate Admissions. Ordinarily, SAT or ACT scores are not required unless specifically requested by the Admissions Office.

An evaluation showing accepted transfer credits and a list of Temple course equivalencies are sent to students who are admitted. Evaluations are based on the majors students indicate on their applications. The Temple school/college in which they enroll will make the final determination of which transfer credits are applicable to the degree.

Transfer Credit Policy

Generally, Temple accepts academic, college-level courses beyond the developmental level completed with a grade “C” or better from schools with regional accreditation. Exceptions to any of these criteria may be considered on appeal. College-level coursework completed at colleges and universities that are not members of one of the six regional accrediting associations may be eligible for credit by validation after matriculation. Temple also awards limited academic credit for previous academic, employment, military, and/or other learning experiences not earned in a traditional college/university classroom setting. Grades are not assigned to transfer credits and therefore credit awarded will not affect a student’s grade point average at Temple.

All transcripts, including dual enrollment in high school, military transcripts and official score reports for standardized exams, such as Advanced Placement, International Baccalaureate, CLEP, etc., should be sent directly to the Office of Undergraduate Admissions (http://admissions.temple.edu/). There is an expectation that final transcripts are received prior to the beginning of registration for the next semester after initial matriculation.

Evaluation of transfer credits is based on a student’s major. Undergraduate Admissions determines which credits will transfer to the University; the student’s school/college at Temple makes the final determination of which transfer credits are applicable to the student’s degree program. Transfer evaluations may change for students who change majors or if additional transcripts or scores are received.

In any instance, credit is only awarded:

• when credit is useful in a student’s program of study;

• in academic subjects with a corresponding Temple University department;

• when the official score information or official transcript is received by the Office of Undergraduate Admissions;

• when possible, for courses completed more than 10 years prior to the date of admission. (Individual schools and colleges may have additional limitations, e.g. FSBM and CST. See individual school/college policy page.)

and credit is not awarded

• for the same course twice;

• for a course(s) in which a student is currently enrolled and/or has previously received a letter grade for the course, including, but not limited to F, W, AU, or I.

To earn a degree from Temple, students must complete at least 45 hours of the last 60 semester hours as a matriculated student at Temple, fulfill all university requirements (the General Education Program) and fulfill all degree requirements of the Temple school or college in which they are enrolled. (See Academic Residency (p. 83.).)

• Transfer credits do not count towards academic residency.

To graduate from Temple with Honors, students must complete at least 60 hours toward their degrees in residence as matriculated students at Temple University. (See Honors for Academic Achievement (p. 95.).)

• Transfer credits do not apply to the minimum number of credits (60) required to earn Latin Honors at graduation.

Non-University/College Credit including Military Credit

Students may earn credits through Advanced Placement Tests, International Baccalaureate Exams, College Level Examination Program (CLEP), DANTES Subject Standardized Tests (DSST), transcripted military experience and Portfolio Review for work or life experience (CLEX).
• Individual Schools and Colleges may have additional limitations regarding the type and the total number of semester hours granted through non-traditional means. (For an individual School/College policy, refer to https://www.temple.edu/vpus/documents/Prior_Learning_Credit.pdf.)

• Credits may be awarded for:

  • Advanced Placement and International Baccalaureate equivalencies are subject to change. Students will receive the equivalency that is in effect at Temple at the time of their matriculation.
    • For listing of Advanced Placement equivalencies and required scores refer to https://www.temple.edu/vpus/transfer/equivalencies.htm#AP
      • Although the AP credits do not transfer as direct equivalents to Temple GenEd courses, Temple University will allow students to satisfy the designated GenEd area with AP Credits.
    • For a listing of International Baccalaureate (IB) equivalencies refer to https://www.temple.edu/vpus/transfer/equivalencies.htm#IB.
      • Students who have earned the International Baccalaureate Diploma and meet minimum eligibility requirements complete the IB GenEd Program in place of the full GenEd Program. For more information refer to https://www.temple.edu/vpus/transfer/TransferGenEd.htm#ibgened.
      • Students may be able to satisfy Gen Ed areas with the IB equivalencies.

  • Credits earned through Dual Enrollment while in high school will be evaluated according to the guidelines established for transfer credits.
    • When students submit dual enrollment credit for an AP course on a university or college transcript and also submit scores for the corresponding AP exam, Temple will only award credit based on the evaluation of the dual enrollment credit presented on the university or college transcript. Duplicate credit will not be awarded for both the university/college credit and the AP score(s), since according to Temple University policy, students cannot receive credit for the same course twice.

  • International Credits
    • British A-Levels - Successful GCE A-Level results are recognized for credit by Temple University and may be awarded 6 to 8 semester hours per course. AS Levels may be awarded 3 to 4 credits.

  • College Level Examination Program (CLEP) provides a recognized assessment for students to meet requirements of a class through examination.
    • Temple will only award credit as indicated on the chart provided at http://www.temple.edu/vpus/transfer/equivalencies.htm#CLEP. Exams that are not listed are not accepted for credit at Temple University, even if the student received credit for the exam at a previous institution.
    • Credit for CLEP examinations posted on transcripts from other institutions will not be used to update a student’s academic record at Temple. It is the responsibility of the student to request a copy of the scores be sent directly to the Office of Undergraduate Admissions, Temple University, 1801 N. Broad Street, Philadelphia, PA 19122.
    • Currently, all literature, history, and political science CLEP exams require an additional Temple essay in order to receive credit for these tests at Temple. For the CLEP credits to be posted to the student’s academic record, the student must have both the minimum score on the CLEP test and a a grade of "pass" on the essay.
    • CLEP credits completed prior to matriculation at Temple will count towards the 45+ GenEd designation and will apply to the General Education program according to the course attribute.
    • Credits brought in through College Level Examination Program (CLEP) exams are considered the same as transfer credits and if completed after matriculation are subject to Policy 02.10.18.

  • Credit is awarded for DANTES Subject Standardized Tests (DSST) completed prior to matriculation according to the American Council on Education (ACE) recommendations.

  • Temple awards college credit for documented military experience according to the ACE guide recommendations. Examples of acceptable documentation include, but are not limited to:
    • AARTS (Army/ACE Registry Transcript System)
    • SMART (Sailor/Marine/ACE Registry Transcript)
    • Community College of the Air Force Transcript.
• Decisions to process a Portfolio Review for Prior Work or Life Experience (CLEX) are made in the individual schools and colleges by a faculty committee. The evaluation may be based on the submission of papers, presentation of a portfolio of completed work, and/or a demonstration of acquired skills.
  • If a student changes his/her program of study after the awarding of CLEX credits, the CLEX credits may not be usable in the new major.
  • CLEX credits will be posted only after the completion of a minimum of 30 credits of formal coursework at the university.
• College-level coursework completed at colleges and universities that are not members of one of the six regional accrediting associations may be eligible for Credit by Validation after matriculation.
  • Students will need to provide the syllabus used in each class to be evaluated along with the qualifications of the instructor of the course.
• Temple University accepts for transfer credit most college-level, liberal arts courses taught at institutions participating in Pennsylvania’s College Transfer System (PA TRAC). To assist students as they prepare to transfer, Temple has identified thirty credit hours of equivalent course content accepted as meeting general education requirements for most majors.
  • View Temple’s PA TRAC Transfer Credit Information at https://www.temple.edu/vpus/documents/temple_pa_trac_transfer_credit_framework.pdf.

**Different Credit Systems**

Quarter hours are converted to semester hours using the ration of 3:2:
  • 2 quarter hour credits are equivalent to 1.5 semester hour credits;
  • 3 quarter hour credits are equivalent to 2.0 semester hour credits;
  • 4 quarter hour credits are equivalent to 2.5 semester hour credits.

**International Credits**

• European Credit Transfer and Accumulation System (ECTS) units are converted using 5 ECTS credit to 3 US semester hour credits.
  • 1.667 ECTS credits = 1 Temple credit
    • 5 ECTS credits = 3 semester hour credits
    • 10 ECTS credits = 6 semester hour credits
    • 20 ECTS credits = 12 semester hour credits
    • 25 ECTS credits = 15 semester hour credits
  • Different US institutions have different conversion ratios for ECTS credits.

**Transfer Credit Appeals Process**

Initial evaluation of transfer credits is made in the Office of Undergraduate Admissions. Re-evaluation of credits will be done first by Undergraduate Admissions and when necessary with the assistance of advisors and faculty, in accordance with Temple policies and procedures.

Re-evaluation of credits will be facilitated by academic advisors in the student’s school/college according to standard Temple policies and procedures. Office of the Senior Vice Provost for Undergraduate Studies will assist with evaluation when necessary.

Credit (re)evaluation/appeals process continues if:
1. additional transcript(s) are received with additional coursework;
2. course(s) needs to be (re)evaluated for General Education (GenEd) Curriculum equivalency;
3. course(s) needs to be (re)evaluated for College/School/Department credit;
4. student changes major, declaration of minor or a second major;
5. credits need to be validated.
Students may have to complete one or more of these processes. The entire process can take as little as a few days to as much as the entire semester, depending on the complexity of each student’s situation, e.g. student’s major, student changing major, addition of certificate or minor, missing information or incomplete student record. Students initiate the appeals process in their respective advising office. For more information, refer to the Office of the Senior Vice Provost for Undergraduate Studies.

Transfer Agreements

To encourage and facilitate transfer for students from other colleges to Temple University, Temple has established the transfer agreements with other institutions:

- **Dual Admissions agreements** conditionally admit students to Temple at the same time they are admitted to a community college, and provide the opportunity for merit scholarships to Temple for eligible students. For a list of Dual Admissions agreements, go to www.temple.edu/vpus/transfer/agreements.htm.

- **GenEd-to-GenEd and Core-to-GenEd Transfer agreements** accept the general education requirements of associate degrees in lieu of Temple's GenEd Program requirements. For a list of these agreements, go to www.temple.edu/vpus/transfer/agreements.htm. (All students complete two Writing Intensive courses at Temple.)

- **Program-to-program agreements** are between Temple's academic schools and/or departments and other two-year and four-year institutions. These agreements align the degree requirements, so students know what they need to complete prior to transferring to Temple in order to be prepared to finish their degree. For more information on Program-to-Program agreements, go to www.temple.edu/vpus/transfer/agreements.htm.

Transfer Students and the University General Education Curriculum

Every Temple students fulfills the 35-36 credit General Education Program (GenEd) in some way. Transfer students may be able to use their transfer credits to satisfy General Education requirements. The following GenEd policies for transfer students apply only to University GenEd requirements.

Basic GenEd Transfer Policies (for additional information on program details, refer to http://gened.temple.edu/):

- Initial evaluation of transfer credits will be made in the Temple Office of Undergraduate Admissions. Re-evaluation of credits will be done by the academic advisor in the schools and colleges, in consultation with the General Education Program when necessary, according to standard Temple policies and procedures.

- Transfer courses will be applied to major and minor requirements first and then to GenEd.

- Students cannot use the same course to fulfill a General Education and a major or minor requirement.

- The Analytical Reading and Writing requirement may be met by placing out of Temple's Analytical Reading and Writing through a placement test or by transferring in the equivalent of Temple's Analytical Reading and Writing course.

  - Transfer students who completed an English placement test at their previous institution and tested out of their previous institution's English Composition or comparable requirement can be waived from the Analytical Reading and Writing requirement if they have documentation of their placement and have successfully completed a higher-level English/Writing course. Acceptable documentation includes an official letter from the university's registrar, advising unit, a faculty member, or other appropriate university official. If approved, the student's advisor will post a DARS exception.

  - The Global/World Society requirement (GG) also may be met by participating in an approved Study Abroad program. Transfer students who completed a study abroad at their previous institution should check with their advisor for additional information.

- All students are required to take two Writing Intensive courses at Temple University in addition to completing the GenEd requirements. Writing Intensive courses in transfer cannot be used to fulfill this school/college requirement. The two Writing Intensive courses will be designated by the student's major.

- Credit for Prior Learning (completed prior to matriculation at Temple) such as Advanced Placement (AP), International Baccalaureate (IB) and College Level Examination Program (CLEP) will satisfy General Education requirements according to current practice, i.e. using course attributes/core equivalents.

- All requirements of Temple’s schools and colleges and major programs of study remain in force. Students should consult the appropriate sections of the Bulletin and their academic advisors about school/college major requirements.

Core-to-GenEd, GenEd-to-GenEd, 45+ GenEd, and IB GenEd students must still complete the required number of credits for their baccalaureate degree, using courses in transfer as well as credits completed at Temple.

- A Core-to-GenEd or GenEd-to-GenEd student has completed the GenEd Program as stipulated in the agreement. For a list of agreements by institution go to www.temple.edu/vpus/transfer/agreements.htm.
• Students must meet the academic residency requirement that requires students to complete 45 of the last 60 credits be taken at Temple University.

• Students with fewer than 45 transfer credits and have not completed an approved degree at a Core-to-GenEd or a GenEd-to-GenEd partner institution, complete the full GenEd Program. Refer to https://www.temple.edu/vpus/transfer/TransferGenEd.htm.

• Students with 45 or more transferable credits and have not completed an approved degree at a Core-to-GenEd or a GenEd-to-GenEd partner institution, complete the 45+ GenEd Program. Refer to https://www.temple.edu/vpus/transfer/TransferGenEd.htm.

  • For students new to Temple: The courses have been taken elsewhere before the student matriculates at Temple.

  • For reenrolled students: 45 or more transferable credits have been taken elsewhere since the student’s last date of enrollment at Temple and before the date of the student’s return to Temple.

  • Courses taken at Temple as a non-matriculated student are not counted toward eligibility for 45+ GenEd.

  • Courses taken elsewhere by students once they are matriculated at Temple are not counted toward eligibility for 45+ GenEd.

  • Credits for prior learning (e.g., AP, IB, CLEP, etc.) are not counted towards eligibility for 45+ GenEd, if completed after matriculation to Temple.

  • Students who have earned the International Baccalaureate (IB) Diploma and meet minimum eligibility requirements, complete the IB GenEd Program. For more information go to www.temple.edu/vpus/transfer/TransferGenEd.htm

  • This program still requires students to complete up to 18-19 credits of the GenEd Program.

**Dual Admissions**

To better encourage and facilitate transfer admission from other colleges to Temple University, Temple and these colleges have established articulation agreements.

Dual Admissions agreements conditionally admit students to Temple at the same time they are admitted to a community college, and provide merit scholarships towards Temple tuition for eligible students. Students may enroll in the Dual Admissions program before completing 30 credits, including any colleges previously attended. Students are then admitted to Temple upon attaining their associate’s degrees at the community college. Go to www.temple.edu/vpus/transfer/agreements.htm for the list of dual admission agreements.
Special Programs

Temple University offers credit-bearing certificate programs (p. 29), non-credit programs (p. 30), off-campus/corporate programs (p. 31) and programs with academic credit (p. 31) that are available for all students intending to study at Temple University without having to be enrolled in a degree program.

The academic policies and regulations generally apply to all students and provide a framework within which schools and colleges may specify further conditions or variations appropriate to students in their courses or programs. Statements of academic policies and regulations apply to both degree and non-degree undergraduates unless explicitly noted otherwise. In addition to the description below, please refer to the Responsibilities (p. 36), Rights (p. 39) and Academic Policies (p. 81) sections of this Bulletin for further information on particular policies that relate to students in these programs.

Temple University provides a broad administrative framework to present and support a wide range of university offerings not falling within the province of typical undergraduate and graduate degree work on Temple campuses. Registration for credit-bearing courses is administered through the Office of Continuing Studies on the various campuses. Registration for non-credit courses is handled through Temple University Fort Washington (TUFW). Students taking non-credit courses at Temple University Ambler, TUFW and Temple University Center City (TUCC) may register and pay online for non-credit courses through the Temple University Fort Washington (http://fortwashington.temple.edu/noncredit-programs/registration-and-payment) web site. The online system links non-credit course payments into the TUPay system, already in use for credit course payment.

Course offerings under special programs respond to the differing needs of adults seeking additional education. Some offerings are of common interest to all, such as writing and general computer skills. Other courses, tailored for those adults who wish to change their work situation, focus on new skill and knowledge development. Coursework is also designed for adults who wish to maintain their current work position in a profession that requires recertification to maintain appropriate licenses. Course offerings are also geared to those adults seeking personal enrichment as their primary goal.

The form of programming includes credit certificates, non-credit professional certificates, and non-credit personal enrichment courses. The courses are offered at Temple University Ambler, Temple University Fort Washington, Temple University Center City, Temple University Harrisburg, and a variety of public and private off-campus sites through the auspices of Office of Off-campus Programs.

Information about the services offered at each campus is presented below.

Main Campus

The Main Campus Office of Continuing Studies (http://www.temple.edu/vpus/arc/continuingstudies/continuingstudies.html) is the university's central office for serving non-degree students. Non-degree students are those who have not been formally admitted to a degree program. The office serves a variety of students, including adults returning to school for undergraduate or graduate courses, professionals updating their skills, qualified students seeking undergraduate admission, students taking courses for personal enrichment, and visiting students. There is no formal application to enroll as a Continuing Studies student; however, first-time enrollees are required to provide documentation of education completed (high school transcript, GED certificate, college transcripts [minimum 2.00 GPA required], or college diploma). Prior to their enrollment, degree-seeking students may be required to take one or more university placement tests.

Services include:

• individual academic advising
• informal evaluation of academic transcripts
• registration and schedule revisions
• referrals to other university services and programs

First-year, non-degree students may register for a maximum of 11 credits per semester. Second-year, non-degree student registrations are based upon academic progress. However, non-degree seeking students are prohibited from registering via Self Service Banner (SSB) and must register through their Continuing Studies office. All non-degree students must maintain satisfactory academic progress in order to continue taking courses through Continuing Studies. Continuing Studies students must apply for admission by the completion of 30 s.h. Pre-admission counseling, academic advising, registration, and other support services are provided for non-degree students.

Refer to the Academic Policies section of this Bulletin for more information on non-degree students (p. 97).

Ambler/Fort Washington

Temple University's Ambler (http://ambler.temple.edu) and Fort Washington (http://fortwashington.temple.edu) campuses offer extensive undergraduate, graduate, and non-credit courses and programs that are available during days, evenings, and weekends. The listing of all offerings is available at http://ambler.temple.edu/. Students interested in credit courses or programs should contact the Office of Academic Advising and Career Development at Ambler Campus by phone (267-468-8200) or go to the web site at http://ambler.temple.edu/academics/advising-and-support. This office coordinates the services for students, as described under Main Campus above. For more information on non-credit offerings and registration, see Non-Credit Programs/Temple University Fort Washington (p. 30) or go to http://fortwashington.temple.edu/.
Center City

In addition to undergraduate and graduate-level programs and courses, Temple University Center City (TUCC) offers a rich selection of non-credit programs and classes. These include courses for your personal enrichment from Music Prep, courses leading to state licensure in the real estate field from the Real Estate Institute, lively classes on every conceivable subject for retirees provided by members of the Osher Lifelong Learning Institute at Temple University (OLLI), and career development seminars and professional certificate programs which are administered through Temple University Ambler campus. For more information on non-credit programs, refer to Non-Credit Programs (p. 30) and/or visit www.temple.edu/tucc/.

Health Sciences Center (HSC)

The Lewis Katz School of Medicine (www.temple.edu/medicine/), the Maurice H. Kornberg School of Dentistry (http://dentistry.temple.edu/), the School of Pharmacy (http://pharmacy.temple.edu/), and the College of Public Health (http://cph.temple.edu) sponsor continuing education activities for their graduates as well as for graduates of other institutions. Many programs meet the requirements of professional accrediting agencies to take refresher courses or seminars in order to keep abreast of changes in the field.

Credit-Bearing Certificate Programs

At Temple University, a certificate is a credit-bearing program of courses leading to a credential that recognizes the student’s work in a specialized area of knowledge. An undergraduate certificate may be part of a degree program, or it may stand alone. It is distinct from an academic major or minor and should not be confused with the process of professional certification for teaching and other fields. Certificate programs often focus on the acquisition of specific skills recognized in the job market. They are open to undergraduates in all Temple schools and colleges and majors and are particularly useful to students seeking to document their exposure to fields and disciplines outside of their academic major and minor. Some majors recommend particular certificate programs to their students. Non-degree students should contact the school or college offering a certificate, as some certificates are restricted to degree students. Below is a list of undergraduate certificate programs. For detailed information, contact the school or college.

<table>
<thead>
<tr>
<th>Certificate of Completion</th>
<th>Department</th>
<th>School</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arabic</td>
<td>Asian and Middle Eastern Languages and Studies</td>
<td>College of Liberal Arts</td>
</tr>
<tr>
<td>Arts in Community</td>
<td>Art Education and Community Arts Practices</td>
<td>Tyler School of Art</td>
</tr>
<tr>
<td>Asian Business and Society</td>
<td>Asian and Middle Eastern Languages and Studies</td>
<td>College of Liberal Arts</td>
</tr>
<tr>
<td>Business Basics (restricted to non-degree students)</td>
<td></td>
<td>Fox School of Business and Management</td>
</tr>
<tr>
<td>Business Plus (restricted to non-degree students)</td>
<td></td>
<td>Fox School of Business and Management</td>
</tr>
<tr>
<td>Career and Technical Education</td>
<td>Teaching and Learning</td>
<td>College of Education</td>
</tr>
<tr>
<td>Chinese</td>
<td>Asian and Middle Eastern Languages and Studies</td>
<td>College of Liberal Arts</td>
</tr>
<tr>
<td>Computer Security and Digital Forensics</td>
<td>Computer and Information Sciences</td>
<td>College of Science and Technology</td>
</tr>
<tr>
<td>Cooperative Education</td>
<td>Teaching and Learning</td>
<td>College of Education</td>
</tr>
<tr>
<td>Emergency Management with Special Populations</td>
<td>Public Health</td>
<td>College of Health Professions and Social Work</td>
</tr>
<tr>
<td>English as a Second Language</td>
<td></td>
<td>College of Education</td>
</tr>
<tr>
<td>Entrepreneurship and Innovation Management</td>
<td>Strategic Management</td>
<td>Fox School of Business and Management</td>
</tr>
<tr>
<td>Environmental Sustainability</td>
<td>Landscape Architecture and Horticulture, Community and Regional Planning</td>
<td>School of Environmental Design</td>
</tr>
<tr>
<td>Event Leadership</td>
<td></td>
<td>School of Tourism and Hospitality Management</td>
</tr>
<tr>
<td>French</td>
<td>French/German/Italian/Slavic</td>
<td>College of Liberal Arts</td>
</tr>
<tr>
<td>Fundamentals of Programming</td>
<td>Computer and Information Sciences</td>
<td>College of Science and Technology</td>
</tr>
<tr>
<td>Geographic Information Systems</td>
<td>Geography and Urban Studies</td>
<td>College of Liberal Arts</td>
</tr>
<tr>
<td>Geography of Sports, Recreation and Tourism Planning</td>
<td>Geography and Urban Studies</td>
<td>College of Liberal Arts</td>
</tr>
<tr>
<td>Geography of Tourism</td>
<td>Geography and Urban Studies</td>
<td>College of Liberal Arts</td>
</tr>
<tr>
<td>German</td>
<td>French/German/Italian/Slavic</td>
<td>College of Liberal Arts</td>
</tr>
<tr>
<td>Health Research</td>
<td>Sociology</td>
<td>College of Liberal Arts</td>
</tr>
<tr>
<td>Horticultural Therapy</td>
<td>Landscape Architecture and Horticulture</td>
<td>School of Environmental Design</td>
</tr>
<tr>
<td>Italian</td>
<td>French/German/Italian/Slavic</td>
<td>College of Liberal Arts</td>
</tr>
<tr>
<td>Japanese</td>
<td>Asian and Middle Eastern Languages and Studies</td>
<td>College of Liberal Arts</td>
</tr>
<tr>
<td>Jewish Secular Studies</td>
<td></td>
<td>College of Liberal Arts</td>
</tr>
<tr>
<td>Landscape Plants</td>
<td>Landscape Architecture and Horticulture</td>
<td>School of Environmental Design</td>
</tr>
<tr>
<td>Latin American Studies</td>
<td>Spanish and Portuguese</td>
<td>College of Liberal Arts</td>
</tr>
</tbody>
</table>
Non-Credit Programs

For further information on the following non-credit programs, you can visit the web sites of Temple University Ambler (http://ambler.temple.edu), Temple University Center City (http://www.temple.edu/tucc), and Temple University Alumni (http://www.alumni.temple.edu/s/705/alumni).

Non-Credit Programs at Temple University Ambler, Fort Washington, and Center City

The Office of Non-Credit and Continuing Education, located at the Ambler campus, provides training and seminars in professional development and personal enrichment topics, as well as computer applications. Courses and programs are offered at the Ambler, Fort Washington and Center City campuses.

Non-credit certificates can be completed in:

- Accounting
- Project Management
- Leadership and Management
- Editing and Writing
- Interior Design
- Meeting Planning
- Wedding Planning and Consulting
- Database Management
- Web Site Design

Personal enrichment courses are offered in:

- Digital Photography
- Arts, Literature and History
- Languages
- Food and Entertainment
- Horticulture
- Healthy Lifestyles and Exercise
- College Prep (SAT Review Workshop)

For more information about non-credit courses and programs, or to receive catalogs, call the Office of Non-Credit and Continuing Education at 267-468-8500, send an e-mail to ncrestab@temple.edu, or visit the Non-Credit Programs (http://ambler.temple.edu/academics/non-credit-programs) web site.
LifeLong Learning Society at Temple University Fort Washington

The Lifelong Learning Society provides stimulating classes with great teachers, topics, and students. Classes are designed for learners 50 and up, but adult learners of all ages are welcome. After paying an annual fee, or semi-annual fee (fall or spring), students may enroll in as many of the LifeLong Learning Society courses as they like. Call 267-468-8500 for details or visit the LifeLong Learning Society web site for a listing of courses.

Real Estate Institute

The Real Estate Institute is the largest professional consumer education program in the tri-state area offering pre-licensure or basic real estate courses as well as a broad spectrum of elective courses, all taught by state-certified real estate instructors. The Real Estate Institute's courses are fully-accredited by the Pennsylvania Real Estate Commission and are intended for those seeking state licensure and/or professional advancement but not an academic degree. The courses allow you to qualify for the Pennsylvania Salesperson Licensing examination and, together with a three-year apprenticeship and additional courses, for the Pennsylvania Real Estate Brokers examination. All students who successfully complete each course of study are awarded Real Estate educational credits and a Temple Real Estate Institute transcript. For more information, call 215-204-1539 and/or visit the Real Estate Institute web site.

Music Prep

Music Prep offers continuing opportunities for musical growth and enrichment for people of all ages and abilities, from the beginner to the experienced musician. There are programs designed for preschool through high school age students who are considering music as a future career or serious avocation and for adults who wish to develop their musical skills and interests. For more information, call 215-204-1512 and/or visit the Music Prep web site.

Osher Lifelong Learning Institute at Temple University

The Osher Lifelong Learning Institute at Temple University (OLLI) is an educational program for people who are retired, near retirement, or adults with discretionary time to take daytime classes. There are no age limitations. The organization brings a lively, no-pressure atmosphere and offers a variety of courses.

OLLI instructors are also OLLI members, representing many professions, vocations, and life experiences. Classes are held Monday to Friday. OLLI also presents the Friday Forum, featuring speakers with diverse and interesting backgrounds. Members may sit-in on one undergraduate course each semester, subject to university policy and instructor approval. All classes are held at Temple's Center City campus - convenient to public transportation. For more information, call 215-204-1505, e-mail olli@temple.edu, or visit the OLLI web site.

Off-Campus/Corporate Programs

Temple University has been bringing its rich educational resources to off-campus sites for over 60 years. Through its Office of Off-campus Programs, Temple University provides both off-campus and customized corporate programs throughout the Philadelphia five-county area and beyond. The Office of Off-campus Programs offers a wide array of credit courses, certificate and full degree programs.

The staff of Off-campus Programs serves as the liaison between the university faculty/trainers and its external customers. They have developed strong affiliations with businesses, school districts, units of government, and non-profit associations. The Office of Off-campus Programs delivers, on site, the most effective credit programs in the Delaware Valley. This office develops and customizes training programs designed to be taught on site at the client's workplace while assuring the utmost quality in instruction and customer service. For more information, view the Off-campus Programs web site or e-mail extserv@temple.edu.

Programs with Academic Credit

Temple University offers a variety of special programs with academic credit. For more details, contact the school, college, or campus where the program is offered.

Visiting Students

Temple University welcomes students from other colleges and universities who wish to enroll in courses on any of our campuses. All students must provide a transcript of their previous academic work and must have earned at least a 2.00 cumulative GPA. Students must bring or fax a permission form from their home institution, listing the specific Temple courses that have been approved for transfer. If the courses have prerequisites, students must provide proof of having taken and passed them. Some courses may also require special authorization from instructors or departments at Temple (e.g. business courses numbered 2000 and above).

Students may use the Visiting Student Registration Form available on the Temple University Summer Programs web site at www.temple.edu/summer. This form must be faxed or sent via postal mail to the Temple University campus you are planning to attend. The full listing of the campus contact
information and registration information for all campuses is available by visiting Summer Programs Registration (http://www.temple.edu/summer/register/visiting-students.html).

Credit Transfer to Your Home Institution

In order to facilitate the transfer of credits, students should request that an academic transcript be sent from Temple to their home institution. The transcript request form (http://www.temple.edu/registrar/alumnifamily/verification/transcripts) is available by visiting Temple’s Office of the University Registrar web site. It will not be sent out automatically. For further information, please contact the Office of the University Registrar at 215-204-1131 or visit in person on the second floor, Conwell Hall, Broad Street and Montgomery Avenue, on the Main Campus. You may also visit the registration office at your campus of choice or go to their web site at www.temple.edu/registrar for more information.

Undergraduate Non-Degree Students

Students who are not currently enrolled at another institution may be permitted to register for some courses as non-degree students. To enroll in undergraduate courses they must have earned a high school diploma or a G.E.D. certificate. Students who have attended another college or university must provide a transcript of their previous academic work and must have earned at least a 2.00 cumulative GPA. With some exceptions, these students are required to take the university placement test before they can register. However, meeting these minimum requirements does not guarantee enrollment as a non-degree student. For more information, and to speak with an academic advisor, please contact the Main Campus Office of Continuing Studies (http://www.temple.edu/vpus/arc/continuingstudies/continuingstudies.html#about) or the office of the campus you wish to attend.

High School Students

High school students who will be entering their senior year may be eligible to register for college-level courses. Before they can register, they must secure and provide written authorization from their guidance counselor or high school principal, specifying the course(s) the student is authorized to take.

Summer Sessions

Temple University welcomes students from other colleges and universities, international students, as well as our own students, to enroll in a summer course at any one of our several campuses. We offer credit, non-credit, day and evening courses at our campuses. We also have several Study Abroad Programs in France, Germany, Italy, Spain and the United Kingdom.
Registration

Office of the University Registrar
200 Conwell Hall
1801 North Broad Street
Philadelphia, PA 19122
215-204-1131
registrar@temple.edu
www.temple.edu/registrar

General Information

Students planning to register for classes should visit the Office of the University Registrar's web site, www.temple.edu/registrar, and click on the “Registration Information” link for information about and links to advising, registration, courses offered, and more.

Detailed information regarding courses offered (day, time, location, instructor) is on the Class Schedule (https://www.temple.edu/apply/common/cdcheck.asp).

Advising is required for students registering at Temple for the first time and is strongly recommended for all students before registering through Self-Service Banner (SSB) at http://tuportal.temple.edu. Students should contact their school, college, or department advisors for appointments or information. Generally, advisors and students review options and requirements, select courses, and complete and sign a registration form when necessary. For further information on academic advising, please see Advising (p. 61) under the Academic Support section of the Bulletin.

Registration Policies

Registration for courses is not optional, and students must not attend courses for which they are not registered. Once a student registers for a course—or is registered by an advisor at the student's request—the student remains financially obligated for the course unless and until he or she drops the course by the prescribed deadlines for dropping and adding courses. Prior to registering for the first time each semester, students are required to accept Temple University's Financial Responsibility Agreement (http://bursar.temple.edu/billing/financial-responsibility-agreement), which outlines the financial terms and conditions associated with course registration.

Students may drop courses and otherwise modify their registrations in Self-Service Banner (SSB) or by working with an academic advisor. Please see www.temple.edu/registrar/documents/calendars/ for add/drop and withdrawal deadlines for each semester and summer session.

Once registered, students must pay tuition and fees according to the Bursar's Office billing schedule. Failure to satisfy billing and financial obligations may result in withholding of official transcripts and diplomas; denial of the right to register for future sessions; and the assessment of late fees and collection costs.

Students who are not planning to attend the semester must drop their course registration. Students who do not drop classes by the end of the official drop/add period (see Academic Calendar [http://www.temple.edu/registrar/documents/calendars] for specific dates) remain financially obligated for the amount due. Instructors are advised to issue letter grades for students who have not been attending but are on their roster of registered students.

Students who drop classes by the end of the published drop period of a semester or summer session will have their courses deleted. This will relieve the student of academic and financial responsibilities associated with the course.

Students who withdraw from classes after the published drop period are responsible for full payment of all tuition and fees, along with any payment plan fees, and late payment charges. These courses will be recorded on the transcript with the notation of “W,” indicating that the student withdrew. Unpaid tuition balances may be referred for collection, and students may be held liable for paying all associated collection costs and/or legal fees.

Continuing Student Registration

Continuing (or priority) student registration is the period in which all currently enrolled, degree-seeking students can register. Each semester, currently enrolled students are sent an e-mail containing the registration schedule. This schedule is also available on the Office of the University Registrar (http://www.temple.edu/registrar) web site under Registration Information.

An installment tuition payment plan is available for students who register for the fall or spring semesters during these periods. See the Tuition and Fees section of the Bulletin for payment information.

Please note the following important information with respect to continuing registration for degree-seeking students (graduates and undergraduates) enrolled in the current semester:

• For fall semester, held in March, with initial fall semester E-bills sent beginning in late July and due mid-August.
• For spring semester, held in October, with initial spring semester E-bills sent beginning in December and due in January.
• Continuing, degree-seeking students (graduates and undergraduates) may continue to register beyond these dates but must register for their next semester by stated deadlines or risk a late registration penalty. Generally, they must be registered by the first day of the term. Visit the Office of the University Registrar (http://www.temple.edu/registrar) web site for specific registration dates and deadlines.

Open registration is available:
• For new students, readmitted students, and continuing students who could not register during continuing student registration
• For fall semester, held in April to late August
• For spring semester, held in November to mid-January

An installment tuition payment plan is available for most students who register during this period. See Tuition and Fees (p. 125) for payment information and registration dates.

Late Registration

Temple conducts late registration at the beginning of each semester or summer session. Registration appointments may be required.

All students will be assessed a $100.00 late registration fee beginning the first day of the term.

Schedule Revision (Drop/Add)

Students may revise their schedules at any time after they have registered, through the add and drop deadlines. Students who cannot register online but wish to make changes in their course schedules must do so with the assistance of their academic advisor. Approvals required vary according to the time the transaction is completed. Visit the Office of the University Registrar (http://www.temple.edu/registrar) web site for more information.

Students may not add or drop courses after the published deadline. Dropping the course results in the deletion of the class from the student’s roster. It also relieves the student of the financial liability associated with the deleted course. If a refund is due, the provisions of the refund policy will apply.

Student Identification Cards

OWL Cards (student IDs) are produced on the Main Campus by the Office of Orientation (http://www.temple.edu/studentaffairs/orientation) during New Student Orientation. At other times throughout the semester, ID cards are produced by the Diamond Dollars Office at 1910 Liacouras Walk. The cost of a replacement ID card is $20.00.

An OWL Card is needed for entry into buildings, library privileges, and many university services.

ID cards also are issued on the Ambler Campus, Health Sciences Center, and on scheduled days and times at the Center City Campus.

Additional Registration Information

Veterans

Veterans may enroll as full-time or part-time students; however, benefits are based on enrollment status. For information on services offered at the university for veteran and service members, please review the Military and Veteran Services Center web site at www.temple.edu/veterans.

PA Act 46

Pennsylvania Act 46 of 2014 requires public institutions of higher education in Pennsylvania to provide veteran students, as defined in the Act, with preference in course scheduling. Non-compliance may be reported to the Pennsylvania Department of Education by submitting the Higher Education Student Complaint form found at: www.education.state.pa.us (http://www.education.state.pa.us).

PA Act 11

Pennsylvania Act 11, which became law July 1, 2015, mandates Temple University to charge the in-state tuition rate to out-of-state students living in Pennsylvania and using their GI Bill benefits under chapters 30, 31, 33, 35 and sections 1606 and 1607. Eligible students will have their student account adjusted to reflect the in-state tuition rate. Temple will also review the financial aid package and make any necessary adjustments based on the in-state tuition rate.

Veterans Certification Process

Veterans may enroll as full-time or part-time students; however, benefits are based on enrollment status. In order to begin the process to use your benefits, it is imperative that you complete the steps that follow before the beginning of the first semester that you are enrolled at the university so that you can receive your benefits in a timely and accurate manner:

• Write your TUID on the front of your Certificate of Eligibility.
• Upload the Certificate of Eligibility and/or other documents in the Veteran Benefit Declaration page in TUPortal.
• If you are receiving Chapter 35 DEA benefits, you must also write the social security number of the parent who transferred benefits.

*NOTE - If you do not submit your Certificate of Eligibility in advance, it can negatively affect the timely and accurate processing of your program benefit payments.

If you do not have a Certificate of Eligibility, you can obtain a copy by contacting the Veterans Administration at http://www.gibill.va.gov (http://www.gibill.va.gov), click on “Ask a Question” or call 1-888-GI-Bill1.

Additional tools that can help you to make an informed decision about choosing Temple University:

G.I. Bill® Comparison Tool Beta

College Scorecard (College Affordability and Transparency Center)
http://collegecost.ed.gov/scorecard/

College Navigator - National Center for Education Statistics
http://nces.ed.gov/collegenavigator/

Yellow Ribbon Program Information 2015-2016
http://www.benefits.va.gov/gibill/yellow_ribbon/2015/states/pa.asp

Paying For College
http://www.consumerfinance.gov/paying-for-college/

For more information on Veterans Administration benefits, go to www.benefits.va.gov/gibill/ (http://www.benefits.va.gov/gibill)

International Students
If a student is on a non-immigrant visa, enrollment for a minimum of 12 credits each semester is required to meet immigration regulations. Non-resident tuition charges are assessed.

Continuing Studies Students
(Non-degree-seeking students attending Temple prior to formal admission into a degree program)

There is no formal application to enroll as a Continuing Studies student; however, first-time enrollers are asked to provide documentation of education completed (high school transcript, GED certificate, college transcripts [minimum 2.00 GPA required], or college diploma). First-year, non-degree-seeking students may register for a maximum of 11 credits per semester. Second-year, non-degree-seeking student registrations are based upon academic progress. However, undergraduate non-degree-seeking students are prohibited from registering via Self-Service Banner and must register through their Continuing Studies office. Continuing Studies students must apply for admission by the completion of 30 s.h. Preadmission counseling, academic advising, registration, and other support services are provided for non-degree-seeking students. Also see the Continuing Studies web site for more information.
Student Responsibilities

Every registered student agrees to abide by an overall set of values, principles and regulations mandated by the university. In order for a student to remain in good standing, it is imperative that each student assumes responsibilities throughout his/her enrollment at Temple. Students also have a number of rights which protect their interests. This section details these important responsibilities and rights.

Academic Honesty

Temple University believes strongly in academic honesty and integrity. Plagiarism and academic cheating are, therefore, prohibited. Essential to intellectual growth is the development of independent thought and a respect for the thoughts of others. The prohibition against plagiarism and cheating is intended to foster this independence and respect.

Plagiarism is the unacknowledged use of another person's labor, another person's ideas, another person's words, another person's assistance. Normally, all work done for courses -- papers, examinations, homework exercises, laboratory reports, oral presentations -- is expected to be the individual effort of the student presenting the work. Any assistance must be reported to the instructor. If the work has entailed consulting other resources -- journals, books, or other media -- these resources must be cited in a manner appropriate to the course. It is the instructor's responsibility to indicate the appropriate manner of citation. Everything used from other sources -- suggestions for organization of ideas, ideas themselves, or actual language -- must be cited. Failure to cite borrowed material constitutes plagiarism. Undocumented use of materials from the World Wide Web is plagiarism.

Academic cheating is, generally, the thwarting or breaking of the general rules of academic work or the specific rules of the individual courses. It includes falsifying data; submitting, without the instructor's approval, work in one course which was done for another; helping others to plagiarize or cheat from one's own or another's work; or actually doing the work of another person.

The penalty for academic dishonesty can vary from receiving a reprimand and a failing grade for a particular assignment, to a failing grade in the course, to suspension or expulsion from the university. The penalty varies with the nature of the offense, the individual instructor, the department, and the school or college.

Students who believe that they have been unfairly accused may appeal through the school or college's academic grievance procedure. For more information see Grievances (p. 41).

Attendance

Enrollment in a course presupposes intention to attend regularly. Attendance requirements should be announced by the instructor at the beginning of the course. The student who is absent for any reason is responsible for work missed. If a pattern of excessive absences develops, the instructor may report this fact to the student's advisor through the department in which the student is enrolled.

The student should understand that excessive absences may, at the option of the instructor, jeopardize the grade and/or continuance in the course. Although attendance is basically a matter between the student and the instructor, either may request the counsel of the advisor or the Office of the Dean in special cases.

Students should consult the policies and regulations of their own school or college for any further specifications of attendance policy.

Clearing Holds

A hold is an action placed on a student's record. Holds may affect a student's ability to register for courses, to apply for graduation, or to receive transcript services or degree audit reports.

Students may receive holds on their records for financial, academic, or disciplinary reasons. Students are obligated to resolve holds as quickly as possible, working with their academic advising office, student financial services, or other offices, as appropriate. Academic holds may be caused by failure to declare a major by the appropriate time, low GPA, or failure to make academic progress. Students receiving a "See College Dean" hold should meet with their academic advisor as soon as possible.

Code of Conduct

The Temple University Student Code of Conduct can be viewed at http://policies.temple.edu/getdoc.asp?policy_no=03.70.12. Printed copies are available at the Office of the Dean of Students.

Temple University has the responsibility to formulate and enforce rules of conduct which are necessary for the furtherance of its educational goals and essential activities. In particular, the university has an obligation to protect itself from any acts which tend to impede, obstruct, or threaten its normal operations. While this authority is inherent, the university attempts to delineate its expectations as clearly as possible and publish its regulations. Students, both as individuals and as members of student organizations, are responsible for apprising themselves of, and complying with, all applicable, existing regulations in the Undergraduate Bulletin and any regulations that may be subsequently promulgated through appropriate publications of the university community. Copies of Student Rights, the Code of Conduct, and the Disciplinary Procedure may be obtained from the Office of the Dean of Students (http://www.temple.edu/studentaffairs/deanofstudents).
The University Disciplinary Committee is responsible for administering the Student Code of Conduct. Violations of the university's Code of Conduct, including, among other things, theft, underage consumption of alcohol, disorderly conduct, plagiarism, and possession of a weapon, can result in a student being brought before the University Disciplinary Committee. A finding of responsibility may result in a fine, suspension, and/or permanent expulsion from the university. A disciplinary hold is placed on the student's record until sanctions are fulfilled. The hold prevents students from registering for courses, receiving their transcript or graduating.

**Financial Obligation to the University**

Being a Temple student means incurring a financial obligation to the university. An important part of taking responsibility for your education is to be aware of tuition and fee charges, payment and financial aid procedures, and all relevant deadlines, and to make sure that forms are submitted and bills paid on time. Even if someone else is paying the bills, you are responsible for remaining in good financial standing with the university. Failure to satisfy financial obligations, when due, can result in cancellation of your current registration, denial of the right to register for future sessions, delay in graduation, and withholding of official transcripts and diplomas after graduation. Unpaid balances are subject to referral to outside collection agencies or law firms.

Prior to registering for the first time each semester, students are required to accept Temple University's Financial Responsibility Agreement (http://bursar.temple.edu/billing/financial-responsibility-agreement), which outlines the financial terms and conditions associated with course registration.

Your registration for courses is not final until all applicable tuition and fees are paid through the Office of the Bursar. For information on registration, its financial aspects, and the impact of registration changes on your financial obligation to the university, please see Registration (p. 33).

For current tuition rates and fees, see Tuition and Fees (p. 125) and the Bursar's Office (http://bursar.temple.edu) web site. For information and instructions concerning the electronic bill, online tuition payments and answers to frequently asked billing questions, please visit the Bursar's Office (http://bursar.temple.edu) web site.

For information about Financial Aid, Financial Aid requirements for satisfactory academic progress, and the impact of registration changes on your eligibility for aid, see Student Financial Aid (p. 137) and the Student Financial Services (http://sfs.temple.edu) web site.

For information on campus housing and meal plans, see Student Support and Services (p. 69) and the Office of University Housing and Residential Life (http://housing.temple.edu) web site.

See your school’s or college’s policies on graduation procedures for information on the impact of unmet financial obligations on clearance for graduation.

**Health and Safety Issues**

**Alcohol Policy**

In accordance with Pennsylvania law, no individual under the age of 21 may possess or consume alcohol on university property. Student organizations may not serve alcohol at campus events. The use of alcohol in the residence halls and university-owned housing is covered in the Proprietary Policies developed by the Office of University Housing and in the Student Code of Conduct. Please also see the university’s Student Drug and Alcohol Policy (http://policies.temple.edu/getdoc.asp?policy_no=03.70.01), Student Code of Conduct (http://policies.temple.edu/getdoc.asp?policy_no=03.70.12) and the Resources, Rights & Responsibilities Guide (http://housing.temple.edu/resources-and-services/rights-and-responsibilities).

**Drug Policy**

The unlawful manufacture, distribution, dispensation, possession or use of controlled substances in any facility or work site of Temple University is strictly prohibited. Please see the university’s Student Drug and Alcohol Policy (http://policies.temple.edu/getdoc.asp?policy_no=03.70.01).

**Immunizations**

Under Pennsylvania state law, all students living in university-owned or -operated housing are required to submit proof of a one-time meningococcal vaccination, or submit a signed waiver. In addition, entering students are strongly advised to submit to Student Health Services proof of two measles immunizations (usually given as MMR), or serologic proof of measles immunity. Other immunizations that are routinely recommended for college students are rubella, mumps, diphtheria-tetanus, varicella (chickenpox) for those who have not had the disease, and Hepatitis B. Some students may also need Hepatitis A, IPV (polio booster), pneumococcal, or influenza vaccines; check with your doctor.

Students from countries with a high rate of tuberculosis must be screened for the disease. These students will be informed of how to complete this screening. Prior BCG vaccination does not exempt students from this evaluation.

**Medical Fees and Insurance**

Students are responsible for any medical fees incurred outside of Student Health Services, including those incurred at Temple University Hospital. Group medical insurance is offered at the beginning of each semester through the Benefits Office. Full-time students may enroll for health coverage in the months of September (effective September 1) or February (effective March 1). Students are urged to carry this insurance or a comparable policy. Students who are insured should keep in their possession the receipt of the above group policies or identification cards for other policies. All new and continuing international students in both J-1 and F-1 status are required to carry health insurance that meets certain minimum standards determined by the United States Information Agency (USIA). These students will be enrolled in the Low Option of Blue Cross/Blue Shield Plan, as well
as the International Group Services Plan. More information is available on the Benefits (http://www.temple.edu/hr/students) web site and by calling 215-204-1321.

**International Students**

Temple University requires all new and continuing international students in Nonimmigrant Student (both F-1 and J-1) status to carry health insurance that meets certain minimum standards determined by the United States Department of State. More information is available on the Benefits (http://www.temple.edu/hr/students/healthinsurance/international.htm) web site.

All international students in Nonimmigrant Student (F-1 and J-1) status must maintain their nonimmigrant status insofar as regulations of the United States Citizenship and Immigration Services (USCIS) and the United States Department of State (DOS) are concerned. In general, students in this status must complete a full-time course load each academic term while they remain in the United States and must not accept unauthorized on-campus or off-campus employment. More information is available on the Current Students (http://www.temple.edu/isss/current-students/status.html) page of the International Student and Scholar Services web site.

Eligibility for employment for individuals in Nonimmigrant Student (F-1 and J-1) status is based on regulations of the USCIS and the DOS. More information is available on the Employment Information (http://www.temple.edu/isss/employment) page of the International Student and Scholar Services web site.

Major medical health insurance is required for all international students in Nonimmigrant Student (F-1 and J-1) status. International students are required to submit to the university's Benefits Office evidence of coverage by a health insurance policy that meets the minimum coverage required by Temple University (consistent with standards established by the United States Department of State): maximum deductible of $500 per accident or illness; payment of at least 75% of covered medical expenses; maximum benefit of $50,000 per accident or illness; repatriation benefits of no less than $7,500; and medical evacuation benefits of no less than $10,000. Students may also purchase such health insurance upon arrival at Temple University. For further information, please contact the university's Benefits Office at 215-926-2270 or e-mail StudentInsurance@temple.edu. For detailed information please see www.temple.edu/hr/students/index.html.

In addition, international students must demonstrate that they are free of active tuberculosis by submitting to Student Health Services a Tuberculosis Screening Record which has been certified by a licensed physician. International students may meet this requirement upon arrival at Temple University by taking a PPD test at Student Health Services (http://www.temple.edu/studenthealth).

A mandatory orientation session is held for new international students at the beginning of each academic term. For more information, please see the International Student and Scholar Services (http://www.temple.edu/isss/future-students/orientation-international.html) web site and the Office of Orientation (http://www.temple.edu/studentaffairs/orientation) web site.

For more information about maintaining Nonimmigrant Student (F-1 and J-1) status, please see www.temple.edu/isss/index.html.

**Registration**

Students must be appropriately registered for courses to receive credits and grades. Students not registered will not receive a grade or credit for a course. Go to Self-Service Banner in the TUPortal (https://tuportal3.temple.edu/cp/home/displaylogin) to confirm your billing and registration status. If you add or drop a course, or revise your class schedule, check Self-Service Banner to make sure that your registration record is accurate. Be warned, if you are registered for a course but don’t attend, you will be held financially responsible and receive a grade.

**Temple E-mail Accounts**

All students are required to obtain a Temple e-mail address and follow guidelines for university use of e-mail; the policy establishes your Temple e-mail account as an approved channel of communication for sending you official university notifications and important information. Visit https://accounts.temple.edu/ in order to activate your account.
Student Rights

Academic Rights and Responsibilities

Temple University students who believe that instructors are introducing extraneous material into class discussions or that their grades are being affected by their opinions or views that are unrelated to a course's subject matter can file a complaint under the university's policy on academic rights and responsibilities (Temple Policy 03.70.02 [http://policies.temple.edu/getdoc.asp?policy_no=03.70.02]).

The policy encourages students to first discuss their concerns with their instructor. If a student is uncomfortable doing so, or if discussions with the instructor do not resolve the student's concerns, an informal complaint can be made to the Student Ombudsperson for the student's school or college. Unresolved complaints may be referred to the dean for handling in accordance with the school or college's established grievance procedure. Final appeals will be determined by the Provost.

Course Syllabus

Instructors are required to supply a detailed syllabus explaining course rules and expectations for courses in which you are enrolled. The content requirements for course syllabi are enumerated on the Temple Policies & Procedures web site in Temple Policy 02.78.13 [http://policies.temple.edu/getdoc.asp?policy_no=02.78.13].

Student Feedback Form (SFF)

Each course (with few exceptions) is required to employ a standard form for student evaluation of courses and teaching. Please fill out the SFF forms thoughtfully at the end of your course. (Temple Policy 02.78.14 [http://policies.temple.edu/getdoc.asp?policy_no=02.78.14])

FERPA/Privacy Guidelines

As is required by the Family Educational Rights and Privacy Act (FERPA) of 1974, with certain exceptions, generally Temple University cannot disclose a student's education records without the written consent of a student or without proof by a parent that the student is dependent on his/her parents for federal income tax purposes.

FERPA provides the following rights for students and for the parents of dependent students, as described above, attending Temple University:

- The right of a student, with minor limitations, to inspect and review his or her education records;
- The right to request amendment of a student's education records to ensure that they are not inaccurate, misleading, or otherwise in violation of the student's privacy or other rights;
- The right, with certain exceptions, to consent to disclosures of personally identifiable information contained in the student's education records;
- The right to withhold public disclosure of any or all items of so-called "Directory Information" by written notification to the Office of the Dean of Students within two weeks after publication of this notice. Under current university policy, the item "Directory Information" includes a student's name, street address, e-mail address, confirmation of enrollment status (full-time/part-time), dates of attendance, degree received, awards received (e.g., Dean's List), major field of study, participation in officially-recognized activities and sports, and weight and height of members of athletic teams.
- The right to file a complaint with the United States Department of Education concerning the alleged failure of Temple University to comply with the requirements of FERPA and of the implementing regulations.

The procedures for exercising the above rights are explained in the Policy Regarding Confidentiality of Student Records [http://policies.temple.edu/ferpa], copies of which are available in the Office of the Dean of Students [http://www.temple.edu/studentaffairs/deanofstudents/parent-resources/ferpa] and on the Temple Policies & Procedures web site in Temple Policy 03.20.11 [http://policies.temple.edu/getdoc.asp?policy_no=03.20.11]. Included in this policy is a description of the types and locations of educational records maintained by the university.

If you or your parents' primary or home language is not English, upon your request, reasonable efforts will be made to provide you with a translated copy of this "Annual Notice," as well as with "Temple University's Guidelines Pertaining to Confidentiality of Student Records."

Please note that, in compliance with a 1997 federal statute designed to advance military recruiting, Temple may release dates of birth to the military unless the student notifies Temple that he or she wishes this information withheld.

FERPA Waiver

A student may consent to the release of information from education records to parents, guardians or other appropriate persons. The students may provide the university with their consent by completing the FERPA waiver online via TUportal [http://tuportal.temple.edu]. Once logged into TUportal, click on the "Self-Service Banner" link, then click the "Student" link, and then the "FERPA Contacts" link. After reading the informational text, click the "New Contact" link and enter the requested information before clicking the "Submit Changes" link.

Americans with Disabilities Act (ADA)

Under the Americans with Disabilities Act (ADA), Section 504 of The Rehabilitation Act of 1973, and Section 508 of the Rehabilitation Act of 1998, Temple University strives to make programs, activities and services accessible for persons with disabilities. Disability Resources and Services (DRS) is
the department that facilitates access for students with disabilities at the university. Please see the Student Services (p. 69) section of the Bulletin for information on Disability Resources and Services.

**Protection from Discrimination and Harassment**

**Office of Equal Opportunity Compliance**

Sandra A. Foehl, Director, Title IX Coordinator and ADA Coordinator
sandra.foehl@temple.edu
215-204-6772

Tracey Hamilton, Assistant Director
tracey.hamilton@temple.edu
215-204-7438

Sullivan Hall, 2nd Floor Mezzanine
Fax: 215-204-8897
www.temple.edu/eoc

**Equal Opportunity**

Temple University is committed to a policy of equal opportunity for all in every aspect of its operations. The university has pledged not to discriminate on the basis of individuals' protected characteristics or statuses: age, color, disability, marital status, national or ethnic origin, race, religion, sex (including pregnancy), sexual orientation and gender identity, veteran status and genetic information.

Temple University's equal opportunity/affirmative action program has these inclusive objectives: To support the admission and successful participation of disadvantaged students, students with disabilities, and those for whom English is a second language; and to employ and advance in employment qualified women, minorities, individuals with disabilities, Armed Forces service medal veterans, disabled veterans, recently-separated veterans, and other protected veterans.

Temple University's equal opportunity/affirmative action program complies with federal regulations. For more information or to review Temple's Affirmative Action Program, contact the Office of Equal Opportunity Compliance.

**Discrimination**

A student or employee who thinks he or she is being discriminated against or harassed because of a protected characteristic or status should contact the Office of Equal Opportunity Compliance. It is this office's responsibility to help the student or employee file a complaint through the appropriate grievance procedures and to investigate complaints of discrimination and harassment.

**Sexual Harassment**

Temple University is committed to providing a learning, working, and teaching environment that emphasizes the dignity and worth of every member of its community, free from discriminatory conduct. Sexual harassment in any form or context, including all forms of sexual violence (sexual assault, domestic violence, dating violence, stalking), is inimical to this and will not be tolerated. Sexual harassment subverts the mission and the work of the university and can threaten the career, educational experience, and well-being of students, faculty, and staff.

The university recognizes that sexual harassment may occur regardless of the formal position or status of each person involved. Sexual harassment is especially offensive, however, when it occurs in relationships between teacher and student or between supervisor and subordinate. In those situations, sexual harassment exploits unfairly the power inherent in the position of the faculty member or supervisor.

Sexual harassment also constitutes a form of sex discrimination that is illegal under Title VII of the Civil Rights Act of 1964, Title IX of the Education Amendments Act of 1972, as amended, and state law. The university recognizes that sexual assault may also be considered sexual harassment.

**Complaint Resolution Procedures**

Persons who feel they have been victims of discrimination or harassment may make an informal complaint to any Equal Opportunity (EO) Ombudsperson or to the Office of Equal Opportunity Compliance. For a list of the names of the EO Ombudspersons designated in a specific school, college, or administrative unit, contact the Dean's Office or visit the EO Ombudspersons (http://www.temple.edu/eoc/AppDev/ombuds.asp) web page, which includes photographs of the current EO Ombudspersons.

Students, faculty members, and staff members may bring a formal administrative complaint of discrimination or harassment by filing a complaint directly with the university's Office of Equal Opportunity Compliance.

Procedures for reporting a complaint of sexual assault are set out in the university policy Preventing and Addressing Sexual Assault, Domestic Violence, Dating Violence, and Stalking (http://policies.temple.edu/getdoc.asp?policy_no=04.82.02). This policy and university policies on preventing and
addressing discrimination and harassment and sexual harassment can be reviewed at the Equal Opportunity Compliance (http://www.temple.edu/eoc) web site.

**Grievances**

Title IX of the Education Amendments Act of 1972 requires that each college or university establish due process for the resolution of academic grievances. Undergraduate students enrolled at Temple University have the right to appeal any academic or non-academic matter in which they feel they have been treated unfairly.

While each school and college at Temple University has established and adheres to its own grievance procedure, all have in common the following steps:

1. Students attempt resolution through discussion with the instructor.
2. Failing agreement, students present appeals to the chair of the department, specifying the nature of the grievance, the result of the previous discussion, and the resolution sought.
3. Failing agreement at the department chair level, students may appeal to the Office of the Dean of the College.
4. When appeals warrant review beyond the school or college, students, faculty members, or the dean’s office may appeal to the Senior Vice Provost for Undergraduate Studies.

Details that may vary from school to school include the involvement of a student-ombudsperson; the constitution of grievance hearing committees, which may be a part of either step two or three; and time limits, both for students’ filing and for the administrative response.

Students should be advised that filing a formal grievance, that is, beyond the level of the instructor, is serious and should be avoided until all informal methods of adjudication have been used.

For further information on academic grievance procedures, students should inquire in their dean's office or with an advisor or the student-ombudsperson in the relevant school. For non-academic grievances, further information is available in the Dean of Students' Office, 215-204-7188 or the Dean of Students (http://www.temple.edu/studentaffairs/deanofstudents) web site. (Temple Policy 03.70.12 (http://policies.temple.edu/getdoc.asp?policy_no=03.70.12))

**Instructor Office Hours**

Full-time faculty are required to hold a minimum of three office hours per week and should schedule one hour immediately before or after one of the scheduled class meeting times for each course. Adjunct instructors are required to schedule one office hour per week for each class they teach and should schedule that hour either immediately before or after one of the scheduled class meeting times for that course. Make it a point to talk with your instructors about your academic work and progress. (Temple Policy 02.78.12 (http://policies.temple.edu/getdoc.asp?policy_no=02.78.12))

**Non-Smoking Policy**

Temple University is committed to providing a smoke-free environment for everyone at Temple. All university facilities are designated as non-smoking. In addition, all indoor Temple University-sponsored activities that take place in facilities not owned or operated by Temple University are smoke-free in those areas under Temple’s control. This policy will be enforced according to established university policies and procedures. (Temple Policy 04.62.11 (http://policies.temple.edu/getdoc.asp?policy_no=04.62.11))

**Student Services Office Hours**

All Temple University offices directly serving students will maintain uniform business hours (8:30 a.m. to 5:00 p.m.). (Temple Policy 04.31.11 (http://policies.temple.edu/getdoc.asp?policy_no=04.31.11))
Academic Opportunities

Experiential Learning

Internships

Internships give students the opportunity to capitalize on what they are learning in the classroom and apply it in a work setting. Internships help students to build and enhance their skills, provide practical experience so often sought by employers, and offer excellent opportunities to establish contacts in their career field. Professional internships are available both on- and off-campus, and may be paid, unpaid and completed for academic credit in many majors. Internships for all academic majors are posted in the OwlNetwork, the university-wide internship posting system managed by the Career Center. To access the OwlNetwork, go to www.temple.edu/provost/careercenter. To obtain information about receiving academic credit for an internship, students should contact their respective school or college.

Temple Volunteers, the university's Office of Community Service, is dedicated to providing students with the resources and guidance necessary to immerse themselves in action for positive social change. As a team of administration, staff, and student leaders, we work to establish strong relationships within and beyond the Temple campus through community service. Temple Volunteers offers everything from one-day service activities to long-term opportunities and alternative break programs. For more information, visit www.temple.edu/community.

First Year & Transfer Programs

Michele O’Connor, Associate Vice Provost
500 Conwell Hall
215-204-0550
michele.oconnor@temple.edu

University Seminar Series

First-Year (Freshman) Student Seminars

First-Year (Freshman) Student Seminars (http://www.temple.edu/vpus/opportunities/FirstYearSem.htm) are academic courses designed to support student learning and development in the critical first semester of college. UNVS 1001 can be taken as part of a Learning Community or as a stand-alone course. College-specific seminars are offered by the College of Liberal Arts, College of Science and Technology, the School of Media and Communication, and the Center for the Performing and Cinematic Arts.

UNVS 1001 is a 1-credit course that introduces first-year students to the opportunities and rigors of higher education, as well as to the skills needed to use academic resources successfully in college. The topics covered in the seminar help first year students articulate and reach their academic goals.

UNVS 1002 is a 1-credit course that introduces first-year students to the opportunities to discover major interests through applied learning and other career-oriented experiences. The course exposes students to career paths and encourages major exploration through discussions with faculty, informational interviews, readings, and opportunities to practice skills needed to be a more effective student.

UNVS 1003 is a 3-credit course that includes instruction in all four language skills (reading, writing, and listening). It also focuses on additional academic skills and strategies necessary for students to succeed in undergraduate courses. Emphasis will be on critical thinking and independent research along with the introduction to technologies that support course requirements.

UNVS 1006 is a 1-credit course that provides students instruction in critical thinking skills. Through the study of historical and contemporary learning theories and research-based cognitive strategies, students will be able to meaningfully reflect upon their learning and have an opportunity to develop and implement techniques to improve their success.

Sophomore Seminar

UNVS 2001 is a 1-credit academic course that provides sophomores opportunities to work on professional planning and development. Topics will include individual strengths exploration, academic majors, potential career paths, internship preparation, research opportunities, campus involvement, graduate school preparation, and career transition preparation.

Transfer Seminar

UNVS 2002 is a 1-credit academic course that introduces new transfer students to the opportunities and resources at Temple University. The course is designed to assist students in their transition as well as assist in preparing them for their future career/educational plans.

Global Citizenship Seminar

UNVS 2003 is a 1-credit academic course that assists students in their development of global perspectives and competencies that are important for successful navigation of the world. This course explores topics and themes related to helping students prepare to move forward as global citizens.
Junior Seminar
UNVS 3001 is a 1-credit academic course that provides junior-level students with an opportunity to work on pre-professional planning and development. It will focus specifically on preparation for post-graduate educational opportunities and entrance exams for graduate and professional programs.

Peer Mentor Development Seminar
UNVS 3002 is a variable credit course (0 to 1 credit) that introduces students to content and communication skills identified as integral to serving as a peer mentor in the college setting. Through this course, students become proficient guides to Temple and community resources, well-versed in college and academic success strategies, and equipped with effective interpersonal communication skills.

Resident Assistant Development Seminar
UNVS 3003 is a 1-credit course that introduces students to topics and issues pertaining to the Resident Assistant (RA) position. Students in this course will be exposed to leadership and student development theories, practical strategies related to community building, crisis management and conflict resolution, and inclusivity concepts. This class examines a theoretical exploration of residential life and will not encompass the entire resident assistant role. Course material will be grounded in student development theory as well as experiential learning. Students will discuss experiences using their first few months as a Resident Assistant to learn from each other and develop best practices.

Learning Communities
A Learning Community consists of two or more linked courses designed to provide students with a more integrated and meaningful learning experience. Learning Communities foster an intellectual environment where learning can flourish and help smooth the transition to college by providing an opportunity for students to form bonds with fellow first-semester students who are in these same classes.

Many learning communities include a section of UNVS 1001. Learning Communities meet General Education, foundational, or academic requirements.

Learning Communities are designed primarily for the special student populations. During New Student Orientation, an academic advisor will help students select the learning communities which best meet their academic interests and needs.

Living Learning Communities (LLCs)
LLCs enhance students’ academic, personal, and professional growth by offering dedicated residential communities ranging from thematic to academic interests. LLCs bring together a challenging curriculum with co-curricular experiences that expand learning beyond the classroom and integrate it with daily campus life. For more information go to http://housing.temple.edu/.

Online Learning
Daniel L. White, Ph.D., Director
Office of Digital Education
Suite 403 - TECH Center
215-204-7701

Temple University’s Online Learning Program is designed to give students a rigorous, high-quality education that provides more flexibility in when and how they attend classes. Courses are offered at both the undergraduate and graduate levels and also for continuing education students.

Continuing degree-seeking (matriculated) students can register online via Self-Service Banner in the TUportal (https://tuportal4.temple.edu/cp/home/displaylogin). Non-degree seeking students must register through the Office of Continuing Studies at 1810 Liacouras Walk, First Floor, Room 101 (215-204-2500). Non-degree seeking students can obtain their registration forms online (www.temple.edu/vpus/arc/) and submit them by fax to 215-204-2516.

How online learning works: Each week, a student will access Blackboard to view assignments and reading materials, and may even participate in virtual classes (when scheduled). The Online Learning Program offers virtual and on campus sessions to help students familiarize themselves with the university's online interactive audio and video online tools and with the library's online databases before enrolling in an online course.

The Online Learning Program provides access to over 300 course titles via online, blended, virtual, and videoconferencing formats. In addition, the following programs can be completed entirely online:

1. Bachelor of Business Administration (Fox School of Business and Management)
2. Master of Business Administration (Fox School of Business and Management)
3. Doctor of Physical Therapy Program (College of Public Health)
4. Doctor of Occupational Therapy (College of Public Health)
5. Master of Science in Regulatory Affairs and Quality Assurance (School of Pharmacy)
6. Master of Science in Digital Innovation in Marketing (Fox School of Business and Management)
For successful completion of an online course, students are recommended to have daily access to a computer with a fast internet connection (DSL or cable type of connections are recommended). Visit the Online Learning Program's web site (http://online.temple.edu) for more information.

**Pre-Professional and Pre-Graduate Programs**

**Pre-Law Program**

Temple offers undergraduates a wide range of courses, programs of study, and majors that will contribute to their preparation for law school and for a career in the legal or a related profession. Temple undergraduates will find numerous opportunities to sharpen their critical thinking, reading and writing skills, both in and out of the classroom. Interested students can participate in the Mock Trial Team, get involved in the pre-law organizations (Phi Alpha Delta and the Pre-Law Society), or undertake an internship in the Philadelphia area. Speakers on legal issues, on careers in law, and on preparing for the LSAT provide additional opportunities for the Temple student to learn more about the study of law and prepare for the intellectual challenges ahead.

Entering first-year students in the College of Liberal Arts and the Fox School of Business and Management can apply for the Temple Law Scholars Program, an early assurance program offered by Temple University's Beasley School of Law. See the Special Admissions Programs section of the Bulletin for details.

**Pre-Professional Health Studies**

Neida Perez, Ed.M., Director  
Pre-Professional Health Studies  
1810 Liacouras Walk, Suite 100  
215-204-2513  
healthadvising@temple.edu  
www.temple.edu/healthadvising

Advising offered by the office of Pre-Professional Health Studies supplements the academic advising (course registration, major requirements and graduation review) provided by the Academic Advisors in the student's primary college which is based on their Major program of study. The office assists students in their academic and experiential preparation for programs in dentistry, medicine, optometry, pharmacy, podiatry, and veterinary medicine or for graduate study in Physical Therapy, Occupational Therapy and Physician Assistant Programs.

Beginning with our electronic (ePortfolio) system as well as special sections of the First-Year Seminar designed specifically for students interested in preparing for a career as a health care professional, advising through Pre-Professional Health Studies will help students stay organized as they identify tracks / programs best suited to their interests in the health care professions. Temple undergraduates will find numerous opportunities both in and out of the classroom to develop the knowledge, skills, and experiences to prepare them for their future endeavors. Temple also offers research opportunities in a wide range of academic disciplines of interest to pre-professional health studies students, and funding is available to support undergraduate research and travel to present at conferences.

**Health Scholar Programs**

**Pre-Med Health Scholars**

The Pre-Med Health Scholar Program is offered to highly talented High School Seniors interested in pursuing a career as a physician. It is designed to recruit exceptional students to Temple University by offering a Linkage Agreement with Lewis Katz School of Medicine at Temple University. Students entering Temple University as Pre-Med Health Scholars may consider an Accelerated BA/MD (3+4) Degree option.

**Dentistry, Pharmacy, Physical Therapy, and Podiatry Accelerated Programs**

Accelerated Programs allow Pre: Dentistry, Pharmacy, and Podiatry (3+4 Tracks) as well as Physical Therapy (3+3 Track) students the option of earning both their Bachelor of Arts and Graduate degrees in a shorter period of time after successfully passing all courses in the first year of professional school.

*Accelerated program Applications for interested entering freshman are available on the health advising web site. Completed applications are due by the end of the first semester at Temple University.* The Accelerated BA/DMD, BA/PharmD, BA/DPM, or DPT Programs are designed for high-achieving students who have distinguished themselves with impressive high school and first semester of college academic records and a demonstrated interest in their respective field.

**Applying to Temple for the entering class of 2016 and beyond**

*NOTE: Beginning with the Temple University entering class of 2016, applications to the Accelerated Programs for Dentistry, Pharmacy, and Podiatry (3+4 Tracks) as well as Physical Therapy (3+3 Track) will be available online and will be due before a student enters Temple University. (Due Date: 1/19/2016 for the entering class of 2016.) Applicants will therefore know their accelerated option status before entering Temple University.*

**Military Science (ROTC) Credits Applicable for Graduation**

Undergraduate students whose degree programs allow for free electives (those beyond required course credits needed to satisfy university General Education or Core, school or college, and major requirements) may be able to apply up to 12 credits of upper-division military science courses toward
the total number of credits required for graduation. The allowable military science credits applicable toward graduation requirements include four upper-

The courses for which credits may be applicable to graduation include:

<table>
<thead>
<tr>
<th>Department</th>
<th>Course #</th>
<th>Course Name</th>
<th>Credits</th>
<th>Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Military Science</td>
<td>MLSC 3001</td>
<td>Applied Leadership &amp; Management I</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Military Science</td>
<td>MLSC 3002</td>
<td>Applied Leadership &amp; Management II</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Military Science</td>
<td>MLSC 4001</td>
<td>Advanced Leadership &amp; Management I</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Military Science</td>
<td>MLSC 4002</td>
<td>Advanced Leadership &amp; Management II</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Aerospace Studies</td>
<td>AIRF 3011</td>
<td>Air Force Leadership Studies I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Aerospace Studies</td>
<td>AIRF 3021</td>
<td>Air Force Leadership Studies I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Aerospace Studies</td>
<td>AIRF 4031</td>
<td>National Security Affairs I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Aerospace Studies</td>
<td>AIRF 4041</td>
<td>National Security Affairs II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Naval Science</td>
<td>NAVS 3001</td>
<td>Naval Ships Systems I: Engineering</td>
<td>3</td>
<td>Fall only</td>
</tr>
<tr>
<td>Naval Science</td>
<td>NAVS 3002</td>
<td>Naval Ships Systems II: Weapons</td>
<td>3</td>
<td>Spring only</td>
</tr>
<tr>
<td>Naval Science</td>
<td>NAVS 3003</td>
<td>Evolution of Welfare</td>
<td>3</td>
<td>Fall only</td>
</tr>
<tr>
<td>Naval Science</td>
<td>NAVS 4001</td>
<td>Naval Operations and Seamanship</td>
<td>3</td>
<td>Fall only</td>
</tr>
<tr>
<td>Naval Science</td>
<td>NAVS 4002</td>
<td>Leadership &amp; Ethics</td>
<td>3</td>
<td>Spring only</td>
</tr>
<tr>
<td>Naval Science</td>
<td>NAVS 4003</td>
<td>Amphibious Welfare</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

For more information about the applicability of ROTC, NROTC and AFROTC courses for graduation credit, please call the Office of the Senior Vice Provost for Undergraduate Studies (215-204-2044).

**Military Science - Army Reserve Officers' Training Corps (Army ROTC)**

Gregory J. Nardi, Lieutenant Colonel
Ritter Hall, Lower Level
215-204-7480 or 215-204-2482
Fax: 215-204-7481
http://www.goarmy.com/rotc/schools/temple-university.html

Through a curriculum offered by the Temple Department of Military Science, qualified full-time students can earn a commission as an Active Duty, Reserve, or National Guard Officer, while concurrently satisfying academic requirements for a baccalaureate or graduate degree. Interested students not convinced that a career in the military is right for them can also learn more about how The Army of the United States selects and trains its future leaders and conducts operations on a day-to-day basis.

Military Science courses are open to all Temple students. There is no requirement for students taking Military Science courses to enroll in the commissioning program. Students taking Military Science courses are under no military service obligation of any kind if not enrolled in the commissioning program.

Students enrolled in the commissioning program incur either an active duty or reserve forces duty commitment commencing upon successful completion of the ROTC Advanced Course program and graduation from college. Temple's Department of Military Science offers both two-year and four-year curricula leading to a commission in the United States Army.

**Army Reserve Officers' Training Corps (AROTC) Four-Year Commissioning Program**

The Four-Year Program consists of two phases: the Basic Course and the Advanced Course.

In the Basic Course, the student takes one Military Science course each semester during the freshman and sophomore years. This instruction orients the student to activities frequently encountered during military service. Though students may voluntarily participate in weekend exercises and ROTC-sponsored events, they are under no obligation to do so. Additionally, students enrolled in the Basic Course are under no obligation for present or future military duty.
During the Advanced Course (normally the junior and senior years), the student receives instruction designed to enhance leadership abilities; reinforce managerial, supervisory, and accountability skills; and further develop the individual's foundation of military knowledge. The highlight of this instruction is the student's attendance at the five-week Cadet Summer Training Course, usually during the summer between the junior and senior years. The camp is a series of rigorous leadership challenges in which the Temple student competes against students from 272 other colleges and universities. Advanced Course students (enrolled in the commissioning program) receive a tax-free stipend (juniors - $450.00 per month and seniors - $500 per month) each year of the Advanced Course. When students complete the Advanced Course, they are obligated to accept a commission as a Second Lieutenant and upon graduation from college, incur either an active duty or reserve forces duty service commitment in the United States Army.

Two-Year Commissioning Program
The Two-Year Program consists of the Advanced Course and is open to any qualified full-time graduate or undergraduate student who has at least two years of academic study remaining at Temple University and has completed the Basic Course or its equivalent. Basic Course equivalency can be granted for prior active or reserve military service. Additionally, Temple students can receive this equivalency by attending a five-week Cadet Summer Training Program at Fort Knox, Kentucky. Following successful completion of this challenging program, the student is eligible to enter the ROTC Advanced Course. Students attending the Cadet Summer Training can incur a military obligation, and they are required to enroll in the ROTC Advanced Course. Students of exceptional academic accomplishment may qualify for Basic Course Placement Credit without being required to attend Cadet Summer Training. If you are a sophomore or junior with between 54-65 credit hours completed, please contact us for additional information at 215-204-7480/4453/2482.

Scholarships
The Military Science Department administers the Army Scholarship Program, which includes numerous options. The scholarships are awarded based on local and national competitions and are for four, three, and two years. The scholarships pay tuition or room and board, a $1200 annual allowance for books and lab fees, and a monthly stipend that varies between $300 to $500 a month. The scholarships are awarded based on academic merit, and a student need not be enrolled in Army ROTC to apply. Inquiries should be directed to:

Mrs. Jackie Hankins-Kent
Administrative Officer
Department of Military Science/ROTC
Ritter Hall - Lower Level, Room 4A
215-204-7480/9622

Course Offerings
Military Science (Army ROTC)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MLSC 1001</td>
<td>Introduction to Military Science I</td>
<td>Fall</td>
<td>1</td>
</tr>
<tr>
<td>MLSC 1002</td>
<td>Introduction to Military Science II</td>
<td>Spring</td>
<td>1</td>
</tr>
<tr>
<td>MLSC 2001</td>
<td>Small Unit Operations and Leadership I</td>
<td>Fall</td>
<td>1</td>
</tr>
<tr>
<td>MLSC 2002</td>
<td>Small Unit Operations and Leadership II</td>
<td>Spring</td>
<td>1</td>
</tr>
</tbody>
</table>

Advanced Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MLSC 3001</td>
<td>Applied Leadership and Management I</td>
<td>Fall</td>
<td>2</td>
</tr>
<tr>
<td>MLSC 3002</td>
<td>Applied Leadership and Management II</td>
<td>Spring</td>
<td>2</td>
</tr>
<tr>
<td>MLSC 4001</td>
<td>Advanced Leadership and Management I</td>
<td>Fall</td>
<td>2</td>
</tr>
<tr>
<td>MLSC 4002</td>
<td>Advanced Leadership and Management II</td>
<td>Fall</td>
<td>2</td>
</tr>
<tr>
<td>MLSC 4003</td>
<td>Leadership Lab (All semesters)</td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>

Enrollment is open to all students, but full participation in some of the military training is limited to students enrolled in the commissioning program. Contact the Military Science Department for details.

Military Science Faculty
Gregory J. Nardi, Lieutenant Colonel, Armor, Professor of Military Science, B.S. - United States Military Academy, MBA - Touro University International, M.S. - U.S. Army Command and General Staff College.

Jaan E. Sarapuu, Captain, Engineer, Assistant Professor of Military Science/Battalion Executive Officer, M.S.-Temple University.

Scott M. McLaughlin, Master Sergeant, Commandant of Cadets and Senior Military Instructor.

Mr. Marco Young, Recruitment Officer, B.S. - Drexel University (e-mail: myoung01@temple.edu).

Aerospace Studies - Air Force Reserve Officer Training Corps (AFROTC)
Department of Aerospace Studies
Saint Joseph's University
5600 City Avenue
Students are eligible to participate in the Air Force Reserve Officer Training Corps (AFROTC) through an agreement with Saint Joseph's University. All aerospace studies courses will be held on the Saint Joseph's University campus, although students can register through Temple's Self Service Banner system for their AFROTC courses. The AFROTC program enables highly qualified college students to earn a commission as an Air Force officer while concurrently satisfying requirements for his or her baccalaureate degree.

AFROTC offers a three- or four-year curriculum leading to a commission as a Second Lieutenant in the United States Air Force (USAF). In the four-year curriculum, a student (cadet) takes General Military Course (GMC) classes during the freshman and sophomore years, attends a four-week summer training program between the sophomore and junior years, and then takes Professional Officer Course (POC) classes during the junior and senior years. Cadets in the three-year curriculum will be dual-enrolled in both GMC classes during the sophomore year, attend a summer training program, and take POC classes during the junior and senior years. A cadet is under no contractual obligation with the USAF until entering the POC or accepting an AFROTC scholarship. The GMC curriculum focuses on the scope, structure, organization and history of the USAF with an emphasis on the development of airpower and its relationship to current events. The POC curriculum concentrates on the concepts and practices of leadership and management, and the role of national security forces in American society.

In addition to the academic portion of the curricula, each cadet participates in a two-hour Leadership Laboratory each week. Leadership Laboratory utilizes the cadet organization designed for the practice of leadership and management techniques.

Further information on the AFROTC program at Saint Joseph's University can be found at https://sites.sju.edu/afrotc/, or students can contact detachment personnel directly at:

Unit Admissions Officer
AFROTC Detachment 750
Saint Joseph's University
Philadelphia PA 19131
610-660-3190
rotc@sju.edu
https://sites.sju.edu/afrotc/

### Course Offerings

**Aerospace Studies (Air Force ROTC) Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIRF 1011</td>
<td>Foundations of the United States Air Force I (Fall)</td>
<td>1</td>
</tr>
<tr>
<td>AIRF 1012</td>
<td>Air Force Leadership Laboratory I (Fall)</td>
<td>0</td>
</tr>
<tr>
<td>AIRF 1021</td>
<td>The Foundation of the United States Air Force II (Spring)</td>
<td>1</td>
</tr>
<tr>
<td>AIRF 1022</td>
<td>Air Force Leadership Laboratory II (Spring)</td>
<td>0</td>
</tr>
<tr>
<td>AIRF 2031</td>
<td>The Evolution of U.S. Aerospace Power I (Fall)</td>
<td>1</td>
</tr>
<tr>
<td>AIRF 2041</td>
<td>The Evolution of U.S. Aerospace Power II (Spring)</td>
<td>1</td>
</tr>
<tr>
<td>AIRF 3011</td>
<td>Air Force Leadership Studies I (Fall)</td>
<td>3</td>
</tr>
<tr>
<td>AIRF 3021</td>
<td>Air Force Leadership Studies II (Spring)</td>
<td>3</td>
</tr>
<tr>
<td>AIRF 4031</td>
<td>National Security Affairs I (Fall)</td>
<td>3</td>
</tr>
<tr>
<td>AIRF 4041</td>
<td>National Security Affairs II (Spring)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Naval Science - Naval Reserve Officers’ Training Corps (NROTC)**

Director, Naval Science Department
University of Pennsylvania
NROTC Unit
417 Hollenback Building
3000 South Street
Philadelphia, PA 19104-6399
215-898-7436
Fax: 215-573-2067
nrotc@pobox.upenn.edu
www.vpul.upenn.edu/nrotc (http://www.vpul.upenn.edu/nrotc)

The Naval Reserve Officer’s Training Corps (NROTC) Program enables a college student to earn a commission in the Navy or the Marine Corps while concurrently satisfying requirements for a baccalaureate degree. Temple students are eligible to participate in NROTC through an agreement with the
University of Pennsylvania. Scholarship and non-scholarship programs are available and can be tailored to support students who join NROTC after the start of their freshman year or by the beginning of their sophomore year.

All NROTC students are required to enroll in NAVS 1003 during every semester they attend.

Navy-Option scholarship and College Program (non-scholarship) students must enroll in NAVS 1001 and NAVS 1002 during their freshman year, NAVS 2001 and NAVS 2002 during their sophomore year, NAVS 3001 and NAVS 3002 in their junior year, and NAVS 4001 and NAVS 4002 in their senior year.

Those seeking commissions in the Marine Corps will enroll in NAVS 1001 and NAVS 1002 during their freshman year, NAVS 2001 during their sophomore year, NAVS 3003 and NAVS 4003 during either their junior or senior year, and NAVS 4002 during their senior year only.

Temple students register for NROTC classes through the Temple Self Service Banner system and all naval science courses are held on the University of Pennsylvania campus.

Navy scholarship students must complete:

- 6 semester hours of calculus (not required for Nurse Corps candidates)
- 6 semester hours of calculus-based physics (not required for Nurse Corps candidates)
- 3 semester hours of American military history or national security policy (not required for Nurse Corps candidates)
- 3 semester hours of World Culture and Regional Studies (case-by-case waivers for Nurse Corps candidates)
- 6 semester hours of English

Marine-Option scholarship students must complete:

- 3 semester hours of American military history or national security policy
- 6 semester hours of English

College Program students must complete:

- 6 semester hours of college-level algebra or advanced trigonometry (one year of calculus is recommended)
- 6 semester hours of physical science courses (one year of calculus-based physics is recommended)
- 3 semester hours of American military history or national security policy
- 3 semester hours of World Culture and Regional Studies
- 6 semester hours of English

Students must check with their naval science instructors to determine specific courses that fulfill the above requirements and to determine which Naval Science courses receive credit within their degree plan.

In addition to the above, all students are required to attend Naval Science Drill (NAVS 1003), a 2-hour professional laboratory period each week (no academic credit) that emphasizes military drill, physical fitness, professional performance, and leadership topics.

**Course Offerings**

**Naval Science (Navy ROTC) Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAVS 1001</td>
<td>Naval Orientation</td>
<td>3</td>
</tr>
<tr>
<td>NAVS 1002</td>
<td>Seapower and Maritime Affairs</td>
<td>3</td>
</tr>
<tr>
<td>NAVS 1003</td>
<td>Naval Science Drill</td>
<td>0</td>
</tr>
<tr>
<td>NAVS 2001</td>
<td>Leadership &amp; Management</td>
<td>3</td>
</tr>
<tr>
<td>NAVS 2002</td>
<td>Navigation</td>
<td>3</td>
</tr>
<tr>
<td>NAVS 3001</td>
<td>Naval Ships Systems I: Engineering</td>
<td>3</td>
</tr>
<tr>
<td>NAVS 3002</td>
<td>Naval Ships Systems II: Weapons</td>
<td>3</td>
</tr>
<tr>
<td>NAVS 3003</td>
<td>Evolution of Warfare</td>
<td>3</td>
</tr>
<tr>
<td>NAVS 4001</td>
<td>Naval Operations and Seamanship</td>
<td>3</td>
</tr>
<tr>
<td>NAVS 4002</td>
<td>Leadership and Ethics</td>
<td>3</td>
</tr>
<tr>
<td>NAVS 4003</td>
<td>Amphibious Warfare</td>
<td>3</td>
</tr>
</tbody>
</table>

**International Education at Temple**

International education takes many forms at Temple: learning other languages; spending a summer, semester or year studying abroad; building an international concentration into a major; or enrolling in special programs such as the Latin American Studies Semester. Students are encouraged to consult their school/college and course descriptions for further information on international and language studies at Temple's Philadelphia campuses.
Education Abroad and Overseas Campuses

Denise A. Connerty, Assistant Vice President of International Affairs
200 Tuttleman Learning Center
215-204-0720
http://studyabroad.temple.edu

Study abroad is one of the most rewarding and beneficial experiences available to Temple students. The opportunity to gain firsthand understanding of other cultures and languages through study abroad is personally enriching, and adding an international dimension to one's education enables students to better understand and contextualize global issues and international events. Temple students have almost limitless options when it comes to studying abroad. Students may spend a semester, academic year or summer participating on one of Temple's numerous programs abroad, or they may choose to participate on an accredited external program through another university or study abroad provider. Students receiving financial aid can usually apply most, if not all, sources of aid to their study abroad fees. Education Abroad can provide students with further information about study abroad, as well as resources and guidance on choosing a program that is best suited to their academic needs and interests.

Scholarships for semester, academic year, and summer study abroad are available for qualified Temple students. A number of external scholarships, such as Fulbright, Gilman and Vira Heinz, are also administered by Temple University, and more details about these are available on the Education Abroad website. In addition, advising is available concerning a variety of other options for financing study abroad.

Students interested in receiving more information about study abroad should visit the Education Abroad web site (http://studyabroad.temple.edu) or contact the office at 215-204-0720 or study.abroad@temple.edu.

Semester and Academic Year Programs

Temple University, Japan Campus (TUJ)

Bruce Stronach, Dean

TUJ is the Tokyo campus of Temple University. Founded in 1982, TUJ is the oldest and largest foreign university in Japan and has developed into a nationally-recognized institution offering an extensive range of educational programs. With an enrollment of 3,500 students and a faculty of 181, TUJ offers undergraduate degrees with majors in art, Asian studies, communications, economics, general studies, international affairs, international business studies, Japanese language, political science, and psychological studies. At the graduate level, TUJ offers an M.B.A., a Master of Science in Education and a Doctor of Education in TESOL (Teaching English to Speakers of Other Languages), and a Master of Laws. TUJ is also home to the Institute of Contemporary Asian Studies, which sponsors special programs devoted to Asian contemporary culture and language, a lecture series, and an academic journal.

American undergraduate students may study at Temple Japan for a semester, year and/or summer, choosing from a broad range of courses in Japanese language at all levels, for native and non-native speakers, and upper-level courses in American Studies, anthropology, art, art history, Asian Studies, communications studies, economics, film and media arts, history, international business studies, journalism, media studies and production, political science and psychology. Internships and internship scholarships are also available. All coursework, with the exception of Japanese language courses, is conducted in English.

To enrich the students' exposure to Tokyo and enhance their understanding of Japanese culture, TUJ organizes several optional field trips and excursions each semester. These include half-day excursions to sites in and around Tokyo, as well as day and overnight excursions to various locations throughout Japan.

TUJ is ideally located in central Tokyo in Minato-ku. Just 20 minutes walking distance from Roppongi, one of Tokyo's major entertainment districts, Minato-ku is home to several embassies, shops, and restaurants. Students have the option of securing their own housing or of taking advantage of housing offered by TUJ. A limited number of homestays with Japanese families are also available for students interested in complete linguistic and cultural immersion.

Information on application, costs, and financial aid can be obtained from Education Abroad. Temple charges regular tuition rates for the Japan program; additional costs include airfare, living expenses, medical insurance, and program expenses.

Temple University Rome

Hilary L. Link, Dean

Temple's campus in Rome offers upper-level courses in anthropology, architecture, art history, drawing, economics, English, geography and urban studies, Greek and Roman classics, history, international business, Italian language and literature, Latin, marketing, painting, photography, political science, printmaking, psychology, sculpture, and sociology; General Education courses; and internship opportunities. Each semester, students from Temple and other universities around the U.S. study in Rome and take courses designed to take advantage of the city's rich resources. American undergraduate students may study at Temple Rome for a semester, year and/or summer.

The Temple University Rome Dean oversees the academic program and arranges for student support services. A distinguished teaching faculty, both European and American, provides a first-rate educational experience. All courses are part of Temple's undergraduate and graduate curricula and carry
full academic credit. Students who have not studied Italian previously must enroll in an elementary Italian language course while in the program in order to take best advantage of their stay in Italy.

An extensive field study program complements the traditional classroom and studio curricula. Classes make regular trips to museums, architectural sites, and other points of interest in Rome, and many courses include field trips to other parts of Italy and Europe. The Villa Caproni, located in the heart of Rome on the Tiber River, houses the Temple Rome program. The facilities at the Villa Caproni include a library with 15,000 volumes, classrooms, art and architecture studios, an art gallery, and complete technical facilities. Students have the option of securing their own housing or choosing Temple-arranged accommodations in the residence. The residence is a convenient 30-minute walk to the Villa Caproni and 5 minutes from one of the major outdoor markets in Rome. A limited number of homestays with Italian families are also available for students interested in complete linguistic and cultural immersion.

Information on application, costs, and financial aid can be obtained from Education Abroad. Temple charges regular tuition rates for the Rome program; additional costs include airfare, living expenses, medical insurance, and program expenses.

Temple University in Spain

Dr. Jamie Durán, Program Director

Temple University's spring semester program in Spain is based at the University of Oviedo, and is designed for students with at least four semesters of college level Spanish, or the equivalent, who are committed to furthering their Spanish language skills.

Spain program participants are enrolled in the Cursos de Lengua y Cultura Españolas para Extranjeros program at the University of Oviedo's humanities campus, El Milán. All students enroll in one of two tracks, Intermediate or Advanced, depending on their Spanish language background, and choose from coursework in Spanish language, literature, translation, history and art. Courses are taught by native Spanish-speaking professors of the University of Oviedo, and by Temple University faculty member, Dr. Jaime Durán.

As a complement to academic courses, cultural programming opportunities and organized leisure activities are arranged throughout the semester to help students acquire in-depth knowledge of various aspects of Spanish and Asturian culture, as well as to strengthen students' Spanish language proficiency outside of a formal classroom setting. Additionally, for one week during the program, students participate in a non-credit enrichment workshop which, in the past, has included themes such as dance, short story, photography, cartoons and journalism. The university also hosts cultural activities, including film series, short story and photography competitions, and organized visits to sites of interest studied in class. Programs which facilitate connections between international and Spanish students, including a language partner conversation exchange, are also offered and organized by the university.

Accommodations are arranged with a local Spanish host family. Students are provided with three meals a day and laundry service. This living arrangement offers the best opportunity to practice the language in a natural setting and have direct access to local lifestyle, gastronomy and social life.

Information on application, costs, and financial aid can be obtained from Education Abroad. Temple charges regular tuition rates for the Spain program; additional costs include airfare, living expenses, medical insurance, and program expenses.

Temple in Spain is also offered as a 4.5 week summer program, during which students enroll in 2 courses (6 credits). The Temple in Spain summer program is comprised of coursework in Spanish language, literature, cultural studies and marketing. Spanish language, literature, cultural studies courses are taught in Spanish. The marketing course is taught in English.

In order to be eligible for the program, students taking Spanish 2002 or 3221 as their afternoon session course are required to have successfully completed at least two semesters of university-level Spanish (Spanish 1002: Basic II at Temple, or the equivalent.) Students who are taking Marketing 2101 as their afternoon course are required to have successfully completed at least one semester of university-level Spanish (Spanish 1001: Basic I at Temple, or the equivalent.)

Exchange Programs

Temple University students may participate in any of Temple's university-wide exchange programs. Currently, exchange partnerships exist with universities in Germany, England, China, Taiwan, and Korea. Students selected for these programs must qualify academically and be fluent in German for study in Germany. College of Science and Technology students may also explore science exchange opportunities in Ireland, Scotland, Northern Ireland, Denmark, Sweden, France, Italy and Spain through Temple's membership in TASSEP, the Trans-Atlantic Science Student Exchange Program.

Applications to participate in these programs are due in the early spring for the following academic year. For further information, contact Education Abroad. Each exchange program can accommodate only a small number of students annually. Specialized exchange programs are also available through some schools and colleges. Check with your school or college advising office for a list of these programs.

Summer Programs Abroad

Each year, a number of Temple faculty members direct summer programs abroad for academic credit. Some programs change on an annual basis; others have been part of Temple's summer curriculum for many years. The programs generally last four to six weeks, admit qualified students from Temple as well as other universities, and charge Temple's regular tuition rates for summer programs abroad. In recent years, summer programs have been conducted in Brazil, Costa Rica, France, Germany, Ghana, India, Italy, Jamaica, Japan, Spain and the UK.
School of Media and Communication, Study Away
Katie Ryan, Assistant Director
School of Media and Communication
6 Annenberg Hall
215-204-2677

Temple University London
The School of Media and Communication (SMC) offers a faculty-led semester and summer program in London. These programs are open to all Temple students, no matter what their major, as well as those from other universities. Recent semester course offerings have included British Mass Media, The Collaborative Art, Creative Thinking for Advertising, British Cinema, Political Communication, British Life and Cultures, and Travel Writing. Internships are also available.

Accommodation in shared, self-contained flats is arranged by the program.

Summer Programs
SMC Study Away also offers faculty led summer programs in Dublin, Barcelona, Hong Kong, London and South Africa for academic credit. The specific topics change each summer but generally focus on intercultural communication, journalism, strategic communication, film, theater, advertising, media and more and all integrate their host city as the classroom. Internships are also available in select locations.

Other Education Abroad programs
Several other schools and colleges at Temple offer options specifically designed for their students, including:

- Boyer College of Music and Dance
- College of Liberal Arts
- School of Theater, Film and Media Arts
- Fox School of Business and Management
- School of Tourism and Hospitality Management

Contact the schools and colleges to learn more about the education abroad opportunities they offer.

University Honors Program
Ruth Ost, Senior Director
204 Tuttleman Learning Center
215-204-0710
honors@temple.edu
http://honors.temple.edu/

University Honors is a comprehensive, four-year program designed to challenge boundaries, expand possibilities and prepare high-achieving students for the world ahead. At the core of the program are classes taught by faculty highly regarded for their scholarship and well-loved for their teaching. Honors classes are typically small seminars in which students and faculty have a chance to engage deeply with each other on the topics at hand.

Supporting the program is a dedicated staff that provides holistic support services. They advise students on major choices, graduate and professional school applications, scholarship and fellowship opportunities, and career decisions.

The University Honors Program is open to students enrolled in every undergraduate school and college. No special application is required for incoming first-year students. Current Temple students or transfer students who would like to be considered for the program must apply through the Honors website. Applications are reviewed at the end of each semester after grades have been posted.

Benefits of the program include:

- exclusive access to Honors courses;
- the option to live in the Honors Living-Learning Community in 1300;
- graduate student library privileges;
- community service and leadership opportunities;
- priority registration;
- Honors transcript notation.

Those admitted to Honors as incoming first-year students will be eligible for merit scholarships and stipend(s). (These scholarships and stipends do not apply to Temple University Japan Campus or students admitted to University Honors as transfers.) More details can be found in the Honors Handbook on the Honors website.
To earn the Honors transcript notation upon graduation:

- All incoming first-year students and transfer students with fewer than 45 credits must complete ten Honors courses (four of the ten must be at or above the 2000 level).
- Students admitted to Honors who have accrued between 45 and 59 credits must complete eight Honors courses (four of which must be at or above the 2000 level).
- Students admitted to Honors with 60 or more credits need to complete only six Honors courses (four of which must be at or above the 2000 level).

All Honors students are required to take the Honors versions of Analytical Reading and Writing, Mosaic I and Mosaic II unless one or more of these requirements are met through placement testing or previously earned credit. Students must show evidence of continued progress in completing course requirements or will be subject to dismissal from the program.

To be in Honors good standing, students must maintain a 3.25 cumulative GPA. Students whose cumulative GPA falls below 3.25 are subject to dismissal from the Honors Program. As a condition of completing the Honors Program, students must graduate with at least a 3.25 cumulative GPA.

Students are strongly encouraged to complete an Honors Scholar Project during their senior year. Project proposals (which can be a research thesis, creative work, or other appropriate project in the major or a related field) are submitted to the Honors Program, preferably during or immediately after junior year. When the project is finished, it must be approved by the Honors Program and two faculty members in the appropriate field(s) of study (a project mentor and a second reader). Further, students are required to present their work (or work-in-progress) in a Temple, regional or national venue. This achievement will be indicated by an additional transcript notation, reading: Honors Scholar Thesis, followed by the title.

Students may visit the Honors Program Office in Tuttleman Learning Center, Room 204, to meet with an advisor if they have any questions. Further information can be found on the Honors website (http://honors.temple.edu).

Undergraduate Research and Peer Teaching

Emily A. Moerer, Assistant Vice Provost
500 Conwell Hall
215-204-4991
emoerer@temple.edu

Creative Arts, Research and Scholarship Program

The Creative Arts, Research And Scholarship (CARAS) Program provides funding to encourage and support undergraduate and professional students engaged in scholarly, creative, and research projects that contribute to advancing their field of study. Two types of grants are made through the CARAS Program: Research/Creative Project Grants provide undergraduate and professional students support for scholarly, research or creative arts projects undertaken with the supervision of a faculty mentor. Travel Grants provide funds for undergraduate travel to present research or creative work at professional conferences. For more information, go to www.temple.edu/vpus/opportunities/CARAS.htm.

Diamond Peer Teachers Program

The Diamond Peer Teachers Program provides upper-level undergraduates at Temple University the opportunity to experience the challenges and rewards of college-level teaching, to work with faculty mentors to develop their own pedagogical skills, and to provide supplemental instruction in lower-level courses. Peer Teachers earn a stipend and one (1) internship credit. For more information, go to www.temple.edu/vpus/opportunities/peerteacher.htm.

Diamond Research Scholars Program

The Diamond Research Scholars Program offers a seven-month long funded research experience under the direction of a faculty mentor. Participants receive a summer stipend and register for a research or independent study course in the fall for their research or creative arts project. Scholars are expected to participate in the annual undergraduate research conference, TURF-CreWS. For more information on the Diamond Research Scholars Program, go to www.temple.edu/vpus/opportunities/ResearchScholars.htm.

Temple Undergraduate Research Forum - Creative Works Symposium

The Temple Undergraduate Research Forum - Creative Works Symposium (TURF-CreWS) provides ambitious, intellectually-motivated undergraduate students the opportunity to present and defend their original research or creative work among colleagues, faculty, family, and friends. TURF-CreWS is open to all departments and all colleges. Through its emphasis on original research or creative work, from theory-driven critical analysis of significant social issues to the development of unique individual artistic talents, TURF-CreWS seeks to inspire undergraduate students to engage, analyze, critique, and advise the world around them, beginning with their own social, ideological or cultural communities, so that they may contribute ideas that make for a better society and world. For more information on TURF-CreWS, go to www.temple.edu/vpus/opportunities/TURF.htm.
Accelerated Degree Programs

Temple University offers several Accelerated Degree Programs arranged between undergraduate and graduate or professional schools and colleges. These programs enable academically qualified students to earn a bachelor's and an advance degree - graduating sooner than they would have completing two distinct programs.

4+1 Undergraduate/Graduate Accelerated Programs

Eligible undergraduate students use up to 12 specified graduate credits approved by the school/college to fulfill requirements for their undergraduate degree. Upon graduation from their undergraduate program, students move seamlessly into their graduate program, which they complete, in most cases, in one additional year. Students should meet with their advisor as soon as possible to discuss requirements for eligibility and the application process.

Fox School of Business and Management

- B.A.-B.S./M.S. in Actuarial Science
- B.A.-B.S./M.S. in Human Resource Management
- B.A.-B.S./M.S. in Information Technology Auditing and Cyber Security
- B.B.A. (Business Management or Marketing)/M.Ed. with specialization in Career and Technical Education

College of Education

- B.S.Ed. in Early Childhood Education/M.Ed. in Special Education (http://education.temple.edu/undergradteach/accelerated-earlychildhood-special-education)
- B.S. in Engineering Technology/M.Ed. with Teacher Certification-Middle Grades Specializations
- B.A. in Adult & Organizational Development/M.Ed. in Adult & Organizational Development (http://education.temple.edu/aod/accelerated)
- B.A. in Sociology/M.Ed. in Urban Education

College of Engineering

- B.S. Bioengineering/M.S. Bioengineering (http://engineering.temple.edu/additional-programs/accelerated-BS-MS)
- B.S. Civil Engineering/M.S. in Civil Engineering (http://engineering.temple.edu/additional-programs/accelerated-bachelors-masters-degree-programs)
- B.S. Civil Engineering/M.S. in Environmental Engineering (http://engineering.temple.edu/additional-programs/accelerated-bachelors-masters-degree-programs)
- B.S. Electrical Engineering/M.S. in Electrical Engineering (http://engineering.temple.edu/additional-programs/accelerated-bachelors-masters-degree-programs)
- B.S. Electrical Engineering with Computer Engineering Concentration/M.S. in Electrical Engineering (http://engineering.temple.edu/additional-programs/accelerated-bachelors-masters-degree-programs)
- B.S. Mechanical Engineering/M.S. in Mechanical Engineering (http://engineering.temple.edu/additional-programs/accelerated-bachelors-masters-degree-programs)
- B.S. Mechanical Engineering with Bioengineering Concentration/M.S. in Bioengineering (http://engineering.temple.edu/additional-programs/accelerated-bachelors-masters-degree-programs)
- B.S.E.T. Construction Management Technology/M.S. in Civil Engineering (http://engineering.temple.edu/additional-programs/accelerated-bachelors-masters-degree-programs)

School of Theater, Film, and Media Arts

- B.A. Theater/M.Ed. with Teacher Certification (http://tfma.temple.edu/theater-education-41-program) - Secondary Specializations

College of Public Health

- Nurse Scholars Program
  - B.S. in Nursing (BSN)/Doctor of Nursing Practice (DNP) with a concentration in Adult-Gerontology Primary Care (previously Adult Nurse Practitioner) (On hold beginning Fall 2015; contact Department)
  - B.S. in Nursing (BSN)/Doctor of Nursing Practice (DNP) with a concentration in Family-Individual Across the Lifespan (previously Family Nurse Practitioner) (On hold beginning Fall 2015; contact Department)

- B.S. Therapeutic Recreation/M.S. Recreation Therapy
- B.S. Public Health/MPH Public Health with a Concentration in Social and Behavioral Science

School of Media and Communication

- Temple University Japan only-- first 3 years at TUJ; last 2 years at Temple Main Campus
• B.A. in Communication Studies (Policy, Regulation, and Advocacy Track)/M.S. in Communication Management
• B.A. in Communication Studies (Contemporary Media Environments Track)/M.A. in Media Studies and Production

B.S. or B.A. in any degree that has 12 free elective credits/Master of Journalism

College of Liberal Arts

B.A. Criminal Justice/M.A. in Criminal Justice (p. 811)
B.A. English/M.A. in English (http://www.cla.temple.edu/english/undergraduate/41-accelerated-b-a-m-a-degree-program)
B.A. German/M.Ed. with Teacher Certification - Secondary Specializations (http://education.temple.edu/undergradteach/accelerated-german-secondary-ed)
B.A. English/M.Ed. with Teacher Certification in Middle Grades Specializations (http://education.temple.edu/undergradteach/accelerated-english-middle-gr-ed)
B.A. Environmental Studies/M.Ed. with Teacher Certification in Middle Grades Specializations (http://education.temple.edu/undergradteach/accelerated-environmental-studies-middle-gr-ed)

School of Environmental Design

B.S. Community Development/M.S. in Community and Regional Planning (http://www.temple.edu/ambler/crp/academicprograms/bs.htm#four)

College of Science and Technology

B.A. Biology/M.Ed. with Teaching Certification - Secondary Specialization (p. 1030)
B.S. Biology/M.Ed. with Teaching Certification - Secondary Specialization (p. 1031)
B.A. Biology/M.Ed. with Teaching Certification - Middle Grades Specializations (Mathematics & Science or Science & Literacy) (http://education.temple.edu/undergradteach/accelerated-biology-middle-gr-ed)
B.S. Biology/M.Ed. with Teaching Certification - Middle Grades Specializations (Mathematics & Science or Science & Literacy) (http://education.temple.edu/undergradteach/accelerated-biology-middle-gr-ed)

B.A. Chemistry/M.A. in Chemistry (p. 1032)
B.S. Chemistry/M.A. in Chemistry (p. 1033)
B.A. Chemistry/M.Ed. with Teaching Certification - Secondary Specialization (p. 1033)
B.S. Chemistry/M.Ed. with Teaching Certification - Secondary Specialization (p. 1033)
B.A. Chemistry/M.Ed. with Teaching Certification - Middle Grades Specializations (Mathematics & Science or Science & Literacy) (http://education.temple.edu/undergradteach/accelerated-chemistry-middle-gr-ed)
B.S. Chemistry/M.Ed. with Teaching Certification - Middle Grades Specializations (Mathematics & Science or Science & Literacy) (http://education.temple.edu/undergradteach/accelerated-chemistry-middle-gr-ed)

B.A. Computer Science/M.S. in Information Science & Technology (p. 1035)
B.S. Computer Science/M.S. in Computer Science (p. 1034)
B.S. Computer Science/M.S. in Information Science & Technology (p. 1036)
B.A. Information Science & Technology/M.S. in Information Science & Technology (p. 1040)
B.S. Information Science & Technology/M.S. in Information Science & Technology (p. 1040)

B.A. Geology/M.Ed. with Teaching Certification - Secondary Specialization (p. 1039)
B.S. Geology/M.Ed. with Teaching Certification - Secondary Specialization (p. 1039)
B.A. Geology/M.Ed. with Teaching Certification - Middle Grades Specializations (Mathematics & Science or Science & Literacy) (http://education.temple.edu/undergradteach/accelerated-geology-middle-gr-ed)
B.S. Geology/M.Ed. with Teaching Certification - Middle Grades Specializations (Mathematics & Science or Science & Literacy) (http://education.temple.edu/undergradteach/accelerated-geology-middle-gr-ed)

B.A. Mathematics/M.S. in Mathematics (p. 1041)
B.S. Mathematics/M.S. in Mathematics (p. 1043)
B.A. Mathematics/M.Ed. with Teaching Certification - Secondary Specialization (p. 1041)
B.S. Mathematics/M.Ed. with Teaching Certification - Secondary Specialization (p. 1042)
B.A. Mathematics/M.Ed. with Teaching Certification - Middle Grades Specializations (Mathematics & Science or Mathematics & Literacy) (http://education.temple.edu/undergradteach/accelerated-mathematics-middle-gr-ed)
B.S. Mathematics/M.Ed. with Teaching Certification - Middle Grades Specializations (Mathematics & Science or Mathematics & Literacy) (http://education.temple.edu/undergradteach/accelerated-mathematics-middle-gr-ed)

B.A. Natural Sciences/M.Ed. with Teaching Certification - Middle Grades Specializations (Mathematics & Science or Science & Literacy) (http://education.temple.edu/undergradteach/accelerated-natural-science-middle-gr-ed)

B.A. Physics/M.S. in Physics (p. 1054)
B.S. Physics/M.S. in Physics (p. 1055)
B.A. Physics/M.Ed. with Teaching Certification - Secondary Specialization (p. 1054)
B.S. Physics/M.Ed. with Teaching Certification - Secondary Specialization (p. 1055)
B.A. Physics/M.Ed. with Teaching Certification - Middle Grades Specializations (Mathematics & Science or Science & Literacy) (http://education.temple.edu/undergradteach/accelerated-physics-middle-gr-ed)
B.S. Physics/M.Ed. with Teaching Certification - Middle Grades Specializations (Mathematics & Science or Science & Literacy) (http://education.temple.edu/undergradteach/accelerated-physics-middle-gr-ed)

School of Tourism and Hospitality Management
B.S. Tourism and Hospitality Management/M.THM (http://sthm.temple.edu/bachelors-programs/bachelors-programs/41-accelerated-program-2)
B.S. Sport and Recreation Management/M.S. in Sport Business (http://sthm.temple.edu/bachelors-programs/bachelors-programs/41-accelerated-program-2)

Tyler School of Art
B.S. Architecture/M.ARCH, Professional Track (https://tyler.temple.edu/programs/architecture/degree/#node-47)

3+2, 3+3, 3+4 Undergraduate/Professional Accelerated Programs
Eligible undergraduate students complete their undergraduate degree with coursework required in the first year of a professional school, such as Temple University’s School of Medicine, Dentistry, Pharmacy, Physical Therapy, and Podiatry. To be eligible the student must be accepted into the professional school program. Students selected to participate finish their professional studies more quickly.

Students interested in this type of accelerated program should contact Neida Perez in the Office of Pre-Professional Health Studies as early in their undergraduate academic career as possible to discuss eligibility, as well as the professional school application process.

Neida Perez
Office of Pre-Professional Health Studies
215-204-2513
e-mail: healthadvising@temple.edu
www.temple.edu/healthadvising

3+2 B.S./M.S. for International Students (http://cst.temple.edu/academics/accelerated-programs/dual-bachelors-masters-degree-program-international-students)

3+4 Dental Program (B.A./D.M.D.) (p. 1036)

• Biology + Dental
• Chemistry + Dental
• Computer Science + Dental
• Geology + Dental
• Information Science & Technology + Dental
• Mathematics + Dental
• Natural Science + Dental
• Physics + Dental

3+3 Law Program (B.B.A./J.D.) (p. 22)

• Legal Studies + Law

3+3 Law Program (B.A./J.D.) (p. 22)
• Any CLA major + Law

3+4 Medical Program (B.A./M.D.) (p. 1043)

• Biology + Medical
• Chemistry + Medical
• Computer Science + Medical
• Geology + Medical
• Information Science & Technology + Medical
• Mathematics + Medical
• Natural Science + Medical

3+4 Pharmacy Program (B.A./Pharm.D.) (p. 1049)

• Biology + Pharmacy
• Chemistry + Pharmacy
• Computer Science + Pharmacy
• Geology + Pharmacy
• Information Science & Technology + Pharmacy
• Mathematics + Pharmacy
• Natural Science + Pharmacy
• Physics + Pharmacy

3+3 Physical Therapy Program (B.S./D.P.T.) (p. 720)

• Kinesiology + Physical Therapy

3+3 Physical Therapy Program (B.A./D.P.T.) (p. 1052)

• Biology + Physical Therapy
• Chemistry + Physical Therapy
• Computer Science + Physical Therapy
• Geology + Physical Therapy
• Information Science & Technology + Physical Therapy
• Mathematics + Physical Therapy
• Natural Science + Physical Therapy

3+4 Podiatry Program (B.A./D.P.M.) (p. 1056)

• Biology + Podiatry
• Chemistry + Podiatry
• Computer Science + Podiatry
• Geology + Podiatry
• Information Science & Technology + Podiatry
• Mathematics + Podiatry
• Natural Science + Podiatry
• Physics + Podiatry
Honor Societies

**Phi Beta Kappa**

Phi Beta Kappa is an honor society open to juniors and seniors in the College of Liberal Arts, the College of Science and Technology, and the Department of Art History. To qualify for Phi Beta Kappa, a student must maintain a high grade point average in a broad, rigorous program of study in the liberal arts, including mathematics and foreign language. For a complete and detailed description of Phi Beta Kappa's requirements, visit www.temple.edu/pbk.

For more information, please contact Chris Wolfgang, Secretary and Membership Chair (cwolfgan@temple.edu).

**Golden Key**

Golden Key is a national academic honors organization dedicated to excellence. Golden Key is interdisciplinary and unites the talents of the brightest undergraduate students in America. Golden Key also provides service opportunities for all university students.

Membership is by invitation only, and no more than the top 15% percent of the juniors and seniors enrolled may be eligible. The Golden Key mailbox is in The Student Center where the Student Organization Offices are located.

**Alpha Lambda Delta**

Alpha Lambda Delta is a national society that honors academic excellence during a student's first year at college. For further information, visit their web site at www.nationalald.org/ (http://www.nationalald.org).
Student Leadership & Development Opportunities

Office of Leadership Development

Howard Gittis Student Center
1755 N. 13th Street, Room 219M
Philadelphia, PA 19122
215-204-7145
www.temple.edu/studentaffairs/leadership/

The Office of Leadership Development works to create future generations of leaders who live and lead with integrity and meaning. We encourage the development of honesty, character and self-awareness by providing avenues for students to impact their own lives as well as create an environment to change communities on local and global levels.

The department's three initiatives are:

• **Academic Connections** - education and development are most transformational when in and out of classroom learning is intricately linked. Therefore, the office works to create and instruct leadership courses and build connections amongst the various schools, colleges, and faculty that offer existing leadership-related curricular content.

• **Diamond Leaders** - Diamond Leaders prepare to become impactful leaders in their community through their active roles on campus and their participation on Lead Teams dedicated to programming, service, and peer facilitation.

• **Student Leadership Challenge** - Service as Temple's signature leadership development program for all students, the Student Leadership Challenge provides dynamic and comprehensive programs that give students access to a rich variety of interactive leadership development opportunities. Students may earn their way to becoming a Diamond Leader by participating in these programs throughout the year and earning Leadership Diamond Points.

In addition to the events in the Student Leadership Challenge, the office sponsors the LeaderShape Institute and hosts the Leadership Living Learning Community through University Housing and Residential Life.

Student Activities

Howard Gittis Student Center
1755 N. 13th Street, Room 219M
Philadelphia, PA 19122
215-204-7131
http://studentactivities.temple.edu/@tuactivities

Looking for something to do on campus? You are in the right place! Student Activities enhances the student experience by developing and empowering students, creating opportunities for meaningful interpersonal relationships, supporting student organizations, and providing fun, engaging programs for the diverse campus community.

One of the best ways to get involved is to become a member of our registered organizations!

Student Organizations

Student Activities works to support and empower student organizations as they enhance campus culture with their events, ideas and leadership. The staff aims to serve as a resource, and provide a path of development for students outside the classroom. With groups devoted to everything from cultural groups to competitive dance to community involvement, chances are we have a registered organization for you. Our office provides these organizations with meeting spaces, financial management, programming assistance, and anything else they need to contribute to student life at Temple University.

Fraternity and Sorority Life

Student Activities supports fraternities and sororities as they provide a focus on leadership, scholarship, service and brotherhood/sisterhood. These groups foster lifetime relationships both between members and to the University and contribute to the diversity of campus. Each chapter falls under the umbrella of the Interfraternity Council, the Multicultural Greek Council, the National Pan-Hellenic Council, and the Panhellenic Association. The groups all come together for community events planned by the Temple University Greek Association.

Main Campus Program Board (MCPB)

MCPB is a student-led organization that plans the largest events on campus. From road trips to Broadway shows to campus concerts, you can help us plan any event you would like to see on campus. Follow us on Twitter @TempleMCPB (https://twitter.com/templemcpb) or go to www.templemcpb.com (http://www.templemcpb.com) to learn more about the events that will become the highlight of every Temple student's college experience! Along with Student Activities, we help plan and implement the following University events:
About Temple University

• Welcome Week: The entire campus joins together to welcome all new and returning students to campus. A FREE concert, hypnotist and a 100-foot banana split have been highlights from past years!
• Homecoming: Enjoy pep rallies, pageants, and great sporting events.

Temple Student Government (TSG)

TSG serves the student body by advocating and representing their voice for the benefit of the university community while providing access to resources. All students are welcome to explore their interests through TSG and are asked to create a progressive environment by participating in university life. For more information, visit the TSG web site (http://templestudentgovernment.org) or follow TSG on Twitter @TempleTSG (http://twitter.com/TempleTSG).

Temple University Ambler Student Government Association (ASGA) is an active student government association that oversees student concerns, policies, interests and activities. The officers of ASGA serve as a liaison between students at Ambler and the administration. Elections are held in the spring for various offices, giving students the opportunity to participate in election campaigns and promotions. For more information about ASGA, visit the Student Activities Office in Bright Hall Lounge, visit http://ambler.temple.edu/campus-life/clubs-and-organizations or call 267-468-8429.

Interested in learning more about Student Activities' events? We've listed a few of our best programs right here!

Philly Connections

Philly Connections presents students with the opportunity to experience the many cultural aspects of a major U.S. city within the budget of a college student. Encompassing every fun event in and around the area, students are given a rare chance to experience Philadelphia at fantastic discount prices! Check out our web site for deals on sporting events and theater tickets.

Free Food and Fun Fridays

Check out the Student Center Atrium every Friday from 10 p.m. to 1 a.m. for your weekly dose of FREE Food and Fun. The events on tap for the evening are different each week, but you are guaranteed a chance to win prizes, listen to your favorite music, and eat a fulfilling snack!

Memorable Moments

Memorable Moments offers students the opportunity to meet others and explore a new country through a cultural exhibition and food at a Philadelphia restaurant. Visit one of three countries each semester, and go on a memorable mini-tour of that country's offerings in or near Philadelphia.

Service Immersion

The vision of the immersion program is to actively engage Temple University students in meaningful experiences that foster cultural awareness, global understanding, and social responsibility through learning, service and reflection. Students are encouraged to apply in the fall semester for our three programs in the spring semester: Philadelphia, South Dakota and El Paso, Texas.

Additional Student Activities

In addition to the Main Campus activities listed above, the Temple University Ambler campus offers a variety of student activities. Please visit http://ambler.temple.edu/campus-life/clubs-and-organizations, or contact the Office of Student Life (267-468-8425) in Bright Hall, Room 101, for further information.

Office of Student Media

Howard Gittis Student Center
1755 N. 13th Street, Room 304
Philadelphia, PA 19122

Students on the Main Campus produce their own editorially-independent newspaper, The Temple News, during the academic year and distribute it to all campuses. The Temple News is published weekly in print (each Tuesday during the fall and spring semesters) and provides daily updated content, which also includes photo slide shows and video pieces, online at www.temple-news.com (http://www.temple-news.com) and on its blog, Broad&Cecil, at http://broadandcecil.temple-news.com. The Temple News was one of 10 non-daily newspapers to win the prestigious Pacemaker Award from the Associated Collegiate Press in 2006 and was named a finalist for the award in 2007 for its print and online product. In 2008, The Temple News won an Online Pacemaker award for its web site and followed that up by winning the prestigious EPPY award from Editor&Publisher in 2009 for having the nation's best college newspaper web site. In 2012, the paper won four Keystone Press awards from the Pennsylvania Newspaper Association. Readers can follow The Temple News on Twitter @TheTempleNews (http://twitter.com/TheTempleNews).

Students also produce and publish Templar, Temple's undergraduate annual yearbook. Templar is a three-time winner of the American Scholastic Press Association's first place award as one of the top college yearbooks in the country, having won the award in 2006, 2007 and 2008. Readers can follow Templar on Twitter @TemplarYearbook (http://twitter.com/TemplarYearbook).

The Office of Student Media now advises WHIP, Temple's student-run internet radio station that broadcasts out of its studio in room 108 of the TECH Center. WHIP is an acronym that stands for "We Have Infinite Potential." The station broadcasts a wide array of programming, from news to sports to
a diverse musical format, and is now one of just 14 stations nationally to be featured through Clear Channel's iHeart Radio College Radio category. Listeners can follow WHIP on Twitter @WhipRadio (http://twitter.com/WhipRadio).

Students at Temple University Ambler campus produce The Parable, a literary magazine each spring, as well as The Temple Column newspaper. Students at Temple University Ambler campus also manage and operate their own radio station, WRFT 1610 AM, which broadcasts a variety of music formats. Visit http://ambler.temple.edu/campus-life/clubs-and-organizations for more information.
Academic Support

Academic Computer Services

Students can take advantage of a number of first-class technology resources available at Temple University, including the TECH (Teaching, Education, Collaboration, Help) Center, a 75,000-square-foot, state-of-the-art facility with resources that cater to current learning styles. The TECH Center, located on Main Campus at 12th Street and Montgomery Avenue, is designed with a variety of workspaces to enable students to work collaboratively or individually.

The TECH Center provides the following resources:

- 700 computers available for student use;
- 13 breakout rooms and 2 MediaScape tables for collaboration and group study;
- specialized labs, including specialty printing, video editing, recording booths, multimedia studio, graphic design, music composition, advanced technology lab, and “quiet” zones;
- social space with lounge areas and plasma televisions;
- a 24-hour Help Desk for students, faculty, and staff; and,
- a Starbucks café.

In addition, for the convenience of students, there is 24-hour access to the center. More information is available at the TECH Center (https://computerservices.temple.edu/lab/tech-center).

At the 24-hour Help Desk, professional consultants offer technical assistance on a wide range of computer topics. To obtain assistance, students can stop by the Help Desk on the first floor of the TECH Center, call 215-204-8000, submit a help request (https://computerservices.temple.edu/#request-help), utilize the live Help Chat (https://computerservices.temple.edu), or send an e-mail to help@temple.edu.

In order to use the computer resources at the TECH Center as well as Temple's numerous applications and systems available online, you will need your AccessNet username and password. With this login information, you can gain entry to the TUportal web site (http://tuportal.temple.edu), a single gateway to the university's most popular services, including TUmail, Blackboard, Self Service Banner, Diamond Dollars, My Backpack, and My Housing.

The Ambler Learning Center (https://computerservices.temple.edu/ambler-learning-center) on Ambler Campus is a state-of-the-art computer facility incorporating smart classrooms, wireless technology, computer labs/classrooms, breakout room, study lounges and a Help Desk/PC Clinic.

TUmail is an integrated e-mail system accessible anywhere on the internet to students using a web browser or software such as Microsoft Outlook or Google Mail.

The Blackboard system enables faculty and students to share coursework materials and discuss topics online.

Self Service Banner allows students to view course prerequisites and register for classes, view rosters, check grades, view account balances and financial aid information, and pay bills, all on the web.

For up-to-date information on the rapidly-changing nature of technology at Temple, including wireless access and security awareness initiatives, go to the Computer Services web site (https://computerservices.temple.edu).

Academic Resource Center

The Academic Resource Center was created to serve the needs of Temple University students who have not yet decided on a school/college or major. The team of professionally trained and dedicated academic advisors will assist students in navigating the transition to campus life as well as provide academic and career exploration assistance to our students. Services include individual and group advising appointments, academic success workshops, and major exploration programs all tailored to support personal growth and to promote scholastic achievement.

Academic advisors are available 9:00 a.m. - 4:30 p.m. Monday through Friday by appointment, and on a walk-in basis during specific hours listed on the Academic Resource Center web site. For assistance, please call 215-204-2500, visit the Academic Resource Center web site (http://www.temple.edu/vpus/arc), or stop by the office at 1810 Liacouras Walk, Suite 101.

Advising

Each school, college, and campus of the university offers a range of academic advising services for students. Professional advisors help students choose majors, plan curriculum, make vocational and post-graduate plans, connect students to university resources, and help resolve a variety of academic issues. Many schools and colleges offer the services of faculty advisors and peer advisors as well. Students should consult the specific advising unit in their school or college section of this Bulletin for locations and specific information about these units.
Students who are active in the Fly in 4 (http://fly.temple.edu) program agree to consult with an academic advisor in their school or college at least once per semester for academic planning. Advisors review proposed coursework and refer students to appropriate information regarding graduation requirements. In addition, advisors help students achieve breadth in the curriculum and provide other assistance as needed.

Students are required to meet with an advisor when they do not meet the academic standards set by the University. See the Academic Policies section of the Bulletin, called Academic Standing (p. 83), for detailed information.

Academic advisors strive to teach students how to make the most informed decisions when planning their academic program, while satisfying all university, college, and major requirements. Students assume primary responsibility for knowing the requirements for their degree and for acquiring current information about their academic status.

Some of the services offered by the advising centers are listed below:

- **New Student Orientation**: for freshmen and first semester transfer students.
- **Registration Assistance**: This includes online processing of original registrations, schedule revisions, and course withdrawals, in accordance with deadlines published on the University Registrar (http://www.temple.edu/registrar) web site.
- **Academic counseling**: Students work with advisors to develop a meaningful education plan compatible with life goals and current needs. Through contact with departmental faculty, students gain an in-depth appreciation of a specific discipline and discover opportunities associated with their field of interest.
- **Problem solving**: Students can meet with advisors to discuss a variety of academic concerns and develop some possible solutions. Students experiencing academic difficulty work with advisors to learn strategies for overcoming the obstacles to success.
- **Policy clarification**: The advising centers help students understand the policies and procedures integral to achieving a successful and fluid transition through university life. This includes such things as academic progress, academic standing, grievance procedures, and registration policies, including add/drop/withdrawal policies.
- **Honors advising**: In addition to receiving advising from their college, students enrolled in the University Honors Program may also be advised in the Honors Office in Tuttleman Learning Center until they have completed 60 semester hours, with the exception of the Fox School of Business and Management students, whose Honors program advising is conducted within the school.
- **Change of Program (CoP) advising**: Students changing programs or campuses at Temple meet in groups or individual sessions, by appointment. (Formerly referred to as Intra-University Transfer, or IUT).
- **Re-enrollment interviews**: Students may meet with advisors if they have taken time away from Temple University and wish to return.
- **Graduation Reviews**: Students meet with advisors prior to the start of their senior year to plan for graduation and beyond.
- **Petition processing**: Advisors facilitate processing of petition requests including leave of absence, completing a course at another institution, third registration for a course, withdrawal with approved excuse, registering for an academic overload, evaluating life experience credit and credit by examination, reviewing of transfer credit evaluation, considering DARS exceptions, academic forgiveness for re-enrolling students, and receiving approval for an exception to policy.
- **Referrals**: Advisors make referrals to such services as financial aid, career development, study abroad advising, counseling, tutoring, disability services, and testing.
- **Pre-registration advising**: Advisors work with students prior to fall and spring registration periods to review outstanding requirements and develop a registration plan. Prior to their pre-registration advising, students should review their DARS and course selections for the upcoming semester. DARS for all students are available on the web through dars.temple.edu.
- **Student retention initiatives**: Each school and college provides focused support for students to enhance their level of engagement with the school or college, and with the university. Advising units reach out to students to increase their awareness of the support services and resources available to all Temple students.
- **Critical Paths advising**: Schools and colleges have identified benchmarks for progress through each academic major. These key courses should be completed according to the timeline laid out by the schools and colleges to ensure timely graduation. Academic advising units help students navigate these critical paths, incorporating individualized needs and goals such as adding a minor or studying abroad into students’ academic plans.

**Academic Advising Mission**

In support of the mission of Temple University, academic advisors work collaboratively with students, faculty, staff, and community partners to meet the diverse, evolving needs of all students within our university community. It is our purpose to provide quality advising programs and services that support students in achieving their personal, academic, and career goals. By helping students interpret university policy, providing referrals to appropriate resources, and assisting students in creating individual plans for academic success, Temple advisors encourage our students to engage in and to take ownership of their education.

**Nancy & Donald Resnick Academic Support Center for Student-Athletes**

Justin Miller, Senior Director
1800 N. Broad Street
Pearson Hall 150
215-204-9002
Hours of Operation
Center Hours:
Monday-Friday 8:30 a.m. - 10:00 p.m.

The Nancy & Donald Resnick Academic Support Center for Student-Athletes monitors the academic progress of all student-athletes. From the admissions stage through graduation, the center provides coordination of academic services, academic counseling and advising, and tutoring services. The center has a strong commitment to the education and graduation of all student-athletes.

The Nancy and Donald Resnick Academic Support Center for Student-Athletes provides superior academic, personal and professional guidance to support all Temple University student-athletes. Through core values of diversity, integrity and collaboration across the University, the Center strives to inspire student-athletes to learn and succeed to their greatest academic and professional potential.

Student-Athlete Tutoring
Tutoring is a service offered to student-athletes by the Resnick Academic Support Center for Student-Athletes. The tutorial program is a supplement to classroom instruction, individual study, and preparation.

Tutorial services are available on an individual, small group, and walk-in basis during scheduled study sessions. Review sessions for courses with high student-athlete enrollment are also offered throughout each semester.

Tutor Program Contact:
Sarah Pergine, Tutor Coordinator
spergine@temple.edu

Degree Audit Reporting System (DARS)
Debbie Bennett-Kenney, DARS and Transfer Systems Coordinator
Sheila Brogden, DARS Sr. Encoder
dars@temple.edu
www.temple.edu/vpus/resources/dars.htm

DARS stands for the Degree Audit Reporting System. Students and advisors can use DARS both to track and plan students' academic progress toward completion of an undergraduate degree in their declared or proposed major. DARS shows students how their Temple University courses, transfer courses, and courses in progress apply toward degree requirements. It enables a student to explore alternative academic programs and gives detailed and accurate information about the student's academic record.

The information on the audit comes from the Banner Student information system. This is the same system students use to register for classes and to check their grades at the end of the term. Since DARS accesses the actual database where student's information is stored, it is current as of the moment an audit is processed.

The Degree Audit system is currently being upgraded to increase the functionality using the latest technology and includes a Self-Service application. Students and Advisors are currently using the Self-Service site to request audits of degree requirements, view course history and review transfer credit evaluations. Coming soon – students will be able to make Academic Plans which will be a personal road map to graduation. These Plans work as a powerful advising and planning tool to provide a clear and individually customized path to meet graduation goals.

Students can request a degree audit by clicking on the Student Tools tab in TUportal and then, in the Records channel, clicking on Degree Audit. The direct link is dars.temple.edu.

Students can learn more about DARS on our web site (http://www.temple.edu/vpus/resources/dars.htm), including information about how to interpret the degree audit, documentation about the new Self-Service site, general resources available in the DARS office, and information about the system.

Fly in 4
Fly in 4 is Temple University's innovative plan to fast-track students' futures and limit student loan debt. The Fly in 4 partnership ensures that students complete their degrees on time—or Temple will pay for their remaining course work. To limit students' obligation to work for pay, Temple will award a limited number of Fly in 4 grants per entering class to students with high financial need. Eligibility is based on the Free Application for Federal Student Aid (FAFSA). To learn more about Fly in 4, visit fly.temple.edu.

Pre-Professional Health Studies: Advising & Programs
Neida Pérez, Ed.M., Director
Pre-Professional Health Studies
1810 Liacouras Walk, Suite 100
215-204-2513
The office of Pre-Professional Health Studies at Temple University provides advising, counseling, and application support for students interested in preparing for specific careers in health care. Advising offered by the office supplements the academic advising (course registration, major requirements and graduation review) provided by the Academic Advisors in the student's primary college which is based on their Major program of study.

Specifically, the office of Pre-Professional Health Studies advises students preparing for the following health professions or graduate programs:

Health Professional schools for:
- Dentistry
- Medicine
- Optometry
- Pharmacy
- Podiatry
- Veterinary Medicine

-or-

Graduate Program options in:
- Physical Therapy
- Occupational Therapy
- Physician Assistant

The office of Pre-Professional Health Studies provides advising support for students to help them identify their academic strengths and interests and the paths that will best prepare them to fulfill their career aspirations within the health professions. Specifically, the office provides:

- individual, group, and electronic (ePortfolio) advising to help students stay organized as they identify tracks / programs best suited to their interests in the health care professions;
- seminars, colloquia, and speakers on issues and concerns central to understanding the complexities of the health care profession in the twenty-first century;
- information on student organizations focused on health care issues and concerns that students can get involved in early and stay involved in throughout their undergraduate career;
- information on opportunities for internships, service learning, and other experiential learning activities key to the professional development of the individual interested in a career in the health-care professions; and
- Pre-Health Evaluation Committee Process for letters of recommendation in support of applications.

Special Admissions Programs

The Pre-Med Health Scholar Program

The Pre-Med Health Scholar Program is offered to highly talented High School Seniors interested in pursuing a career as a physician. It is designed to recruit exceptional students to Temple University by offering a Linkage Agreement with Lewis Katz School of Medicine at Temple University. Students entering Temple University as Pre-Med Health Scholars have the option to consider an Accelerated BA/MD (3+4) Degree.

Accelerated Programs for Dentistry, Pharmacy, Podiatry, or Physical Therapy

Accelerated Programs allow Pre: Dentistry, Pharmacy, and Podiatry (3+4 Tracks) as well as Physical Therapy (3+3 Track) students the option of earning both their Bachelor of Arts and Graduate degrees in a shorter period of time after successfully passing all courses in the first year of professional school. Each program offers a Linkage Agreement with the corresponding Temple University professional school or graduate program.

Applications for interested entering freshman are available on the health advising web site. Completed applications are due by the end of the first semester at Temple University. The Accelerated BA/DMD, BA/PharmD, BA/DPM, or BA/DPT Programs are designed for high-achieving students who have distinguished themselves with impressive high school and first semester of college academic records and a demonstrated interest in their respective field.

Applying to Temple for the entering class of 2016 and beyond

NOTE: Beginning with the Temple University entering class of 2016, applications to the Accelerated Programs for Dentistry, Pharmacy, and Podiatry (3+4 Tracks) as well as Physical Therapy (3+3 Track) will be available online and will be due before a student enters Temple University. (Due Date: 1/19/2016 for the entering class of 2016.) Applicants will therefore know their accelerated option status before entering Temple University.
Scholar Development and Fellowships Advising

Tuttleman Learning Center, Suite 201
215-204-0708
215-204-0704 (fax)
www.temple.edu/vpus/fellowships/

Temple University students are eligible to apply to a variety of funded opportunities, including scholarships, fellowships, funded summer research opportunities and funded internships. Fellowships Advising will help any Temple student identify awards and opportunities that are well suited to their aspirations and accomplishments, and will provide guidance and support throughout the application process.

The University Libraries

http://library.temple.edu/

The Temple University Libraries form an extensive network of services and resources to support the educational and research needs of the university's students and faculty.

The combined collections include more than 3 million volumes and 27,000 current serial subscriptions, and over 600 research databases, as well as extensive collections of microforms, maps, photographs, and audiovisual materials.

The Special Collections Research Center includes the Urban Archives and the Philadelphia Jewish Archives collections, which document the social, economic, and physical development of the greater Philadelphia region since the mid-19th century; rare books, artists books, and manuscripts collections; the Contemporary Culture Collection; the Science Fiction and Fantasy collections; the Philadelphia Dance Collection; and the University Archives. The Charles L. Blockson Afro-American Collection documents the history and culture of people of African descent. The Libraries serve as a depository for both Pennsylvania and federal documents.

Information retrieval

Research databases, full-text resources, the online catalog, electronic references, and other information and services are at http://library.temple.edu/. The online catalog (diamond.temple.edu) lists library holdings and course reserves and their circulation status, and links directly to selected electronic course reserve materials. The Paley Library offers a computing commons and hundreds of seats for study. A media services center provides access to audio-visual resources, and offers specialized viewing/listening stations and study rooms.

Expert assistance in using the library resources is provided by reference staff. Students are introduced to basic information literacy skills through the University General Education (p. 143) program. Librarians collaborate with faculty to integrate research skills development into general education courses, such as the freshman Analytical Reading and Writing course. Librarians also provide user education classes tailored to individual courses. Individual questions are answered in person, as well as by phone, e-mail, text message, online chat, and IM. Go to the Ask A Librarian web site at http://library.temple.edu/asktulibraries to ask questions and retrieve information.

When local resources do not supply needed material, Temple students and faculty may directly request books from other universities and colleges through the E-Z Borrow Program, or request article copies and books through the Temple Libraries' interlibrary loan service.

Locations

The resources of the University Libraries are housed in Paley Library (the main library) and in a number of separate facilities serving specific disciplines and campus locations. Hours and information for the following are on the libraries' web site.

- Ambler Library, 580 Meetinghouse Road, Ambler, PA 19002, 267-468-8640
- Charles L. Blockson Afro-American Historical Collection, Sullivan Hall, Main Campus, 215-204-6632
- Harrisburg Library, 234 Strawberry Square, Harrisburg, PA 17101, 717-232-6400
- Health Sciences Library, 3500 N. Broad Street, Health Science Campus, 215-707-2665
- Charles E. Krause Library of Podiatric Medicine, School of Podiatric Medicine, 8th and Race Streets, Philadelphia, PA, 215-629-0300
- Law Library, Charles Klein Law Building, Main Campus, 215-204-7981
- Paley Library, 1210 W. Berks Street, Main Campus, 215-204-0744
- The Science and Engineering Library, College of Engineering Building, Second Floor, Main Campus, 215-204-7828

Reading rooms and libraries are also maintained by several academic programs. The following facilities are located on the Main Campus:

- College of Liberal Arts Educational Technology Center, AL-21 Anderson Hall, 215-204-8265
- Esther Boyer College of Music Alice Tully Library, Rock Hall, 215-204-5531
- Esther Boyer College of Music Listening Library, 100 Presser Hall, 215-204-8338
- Social Science Data Library, 863 Gladfelter Hall, 215-204-5001
Math & Science Resource Center (MSRC)

Mona Zaoudeh, Director
1810 Liacouras Walk, Room 201
215-204-8466
www.temple.edu/msrc

Hours of Operation for Fall and Spring Semesters on Main Campus:
Monday-Thursday, 8:30 a.m. - 8:30 p.m.
Friday, 8:30 a.m. - 3:30 p.m.
Saturday, 10:30 a.m. - 2:30 p.m.
(Summer I and II hours of operation can be found on the MSRC web site)

Ambler Campus
102 Learning Center
For hours of operation, visit the MSRC web site (http://www.temple.edu/msrc/tutoring/schedules).

The Math & Science Resource Center creates an environment that fosters a balance of intellectual stimulation with productive and engaging academic support for our students. The academic support center is a welcoming atmosphere for all students enrolled in math, science, statistics, and many other quantitative courses. The student-centered learning and enrichment facility, led by an undergraduate peer assistance model, centers around both content support & learning and study strategies that can be utilized anytime during a student's academic career. The Center is designed to help all students achieve their highest potential as they aim to reach their academic goals.

To help students learn and master math and science course content and the approaches to effective learning, the MSRC offers individual/group drop-in tutoring in its Main and Ambler locations, as well as online tutoring for Ambler and TUCC students. Furthermore, main campus Peer-Assisted Study Sessions (PASS) are offered to students in certain courses by providing weekly guided study sessions that support students not only in content but with learning and study strategies. MSRC tutors are Temple students majoring in Biology, Chemistry, Mathematics, Physics, Statistics and related fields. Comprehensive training prepares the peer staff to help students, especially those new to university-level courses, overcome their difficulties.

In addition to tutoring services, the MSRC provides an array of resources to help Temple students achieve their academic goals. Academic coaching is provided to those students referred to the MSRC by an advisor or a faculty member, and the graduate assistants and tutors can provide students with student success strategies while in the tutoring lab. Tutors also use sample problem sets coordinated and provided by academic departments to conduct exam review sessions that emphasize fundamental principles introduced in the classroom, and at the end of each semester, final exam review sessions are provided for these coordinated classes with high enrollments. During these sessions, tutors reinforce material presented during the course and address specific questions students may have.

At the front desk students can reserve break out rooms for distraction-free study group meetings; borrow a wide variety of relevant textbooks; and access our quiet computer lab with up-to-date workstations and onsite printing. In addition to tutoring, the tutoring lab houses a Laptop Loaner Program as well as a study space for those seeking an academic setting to focus on their work.

A valid Temple student ID is all that is needed to use any of the MSRC's resources or services. For up-to-date announcements and resources, visit the MSRC office or web site (http://www.temple.edu/msrc).

Tutoring Services
Tutoring at no charge is available in the following schools, colleges, and departments:

Main Campus
Accounting
403 Alter Hall
215-204-8110

Alliance for Minority Participation (AMP) Bridges to Baccalaureate Program
A306 Barton Hall
215-204-4550

Economics
626 Ritter Annex
215-204-8880

Engineering
Engineering Building, Room 349
215-204-7800
Finance
401 Alter Hall
215-204-8451

French
Anderson Hall, Room 512
215-204-8266

Intellectual Heritage
215A Anderson Hall
215-204-1770

Kinesiology
Students enrolled in KINS 1223 and KINS 1224 are advised to consult their syllabi and Blackboard sites for information about tutoring.

Marketing
501 Alter Hall
215-204-8111

Math and Science Resources Center (MSRC)
Walk-in basis, no appointments necessary
1810 Liacouras Walk
Room 201 - Main Office
Room 208 - Tutoring Lab
215-204-8466
www.temple.edu/msrc/

Praxis Tests
Office of Student Services
College of Education
215-204-6010

Risk Management and Insurance (RMI)
601 Alter Hall
Tutoring is available for RMI 2101

Statistics
390 Speakman Hall
215-204-8144

University Writing Center
201 Tuttleman Learning Center
215-204-0702
www.temple.edu/writingctr

Ambler Campus
Office of Academic Advising and Career Development
109 West Hall
267-468-8200

Math/Science Resource Center
102 Learning Center
267-468-8386
www.temple.edu/msrc

Writing
102 Learning Center
267-468-8386

Center City Campus
Statistics
Sixth Floor, 1515 Market St.
Other Tutoring Sources

• Instructors may be able to recommend tutors, often graduate students working toward master's or doctoral degrees in the department.
• Departmental offices generally have lists of qualified tutors available to work with undergraduates.
• The Student Assistance Center, first floor, Student Center, Main Campus, maintains a list of students available to tutor in a variety of subjects. These tutoring services often are available for a nominal hourly fee, arranged with the tutor.
• At the Ambler campus, the Office of Academic Advising and Career Development, 109 West Hall (267-468-8200), maintains information about tutoring services.

The University Writing Center

Lori Salem, Director
www.temple.edu/writingctr

Locations and Hours:

Main Campus
Hours: Monday – Thursday, 8:30 a.m. to 8:30 p.m.
Friday, 8:30 a.m. to 4:30 p.m.
Saturday 10:00 a.m. to 4:00 p.m.
201 Tuttleman Learning Center
215-204-0702

Ambler Campus
Call 215-204-0702 for hours
102 Learning Center

The University Writing Center provides services to students and faculty across the university. These services include tutoring, workshops, and seminars, as well as a computer classroom. Many of these services, including tutoring, are accessible online through the center’s web site. All services are free-of-charge to Temple students and faculty. Tutoring services are offered on a drop-in basis or by appointment.

Center staff include graduate students and advanced undergraduates from a variety of fields and disciplines, including history, English, political science, and education. All are selected based on their demonstrated writing ability and teaching aptitude. Staff participate in regular professional development sessions.

Services for Students

Students can work one-on-one or in small groups with center staff on writing being done for any course. They may also bring writing being done outside of course work. Tutors work with students at any stage of a writing project, from planning and drafting to revising and editing. They encourage students to focus on specific aspects of their writing, such as organization, sentence clarity, or paragraph structure. Tutoring sessions are a collaborative process in which the tutor works with and supports the student through the revision process.

Non-native English speaking students (including IELP) can work one-on-one with Conversation Partners on any language-related issue, including but not limited to listening, speaking, grammar, pronunciation, presentations, and test prep. Workshops are also provided on specific language topics. Students can also practice English in group settings with staff and alumni in our monthly events, which can be found on our web site.

Students who come to the center for tutoring or conversation partners can also make use of the center’s computer lab. They can use desktop publishing software to write and print papers; plan, outline, revise, edit, and proofread; and format and generate bibliographies and citations. The lab is connected to the internet; students may access the web and all library research facilities. Help is available for using these technologies. The lab also includes hardware and software designed to assist students with disabilities.

The center maintains an interactive web site (http://www.temple.edu/writingctr). Students can access and download resources and handouts, and they can also access online tutoring. Students can submit papers or questions to the e-mail tutoring service, and they will receive a reply from a tutor within 12-24 hours.

Services for Faculty

Faculty teaching a writing or writing-intensive course can request an in-class writing workshop on a wide variety of topics. The writing workshops are interactive, and they are tailored to specific courses and assignments. To request a workshop, faculty can call the center or access the center’s web site (http://www.temple.edu/writingctr).

Faculty teaching writing-intensive courses are invited to request use of the center’s state of the art computer classroom. This 27-station classroom is organized in a seminar style, with access to projection and to the internet. Technical support for faculty using this facility is also available.
Student Services

Temple University Career Center

220 Mitten Hall 1913 N. Broad Street
215-204-7981
215-204-4462 (Fax)
www.temple.edu/provost/careercenter/

The Temple University Career Center is a central resource that builds collaborative relationships among the Temple community, and empowers students and alumni through comprehensive career development services, driving successful careers.

Career services are offered online and at the Career Center. Visitors can explore major, careers, and graduate school options; learn how to brand themselves by receiving advice on resumes, cover letters, interviewing, networking, and job search skills; and connect with employers for internships, part-time, and full-time positions.

Visit the Temple University Career Center online at www.temple.edu/provost/careercenter/ or in person at 1913 N. Broad Street, Mitten Hall 220, Philadelphia, PA 19122.

Meet with a Career Coach by dropping-in for a 15-minute appointment Monday through Friday between 11:00 a.m. and 3:00 p.m., by scheduling a 30-minute appointment, or virtually Monday – Friday from 2:00 p.m. to 3:00 p.m.

Contact the Career Center at 215-204-7981 or careercenter@temple.edu.

Disability Resources & Services

100 Ritter Annex
1301 Cecil B. Moore Avenue
215-204-1280
215-204-1786 (TTY)
215-204-6794 (Fax)
drs@temple.edu
www.temple.edu/disability

Temple University is committed to the full inclusion of students with a disability in all programs and services. Disability Resources and Services (DRS) facilitates access and accommodations on an individualized basis and provides opportunities for students with a disability to grow and develop. We work to build a learning community where people with diverse abilities are valued and included in all facets of life at the university.

Our dedicated, knowledgeable staff meets with students to determine eligibility for accommodations and discuss strategies for college success. DRS develops programs and workshops to support student retention and provides training and awareness about access and inclusion to the entire university community.

Students who connect with DRS include those with physical, visual, hearing and speech disabilities, health, mental health, and autism spectrum conditions, attention deficits, brain injuries, and learning disabilities. We value students of all backgrounds. Many student veterans, student athletes, honors students, and international students who have a disability connect with DRS. DRS is a free, confidential service.

Services are available at all Temple University campuses. All students, regardless of their home campus, should contact DRS on Main Campus to register. Each campus has an identified DRS liaison.

Disability Resources and Services provides the following services:

• Pre-College Information
• Intake Assessment
• Accessible housing
• Orientation and placement test accommodations
• Classroom and testing accommodations, including:
  • Note-taking support
  • Testing accommodations
  • Alternate format materials
  • Sign language interpreters and CART services
• Assistive Technology
  • Assessment, training, and short-term equipment loans
• Scholarships
• Career Development
• Mentoring and leadership development opportunities

Visit www.temple.edu/disability to explore our programs and services.

Military and Veteran Services Center

215-204-6130 or 267-468-8102
tu vets@temple.edu
www.temple.edu/veterans

Making the transition from military to college life can be challenging. To assist with this transition, Temple University Military and Veteran Services Center works with the various university departments to plan and implement educational and social programs to help veteran students succeed at Temple University.

Temple is recognized for its support of U.S. military veterans and active duty servicemembers in their pursuit of a college education. Designated by U.S. News & World Report as one of the nation’s “Best Colleges for Veterans” and ranked in the top 20% of Military Friendly® Schools by G.I. Jobs Magazine since 2010, Temple University, a proud participant of the Yellow Ribbon Program, provides access to excellence and opportunities for success for military service members and veterans who are admitted to and/or enrolled at Temple. Each school and college at the university, as well as all the key student services departments that provide direct service to veterans, has a designated veteran point of contact person to help assist students. Each school and college also has a veteran academic advisor. More information can be found on the website at www.temple.edu/veterans. The University is committed to assisting our veterans, military students and their dependents with making a smooth transition from the military to student life.

For more information, please contact the Associate Director for Adult and Veteran Student Recruitment at 215-204-6130 or 267-468-8102 or e-mail tu vets@temple.edu. Questions regarding the certification process and VA benefits can be directed to the University’s Certifying Officer in the Office of the University Registrar at 215-204-7378 or vastudentbenefits@temple.edu.

Veterans Certification Process

Veterans may enroll as full-time or part-time students; however, benefits are based on enrollment status. To begin the process to use your benefits, it is imperative that you complete the steps that follow before the beginning of the first semester in which you are enrolled at the university, in order to receive your benefits in a timely and accurate manner:

• Submit a copy of your certificate of eligibility
• Write your TUID on the front of the certificate
• If you are receiving Chapter 35 DEA benefits, you must also write the social security number of the parent who transferred benefit
• Scan/e-mail your certificate to loriann@temple.edu or hand-deliver a copy to the Office of the University Registrar, 1801 N. Broad Street, Conwell Hall, Room 200.

*NOTE - If you do not submit your certificate of eligibility in advance, it can negatively affect the timely and accurate processing of your program benefit payments.

If you do not have a Certificate of Eligibility, you can obtain a copy by contacting the VA at www.benefits.va.gov/gibill/ (http://www.benefits.va.gov/gibill), click on “Submit a Question” or call 1-888-GI-Bill1.

Once your certificate of eligibility has been processed you will receive a veteran declaration tab on your TUportal. If you would like to use your GI Bill® benefits for a term, you must be registered for classes. Go to the Veteran Benefit Declaration page by clicking on the Veterans Declaration link in the Registrar Channel on TUportal.

• On the Veteran Benefit Declaration page, select the term, select "yes" under process benefits, provide your credit hours and click "save declaration."
• This process notifies the certifying official that you are ready to have your benefits processed for that term.
• You must submit a declaration to use your benefits!

If you do not want to use your GI Bill® benefits for the term, go to the Veteran Benefit Declaration page, select the term, select "no" under process benefits and click "save declaration."

The Veterans Coordinator in the Office of the University Registrar is available to answer questions concerning VA benefits at 215-204-7358 or vastudentbenefits@temple.edu.

Additional tools that can help you to make an informed decision about choosing Temple University:

G.I. Bill® Comparison Tool Beta

College Scorecard (College Affordability and Transparency Center)
Temple University Campus Recreation is the coordinating office for recreational sports programs at Main Campus. More than 4,000 students, faculty, and staff participate daily in one or more of the various activities offered by our office. These activities include intramurals (men's, women's, co-rec), sports clubs and organizations, informal recreation, special events and programs, group fitness, adapted recreation, aquatics, and student staff development.

**Facilities**

**Independence Blue Cross Student Center (IBC) - 1701 N. 15th Street**
The 59,000 square foot Independence Blue Cross Student Center (IBC) provides participants with a first-class environment for fitness conditioning, group fitness, martial arts, and racquetball. The IBC also has an indoor jogging track and an outdoor multi-purpose court.

**Pearson McGonigle Halls - 1800 N. Broad Street, 3rd Floor Rec Court Area**
This newly constructed space provides opportunities for activities such as basketball, volleyball, badminton, table tennis, as well as an indoor golf driving range. The courts are divided by three and a half mechanical curtains that can section off specific court areas or be raised to allow for full area events.

**Pearson McGonigle Halls - 1800 N. Broad Street, 2nd Floor Fitness Mezzanine Area**
The Fitness Mezzanine is a new informal recreation area located on the second floor of the Pearson McGonigle Halls. The 2,200 square foot Fitness Mezzanine features the following equipment: 14 cardio machines, 8 selectorized pieces, interactive Xbox Kinect and Nintendo Wii gaming stations and 3 speed bag workout stations. Boxing workout and gaming stations are available during designated hours; please check the Campus Recreation web site for more information. General Campus Recreation access policies and equipment use policies apply. Access to the Fitness Mezzanine Area must be through the second floor - Room PH-200.

**Pearson McGonigle Halls - 1800 N. Broad Street, Climbing Wall, Atrium**
Recreational climbing is available in the Pearson McGonigle Halls Atrium, featuring a 26 foot climbing wall, a 26 foot free standing tower and a 12 foot bouldering wall. Hours of operation will be listed on the Campus Recreation web site each semester. Equipment available for recreational use will include harnesses, carabiners, and climbing shoes. Orientations, belay certifications and climbing clinics will be offered at specified times throughout the semester. ID with valid recreation access is required to enter the climbing wall area. Limited space is available in the climbing wall area for patron access. Please Note: Due to the nature of climbing wall activities and the safety orientations required to use the wall, guest pass holders are not permitted entry into the climbing wall area. Special event activities are offered throughout the semester as well. Alterations to the normal schedule will be posted in the facilities and on the web site in advance.

**Pearson McGonigle Halls Pools (30/31) - 1800 N. Broad Street, Ground Level**
Aquatics programs are held in Pearson Hall Pools 30 & 31. Pool 30 is available for scheduled recreational swimming hours with some specific hours identified for lap swimming. Other aquatics events throughout the semester include: Swim into Shape, Water Aerobics, and Learn to Swim/Guard Classes.

**Temple University Fitness Center (TUF) - 1600 N. Broad Street, 2nd Floor**
The TUF center is a 16,000 square foot fitness facility that includes cardiovascular machines and selectorized weight training equipment. It also has significant space dedicated to circuit training, light weight, strength and core workout areas. TUF has backpack locker and sport towel services as well as a lounge area available for use by students, employees and alumni rec patrons.

**Temple Administrative Services Building Fitness Center - 2450 W. Hunting Park Avenue**
Campus Recreation manages the employee-only 4,300 square foot corporate fitness center at Temple's Administrative Services Building (TASB). The center offers a full line of strength equipment, numerous cardiovascular exercise machines and stretching/abdominal areas. Access is available through payroll deduction.

**Informal Recreation**
Informal Recreation provides the opportunity to pursue recreational activities on an unstructured and voluntary basis. Run, swim, lift weights, or participate in other recreational activities at designated times. With fitness as the overriding theme, informal recreation is a very popular amenity available to the campus community.

**Group Fitness**
Group Fitness programs provide participants with a variety of choices ranging from aerobics and yoga to body toning and spinning. More than 55 sessions per week are offered by certified leaders. Campus Recreation provides participants with a dynamic array of sessions in a first-class aerobic facility.

**Adapted Recreation**
Extracurricular opportunities exist for students with physical disabilities. The goals of the Adapted Recreation program are: to introduce students to lifelong leisure skills and to promote total participation in college life. The main focus of the program is a workout buddy program that matches students with disabilities with an able-bodied assistant to help them in their selected workout. Tennis, hand cycling, rowing and fitness conditioning are some of the available activities. If you seek advisement on recreational concerns in this area, contact our office to make an appointment.

**Intramural Sports**
The Intramural Program provides students with a flexible, yet structured, environment in which to participate in sport activities. Sport activities include basketball, dodgeball, flag football, floor hockey, handball, indoor and outdoor soccer, softball, and volleyball. The sports are administered in league format with various divisions servicing men's, women's, and co-recreational teams. Teams and individuals must formally register for activities.

**Sport Clubs & Sport Organizations**
Sport Clubs and Sport Organizations are groups of individuals who share a common interest in a sport activity and have gained university recognition via registration procedures governed by Campus Recreation. Sport Clubs and Sport Organizations differ in scope and purpose and are classified as highly-competitive, instructional, and/or recreational. The key element to the program is that it is student-initiated and organized with an emphasis placed on participation and interest in the same activity. There are currently 36 active clubs: Badminton, Baseball, Bowling, Crossfit, Cycling, Equestrian, Fencing, Field Hockey, Gymnastics, Men's Gymnastics Elite, Handball, Ice Hockey, Indoor Rock Climbing, Karate, Lacrosse (Men's & Women's), Paintball, Powerlifting, Racquetball, Roller Hockey, Rugby (Men's & Women's, Sevens (M & W)), Snowboarding, Softball, Soccer (Men's & Women's), Swimming, Taekwondo, Tennis, Track (M), Ultimate Frisbee (Men's and Women's), Volleyball (Men's & Women's) and Wrestling. Additional clubs and organizations are not being added at this present time. Sport Club Interest Forms and Club Contact Lists may be obtained by visiting the Campus Recreation web site or the main office in Suite 303 of Pearson McGonigle Halls.

For further information, call Campus Recreation at 215-204-1267, or visit the department web site at www.temple.edu/studentaffairs/campusrec.

**Ambler Campus**
Ambler Campus offers a variety of recreational and intramural activities. The campus includes the Red Barn Gym, basketball courts, a fitness center, outdoor pool, sand volleyball pit, a multipurpose field and tennis courts. For information about Ambler Campus recreational activities and facilities, visit the web site at http://ambler.temple.edu/athletics-and-wellness/recreation. For gymnasiuim information, call 267-468-8151. For pool information, call 267-468-8152.

**International Student Services**
Martyn J. Miller, Ph.D., Director
1700 N. Broad Street, Office 203B
215-204-7708 (Phone)
215-204-6166 (Fax)
www.temple.edu/isss and www.temple.edu/provost/international/ielp/

International Student and Scholar Services (http://www.temple.edu/isss) (ISSS) provides services and support to Temple University’s international students, scholars and researchers. Contributing to Temple’s intellectual and cultural diversity, the international student and scholar community represents more than 120 countries and offers a unique opportunity to expand one’s cultural and academic horizons. To accomplish its mission, International Student and Scholar Services generates all legal documents required for nonimmigrant students and scholars; provides advisory and
counseling services; serves as a liaison to university departments, U.S. and foreign government agencies, and the greater community; facilitates the assimilation of international students and scholars into the larger Temple community; and contributes to the international community’s cross-cultural understanding and appreciation. Detailed information on programs and services offered by ISSS is available from the office in 1700 N. Broad St. or the office’s web site at www.temple.edu/isss.

The Intensive English Language Program (http://www.temple.edu/provost/international/ielp) provides English-language training to individuals seeking to improve their English language skills to prepare for admission to Temple University or other universities or colleges whose primary language of instruction is English. Detailed information on programs offered by IELP is available from the office in 1700 N. Broad St. or the office’s web site at www.temple.edu/provost/international/ielp.

Temple University requires all new and continuing international students in Nonimmigrant Student (both F-1 and J-1) status to carry health insurance that meets certain minimum standards determined by the United States Department of State. For detailed information, please see www.temple.edu/hr/students/healthinsurance/international.htm.

All international students in Nonimmigrant Student (F-1 and J-1) status must maintain their nonimmigrant status insofar as regulations of the United States Citizenship and Immigration Services (USCIS) and the United States Department of State (DOS) are concerned. In general, students in this status must complete a full-time course load each academic term while they remain in the United States and must not accept unauthorized on-campus or off-campus employment. For detailed information, please see www.temple.edu/isss/current-students/status.html.

Eligibility for employment for individuals in Nonimmigrant Student (F-1 and J-1) status is based on regulations of the USCIS and the DOS. For detailed information, please see www.temple.edu/isss/employment/index.html.

Major medical health insurance is required for all international students in Nonimmigrant Student (F-1 and J-1) status. International students are required to submit to the university’s Benefits Office evidence of coverage by a health insurance policy that meets the minimum coverage required by Temple University (consistent with standards established by the United States Department of State): maximum deductible of $500 per accident or illness; payment of at least 75% of covered medical expenses; maximum benefit of $50,000 per accident or illness; repatriation benefits of no less than $7,500; and medical evacuation benefits of no less than $10,000. Students may also purchase such health insurance upon arrival at Temple University. For further information, please contact the university’s Benefits Office at 215-926-2270 or e-mail StudentInsurance@temple.edu. For detailed information, please see www.temple.edu/hr/students/index.html.

In addition, international students must demonstrate that they are free of active tuberculosis by submitting to Student Health Services a Tuberculosis Screening Record which has been certified by a licensed physician. International students may meet this requirement upon arrival at Temple University by taking a PPD test at Student Health Services (http://www.temple.edu/studenthealth).

A mandatory orientation session is held for new international students at the beginning of each academic term. For more information, please see the International Student and Scholar Services web site at www.temple.edu/isss/future-students/orientation-international.html and the Office of Orientation web site at www.temple.edu/studentaffairs/orientation.

For more information about maintaining Nonimmigrant Student (F-1 and J-1) status, please see www.temple.edu/isss.

**Department of Intercollegiate Athletics**

www.owlsports.com (http://www.owlsports.com)

The Department of Intercollegiate Athletics is committed to pursuing excellence at the Division I Football Bowl Subdivision (FBS) level and providing opportunities for its diverse student-athletes to maximize their athletic, academic and life-skill potential. The department sponsors 19 sports and provides high-level coaches and administrators, whose goal is to instill a winning attitude on and off the field of play through core values such as teamwork, leadership and service to others. As one of the most visible messengers of the Temple story, the Department of Intercollegiate Athletics strives to be a unifying force for the university with the city of Philadelphia, The Commonwealth of Pennsylvania, as well as the nation. Temple University is a proud member of the National Collegiate Athletic Association, the American Athletic Conference, the Big East Conference and the ECAC.

**Office of the Dean of Students**

Howard Gittis Student Center, Room 304
215-204-7188
215-204-1663 (Fax)

www.temple.edu/studentaffairs/deanofstudents/

The mission of the Office of the Dean of Students is to engage, develop, and retain Temple students by providing them with supportive services, advocacy, and education. The Dean of Students office provides assistance to students and their parents/families in an effort to ensure co-curricular learning and overall collegiate success. The Dean's office also leads the University's CARE (Crisis Assessment Response and Education) Team and serves as a resource to faculty and staff who have concerns about a student. The areas which report through the Dean of Students are: CARE Team, Disability Resources and Services, HEART Wellness Resource Center, Leadership Development, Orientation, Student Activities (including Greek Life and student government), Student Conduct and Community Standards, Student Media, and Tuttleman Counseling Services.
Student Center Operations

Main Campus
Second Floor Mezzanine, Howard Gittis Student Center
215-204-7131
www.temple.edu/studentaffairs/studentcenters/

Health Sciences Center
Second Floor, Student Faculty Center
215-707-4017
www.temple.edu/studentaffairs/studentcenters/

Student Center Operations is responsible for the management of the Main Campus Student Center, the Student Faculty Center on the Health Science Campus and a variety of other student-focused spaces on Temple's Main Campus. Our role is to serve the living, dining, meeting and recreation needs for the greater campus community. To foster excellent interactions, we offer flexible student focused spaces, opportunities for student leadership and employment, and areas for student organizations to host events, programs and meetings.

On the Main Campus in the Howard Gittis Student Center our areas include the Game Room, the "Reel" Cinema, the Information Desk, the Graphics Media Center, and the Student Organizations Village. Additionally, just off the Atrium you will find the Book Store (Barnes & Noble), Philadelphia Federal Credit Union (PFCU), a UPS Store, Parking Services and the Walker Food Court. We also manage the Owl Cove and the Great Court in Mitten Hall, and a variety of outdoor spaces including the Bell Tower and Liacouras Walk for Student Organization use. All use of Student Center meeting and conference room spaces, lounges, and special event areas are managed by the Operations team, and we support over 7000 events each year.

On the Health Sciences Campus, just north on Broad Street, in the Student Faculty Center (SFC), you will find another wonderful student center facility. The SFC includes both activities and operations with a primary focus on Health Science students - but all are welcome to attend events or programs. Our office manages the Recreation Center and all conference services needs for the Health Science Campus. All Student Center facilities are designed and managed with a strong student focus, to provide avenues for leadership through employment, and facilities which foster both formal and informal involvement.

The Main Campus Student Center offers a three-story atrium as a grand entrance to a variety of Student Affairs offices within the building. The Dean of Students; Student Activities; Orientation; Student Conduct; Temple Student Government; Temple News (student newspaper); and the Templar (student yearbook) all "live" in the Student Center.

The Student Faculty Center also offers a bookstore location, study and informal lounges, conference rooms, game spaces, a television lounge, dance studio, gymnasium, and fitness center. Your Temple identification card allows you access to the facility.

If you are interested in getting involved, finding a great place to meet and relax, or using space for your event, program or meeting, please visit us on the web at www.temple.edu/studentaffairs/studentcenters/ or in our offices for more information - and please make sure to visit your Student Centers often!

Student Health & Wellness

Student Health Services

1810 Liacouras Walk, Fourth Floor
215-204-7500
215-204-4660 (Fax)
www.temple.edu/studenthealth

Student Health Services strives to promote a high standard of health among Temple University students through programs in preventive medicine and health education, in addition to diagnosis and treatment of injury and illness. Care providers include doctors, nurse practitioners, and nurses. Services offered at the Main, Ambler, and Health Sciences Center campuses include basic medical care, an immunization/allergy injection clinic, family planning services, and a self-care center. Other services offered at Main Campus include nutritional consultation and HIV testing.

Student Health Fee

As part of the University Services Fee, students are charged each semester during the academic year to help subsidize the basic diagnostic and treatment services provided by health care providers at all four campus locations. There are charges for services not covered by the Student Health Fee such as dispensed medications, orthopedic supplies, and immunizations. Office laboratory tests can be performed at Ambler and Health Sciences Center offices, while more extensive laboratory testing is available at the Main Campus office. Please check the Student Responsibilities (p. 36) section for further information on health fee and insurance.

Tuttleman Counseling Services

John DiMino, Ph.D., Director
1810 Liacouras Walk
215-204-7276
Tuttleman Counseling Services (TCS) is a comprehensive provider of mental health services to Temple’s student population. Our mission is to support and enhance the psychological functioning of our students and thereby support the academic mission of the university. It is recognized that our students are dealing with a variety of major life issues as they pursue their education. These include separation and individuation, identity formation, relationships, affiliation, and career choices. In addition, some students come to us with prior mental health histories and medication needs.

TCS is first and foremost a provider of individual and group counseling services. Couple and occasionally family counseling is available as well at the student’s request. This foundation provides students with support and guidance for a wide variety of problems, from adjustment issues and transitory difficulties to more serious psychological problems and even severe mental illness. Whenever possible, we seek to help students avoid or reduce self-harm that may stem from making poor choices. TCS provides services in the following areas:

**Psychological Services:** Psychological Services is staffed by licensed psychologists who provide brief individual, couple, and group counseling, as well as referral, consultation, and educational workshops. Some common issues that are addressed, either individually or in groups, include:

- relationship problems
- stress, depression, anxiety
- eating disorders
- loss and/or grief
- procrastination
- shyness
- academic performance
- career decisions
- family problems
- sexuality and sexually-transmitted diseases
- gay, lesbian, bisexual, and transgender issues
- racism
- sexism
- vocational counseling

The Psychological Services staff will also assist students in locating resources and other services available on campus or in the city that are specific to their needs.

**Psychiatric Services:** Psychiatric Services is committed to caring for the mental health needs of Temple University students by providing psychiatric evaluations, medication consultations, and short-term individual psychotherapy. The psychiatrist also responds to referrals from other TCS units and serves as a liaison to the Health Sciences Center. Students are seen by appointment, except in emergency situations when immediate care is required.

**CASA (Campus Alcohol and Substance Awareness):** The Campus Alcohol and Substance Awareness (CASA) program is a comprehensive program focusing on all aspects of alcohol and other drug use and abuse. The CASA program is staffed by counselors who work with students individually and in groups.

**SACE (Sexual Assault Counseling and Education):** The SACE staff provides crisis intervention, survivor advocacy, individual counseling, and groups for survivors of assault, child sexual abuse, domestic violence, and sexual harassment.

Hours are 8:30 a.m. to 5:00 p.m., Monday - Friday. Walk-in Clinic hours for accessing services are 10:00 a.m. to 1:30 p.m. on Monday, Tuesday, Thursday, and Friday, and 9:00 a.m. to 12 noon on Wednesday. The staff also provides on-site services at the Ambler campus. Students are seen by appointment except in emergency situations when immediate care is required. Services are free and confidential for all registered students. Please call 215-204-7276 for more information.

**Wellness Resource Center**

Kimberly Chestnut, Ph.D., Director

Mitten Hall - Lower Level

215-204-8436
215-204-9710 (Fax)
tuheart@temple.edu

The Wellness Resource Center is the on-campus health education and prevention department. The center is staffed by masters and doctorate level health professionals and supported by peer health educators. We are committed to providing comprehensive wellness resources and services that empower Temple University students in making informed, healthier choices, and achieving academic success. We also work with faculty, staff, and departments in training and consultation capacities to support them in addressing student health needs and concerns.
multifaceted model helps to create a collective consciousness of wellness on Temple’s campus—with the hope of producing students who are not only well-educated but also healthy.

Wellness Resource Center provides training, consultation, and programs on a variety of topics, including:

• LGBTQ
• Alcohol and Substance Abuse
• Sexual Assault, Rape and Dating Violence
• Healthy Relationships
• Safer Sex
• Diversity
• Alcohol and Sex
• Sexually Transmitted Infections
• Stress/Time Management
• Self-Esteem
• Body Image and Nutrition
• HIV
• Sexuality: Orientation, Gender, Identity
• Mental Health

Wellness Resource Center provides a safe space for students to receive free, anonymous or confidential health information in a supportive environment. We engage with students in a variety of ways:

• Individual Health Education sessions
• Health Programming
• Peer Education
• Health-Related Referrals
• Condom Sales
• Promotion of a healthier campus environment
• Course instruction
• HIV Testing
• Campus-wide wellness events

Wellness Resource Center offers students opportunities to get involved as peer educators and interns. These students receive comprehensive wellness training, preparing them to support campus-wide health and wellness initiatives. Students can receive academic credit for their work with the Wellness Resource Center and there are a limited number of paid positions for students who have successfully completed our peer education class (PBHL 2304).

Hours are 8:30 a.m. to 5:00 p.m., Monday - Friday. Please call 215-204-8436 for more information or visit our web site (http://www.temple.edu/studentaffairs/heart).
University Housing & Dining Services

University Housing & Residential Life

Michael D. Scales
Associate Vice President for Student Affairs
Director of University Housing & Residential Life
1910 Liacouras Walk
(P) 215-204-7184, option #5
(F) 215-204-3261
housing.temple.edu

Residence halls at the Main campus, as well as one leased, off-campus housing option, provide an opportunity for students to extend their learning experiences beyond the classroom, library, and laboratory.

University Housing & Residential Life works to create group-living environments in which each student is encouraged to develop as an individual in an atmosphere that promotes emotional, social, and intellectual growth. In addition, University Housing & Residential Life is committed to creating community-living environments that value and promote an appreciation for diversity of cultures, lifestyles, and people.

Please check the Office of University Housing & Residential Life web site listed above for additional information on residential services available. The Office of University Housing & Residential Life web site also provides online resources to assist Temple University students in locating off-campus housing.

Dining Services

Temple University Dining Services offers a variety of meal plans and dining locations to accommodate every student’s unique schedule and dining needs. So if variety is what you are looking for, we have it! From hot entrees, cold sandwiches, sushi, vegetarian, vegan, gluten-free and Kosher options, you can find whatever you’re craving conveniently located throughout campus. Meals are provided during breakfast, lunch, dinner and “Fourth Meal” throughout the week.

Temple Dining Services Meal Plan Packages

Meal plans are offered to fit every lifestyle. With no restrictions on when you can use your meals, Premium meal plans provide students with the ultimate flexibility, allowing students to use their meal plan numerous times during any period. Premium meal plans offer a set number of meals per week, with many options from 5 meals per week to 25 meals per week. Other meal plans include:

- J&H Unlimited Plan - Ideal for students who want to eat small meals throughout the day, or athletes requiring high caloric intake. It allows you to have unlimited meals at the Louis J. Esposito Dining Center (commonly referred to as “J&H”) and once during each meal period at any other dining location.
- Basic Meal Plans - Allow students to use their meal plan once during each meal period (breakfast, lunch, dinner and 4th meal).
- Meal Passes - Can be used at any dining location, just like our other plans. They are purchased on a “per semester basis” with all of the perks of a premium plan.

To find more information about our meal plans, visit www.tudining.com.

Diamond Dollars are built into the price of each meal plan, which provides students with ultimate flexibility around campus. Diamond Dollars are just like having a bank account with Temple. Your OwlCard acts as a debit card at many locations on and around campus. Diamond Dollars are tax-free and able to be used at all Temple Dining Services locations.

Dining on the Ambler Campus

Temple Dining Services operates Café a la Carte, located in the Ambler Learning Center, where you can get beverages, salads, sandwiches, fresh fruit cups, yogurts, desserts, snacks, and much more!
University Services

Temple University Alumni Association

Sullivan Hall, Suite 100
Main Campus
215-204-7521
alumrel@temple.edu
alumni.temple.edu

As a current Temple student, embrace your role as an alumnus/a-in-residence and plug into the Temple University Alumni Association's (TUAA) global network of more than 285,000 living alumni now - before you don a cap and gown!

Here's what it means for you:

• Opportunities to connect with alumni at an upcoming event (http://www.alumni.temple.edu/s/705/alumni/2col.aspx?sid=705&gid=1&pgid=3955), including Homecoming (http://www.alumni.temple.edu/homecoming) (October 8-11, 2015) and Alumni Weekend (http://www.alumni.temple.edu/alumniweekend)


Stop by the Alumni Center in Sullivan Hall—the historic building dedicated by President Franklin Roosevelt in 1936—to learn more about how the Student Alumni Association and TUAA can enhance your on-campus experience. The Alumni Center is open Monday through Friday from 8:30 a.m. to 5:00 p.m.

For more information on the student resources available through the TUAA, call 215-204-7521, e-mail alumrel@temple.edu, or visit alumni.temple.edu.

Bookstore

There are five Temple University Bookstore locations. Each store stocks the required books and supplies for the campus it serves. Course materials may be purchased through the bookstore's web site for home delivery or pick-up in store. A student's booklist is accessible via a link on the Student Roster in Self-Service Banner. Select textbooks may also be rented instead of purchased. Please contact the store for more details. In order to maximize the number of used books available to students, the bookstore buys back from students books at the highest possible prices throughout the year. In addition to housing required course materials, all stores feature clothing, souvenirs, and giftware imprinted with the Temple name. Graduation rings can be ordered at any time. Academic regalia are available in the months preceding graduation.

You will also find a large selection of snacks, soft drinks, greeting cards, gift-wrap, posters, and health and beauty items.

During the first weeks of classes, store hours are extended at all locations. See signs posted at each location for specific hours during rush periods and semester breaks.

During the summer and semester breaks, store hours may vary. Visit the bookstore (http://temple.bncollege.com) web site for more details.

Regular hours of operation are:

**Main Campus**
13th St. and Montgomery Ave.
The Gittis Student Center, lower level; 215-204-5578
Monday – Thursday: 9:00 a.m. – 6:00 p.m.
Friday: 9:00 a.m. – 5:00 p.m.
Saturday: 11:00 a.m. - 3:00 p.m.

**Law School**
Barnes & Noble @ Temple University Law School Bookstore
1700 N. Broad St., Ground Floor; 215-204-0514
Monday – Thursday: 7:30 a.m. – 7:00 p.m.
Friday: 7:30 a.m. – 5:00 p.m.
Saturday: 11:00 a.m. – 5:00 p.m.

**Ambler Campus**
Bright Hall, First Floor; 267-468-8460
Monday – Thursday: 9:00 a.m. – 5:30 p.m.
Friday: 9:00 a.m. – 4:00 p.m.

Health Sciences Center
Broad and Ontario Streets
Student Faculty Center, First Floor; 215-707-3157
Monday – Friday: 8:30 a.m. – 4:30 p.m.

Center City Campus
1515 Market St., First Floor; 215-204-1527
Monday – Thursday: 7:00 a.m. – 8:00 p.m.
Friday: 7:00 a.m. – 6:00 p.m.
Saturday: 8:30 a.m. - 3:00 p.m.

Campus Safety Services
Charles J. Leone, Executive Director

Temple Police Locations

Temple Police Administration, 1101 W. Montgomery Avenue, Philadelphia PA 19122
Temple Police Patrol/Police Headquarters, 1801 N. 11th Street, Philadelphia PA
Temple Police Center Station, corner of Beasley and Polett Walks, Philadelphia PA
Temple Police Mini Station, 1600 N. Park Avenue, Philadelphia PA
Temple Police at Health Sciences Center Campus, Parkinson Pavilion, Broad and Tioga Streets, Philadelphia PA
Temple Police at Ambler Campus, Bright Hall, Room 103, Upper Dublin, PA; 267-468-8480

Emergency Phone Number for all campuses

On Campus: 1-1234
Off Campus: 215-204-1234
TTY: 215-204-2357

These phone numbers will reach the Department of Campus Safety Services from all campuses. You can also reach us through our web site at www.temple.edu/safety.

Campus Safety Services is a multi-faceted department that is committed to serving the students, faculty, employees, visitors, families and vendors, who work for, study at and visit our campuses. The department services a diverse community, 24 hours a day, 365 days a year. The Campus Police Division currently has over 130 campus police officers who patrol our area campuses by foot, by bike and in patrol cars. They are police professionals who receive state-mandated training at an accredited police academy. The Security Division officers are stationed in University residence halls and other University buildings, checking IDs and assisting students, staff and visitors.

During the academic year, members of the Temple Community are free to use the OWLoop shuttle and TuR Door service on the Main Campus from 5:30 p.m. to 6:00 a.m. All services are operated by Facilities Management and information is available on their web site at http://campusoperations.temple.edu/.

The Department of Campus Safety Services also offers a variety of Crime Prevention programs, including self-defense, street smarts, and big-city living programs. For further information call 215-204-5870.

The Annual Security and Fire Safety Report (http://www.temple.edu/safety/asfr) is available on our web site.

Parking Services

Office of Parking Services
Montgomery Garage (Main Campus)
1859 North 11th Street
Philadelphia, PA 19122
215-204-5301
parking@temple.edu
campusoperations.temple.edu/parking-transportation

Temple University has a variety of parking options (http://campusoperations.temple.edu/parking-transportation/garages-lots) at its Main, Health Sciences Center, and Ambler campuses. For its Center City campus, Temple has negotiated parking discounts with nearby garages.

Part-time parking is available for students who park infrequently.
• These parkers are assigned to the Liacouras Garage or the Montgomery Garage. The permit is complimentary and valid for one academic year (September through August).

• Part-time parkers pay $8/entry, which is automatically deducted from their Parking Services account when they enter the garage.

• There is no required minimum to fund a part-time parking account, but Parking Services recommends an initial balance of $80. Funds can be managed on the TU Parking Account (https://templeparking.12hosted.com/cmn/auth.aspx) site.

Semester parking is available for students who park frequently and/or need overnight parking.

• Students who purchase semester parking but do not need overnight access are called “commuters”, and the rate for these students is $240/semester. Commuters are assigned to the Diamond Street Lot, the Liacouras Garage, or the Montgomery Garage on Main Campus, or the Battersby Lot at the Health Sciences Center.

• Students who purchase semester parking and require overnight access are called “overnight parkers”, and the rate for these students is $400/semester. Overnight parkers have 24/7 access to the Tyler Lot, Liacouras Garage, or Montgomery Garage on Main Campus, or the Carlisle West Garage at the Health Sciences Center.

Ambler Campus parkers must purchase a permit.

• Ambler students have the option to pay $84 for the entire academic year (September through August) or $55/semester. There is no reciprocity between campuses, and Ambler students who need to park on Main Campus will need to register as part-time parkers or park in a visitor lot.

Visitors to Main Campus have hourly parking options in the Montgomery Garage or the Cecil B. Moore lot for $3/hour, or the Tuttleman Lot for $6/hour. Additionally, daily parking is available in the Montgomery Garage, Liacouras Garage, 15th Street Lot, and Diamond Street Lot for $17/visit.

Your Parking Services permit and Temple OWLcard are the mechanisms that control access to your assigned parking area. Failure to display your permit may result in a citation. Also, availability of areas and parking assignments are subject to change during summer, holidays, and some special events.

You can sign up for parking by visiting the Parking Services web site (https://campusoperations.temple.edu/parking-transportation/signing-parking/student) or one of our office locations (https://campusoperations.temple.edu/parking-transportation/parking-services/parking-services-office-locations).

We pride ourselves in providing affordable, convenient, and secure parking to the Temple community, and look forward to having you as a customer!

Inter/Intra Campus Shuttle Service

The University provides Evening Shuttle services for those students living on and around the Main Campus. The OwLoop or Main Campus Shuttle provides regular route service 7 days per week between the hours of 5:30 p.m. to 6:00 a.m. The TUr Door service, which also operates during the same hours as the OwLoop, transports students directly to their off-campus residences. The OwLoop bus will be at every stop, indicated on the route map, approximately every 30 minutes. Use this service to obtain secure, fast passage to all major Main Campus locations. The TUr Door service departs from the Transportation Hub at 12th & Berks Streets near the Paley library. TUr Door will transport students directly to their off campus residences via the fastest route possible. TUr Door shuttle operates within the area bordered by Cumberland Street to the North, Girard Avenue to the South, Fifth Street to the East and Twentieth Street to the West. The two routes are distinguished by the lettering and appearance of the buses.

A map of the OwLoop bus route and the TUr Door service area can be found at http://campusoperations.temple.edu/parking-transportation/shuttle-services.

Temple University provides daily shuttle transit services to and from the Ambler, Health Science and Main Campuses during the Fall and Spring semesters. The Monday through Friday service currently operates from 7:00 a.m. through 6:30 p.m. The service is offered at no charge to all students, faculty and staff of the University. All buses are equipped with Wi-Fi internet coverage via Verizon 4G service which is provided at no charge to the passengers. All scheduled departures, in addition to the Main and Ambler Campus, stop at the Health Science Campus on Broad Street. During the school year, there is a regular Monday through Friday service except for semester breaks. During the summer months, there is no service. In addition, there is free shuttle bus service on a regular schedule between the Ambler SEPTA station and the Ambler Campus during the fall and spring semesters. Please check the Office of Facilities Management’s Shuttle Services (http://campusoperations.temple.edu/parking-transportation/shuttle-services) web page for a schedule of shuttle services. Information on these schedules may also be obtained at the Office of Parking Services or Campus Safety Services.
Academic Policies

These academic policies and regulations generally apply to all undergraduate students and provide a framework within which schools and colleges may specify further conditions or variations appropriate to students in their courses or programs. Statements of academic policies and regulations apply to both degree-seeking and non-degree-seeking students unless explicitly noted otherwise.

The information in this bulletin is subject to change by Temple University at any time. Neither this bulletin nor any parts of it may be relied upon as a contract between Temple University and any student, applicant, or other user of this site. All prospective and current students should consult with appropriate University Offices to verify current information and the status of policies, programs, descriptions of curricula, or other information in this bulletin.

The texts of some of these policies are available on the Temple Policies & Procedures web site at http://policies.temple.edu/.

Students should consult their advisors and dean’s offices for any changes in policy that affect them.

- Academic Course Load (p. 82)
- Academic Forgiveness (p. 82)
- Academic Progress for Undergraduate Courses (p. 83)
- Academic Residency Requirements (p. 83)
- Academic Rights and Responsibilities (p. 83)
- Academic Standing (p. 83)
- Assessment of Student Learning (p. 87)
- Athletic Policies (p. 88)
- Attendance (p. 88)
- Audit (p. 88)
- Code of Conduct (p. 89)
- Continuing Degree Seeking Students (p. 89)
- Course Numbering System (p. 89)
- Courses Inapplicable to Graduation (p. 90)
- Courses Over Ten Years Old (p. 90)
- Credit Hours (p. 90)
- Credit for Prior Learning (p. 92)
- Credit/No Credit Courses (p. 92)
- Dean’s List (p. 92)
- Declaration of Major (p. 93)
- Disciplinary Action (p. 93)
- Double Major Across Colleges (p. 93)
- Family Educational Rights & Privacy Act (FERPA) (p. 93)
- Final Examinations (p. 93)
- Grade Change (p. 94)
- Grade Point Average (GPA) (p. 94)
- Grades and Grading (p. 94)
- Graduation Procedures (p. 95)
- Grievances (p. 95)
- Honors for Academic Achievement (p. 95)
- Incomplete Coursework (p. 97)
- Leave of Absence (p. 97)
- Non-Degree Seeking Students (p. 97)
- Permission to Complete a Course at another Institution after Matriculation (p. 98)
- Placement Testing (p. 99)
- Plagiarism and Academic Cheating (p. 99)
- Prerequisites and Co-requisites (p. 99)
- Probation and Dismissal (p. 99)
- Registration (p. 99)
Academic Course Load

The average semester load for full-time students is 15 to 17 semester (or credit) hours. Students must carry at least 12 semester hours to be classified as full time.

Academic overloads during fall and spring semesters (18 or more semester hours for students in the College of Liberal Arts and the College of Science and Technology; 19 or more semester hours in all other schools and colleges) need special approval of the dean or dean's designee of the school or college in which a student is matriculated. Tuition for full-time students covers 12 to 17 hours. Credits over 17 carry additional tuition charges. See Tuition and Fees (p. 125) in the Financial Information section of the Bulletin.

Summer Sessions

Undergraduates must get overload approval for 9 credits or more.

Academic Forgiveness

Scope of Policy & Rationale

Former undergraduate, baccalaureate degree-seeking students who have not taken any coursework at Temple University for a minimum of four consecutive years are eligible for Academic Forgiveness (policy # 02.10.17 (http://policies.temple.edu/getdoc.asp?policy_no=02.10.17)). Students electing Academic Forgiveness must choose the option before the end of the drop/add period of their first semester following their absence.

Definitions

1. Re-enrolled - Students are re-enrolled when they are approved to return to the university after leaving of their own accord.
2. Reinstated - Students are reinstated when they are approved to return to the university following dismissal.
3. Academic Forgiveness - Academic Forgiveness is a status that enables students to return to the university with a renewed cumulative grade point average (GPA).
4. Four Consecutive Years - A total of eight consecutive fall and spring semesters.

Policy Statement

Undergraduate, baccalaureate degree-seeking students who re-enroll or are reinstated following a four-year consecutive absence from the university may petition to have their cumulative GPA recalculated from the time of re-enrollment/reinstatement to the university.

Upon successful petition:

- Cumulative GPA will be reset to 0.00.
- All prior courses and grades will remain on the student's academic record and transcript.
- The notation of "Academic Forgiveness" will be recorded on the student's transcript.
- Courses previously earned at Temple University with grades of D+, D, D-, F and NC will not be used for credit. Credit will be considered for courses with grades of A, A-, B+, B, B-, C+, C, C- and CR. The student's department has final approval of credits that will count towards graduation. Schools/Colleges may disallow credits towards graduation for some older courses.

Re-enrolled or reinstated students electing the forgiveness option may repeat a course one additional time if they previously exhausted their repeat options for that course under the policy on Repeating a Course (policy # 02.10.12 (http://policies.temple.edu/getdoc.asp?policy_no=02.10.12)).

Once enacted, the reset GPA cannot be reversed.
Students are afforded one opportunity for Academic Forgiveness.

**Notes**

1. **Dates of official enactment and amendments.** Adopted by the president on February 8, 2011. Effective August 30, 2011 (Fall 2011).
2. **History.** Supersedes previous policies concerning Withdrawal; Repeat; and Academic Warning, Probation and Dismissal with effective dates prior to May 16, 2011.
3. **Cross References**
   - Policy #02.10.12, Repeating a Course (Undergraduate)
   - Policy #02.10.14, Withdrawal from Classes (Undergraduate and Graduate)
   - Policy #02.10.11, Academic Standing (Undergraduate)

[Note: Academic Forgiveness students wishing to qualify for Latin honors at Graduation must complete a minimum of 60 earned credit hours at Temple following their reinstatement (i.e., excluding their earned credit hours allowed at the time of academic forgiveness)]

**Academic Progress for Undergraduate Courses**

Students in undergraduate courses receive a mid-semester rating report indicating that their work to date is satisfactory or unsatisfactory or that they have not been attending the course. This report is available on Self Service Banner by the end of the sixth week of fall and spring semesters. For further information, see policy #02.10.15 (http://policies.temple.edu/getdoc.asp?policy_no=02.10.15).

**Academic Residency Requirements**

Temple University requires that all undergraduate degree candidates complete 45 hours of the last 60 hours of the degree or program as matriculated students at Temple University. If a matriculated student previously took Temple courses on a non-matriculated basis, those courses are counted towards this requirement. See the policy on Transfer Credits (p. 23).

Students admitted to the University with a large number of transfer credits who want to participate in a Temple Exchange or approved external study abroad program in their junior or senior year should meet with their academic advisors to discuss eligibility.

Students who were active undergraduate students in Spring 2014 or were on an approved Leave of Absence follow the residency requirement indicated in their bulletin when they first matriculated.

To graduate with Latin Honors, a student must complete at least 60 semester hours of the program matriculated at Temple. See Honors (p. 95). Students should consult their school or college for additional academic residency requirements.

**Academic Rights and Responsibilities**

See Academic Rights and Responsibilities (p. 39) in the Student Rights section of the Bulletin.

**Academic Standing**

**Scope of Policy & Rationale**

Undergraduate baccalaureate and associate degree-seeking students are subject to the academic standing rules addressed in this policy.¹ (Policy #02.10.11 (http://policies.temple.edu/getdoc.asp?policy_no=02.10.11))

**Definitions**

1. **Academic Good Standing** - A student is in Academic Good Standing if enrolled in an associate or baccalaureate degree-seeking program and not in the first term of Academic Recovery.
2. **Academic Warning** - A student is on Academic Warning status when:
   a. the student's most recent semester grade point average is less than 2.0 or
   b. prior to having earned 30 credit hours (or 20 credit hours for an associate degree program) the student's cumulative grade point average is below 2.0 or
   c. a transfer student in the first matriculated semester is registered for 18 or fewer credits and whose semester grade point average is less than 2.0.
3. **Academic Probation** - A student is on Academic Probation when the student's cumulative grade point average is below 2.0 after having accumulated 30 or more credit hours (or 20 or more credit hours for an associate degree program). However, transfer students in the first matriculated semester are subject to Academic Warning as specified in 2.c.
4. **Academic Dismissal** - A dismissed student is not in Academic Good Standing. The status of Academic Dismissal is applied to a student who:
   a. accumulates more than 30 credit hours (or more than 20 credit hours for an associate degree program); and
   b. had the status of Academic Probation in the most recent semester; and
   c. has a GPA equal to or below the Dismissal GPA (See Appendix 1: Dismissal GPA by Total Institutional GPA Hours + Total Transfer Earned Hours).

5. **Academic Recovery** - A student on Academic Dismissal status can apply to the applicable advising office for the status of Academic Recovery. The status of Academic Recovery is available, upon approved application, provided that the student:
   a. is on Academic Dismissal status for the first time;
   b. has a cumulative GPA equal to or below the Dismissal GPA (See Appendix 1: Dismissal GPA by Total Institutional GPA Hours + Total Transfer Earned Hours);
   c. has a cumulative GPA that can be raised above the Dismissal GPA (See Appendix 1) within two calendar years or 150 total attempted credit hours, whichever comes first.

6. **Institutional GPA Hours** - Include credit hours in all courses graded "A" through "F". Credit hours for repeated courses are calculated according to the policy on Repeating a Course (Undergraduate and Graduate) (Policy # 02.10.12).

---

**Policy Statement**

The university assesses academic standing and the statuses of Academic Warning, Academic Probation, Academic Dismissal and Academic Recovery based on academic performance following each of the fall and spring semesters. For students on Academic Recovery, academic standing is also assessed following summer sessions.

A student on Academic Warning or Academic Probation or a student who is granted Academic Recovery status must meet with an advisor to discuss his/her academic standing. An advisor will help in planning a schedule of courses to assist the student in achieving above the Dismissal GPA. A student on Academic Warning will be able to self-register after this meeting; a student on Academic Probation or Academic Recovery must be registered by his/her advisor.

If a student is on Academic Dismissal status for the first time, the student has two options:

1. **Apply for Reinstatement**
   A student on Academic Dismissal status for the first time may apply for reinstatement not less than four years from the date of last enrollment at Temple University. At the time of application, all credit hours will be evaluated. Final determination of the acceptability of such credit hours is the responsibility of the applicable academic unit.

   A student may also apply for Academic Forgiveness (Policy # 02.10.17) at this time.

2. **Reinstatement through Academic Recovery**
   A student on Academic Dismissal status for the first time may apply for Academic Recovery status through their respective advising unit. Academic Recovery would be applicable the next immediate semester or summer term unless the student is granted a Leave of Absence pursuant to university policy. Students granted Academic Recovery status will be required to meet with advisors, complete for a grade a minimum of six credit hours, and achieve a minimum semester GPA requirement.

   During the student's first semester or summer session of Academic Recovery status, the student will not be in Academic Good Standing and therefore will be ineligible for aid of any kind, including without limitation federal loans or grants, tuition remission and scholarships.

   Students who successfully complete the requirements of the first semester or summer session on Academic Recovery status will:

   a.) return to Academic Good Standing
   b.) be permitted to attend classes during the next summer session or semester.

   Students may only continue on Academic Recovery if they meet the Target Semester GPA. (See Appendix 2.) The student must maintain a GPA at or above the Target Semester GPA in Appendix 2 for each semester or session they are on Academic Recovery. Students on Academic Recovery must register for a minimum of six (6) credit hours per term. Course overloads are not permitted while on Academic Recovery.

   Students may not remain on Academic Recovery status for more than two calendar years following their original dismissal or 150 attempted credits, whichever comes first.

   A student on Academic Recovery who achieves above the Dismissal GPA (as determined by Appendix 1) will be removed from Academic Recovery status.

   Students who do not meet requirements of their Academic Recovery status during any summer session or semester will be Academically Dismissed for a second time. Upon the second Academic Dismissal a student must wait and apply for reinstatement not less than four years from the date of the first Academic Dismissal in accordance with this policy. The student will also be eligible for Academic Forgiveness (Policy # 02.10.17).
In the event a student is removed from Academic Recovery status after achieving above the Dismissal GPA, but is subsequently Academically Dismissed for a second time, the student must wait and apply for reinstatement four years from the date of the second Academic Dismissal. The student will also be eligible for Academic Forgiveness.

1. Academic Standing is determined by calculating Total Earned Transfer Hours plus Total Institutional GPA Hours. For Academic Forgiveness Students calculation includes Forgiveness Institutional Earned Hours (grades A through C- preceded by an asterisk) + Total Institutional GPA Hours + Total Transfer Earned Hours. Not included in Total Institutional GPA Hours for all calculations: AU, CR, NC, HC, I, IC, IP, MG, M, NR, P, PI, R, S, W, WE, WF, WS. See your academic advisor for assistance.

2. A calendar year begins the date of dismissal and is equivalent to one fall, one spring, and two sequential summer sessions.

Notes

1. Dates of official enactment and amendments
   Adopted by the President on June 12, 2003.
   Amended by the President on September 7, 2006. Effective immediately.
   Amended by the President on September 26, 2007. Effective immediately.
   Amended by the President on August 1, 2011. Effective May 18, 2012. Beginning of Spring Semester 2012 and applying retroactively to end of Fall 2011 semester, admitted transfer students in first matriculated semester and who are registered for 18 or fewer credits and whose semester grade point average is less than 2.0 will be applied the status of warning.
   Amended by the President on June 1, 2015, effective immediately. Students on Academic Dismissal status at the end of the 2012 spring semester are eligible to apply for Academic Recovery status, if necessary, or return to such other academic status as permitted by university policy. (For example, a student placed on Academic Dismissal for failure to complete English 0701, but who had a cumulative GPA above 2.0 would be eligible to return to Academic Good Standing.)
   Students on Academic Dismissal status for the first time at the end of the 2012 spring semester may apply for Academic Recovery status through their respective advising unit for return to the university no later than the 2016 spring semester. The two calendar year limit for the Academic Recovery status for these students will apply from the date of their first registered term.

2. History
   September 7, 2006 amended the provisions regarding eligibility for institutional financial aid and university housing.
   September 26, 2007 amended the requirements for academic good standing and dismissal.
   August 1, 2011 amended language describing the method by which dismissal is determined and the requirements for reinstatement.
   May 18, 2012 amended the requirements for academic warning and probation for first-semester transfer students.
   June 2015 amended the dismissal requirements for certain courses and created Academic Recovery status.

Supersedes
   This policy supersedes all policies and procedures related to academic warning, dismissal and reinstatement for undergraduates, and specifically "Undergraduate Policy on Academic Warning, Probation, Dismissal and Reinstatement."

3. Cross References
   Policy 02.10.12 (http://policies.temple.edu/getdoc.asp?policy_no=02.10.12), Repeating a Course (Undergraduate and Graduate)
   Policy 02.10.17 (http://policies.temple.edu/getdoc.asp?policy_no=02.10.17), Academic Forgiveness (Undergraduate)
   Policy 02.10.16 (http://policies.temple.edu/getdoc.asp?policy_no=02.10.16), Leave of Absence (Undergraduate)

Appendix 1 Dismissal GPA by Total Institutional GPA Hours + Total Transfer Earned Hours

<table>
<thead>
<tr>
<th>Total Institutional GPA Hours + Total Transfer Earned Hours</th>
<th>Dismissal GPA (equal to or less than)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-30</td>
<td>No Dismissal</td>
</tr>
<tr>
<td>31</td>
<td>1.51</td>
</tr>
<tr>
<td>32</td>
<td>1.53</td>
</tr>
<tr>
<td>33</td>
<td>1.55</td>
</tr>
<tr>
<td>34</td>
<td>1.56</td>
</tr>
<tr>
<td>35</td>
<td>1.58</td>
</tr>
<tr>
<td>36</td>
<td>1.60</td>
</tr>
<tr>
<td>37</td>
<td>1.61</td>
</tr>
<tr>
<td>38</td>
<td>1.63</td>
</tr>
<tr>
<td>39</td>
<td>1.64</td>
</tr>
<tr>
<td>40</td>
<td>1.65</td>
</tr>
<tr>
<td>41</td>
<td>1.67</td>
</tr>
<tr>
<td>Page</td>
<td>Font Size</td>
</tr>
<tr>
<td>------</td>
<td>-----------</td>
</tr>
<tr>
<td>42</td>
<td>1.68</td>
</tr>
<tr>
<td>43</td>
<td>1.69</td>
</tr>
<tr>
<td>44</td>
<td>1.70</td>
</tr>
<tr>
<td>45</td>
<td>1.71</td>
</tr>
<tr>
<td>46</td>
<td>1.72</td>
</tr>
<tr>
<td>47</td>
<td>1.73</td>
</tr>
<tr>
<td>48</td>
<td>1.74</td>
</tr>
<tr>
<td>49</td>
<td>1.75</td>
</tr>
<tr>
<td>50</td>
<td>1.75</td>
</tr>
<tr>
<td>51</td>
<td>1.76</td>
</tr>
<tr>
<td>52</td>
<td>1.77</td>
</tr>
<tr>
<td>53</td>
<td>1.78</td>
</tr>
<tr>
<td>54</td>
<td>1.78</td>
</tr>
<tr>
<td>55</td>
<td>1.79</td>
</tr>
<tr>
<td>56</td>
<td>1.80</td>
</tr>
<tr>
<td>57</td>
<td>1.80</td>
</tr>
<tr>
<td>58</td>
<td>1.81</td>
</tr>
<tr>
<td>59</td>
<td>1.82</td>
</tr>
<tr>
<td>60</td>
<td>1.82</td>
</tr>
<tr>
<td>61</td>
<td>1.83</td>
</tr>
<tr>
<td>62</td>
<td>1.83</td>
</tr>
<tr>
<td>63</td>
<td>1.84</td>
</tr>
<tr>
<td>64</td>
<td>1.84</td>
</tr>
<tr>
<td>65</td>
<td>1.85</td>
</tr>
<tr>
<td>66</td>
<td>1.85</td>
</tr>
<tr>
<td>67</td>
<td>1.86</td>
</tr>
<tr>
<td>68</td>
<td>1.86</td>
</tr>
<tr>
<td>69</td>
<td>1.87</td>
</tr>
<tr>
<td>70</td>
<td>1.87</td>
</tr>
<tr>
<td>71</td>
<td>1.87</td>
</tr>
<tr>
<td>72</td>
<td>1.88</td>
</tr>
<tr>
<td>73</td>
<td>1.88</td>
</tr>
<tr>
<td>74</td>
<td>1.89</td>
</tr>
<tr>
<td>75</td>
<td>1.89</td>
</tr>
<tr>
<td>76</td>
<td>1.89</td>
</tr>
<tr>
<td>77</td>
<td>1.90</td>
</tr>
<tr>
<td>78</td>
<td>1.90</td>
</tr>
<tr>
<td>79</td>
<td>1.90</td>
</tr>
<tr>
<td>80</td>
<td>1.91</td>
</tr>
<tr>
<td>81</td>
<td>1.91</td>
</tr>
<tr>
<td>82</td>
<td>1.91</td>
</tr>
<tr>
<td>83</td>
<td>1.91</td>
</tr>
<tr>
<td>84</td>
<td>1.92</td>
</tr>
<tr>
<td>85</td>
<td>1.92</td>
</tr>
<tr>
<td>86</td>
<td>1.92</td>
</tr>
<tr>
<td>87</td>
<td>1.93</td>
</tr>
<tr>
<td>88</td>
<td>1.93</td>
</tr>
<tr>
<td>89</td>
<td>1.93</td>
</tr>
<tr>
<td>90</td>
<td>1.93</td>
</tr>
<tr>
<td>91</td>
<td>1.94</td>
</tr>
<tr>
<td>92</td>
<td>1.94</td>
</tr>
<tr>
<td>93</td>
<td>1.94</td>
</tr>
</tbody>
</table>
Appendix 2 - Target GPA Calculation

\[((\text{Max recovery hours available} + \text{Current GPA hours}) \times (\text{New Dismissal GPA} + 0.01)) - \text{[Current GPA hours} \times \text{Current GPA}] \] / \text{Max recovery hours available}

Where:

1. Max recovery hours available is the lesser of: hours remaining to the 150 attempted hours ceiling OR 68 (which represents 4 major semesters at 17 hours per semester)
2. Current GPA hours is the cumulative GPA hours after the most recent semester completed
3. New Dismissal GPA is the projected Dismissal GPA threshold at the end of the Academic Recovery period, when the 2-year period and/or available hours to the 150 attempted credit ceiling have been exhausted
4. Current GPA is the cumulative GPA after the most recent semester completed.

Assessment of Student Learning

Temple University is committed to providing superior educational opportunities to its students. To help us maintain quality academic offerings, the University and its programs regularly examine the effectiveness of the curricula, teaching, services, and programs the University provides. As Temple University sees appropriate, it may retain representative examples or copies of student work. This might include papers, exams, creative works, or portfolios developed and submitted in courses or to satisfy the requirements for degree program(s).

In addition to regularly collecting and reviewing student work, Temple University may summarize the results of this review, and use the information to improve programs and enhance student learning. Some of this assessment may also be necessary for Temple University or its programs to demonstrate it meets the standards of external review or accrediting bodies.

Typically, results will be reported in a general, summary format and students' names will not appear on the collected examples. Cohorts may be tracked for specific educational purposes, but the expectation is that assessment will be anonymous. Identifiers will only be used when there is a compelling reason and educational value.
Questions about the assessment of student learning at Temple University may be directed to the Office of Institutional Research and Assessment, 215-204-8611 or assessment@temple.edu.

**Athletic Policies**

**Academic Eligibility**

Initial and continuing academic eligibility requirements for student-athletes relative to NCAA guidelines are stated below. Student-athletes participating in the sport of football may have additional academic requirements regarding eligibility for competition. Please direct questions regarding academic/athletic eligibility to the Athletics Certifying Officer at 215-204-2507.

1. Temple University is a member of the NCAA Division I (FBS) level of competition. This division of the NCAA requires all student-athletes first entering college to enroll and be certified by the NCAA Eligibility Center.
2. Student-athletes must be registered and attending a minimum of 12 semester hours. They may not withdraw from courses that would put them below 12 semester hours without prior approval from the Student-Athlete Academic Advisor or Athletics Certifying Officer.
3. Student-athletes must pass 6 credits each semester, 18 credits each academic year, accumulate 24 credit hours, and maintain a 1.8 cumulative grade point average after their first two full-time semesters of collegiate enrollment.
4. Student-athletes must officially declare a degree program prior to the beginning of their fifth semester of full-time collegiate enrollment. In addition, the student-athlete must have completed at least 40% of the declared program and maintain a 1.9 cumulative grade point average before the first date of competition.
5. Student-athletes are required to complete 60% of their declared program and maintain a 2.0 cumulative grade point average before the first date of competition of their seventh semester of collegiate enrollment. Student-athletes entering their ninth semester of collegiate enrollment will need to meet 80% of a declared program and maintain a 2.0 cumulative grade point average.
6. Student-athletes must remain in “Good Standing” each semester as determined by Temple University.
7. Transfer student-athletes from two-year institutions may need to graduate with an Associate’s degree before entering Temple University for immediate consideration for practice/“try-out” opportunity.
8. Initial and Transfer student-athletes are also bound by a 5-year clock that begins at the time of first full-time enrollment at any institution of higher education.

**Athletic Eligibility**

The Department of Intercollegiate Athletics is committed to practices, procedures and policies that are designed to assure proper emphasis on educational objectives, to promote competitive equity among institutions and to prevent the exploitation of student-athletes.

Eligibility to represent Temple University in intercollegiate competition as a varsity athlete is a privilege and not a right. Additionally, Division I athletic eligibility standards are more rigorous than other divisions. Factors which constitute athletic eligibility include, but may not be limited to:

- Amateurism
- Medical Certification
- Behavior and Conduct

**Attendance**

See Attendance (p. 36) in the Student Responsibilities section of the *Bulletin*.

**Audit**

There may be circumstances under which a student will wish to audit a course, i.e., participate in the class without earning academic credit, credit hours, or grades.

The student must have written permission of the instructor and of the dean of the college on a special approval form. Full tuition is charged, and standard payment procedures apply.

Change of registration from credit to audit, or from audit to credit, may be processed only during the following periods:

- before the end of the second week of the fall or spring semesters.
- before the end of the third day of classes during summer sessions.
Code of Conduct

The Temple University Student Code of Conduct can be viewed at Policies & Procedures (http://policies.temple.edu/getdoc.asp?policy_no=03.70.12). Printed copies are available at the Dean of Students’ Office. Other information about the Student Code of Conduct may also be found in the Student Responsibilities (p. 36) section of this Bulletin.

Continuing Degree Seeking Students

Beginning in academic year 2011-2012, the term “matriculated student” was replaced by “continuing degree seeking student.”

Continuing degree seeking students are those who have applied, been accepted, and enrolled in a degree program of the university during the semester for which they were admitted.

Completion of course credits before becoming a continuing degree seeking student does not assure the acceptance of those credits into the program of study.

Course Numbering System

All courses have full four-digit numbers. The first digit of a course identifies its level.

- Courses numbered A000 - U000 are reserved for transferred elective and generic credits.
- Courses numbered 0700 - 0999 are reserved for preparatory courses, General Education courses and Honors General Education courses.
- Courses numbered 1000 - 1999 are appropriate for undergraduate students in their first year of study.
- Courses numbered 2000 - 5999 are considered “upper level” for undergraduates.

- Courses numbered 2000 - 2999 are appropriate for undergraduate students in their second year of study.
- Courses numbered 3000 - 3999 are appropriate for undergraduate students in their third year of study.
- Courses numbered 4000 - 4999 are appropriate for undergraduate students in their fourth year of study.
- Courses numbered 5000 - 5999 are primarily for graduate students, but undergraduate students in their third or fourth year may enroll with permission of their instructors and the dean’s designee.
- Courses numbered 8000 - 9999 are for graduate students.

Other classifications and definitions for undergraduate courses:

- **0700 - 0799 Preparatory Courses**: Courses numbered from 0700-0799 are appropriate for undergraduate, first-year math and writing courses. Students’ math and writing placement examination results determine these course-level selections.
- **0800 - 0899 General Education Courses**: Courses numbered from 0800-0899 are appropriate for any undergraduate General Education course requirements.
- **0900 - 0999 General Education Honors Courses**: Courses numbered 0900-0999 are appropriate for any undergraduate General Education Honors course requirements.
- **xxx0 Special Topics**: Regularly-scheduled courses (not individualized instruction) offered with variable content, and repeatable for credit.
- **x9xx Honors Courses**: Undergraduate Honors courses will be identified by a 9 as the second digit of the course number and will have “Honors” as the first word of the title. The 9 in the second position will not be used by any non-Honors undergraduate course. General Education Honors courses are designated 09xx.
- **xx81 Cooperative Assignment**: Increasingly complex, experiential learning with supervision external to the university. Usually these courses include learning experiences over more than one semester - as part of a defined program.
- **xx82 Independent Study**: Explorative study or research initiated by an undergraduate student with faculty sponsorship and an approved Independent Study contract.
- **xx83 Directed Reading/Study**: Mentored reading/study between a faculty member and an undergraduate student.
- **xx84 Performance**: Concert performance, juried art exhibition or other performance taken as a requirement for the degree.
- **xx85 Internship/Externship**: Pre-professional clinical or experiential traineeships contracted by the student's department, including experiences with a clinical, research, or other special concentration in a specific area. Students must have faculty sponsorship and an approved Internship/Externship contract.
- **xx86 Internship/Externship**: Reserved for a continuation of an internship/externship experience, following xx85.
- **xx87 Practicum**: Programs that are traineeships contracted by the student's department to meet the educational, geographic, and specific interests of the student. Settings generally have on-site clinical supervision.
- **xx88 Student Teaching**: Practical experiences in student teaching designed to support and lead to teacher certification.
• **xx89 Field Study**: On-site, observational study or data collection and analyses which deepen practical knowledge in the discipline. The purpose of the Field Study is to integrate and apply academic theories to on-site experiences.

• **xx91 Directed Research**: Mentored research between a faculty mentor and an undergraduate student.

• **xx92 Undefined**

• **xx93 Undefined**

• **xx94 Undefined**

• **xx95 Undefined**

• **xx96 Writing-Intensive Course**: Courses fulfilling the requirement of the General Education Program that each undergraduate major designates at least two courses as "writing-intensive." The designated courses shall require students to edit and rewrite papers to achieve a high level of clarity and cogency, use a variety of methods to find appropriate materials to support written work and to make proper attribution of those sources.

• **xx97 Writing-Intensive Course**

• **xx98 Writing-Intensive Course**

• **xx99 Undergraduate Thesis**: Sustained research, performance or artistic project resulting in a substantial, finished written report or other product in a format appropriate to the project. Assumes faculty sponsorship and mentorship.

For more specific policies, consult individual schools, colleges, or programs.

**Courses Inapplicable to Graduation**

Semester hours earned in some courses are excluded from the total minimum semester hours or earned credit hours required for graduation from some schools and colleges. While policies vary among schools and colleges, courses inapplicable to graduation requirements generally are ELECT, Mathematics 0015 (formerly Mathematics 0001), Russell Conwell Center courses, and lower-level Military Science (ROTC) courses.

For specific information, see Policies and Regulations: Courses Inapplicable to Graduation in each school and college's section in this Bulletin, or consult academic advisors.

**Courses Over Ten Years Old**

In admitting transfer or returning students, the university will, when possible, allow credit for courses taken ten or more years prior to the date of admission or re-enrollment.

However, academic units may choose not to accept courses regardless of age for credit in the major. Courses of a technical nature or courses in a particularly dynamic field may not be accepted for credit.

Final determination of the acceptability of such sources is the responsibility of academic units in the schools and colleges and generally occurs after the student has matriculated or been re-enrolled.

**Credit Hours**

**SCOPE OF POLICY & RATIONALE**

This policy (Policy # 02.10.19 (http://policies.temple.edu/getdoc.asp?policy_no=02.10.19)) applies to all credit-bearing academic programs and courses within the university.

**DEFINITIONS**

The semester credit hour is the basic unit of academic credit granted by Temple University. One semester credit is equivalent to one hour (50 minutes) of faculty instruction time per week for 15 weeks, which includes one week for exams; and a minimum of two hours of out of class student work each week per credit hour. An equivalent amount of work is required for other academic activities such as laboratory work, internships, practica, studio work, or other academic work leading to the award of credit hours.

Note: Temple University follows a semester system with the fall and spring semesters consisting of approximately 16 weeks, which includes one week for exams and one week per semester for a fall and spring break. Summer semesters vary in length and adhere to this policy.

**POLICY STATEMENT**

Temple University's credit hour policy is consistent with guidelines set by the Pennsylvania Department of Education for determining the amount and level of credit awarded for courses, regardless of instructional method or mode of delivery. These guidelines are in compliance with policies set forth by both the US Department of Education and the Middle States Commission on Higher Education.

1. Determination of amount and level of credit
The faculty is responsible for the curriculum. Credit values are determined at the department level based on course goals, learning outcomes, instructional needs and faculty expertise. Once a course is approved it is included in the University course catalog. It is then the responsibility of the school/college to verify that it is scheduled for the minimum number of minutes.

2. Credit hours by instructional method

**Lecture and seminar:** Courses with multiple students that meet to engage students in various forms of group instruction. A typical 3 hour course will meet 2100 minutes over 14 weeks (excluding the exam period and scheduled breaks).

<table>
<thead>
<tr>
<th>Credits awarded</th>
<th>Minimum contact time per week for 14 weeks</th>
<th>Minimum instructional time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50 contact minutes</td>
<td>700 contact minutes</td>
</tr>
<tr>
<td>2</td>
<td>100 contact minutes</td>
<td>1400 contact minutes</td>
</tr>
<tr>
<td>3</td>
<td>150 contact minutes</td>
<td>2100 contact minutes</td>
</tr>
<tr>
<td>4</td>
<td>200 contact minutes</td>
<td>2800 contact minutes</td>
</tr>
</tbody>
</table>

**Laboratory and studio:** Courses with a focus on experimental learning where in the student performs substantive work in a laboratory or studio setting. The minimum contact time per credit is twice that of a lecture (2:1 ratio).

<table>
<thead>
<tr>
<th>Credits awarded</th>
<th>Lab studio minimum instruction time per week for 14 weeks</th>
<th>Minimum instructional time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>100 contact minutes</td>
<td>1400 contact minutes</td>
</tr>
<tr>
<td>2</td>
<td>200 contact minutes</td>
<td>2800 contact minutes</td>
</tr>
<tr>
<td>3</td>
<td>300 contact minutes</td>
<td>4200 contact minutes</td>
</tr>
<tr>
<td>4</td>
<td>400 contact minutes</td>
<td>5600 contact minutes</td>
</tr>
</tbody>
</table>

**Independent study:** Courses offered as directed studies with approval and supervision of faculty member. Student(s) meet periodically as agreed upon during the duration of the course. Semester hour credit awarded must be comparable in scope, content, academic rigor and student study time as courses offered in lecture format.

**Internships, Practicum/clinical/field experience, Externships:** Courses developed for independent learning or experience involving self-directed and often off-site learning. These courses are taught on a minimum 2:1 ratio (see laboratory / studio chart above).

**Accelerated Courses:** Courses offered in terms of length less than a traditional 15 week semester. These courses offer the same semester credit hours as traditional semester-length classes. Within the shortened time frame, accelerated courses must meet the minimum contact hour requirements of the lecture format.

**Online:** Courses offered entirely online without regard to face-to-face meetings. Students are expected to be academically engaged with comparable learning outcomes of a standard lecture course with alternate delivery methods. Contact time is satisfied through several means which can include but is not limited to the following: a) regular instruction or interaction with a faculty member once a week for each week the course runs; b) academic engagement through interactive tutorials, group discussions moderated by faculty, virtual study/group projects, engaging with class peers and computer tutorials graded and reviewed by faculty. Departments must document through scheduling of classes or syllabi that they are meeting the minimum credit hour requirement for the credit awarded.

**Hybrid:** Courses offered in a blended format with one or more required face-to-face class sessions and with one or more required online sessions. Departments must document through scheduling of classes or syllabi that they are meeting the minimum credit hour requirement for the credit awarded.

3. Courses evaluated for transfer from colleges and universities with different credit systems

Courses evaluated for transfer from colleges and universities with different credit systems (quarter hours, units) are converted to semester hours (i.e., 2 quarter hour credits are equivalent to 1.5 semester hour credits; 3 quarter hour credits are equivalent to 2.0 semester hour credits; 4 quarter hour credits are equivalent to 2.5 semester hour credits).

4. Review

The Banner Student Competency Center, in consultation with the appropriate administrative offices including the Office of the Registrar and the Office of Digital Education, regularly audits scheduled course offerings to ensure compliance with credit hour requirements through its processes for scheduling each semester, including compliance with the university's scheduling matrix. This review is conducted across all schools, disciplines, course levels and modes of instruction.

**NOTES**

1. **Dates of official enactment and amendments**

   Adopted by the President on February 16, 2015.

2. **History**

   Supersedes previous guidelines and protocols in the *Undergraduate Bulletin* for students.

3. **Cross References**

   Procedures related to this policy can be found in the Academic Policies section of the Undergraduate Bulletin.
Credit for Prior Learning

For information on credit for prior learning, refer to the Transfer Students (p. 23) section of this Bulletin.

Credit/No Credit Courses

Eligible students may want to take a course in an area in which they are not proficient or about which they are curious, while not risking their grade point average. Such students, with certain provisions, may be graded using the Credit/No Credit (CR/NC) grading option.

Students may select the CR/NC grading option or return to the traditional grading option only during the first two weeks of a fall or spring semester course and during the first three days of a first or second summer session course, with the written authorization of their advisor and dean.

Eligibility is limited to:

- matriculated, full-time students
- those in academic good standing
- juniors or seniors (60 or more semester hours)
  OR
- transfer students who are retaking a course at Temple for which they have already received transfer credit.\(^1\)

\(^1\) If the transfer student earns an NC in the Temple course, the transfer course would then satisfy the requirement according to the School/College transfer rules. Transfer students are limited to a maximum of four CR/NC courses with a limit of one instance per semester.

Courses are restricted to:

- any non-General Education course
- one CR/NC course per semester
- maximum of four CR/NC courses toward the degree

No grade points are assigned to either the CR or NC grade. CR is equivalent to grades of D- or higher. NC is equivalent to F. The semester hours earned are credited toward the total required for graduation. Because CR and NC yield no grade points, they are not included in divisor hours for calculating the grade point average. CR and NC are not included in calculating cumulative credits for determining academic actions specified in the Undergraduate Policy on Academic Standing.

Dean’s List

Dean’s List eligibility is determined by the semester grade point average (GPA) corresponding to cut-off points that will yield the top 16% of GPAs based on the five previous fall and spring semesters for each school or college. Students must have 12 graded credits (A to F grades) in order to be eligible for dean’s list for the fall or the spring semesters.

Students who begin in the fall as part-time (i.e., registered for fewer than 12 credits) and continue as part-time in the spring will be eligible for dean’s list in the spring if they accumulate at least 12 graded credits (A to F grades) over the fall and spring semesters and meet the GPA criteria listed on the chart for the school or college. If a student is enrolled part-time in the fall but full-time in the spring, eligibility for dean’s list will be based on spring semester grades.

For fall 2015 and spring 2016, the cut-offs for dean’s list eligibility are:

<table>
<thead>
<tr>
<th>College</th>
<th>GPA Cut-off</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boyer College of Music &amp; Dance</td>
<td>3.93</td>
</tr>
<tr>
<td>Center for the Performing &amp; Cinematic Arts (School of Theater, Film &amp; Media Arts)</td>
<td>3.81</td>
</tr>
<tr>
<td>College of Education</td>
<td>3.93</td>
</tr>
<tr>
<td>College of Engineering</td>
<td>3.55</td>
</tr>
<tr>
<td>College of Liberal Arts</td>
<td>3.80</td>
</tr>
<tr>
<td>College of Public Health</td>
<td>3.73</td>
</tr>
<tr>
<td>College of Science &amp; Technology</td>
<td>3.62</td>
</tr>
<tr>
<td>Fox School of Business &amp; Management</td>
<td>3.61</td>
</tr>
<tr>
<td>School of Environmental Design</td>
<td>3.79</td>
</tr>
<tr>
<td>School of Media &amp; Communication</td>
<td>3.75</td>
</tr>
<tr>
<td>School of Social Work</td>
<td>3.86</td>
</tr>
</tbody>
</table>
Declaration of Major

Students admitted to Temple for fall 2002 and after must be enrolled as a major in a degree-granting program in a school or college by the time they have completed 60 credits, including any credits transferred from another institution.

Students admitted to Temple with 60 or more transfer credits will be matriculated directly into a degree-granting program, rather than as “undeclared” in a school or college or the Division of University Studies.

Students declare a major either by completing their school’s or college’s declaration of major process (see specific school or college section in this Bulletin) or by completing a Change of Program form (may also be referred to as an Intra-University transfer or IUT) to transfer to another Temple school or college (see the policy on Transfer between Colleges within the University (p. 102)).

Individual schools and colleges may require students to declare a major earlier than 60 credits. Students should consult the policies and regulations of their own school/college for any additional guidelines regarding declaration of major.

Disciplinary Action

The Office of Student Conduct and Community Standards, located on the third floor of the Howard Gittis Student Center, is responsible for administering the Student Code of Conduct. Violations of the university’s Code of Conduct, including among other things, stealing, cheating, disorderly conduct, plagiarism, and illegal possession/use of alcohol and other drugs, may result in a student being brought before one of the Student Conduct Boards, as outlined in the Student Code of Conduct. Student Conduct and Community Standards facilitates the student conduct process striving to create a campus environment conducive to learning. The process is designed to help students realize their role in maintaining campus civility through educational programming and sanctioning as well as through the participants on the student conduct boards.

The Student Code of Conduct can be found online at the Temple University’s Policies web site as policy # 03.70.12 (http://policies.temple.edu/getdoc.asp?policy_no=03.70.12).

Double Major Across Colleges

A student who meets the major requirements of two departments may declare, and have recorded on his or her transcript, a double major. Students who graduate with a double major across two colleges are required to complete all university requirements (General Education) and the requirements of both majors (including two Writing Intensive courses for each major), but only one set of college graduation requirements. The student must obtain prior approval from both schools or colleges. One department must be declared the primary department for the purpose of registration and college graduation requirements. (Students considering a double major across colleges should ask academic advisors in both colleges about college policies related to choosing the primary department.)

Family Educational Rights & Privacy Act (FERPA)

For information on the Family Educational Rights and Privacy Act (FERPA) of 1974, see the FERPA (p. 39) text in the Student Rights section of this Bulletin.

Final Examinations

University policies require that final examinations be given only during the university-approved final examination days as noted on the academic calendar (http://www.temple.edu/registrar/documents/calendars) posted by the Office of the University Registrar.

For day classes on Main campus, a detailed examination schedule (http://www.temple.edu/registrar/students/courseinfo/exams.asp), by day and time, is available on the Office of the University Registrar’s web site; this information is also circulated at the beginning of each semester.

Final examinations for evening classes on Main and Ambler campuses, TUCC classes, and Health Sciences Center classes are given at the regular class time during final examination week.

For both day and evening Ambler classes, a detailed examination schedule, by day and time, is circulated to the faculty and posted to the Ambler (http://ambler.temple.edu/academics/courses-and-calendars) web site.

Some courses have common final examination times. (Consult the registrar’s final examination schedule for a complete list.)
Instructors are encouraged to make individual accommodations with students who have more than two (2) examinations scheduled on one day.

Grade Change

No change of final grade for a completed course will be made without the approval of the instructor's dean or designee. Deans will consider the grade change upon receipt of the instructor's written explanation. No grade will be changed after the baccalaureate degree is awarded.

Grade Point Average (GPA)

Each student's transcript indicates the credit hours completed and passed, grade points, and grade point average (GPA).

The GPA also appears on a student's DARS reports or the academic advising document as well as the Self-Service Banner (SSB) and official transcripts.

A student's GPA may be useful in assessing academic progress, in determining eligibility for specific programs, or in determining eligibility for Honors or other awards.

No change in a student's GPA is made after the baccalaureate degree is awarded.

To Compute Semester Grade Point Average:

1. Multiply the value of the grade (see the "Grades and Grading" section below) by the course's number of credit hours to get quality points (QPts).
2. Add the total quality points.
3. Divide total number of quality points by the total number of GPA hours completed in courses that yield quality points.

Note: Not included in GPA computations: AU, CR, NC, HC, I, IC, IP, MG, NR, P, PI, R, S, W, WE, WF, WS. Also see policy on Repeating a Course (p. 99).

To Compute Cumulative Grade Point Average:

Divide the total number of quality points by the total number of GPA hours completed in courses that yield quality points.

Note: Not included in GPA computations: I, IC, IP, MG, NR, CR, NC, R, P, AU, W, WE, WS, PI. Also see policy on Repeating a Course (p. 99).

For credit transferred from other institutions, no grade points are allowed. See also Repeating a Course (p. 99).

Grades and Grading

Semester Grades

The work of all undergraduate students is graded and reported at the end of each semester. Students may access their semester grades on Self Service Banner within 48 hours of the end of the examination period for that semester.

Three systems are in use for grading and reporting students' work:

Letter grades and points

<table>
<thead>
<tr>
<th>Grade</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.00</td>
</tr>
<tr>
<td>A-</td>
<td>3.67</td>
</tr>
<tr>
<td>B+</td>
<td>3.33</td>
</tr>
<tr>
<td>B</td>
<td>3.00</td>
</tr>
<tr>
<td>B-</td>
<td>2.67</td>
</tr>
<tr>
<td>C+</td>
<td>2.33</td>
</tr>
<tr>
<td>C</td>
<td>2.00</td>
</tr>
<tr>
<td>C-</td>
<td>1.67</td>
</tr>
<tr>
<td>D+</td>
<td>1.33</td>
</tr>
<tr>
<td>D</td>
<td>1.00</td>
</tr>
<tr>
<td>D-</td>
<td>.67</td>
</tr>
<tr>
<td>F</td>
<td>.00</td>
</tr>
</tbody>
</table>

Note: Although D- is a passing grade, a minimum grade of C- is required in General Education courses and, in many programs, courses required by the major.
Credit/No Credit

| CR | Equivalent to A, A−, B+, B, B−, C+, C, C#, D+, D or D− |
| NC | Equivalent to F |

Note: In the Credit/No Credit system, no grade points are assigned, but a limited number of credits in courses in which students earn the CR designation counts toward the total credit hours completed. See Credit/No Credit Courses (p. 92).

Other transcript notations

| AU | Audit |
| I | Incomplete |
| IC | Incomplete in a Credit/No Credit course |
| IP | Incomplete pass/fail course |
| MG | Grade temporarily missing |
| NR | Grade not reported |
| P | Passed grade |
| PI | Permanent incomplete |
| W | Withdrawal from course |
| WE | Withdrawal with approved excuse |
| WS | Withdrawal from the semester (historical) |

For more information, see the policies on Audit (p. 88), Credit/No Credit Courses (p. 92), Incomplete Coursework (p. 97), and Withdrawal Policies (p. 102) in this Bulletin.

Graduation Procedures

As students approach the end of their undergraduate careers, they must make sure that they are eligible for, and can participate in, graduation ceremonies.

In their junior year, or when 80 semester hours have been completed, students should begin an ongoing graduation check with their academic advisors in order to determine that they are meeting the university, college, departmental, and program requirements for their degree and for graduation.

Early in the semester in which graduation requirements will be completed, students complete an Application for Graduation.

Questions about this process or graduation status should be directed to the student’s Advising Office or Academic Dean’s Office.

Application deadlines are:

- February 1 for May graduation
- May 18 for July graduation
- October 1 for January graduation

Note: Earlier deadlines may be in effect in some academic units.

The Application for Graduation must be properly completed, particularly the areas relating to the resolution of incompletes and diploma instructions. Information concerning commencement activities (such as time, place, invitations, rental of academic regalia) is available to students once they have submitted their completed Application for Graduation. Students will not have their degree awarded or diploma or transcript released until all university tuition and fees have been paid.

Grievances

See Grievances (p. 41) in the Student Rights section of the Bulletin.

Honors for Academic Achievement

Temple University recognizes academic achievement in several ways.
Dean's Lists

Dean's Lists record the names of those full-time students in each school or college who completed a semester's work with 12 graded credits and meet the GPA criteria as outlined in the Dean's List (p. 92) policy. In addition, part-time students who have accumulated at least 12 graded credits across an academic year (fall and spring semesters) are eligible to be considered for Dean's List recognition in the spring.

For further information, see the Dean's List (p. 92) policy in the Academic Policies section of the Bulletin, check under your school or college listing in the Bulletin, or contact your school or college Advising Center.

Graduation (Latin) Honors

Latin Honors are awarded based on estimation procedures that are intended to yield 2% Summa, 5% Magna, and 9% Cum Laude awards for baccalaureate recipients from each Temple school and college. Graduates who have completed at least 60 credits at Temple are eligible for the appropriate honor if their cumulative grade point average (CGPA) is equal to or greater than the cut-off value established for the honor. (Students returning to the university following Academic Forgiveness may qualify for Latin Honors if they have a minimum of 60 earned hours in addition to the approved earned hours allowed at the time of Academic Forgiveness.)

Awards for August 2015, January 2016 and May 2016 graduates are based on cutoff scores computed from CGPAs earned by August 2010 through May 2015 graduates. In July of each year, the cut-off values are updated to include the most recent five-year cycle of CGPAs.

The cut-off values for calculating eligibility for Summa, Magna, and Cum Laude Honors for August 2015, January 2016, and May 2016 graduates are listed in the table below along with the schedule for updating the cut-off values.

| Latin Honors Minimum Cumulative Grade Point Averages by College (for August 2015, January 2016 and May 2016 Graduations) |
|---|---|---|
| College | Summa Cum Laude | Magna Cum Laude | Cum Laude |
| Boyer College of Music & Dance | 3.98 | 3.92 | 3.85 |
| Center for the Performing & Cinematic Arts (School of Theater, Film & Media Arts) | 3.91 | 3.80 | 3.68 |
| College of Education | 3.96 | 3.88 | 3.76 |
| College of Engineering | 3.84 | 3.66 | 3.46 |
| College of Liberal Arts | 3.95 | 3.84 | 3.68 |
| College of Public Health | 3.90 | 3.78 | 3.63 |
| College of Science & Technology | 3.93 | 3.79 | 3.62 |
| Fox School of Business & Management | 3.86 | 3.71 | 3.53 |
| School of Environmental Design | 3.97 | 3.85 | 3.69 |
| School of Media & Communication | 3.89 | 3.78 | 3.62 |
| School of Social Work | 3.91 | 3.83 | 3.69 |
| School of Tourism & Hospitality Management | 3.79 | 3.61 | 3.41 |
| Temple University Japan (BSIB program) | 3.92 | 3.80 | 3.64 |
| Tyler School of Art | 3.89 | 3.80 | 3.70 |

Award and Update Schedule for Latin Honors

<table>
<thead>
<tr>
<th>For Honors awarded in:</th>
<th>Cut-offs based on CGPAs for Graduates:</th>
</tr>
</thead>
</table>
**Incomplete Coursework**

An instructor will file an "I" (Incomplete) only if the student has completed the majority of the work of the course at a passing level, and only for reasons beyond the student's control.

An instructor may file an "I" when a student has not completed the work of a course by the time grades must be submitted, but has completed the majority of the work at a passing level and has a written agreement with the instructor and the department regarding completion of the work, including the nature of the work to be completed, the means by which the final grade will be determined, and the date by which the work must be completed. The completion date may be no later than one year from the end of the semester in which the student took the course. The agreement shall also specify a default grade to be received if the work is not completed by the date indicated. One copy of the agreement shall be retained by the instructor, one shall be given to the student, and one shall be filed with the department office or, in colleges or schools without departments, the Dean's office.

When reporting the grade of "I" for a student, the instructor shall also file a report of the default grade in the electronic grading system. If the instructor does not change the grade of "I", pursuant to the agreement with the student, by the end of one year from the time the grade of "I" was awarded, the appropriate University official shall automatically change the grade of "I" to the reported default grade, and the default grade shall appear on the transcript and be used for all other grading purposes as the actual grade received in the course.

Faculty advisors and staff advisors have the option of not permitting a student to register for an "overload" if the student is carrying one or more active incomplete courses, or for a "full load" if the student is carrying two or more active incompletes.

(policy # 02.10.13 (http://policies.temple.edu/getdoc.asp?policy_no=02.10.13))

**Leave of Absence**

Students may apply for a Leave of Absence (LOA) through the end of the drop/add period of any given semester. An LOA may be granted for one or two consecutive semesters, excluding summer sessions. Under special circumstances, an extension to an approved LOA may be considered, but some of the privileges listed below may not apply.

Students granted an LOA retain their admitted student status and remain eligible for the following privileges:

- Retain the university requirements in place for their academic programs at the time of their first semester at Temple and the requirements in place for their major, concentration, minor or certificate at the time they declared them.
- Temple e-mail access.
- Priority and self registration for the approved semester of return.
- Library access and borrowing privileges.

Students granted LOA are not considered registered students and as non-enrolled students are not eligible for:

- Financial aid disbursements during the semesters while on LOA. Students on an LOA are reported to lenders and loan service agencies as "not enrolled" and need to contact lenders for information on possible repayment requirements.
- Enrollment verification since they are reported as "not enrolled," which could affect eligibility for health insurance, etc.
- Use of Student Health Services during the semesters while on LOA or any other university services not listed in the previous section.
- Campus Housing during their LOA.

Students may return earlier than the original agreed return date by providing notice to their schools/colleges as soon as possible, keeping in mind applicable deadlines for registration, financial aid, etc.

Students who do not return following the approved term for their LOA, or those students who did not apply for LOA, need to apply for re-enrollment to their schools/colleges if they wish to continue their coursework. Re-enrolled students do not retain their original bulletin year nor major declaration requirements and must follow the most current requirements for their schools/colleges and majors.

Students taking an approved medical withdrawal (WE) in a current semester are not considered to be on LOA.

To obtain the Undergraduate Leave of Absence Petition (http://www.temple.edu/vpus/documents/Undergraduate_Leave_Of_Absence_Petition.pdf) form, visit the Senior Vice Provost for Undergraduate Studies web site (www.temple.edu/vpus) and click on "Advising Forms."

(policy # 02.10.16 (http://policies.temple.edu/getdoc.asp?policy_no=02.10.16))

**Non-Degree Seeking Students**

Non-degree seeking students are those who have not been admitted formally to a degree program. For information and academic advising for non-degree seeking students, see Programs with Academic Credit (p. 31) in the Special Programs section of the Bulletin and the Office of Continuing Studies (http://www.temple.edu/vpus/arc/continuingstudies/continuingstudies.html) web site.
Non-degree seeking undergraduate students who wish to pursue a degree are required to apply for admission to a degree program before they complete 30 credits in Continuing Studies. To enroll in undergraduate courses, students must have earned a high school diploma or a G.E.D. certificate. Students who have attended another college or university must have earned at least a 2.00 GPA and provide a transcript (official or unofficial) of their previous academic work.

Prior to their enrollment, non-degree seeking students who wish to pursue a degree are required to take one or more University placement tests. (Some transfer students may be exempt from this requirement. To find out if they are exempt or not, transfer students are strongly encouraged to seek guidance from a Continuing Studies academic advisor prior to taking this test.)

Non-degree seeking undergraduate students are not permitted to take more than 11 credits during their first semester.

Non-degree seeking undergraduate students who are accepted into an undergraduate degree program may count their Temple, non-degree credits toward their residency requirements.

Permission to Complete a Course at another Institution after Matriculation

The university expects that undergraduate students who are earning a Temple degree take all (or almost all) of their courses at Temple. However, once at Temple, students in good academic standing who meet all student and course eligibility criteria are allowed to transfer credit for two summer or special session courses (up to a maximum of 8 credits) taken elsewhere toward their Temple baccalaureate degree. Students will not receive credit for courses taken at another institution while matriculated at Temple, unless prior permission is received from their school or college through their advising center. (For information on the approval process for students studying abroad, go to: http://studyabroad.temple.edu/external-programs-approval-process).

To be eligible to complete the Petition to Complete a Course(s) at Another Institution After Matriculation the following criteria must be met:

- The student's cumulative grade point average must be 2.00 or above at the time of this petition.
- At the time of admission or reenrollment the student had fewer than 60 credits in transfer.
- The student has met the prerequisites for the course(s).
- The course cannot be available through Temple's distance learning program.
- The course cannot be a duplicate of a course for which the student has already received credit.
- The course cannot be a duplicate of a course previously attempted (earned a letter grade, failed, withdrawn or incomplete) at Temple.

Students must apply during the semester prior to the one in which they wish to take the course(s) elsewhere.

Students must complete a "Petition to Complete a Course(s) at Another Institution After Matriculation" form obtained either from their advising center or at www.temple.edu/vpus/forms/index.htm.

- If the course(s) equivalency is not listed in the Transfer Articulation system, the course must be evaluated by the relevant Department's designee/representative. The Department designee/representative must note the approved evaluation on the petition and return the form to the student so it can be filed in his/her advising records. (Transfer credits cannot be added without a completed form.)
- Students will not receive credit for courses taken at another institution while matriculated at Temple, unless prior permission is received from their school or college through their advising center.

Students should note that:

- Credits will be transferred to Temple only upon the completion of the course(s) with a grade of "C" or better. See Admissions: Transfer Credit (p. 23).
- Some Temple schools and colleges have additional limitations on the kind or number of transfer credits accepted.
- Once matriculated at Temple, it is expected that General Education courses be completed at Temple.
- Transfer credit is not awarded for internships, practicums, field studies or independent studies not supervised by Temple University faculty. Students should check with their School/College academic advisor for exceptions.
- Students may also receive transfer credit for courses taken through a pre-approved study abroad program. However, students planning to receive transfer credit for courses completed on a non-Temple program must complete the form "Request for Approval to Study Abroad on a non-Temple Program" for course equivalency approvals. For information about Temple study abroad programs, see Education Abroad (p. 49). For information about receiving permission to study abroad through another institution, see Study Abroad Approval Procedures for External Programs (p. 101).
- Transfer credits do not affect a student's Temple grade point average.
- A student cannot receive credit for the same course twice.
- Grades earned in transfer courses cannot be used to replace grades earned in the Temple equivalent courses.
- A student will not be approved to take a course(s) at another institution if it is the third time that the student will have taken the course(s).
- Forty-five (45) of a student’s last sixty (60) credits must be taken at Temple University. (Some majors have additional residency requirements.) See Academic Residency Requirements (p. 83).
• To be eligible for Latin Honors at graduation, a student must complete a minimum of 60 semester hours of the program while matriculated at Temple.

Once a student has received prior permission and taken a course elsewhere, the student must have an official transcript from that institution sent to the Admissions Office as soon the transcript is available.

Placement Testing

Go to the Institutional Research and Assessment web site at www.temple.edu/ira/exam-services/placement-assessments.html for details.

Also, see the Admissions: Placement Testing (p. 20) section of the Bulletin.

Plagiarism and Academic Cheating

See Academic Honesty (p. 36) in the Student Responsibilities section of the Bulletin.

Prerequisites and Co-requisites

A course prerequisite is any requirement an academic department identifies as essential for a student to complete before taking a course. The university is responsible for publishing prerequisite requirements. All prerequisites, whether they apply to an individual course or to all courses in a department, should be stated in the electronic version of the university's Course Catalog (https://prd-wlssb.temple.edu/prod8/bwckctlg.p_disp_dyn_ctlg). They should also be stated in the course syllabus.

Course prerequisites consist of one or more of the following: completion of placement or proficiency tests or other assessments; achievement of specified scores on placement or proficiency tests or other assessments; possession of specified knowledge or skills; approval after audition; approval of portfolio; declaration of major or admission to restricted program; completion of specific courses, sets of courses, and/or kinds of courses; completion of a specified number of semester hours or achievement of a specified class level; achievement of specified grades in prerequisite courses or sets of courses; achievement of a specified GPA; approval of an application or proposal; permission of the instructor, department, or other person or office; satisfaction of other specified requirements.

Students are responsible for knowing and completing all published prerequisite requirements for a course before taking that course. The university has the obligation to inform students of prerequisite requirements. It has the right to cancel a student's registration in a course if the student has not satisfied the published prerequisite requirements for that course.

A course co-requisite is a requirement that must be completed at the same time as the course for which it is required. The university is responsible for publishing co-requisite requirements. All co-requisites, whether they apply to an individual course or to all courses in a department, should be stated in the electronic version of the university's Course Catalog (https://prd-wlssb.temple.edu/prod8/bwckctlg.p_disp_dyn_ctlg). They should also be stated in the course syllabus. Co-requisites may be specified courses, permissions, admission to programs, and/or other requirements. Students are responsible for knowing and completing all published co-requisite requirements for a course. The university has the obligation to inform students of co-requisite requirements and the right to cancel a student's registration in a course if the student has not arranged to satisfy the co-requisite requirements for that course.

Probation and Dismissal

See Academic Standing (Undergraduate) (p. 83).

Registration

See the Registration (p. 33) section of the Bulletin.

Repeating a Course

Scope of Policy & Rationale

Undergraduate and graduate students may repeat a course to earn a higher grade; only the highest grade earned will be used in calculating the grade point average. Undergraduate and graduate students will not be permitted to repeat a course more than twice, except as permitted by this policy.

Definitions

The term "repeat" is applied when a student retakes a course. Except for courses designated to be taken multiple times, such as independent study, research, or other courses, credit for a given course will be granted only once.
Policy Statement

All students are permitted to repeat a course one time. Students who need to repeat a course a second time must obtain the approval of the dean/designee of their home school or college and be registered with assistance. Except as permitted by this policy, no students may repeat a course a third time.

If a course was taken previously with a standard grading option, it cannot be repeated with a credit/no credit grading option. Students are responsible for ensuring registration carries the appropriate grading option. All occurrences of a course where a grade is earned, including withdrawals (W) and withdrawals excused (WE), appear on the transcript, but only the highest grade earned is used in calculating the grade point average. Since credits are awarded only once for a course, repeats can affect athletic eligibility, academic standing and financial aid status.

All course withdrawals, with the exception of "withdrawal with approved excuse (WE)" are included in the course repeat count (see Policy # 02.10.14 (http://policies.temple.edu/getdoc.asp?policy_no=02.10.14), Withdrawal from Classes).

First repeat: Undergraduate students are strongly encouraged to meet with an academic advisor prior to registration to discuss academic and financial implications.

Graduate students seeking to repeat a course are required to meet with an academic advisor to register.

Second repeat: Undergraduate and graduate students must obtain the approval of the dean/designee of their home school or college and be registered with assistance.

If in the allotted number of repeats, undergraduate students are unable to successfully complete the following university requirements and/or courses required as a result of placement exams (including their course equivalencies), they will be required to meet with their advisor prior to registering for any further classes:

- English 0701, Introduction to Academic Discourse
- English 0802, Analytical Reading and Writing
- IH 0851, Mosaic: Humanities Seminar I
- IH 0852, Mosaic: Humanities Seminar II
- Math 0701, Elementary Algebra

Students unable to successfully complete courses that are required or prerequisites for their majors or school/college requirements in the allotted number of repeats must meet with their academic advisors to discuss alternate graduation plans. Students who have exhausted course attempts for course(s) required for their major will be required to change majors. If the selected new major does not require the course in question, it is possible that the new major may be in the same school or college. Students who have exhausted allowable course attempts in course(s) required for their degree program (school/college requirements) will be required to transfer internally (IUT) within the university from their current school or college to a school or college degree program that does not require the course in question.

Following the awarding of a degree, no changes in the grade point average will be made, even through the repeat process.

Notes

1. Dates of official enactment and amendments
   Adopted by the president on November 13, 2002. First effective on September 1, 2003.
   Amended by the president on February 8, 2011. Effective May 2011 (for Summer Session I) - GPA calculation with highest grade. Effective March 2012 (for Summer I, II and Fall 2012 registrations) - maximum number of course repeats including their course equivalencies.
   Amended by the president in June 2015. Effective as of May 2015.

2. History
   The February 8, 2011 amendment added the limit on the number of repeats.
   The May 18, 2012 amendment clarified that students who have exhausted allowable course attempts in courses required for the major or school/college degree requirements may be required to change majors or transfer internally within Temple to another school or college.
   The June 2015 amendment eliminated the university dismissal for failure to successfully complete certain courses.

3. Cross References
   Policy # 02.10.11 (http://policies.temple.edu/getdoc.asp?policy_no=02.10.11), Academic Standing (Undergraduate)
   Policy # 02.10.14 (http://policies.temple.edu/getdoc.asp?policy_no=02.10.14), Withdrawal from Classes (Undergraduate and Graduate Classes)
   Policy # 02.10.17 (http://policies.temple.edu/getdoc.asp?policy_no=02.10.17), Academic Forgiveness (Undergraduate)
Reverse Transfer

Students who are one or two courses short of completing the requirements for an Associate degree approved for GenEd/Core-to-GenEd from a partner community college are eligible for reverse transfer or Conditional GenEd. Students will need approval from their community college to complete their Associate degree using one or two courses from their first semester roster at Temple University.

For more information, see http://www.temple.edu/vpus/documents/ConditionalGenEdtoGenEd.pdf.

Satisfactory Academic Progress

Satisfactory academic progress is determined by a number of factors, including a student's semester grade point average, cumulative grade point average, and the number of semester hours attempted and completed. A student's progress is reviewed at the end of each semester by the student's Temple school or college and may affect the student's ability to continue in a program or major and eligibility for financial aid. Students should be advised that course withdrawals and incompletes will affect their progress and thus their academic standing. See Academic Standing (p. 83) and Grade Point Average (p. 94).

Schedule Revision (Drop/Add)

See Schedule Revision (Drop/Add) (p. 34) in the Registration section of the Bulletin.

Second Degrees

A second baccalaureate degree may not be the only option available to enhance academic credentials, to prepare for a change in career, or to obtain a professional certification. In some cases, all that may be needed are additional undergraduate courses. Professional schools and organizations, Temple’s Career Center, Graduate School, Continuing Studies, Pre-Professional Health Advising, as well as the advising units of the schools and colleges may have more information on alternative paths. In other cases, the student may be encouraged to begin graduate-level academic work in the new discipline.

If a second bachelor’s degree is sought, this is possible in some, but not all, schools and colleges of Temple University when the second degree is in a sufficiently different field of study. Students should consult with the Office of the Dean of the school or college offering the desired degree.

A student may earn a second baccalaureate degree provided the requirements for the second degree include a minimum of 45 new semester hours beyond those required for the first degree. Students approved for the second baccalaureate degree will be waived from University requirements (i.e., GenEd requirements). Students with a Temple baccalaureate degree will be waived from the 45 new semester hour requirement, since they will already have met the residency requirements. However, in all cases, students must fulfill all non-waived requirements for the second degree.

Students at the undergraduate level may not be enrolled in concurrent undergraduate degree programs, but may regularly have second majors (p. 93), or might consider an approved accelerated or joint program with a Temple graduate or professional school, if they meet admissions qualifications. For more information, refer to the list of accelerated programs (p. 53) and requirements.

Simultaneous Enrollment

Matriculated students at Temple University may not be enrolled simultaneously at another institution in the same semester or summer session and receive permission to transfer those credits to Temple. Certain exceptions are allowed, if permission is given in advance, for courses unavailable at Temple but needed to complete degree requirements for the next scheduled awarding of degrees; or for specialized study where alternatives are not available at Temple; or as part of established programs. Students taking a Temple online course during the summer and living well beyond commuting distance of a Temple campus may also be approved for simultaneous enrollment at another institution. See Permission to Complete a Course at Another Institution after Matriculation (p. 98).

Study Abroad Approval Procedures for External Programs

To receive credit for courses taken on an external study abroad program, students are required to complete Temple’s External Program Approval process, which includes seeking permission from Education Abroad, having any anticipated courses evaluated and approved by appropriate academic departments, and receiving academic approval from their Temple school/college academic advising office.

A list of approved External Programs (http://studyabroad.temple.edu/temple-external-programs) can be found on the Education Abroad website (http://studyabroad.temple.edu). Temple University strongly encourages students to consider these program options prior to exploring other possibilities. In addition to the suggested list, students also have the ability to enroll directly at any accredited foreign university or petition to participate in a program that is not on the approved list.

Students should discuss their study abroad plans with their academic advisor. Permission to study abroad is rescinded if the student is placed on academic warning or probation. As with all courses accepted in transfer, only a grade of C or higher is acceptable.
Transcripts

A student's academic history is contained in a transcript, which is maintained by the Office of the University Registrar.

Official transcripts are issued upon the written request of the student, carry the seal of the Office of the University Registrar, and are usually sent directly to another educational institution, a potential employer or other approved third party. For transcript request information, please go to the Office of the University Registrar's Transcript Services (http://www.temple.edu/registrar/alumnifamily/verification/transcripts) site.

Official transcripts may also be issued directly to the student but will be identified with information that will indicate to the reader (whether a potential employer or another educational institution) that it was so issued.

Transfer Between Schools/Colleges Within the University (Change of Program)

Transfer between academic units is not automatic. If students decide to earn their degrees in an academic unit other than the one in which they are matriculated, they must submit a Change of Program (may also be referred to as an Intra-University transfer or IUT).

To be eligible to complete a Change of Program (CoP), a student should be in academic good standing. Please consult the individual school or college policy in the Bulletin for specific school/college CoP requirements. In addition the Tyler School of Art requires a portfolio and Esther Boyer College of Music and Dance requires an audition.

Students who are compelled to change their program after exhausting the number of permitted attempts for a required course under the Repeating a Course policy may consult another school or college or the Division of University Studies, regardless of grade point average, academic standing, or the number of credits completed.

The CoP form can be downloaded from the Student Tab on the TUPortal or picked up at any of the school/college advising offices. Contact the school/college advising office to which you would like to transfer for more information.

Transfer Credit

See Admissions: Transfer Credit (p. 23).

Undergraduate Credit for Graduate Level Courses

Undergraduate students may take 5000-level graduate courses with the permission of the instructor and the dean’s designee for undergraduate degree credit. Undergraduates who wish to take higher level graduate courses must have the permission of the dean, the Graduate School and Undergraduate Studies.

Undergraduate students taking graduate level courses for partial fulfillment of undergraduate degree requirements may not use these credits to fulfill graduate-level degree requirements unless formally accepted into an accelerated, undergraduate/graduate/professional program.

Withdrawal Policies

WITHDRAWAL FROM CLASSES (policy 02.10.14 (http://policies.temple.edu/getdoc.asp?policy_no=02.10.14))

An undergraduate or graduate student who wishes to discontinue a course after the drop period has ended may withdraw during the time period specified below. Withdrawing from courses during the prescribed period may have serious consequences for academic progress to the degree, for financial aid eligibility, (for international students) visa requirements, and (for student-athletes) NCAA eligibility for competition. Students should consult with their instructors and academic advisors before withdrawing from a course.

- A student may “withdraw” from a class during weeks three through nine of the fall or spring semester, or during weeks three and four of summer sessions³.
- The course is recorded on the transcript with the notation of "W."
- Course withdrawals are included in the course repeat count (see the policy on Repeating a Course #02.10.12 (http://policies.temple.edu/getdoc.asp?policy_no=02.10.12)).
- A student is financially responsible for courses from which he/she has withdrawn.
A student may "drop" a class during the first two weeks of the fall or spring semester or summer sessions\(^1\) to remove a course from his/her transcript. A student is not financially responsible for dropped courses.

\(^1\) The dates apply to courses that meet the standard schedule. All other courses will have customized drop/add/withdrawal dates.

A student who must withdraw due to extenuating circumstances beyond the student’s control may petition for an "excused withdrawal" and/or "withdrawal with approved excuse." An excused withdrawal is generally only approved for all courses in a term. In exceptional cases, an excused withdrawal can be approved for a single course when the need to withdraw is directly related, or attributed, to requirements related to that course.

- The course is recorded on the transcript with the notation of "WE."
- Courses with WE grades will not be included in the course repeat count.
- A Petition for Excused Withdrawal must be filed within one (1) year from the end date of the semester in which the student is seeking an excused withdrawal. (For a list of extenuating circumstances, see the complete policy 02.10.14 [http://policies.temple.edu/getdoc.asp?policy_no=02.10.14].)
- A student who is granted an excused withdrawal (WE) for medical reasons will not be permitted to return to the University until he/she presents a statement from a medical provider showing that he/she is medically ready to return to the rigors of academic work.
- A student may be financially responsible for courses from which he/she has withdrawn with an approved excuse.

Drop and Withdrawal deadlines are published for each semester and summer session at [www.temple.edu/registrar/documents/calendars/](http://www.temple.edu/registrar/documents/calendars/).

**Refunds for Withdrawals**

Complete refund of tuition or cancellation of tuition charges will be made only if the drop form or student's SSB entry is processed by the end of the second week of classes of the fall and spring semesters or summer sessions.

Students withdrawing after these periods are responsible for payment of all charges incurred. No refund or adjustments of charges will be made for withdrawals after the second week unless specified under the university's refund policy. See the bottom of the Tuition and Fees (p. 125) section for the Refund Policy.
Campuses

University Campuses

Convenience and accessibility are two of the benefits that draw people to Temple University. Our nine distinct campuses offer an array of diverse learning environments - from urban to suburban and local to international - that are sure to fit your needs, schedule and personality.

- Main (p. 119)
- Ambler (p. 105)
- Center City (p. 121)
- Fort Washington (p. 116)
- Harrisburg (p. 123)
- Podiatric Medicine (http://podiatry.temple.edu)
- Health Sciences Center (p. 117)
- Japan (p. 165)
- Rome (http://studyabroad.temple.edu)
Ambler Campus

Founded 1958

Vicki L. McGarvey, Ed.D.
Vice Provost for University College and Acting Director
Temple University Ambler
580 Meetinghouse Road
Ambler PA 19002
267-468-8020
ambler@temple.edu
http://ambler.temple.edu/

Temple University Ambler, a respected innovator in research and education in social, economic, and environmental studies, delivers high-quality undergraduate, graduate, and non-credit courses and programs to meet the needs of the region and provide a rewarding life experience for students of all ages. Ambler Campus faculty members and administrators promote responsible citizenship through curricular and extracurricular activities and applied research that demonstrate and promote concepts central to the creation of strong, sustainable communities: student-centered learning, community engagement, and respect for the environment.

The Ambler Campus, with an undergraduate student population of 1,500, is an ideal campus to pursue higher education, with a convenient location, courses in a variety of disciplines, and a friendly atmosphere. Located in suburban Montgomery County, just 18 miles north of the Main Campus (and minutes from Route 309 and the Pennsylvania Turnpike), Ambler offers the benefits of a small college campus with the excitement and vast resources of a large university. Ambler attracts students who live or work in the greater Philadelphia area, including those from Philadelphia, Bucks, Lehigh, Montgomery, and Northampton counties. The Blue Route (Route 476) also makes Temple University Ambler easily accessible to students from Chester and Delaware counties.

Students enjoy Ambler's beautiful grounds, student organizations and activities, and recreational facilities that include an exercise/weight room, outdoor pool, and tennis, basketball and volleyball courts. The campus is also home to Temple University’s men’s and women’s soccer NCAA Division I teams.

Ambler’s facilities include science laboratories, a library, top-quality computer labs, smart classrooms, Computer-Assisted Design (CAD) and Geographic Information Systems (GIS) labs/classrooms, video conferencing room and 300 seat auditorium. Additionally, there is a writing-mathematics-science resource center.

The Ambler Campus offers undergraduate courses during the day, evening, weekends, and online taught by the university’s distinguished faculty. Students may begin many undergraduate programs at Ambler. Majors that can be completed entirely at Ambler include:

- Accounting
- Adult and Organizational Development
- Business Management
- Community Development
- Horticulture
- Interdisciplinary /Liberal Arts
- Landscape Architecture
- Legal Studies
- Liberal Studies
- Marketing
- Psychology

Majors that can be completed with a majority of their coursework at Ambler Campus include:

- Criminal Justice
- History

For a complete list of undergraduate majors, minors, and certification programs (for degree and non-degree students) that can be completed at the Ambler Campus, go to: http://ambler.temple.edu/academics/degree-programs/undergraduate

Undergraduate courses also include offerings from Temple’s General Education curriculum (GenEd (p. 143)) and basic science courses in Biology, Chemistry, and Earth and Environmental Science. These enable Pre-Health Information Management students to complete many of the required first two years of prerequisite coursework. Students pursuing Pre-Professional Health Studies may take some initial courses at Ambler required for admission to a professional school. Pre-Law students may remain at Ambler for four years, pursuing degrees in Business, Community Development, or the Social Sciences.
The campus is home to Temple’s School of Environmental Design, which houses the Department of Landscape Architecture and Horticulture (A.S. and B.S. in Horticulture programs; B.S. and M.L.Arch. in Landscape Architecture programs; plus undergraduate minors and certificates), the Department of Community and Regional Planning (B.S. in Community Development and M.S. in Community and Regional Planning programs; undergraduate minors and certificates; plus graduate certificates), and the Center for Sustainable Communities at Temple University Ambler. (See the School of Environmental Design (p. 658) section of this Bulletin for more details.)

The landscaped grounds, also known as the Ambler Arboretum of Temple University, feature formal gardens, a sustainable wetland garden, a green roof garden, a healing garden, an herb garden, a winter garden, wooded areas, a native plant propagation center, and much more.

For a change of pace and scenery, Ambler students can also take courses at Main Campus, Center City, or the Health Sciences Center.

After graduating, Temple students can continue their graduate work at the Ambler Campus or at Temple University Fort Washington Graduate and Professional Center (p. 116).

For more information about Ambler programs, please call 267-468-8000 or visit the Temple University Ambler Campus (http://ambler.temple.edu) web site.

**Academic Awards and Scholarships, Standards and Honor Societies at Ambler**

For additional details and application procedures, go to http://ambler.temple.edu/admissions/costs-aid-and-scholarships/scholarships-ambler-campus

- **Elizabeth Clarke Award for Conservation Education:** presented to a graduating senior intending to study, teach, or work in the discipline of conservation education; based on the student’s positive attitude and financial need.
- **Criminal Justice Scholar's Award:** given to an Ambler graduating senior in Criminal Justice who exhibits a passion for learning and outstanding academic achievement.
- **Gold Key Awards for Academic Excellence:** given to Ambler students in the sophomore, junior, and senior classes who have taken the greatest number of credits at the Ambler Campus and have achieved the highest grade point average.
- **James W. Hilty Adult Student Award:** established in 2008 by campus administration, an award to a current degree-seeking graduate or undergraduate student 25 years of age or older (taking more than half of his/her classes at Ambler/Fort Washington) who has demonstrated academic excellence. Applicants must provide a two-paragraph personal statement outlining financial need, personal background, educational path from high school through college, and educational goals.
- **Norman J. Kaner Memorial Award:** established by the Temple University History Department and supported by family, faculty, and former students in honor of Norman J. Kaner, a member of the History Department from 1968 to 1993. This award is given to an Ambler graduating senior in history with the highest grade point average who best exemplifies the values of critical thought, social curiosity, and intellectual vigor that characterized Professor Kaner’s teaching and scholarship.
- **Kevin and Georgette Ruth Scholarship:** given to an undergraduate or graduate Ambler Campus of record student who demonstrates financial need. Preference is given to full time students working 40 hours a week outside of the university with additional preference be given to those who also support a family.
- **Ambler Campus Summer Student Scholarship:** given to an undergraduate or graduate Ambler Campus of record student who demonstrates financial need and will be taking summer classes on the Ambler Campus.
- **Patricia A. Woods Memorial Fund Award:** given to an undergraduate in the pre-health professions, who expresses the desire for advanced undergraduate study in allied health or post-graduate study in the health professions, with a cumulative grade point average of 3.5 or higher and a demonstrated commitment to the health professions through experience or service. The name of the recipient is added to the plaque hanging in West Hall.

**Dean’s List:** Letters are received by students from the dean of the school or college in which they are enrolled in accordance with the academic criteria for scholastic distinction established by their college or school. See Dean’s List (p. 92).

**Academic Standards:** Students may receive an academic warning, be placed on probation, or be dismissed from the university based on university standards. See Academic Standing (p. 83).

**Honor Society:** Alpha Sigma Lambda, Nu Omicron Xi Chapter, is an honor society for adult students who have completed at least 24 semester hours at Temple and achieved an excellent grade point average. The Temple University Ambler students who are invited to join this society are inducted at a ceremony held each spring.

**Support Services**

Ambler Campus is a full-service campus with an array of offices and services to assist students in achieving educational success. The services described below are tailored to the needs of Ambler Campus students. For further information about support services provided at Ambler, please visit the Ambler Campus (http://ambler.temple.edu) web site and/or the corresponding sections in this Bulletin describing these services.
Academic Support Services

Academic Advising
Dedicated professional and faculty advisors at the Ambler Campus help students choose a program of study that is suited to their educational and career goals. While the students are ultimately responsible for knowing their academic status and requirements for their degree programs, advisors assist with information about program requirements and university policies and procedures. For transfer students, advisors can answer questions about transfer credit evaluations and determine whether these credits meet Temple program requirements.

Office of Academic Advising and Career Development
West Hall 109
267-468-8200
tuaadvis@temple.edu
http://ambler.temple.edu/academics/advising-and-support

This office coordinates academic advising at the Ambler Campus.

Center for Undergraduate Advising-Ambler, Fox School of Business and Management
West Hall 109
267-468-8350
http://ambler.temple.edu/academics/advising-and-support

Students can make an appointment online or call the number above to schedule an appointment.

Visit www.fox.temple.edu/cms_academics/dept/advising/overview/overview/

Career Development Services
West Hall 109
267-468-8200
http://ambler.temple.edu/students/career-development

Deciding on a major or profession can be a challenge. This office provides resources and expertise to assist students. These include: coaching/advising, career materials, résumé critique, and workshops. Externships, internships, and cooperative work experiences provide students with valuable hands-on learning that can take them one step closer to their future careers. At Ambler, information about externships, department sponsored internships, and other career opportunities are available through the Career Development Services office. Also visit http://www.temple.edu/provost/careercenter/ to access Focus-2, a self assessment career tool, as well as the OwlNetwork, an online resource for applying for jobs and internships.

Center for Student Professional Development
West Hall Lower Level 1
267-468-8354 or 215-204-2371
foxcspd@temple.edu
www.fox.temple.edu/cspd/

The Center for Student Professional Development (CSPD), part of the Fox School of Business and Management, coordinates all activities that support the ultimate goal of business students — choosing a meaningful and rewarding career. This annex is linked with the CSPD located in Alter Hall 134, at Main Campus. The CSPD strongly urges students to become active members of student professional organizations.

Computer Center
Ambler Campus Technology (ACT) Center
Learning Center 106
Help Desk: 267-468-8323
http://ambler.temple.edu/students/computers-and-technology

The Ambler Campus Technology (ACT) Center is equipped with 80 PCs and 6 iMacs equipped with software for all Temple programs, color and black and white laser printing, two plotters, scanner applications, video editing equipment, and a wireless lounge area. A help desk area is located within the ACT Center. A break out room is available for students to reserve.

Disability Resources and Services
West Hall 109
267-468-8200
http://ambler.temple.edu/campus-life/disability-resources
The Office of Academic Advising and Career Development, in conjunction with Disability Resources and Services (http://www.temple.edu/studentaffairs/disability) (Division of Student Affairs), provides accommodations for students with disabilities at Temple University's Ambler and Fort Washington campuses.

**Library**
Library Building
267-468-8643 or 267-468-8648
http://ambler.temple.edu/library

The Ambler Library supports the students and faculty with a collection of more than 100,000 books including a Leisure Reading collection; a Children's and Young Adult collection; a New Book area for books recently processed; current periodicals; maps; and DVDs, including feature films and documentaries in various fields. The library is part of the Temple University Libraries and through Diamond, the online catalog, and daily deliveries of materials requested via intra-library loan, the Ambler academic community is provided with convenient access to the discipline-based collections of all of Temple's libraries. The Ambler Library is part of the network that provides online access via the home page, library.temple.edu, to the Diamond Online Catalog. This online catalog leads to collections of printed materials and a rich collection of electronic materials, including databases for research, other internet resources, electronic journals, and e-books.

**Re-enrollment**
West Hall 102
267-468-8248
Degree students who have not attended Temple for one semester or more must contact this office for re-enrollment procedures prior to registering.

**Writing-Math-Science Center**
Learning Center 102
267-468-8386
http://ambler.temple.edu/academics/advising-and-support
Math-Science: Main Campus: 215-204-8466
www.temple.edu/msrc/
Writing: Main Campus Hotline: 215-204-0700
www.temple.edu/writingctr

The Writing-Math-Science Center (with computer lab) helps with questions about all aspects of writing, mathematics, and the sciences. It assists with brainstorming and planning papers, reports, and projects, and offers tutoring. This free service is open to all students. Please refer to the web sites listed above for hours of operation each semester and for online tutoring options.

**Other Services**

**Admissions**
West Hall
267-468-8100
bler@temple.edu
http://ambler.temple.edu/admissions

**Bookstore**
Bright Hall
267-468-8460
http://temple.bncollege.com/

The bookstore provides textbooks and course materials required for classes. The Temple University Bookstore is an affiliate of Barnes & Noble College Bookstores, offering the services and conveniences of a great bookstore chain. The bookstore also carries stationery items, Temple apparel, health and beauty aids, snacks, and other useful items.

**Bursar (Student Financial Services)**
West Hall 101
267-468-8250
http://ambler.temple.edu/admissions/costs-aid-and-scholarships

The Bursar's Office is available for students to process tuition payments, resolve billing questions, and purchase parking hangtags.

**Bus Service**
Bright Hall 101
267-468-8425
Temple University provides a free bus shuttle service on a regular schedule between the SEPTA Regional Rail station in Ambler and the Ambler Campus during the fall and spring semesters. There is also a fall and spring shuttle bus service between Ambler, Health Science, and Main campuses for students. Copies of the schedule and bus regulations are available in the Office of Student Life. (Note: There is no bus service in the summer from the Ambler Campus.)

**Financial Aid (Student Financial Services)**
West Hall 103  
267-468-8443  
http://ambler.temple.edu/admissions/costs-aid-and-scholarships

**General Information**
Administration Building  
267-468-8000  
http://ambler.temple.edu

**Health Services**
West Hall  
267-468-8490  
http://ambler.temple.edu/athletics-and-wellness/wellness

The Ambler Health Services office, open Monday through Thursday, allows students to drop in as needed to discuss health concerns with the RNs, who are certified in college health, and with physicians. Brochures are available on a wide range of health topics. Services provided at Temple University Ambler include: General Medical Clinic; Allergy Clinic; Self-care Center; women's health/family planning; immunizations, physical examinations and travel assessments; referrals to outside specialist and facilities; dispensary; and confidential HIV testing. The psychological counselor is available by appointment; see Psychological Services below. Health services are available to all currently enrolled students with a valid University I.D. Many services are free; some have discount charges for medication and treatment.

**Off-Campus Housing**
Bright Hall 101  
267-468-8425  
http://ambler.temple.edu/campus-life/campus-housing

Each semester, the Office of Student Life provides an online listing of apartments and houses to rent or share for students seeking off-campus housing. Also, local apartment complex brochures are available.

**Parking**
West Hall 102  
267-468-8250  
http://ambler.temple.edu/about/maps-and-directions/parking

Temple students must purchase a hangtag/decal from the Bursar's Office for any vehicle they wish to park on campus lots. There is no daily charge to park at Ambler. Special accommodations are available for students with disabilities. (See the Bursar's Office above.)

**Psychological Services**
West Hall  
267-468-8200  
http://ambler.temple.edu/athletics-and-wellness/wellness

Main Campus: 215-204-7276 for appointments  
http://www.temple.edu/studentaffairs/counseling/

Free and confidential psychological services are available at Ambler by appointment only. Emergencies and/or "walk-ins" and psychiatric services are managed on the Main Campus at Tuttleman Counseling Services located at 1810 Liacouras Walk, 5th floor.

**Registration/ID Cards**
West Hall 102  
267-468-8248  
amblereg@temple.edu  
http://ambler.temple.edu/academics/registration-and-books
This office provides information and assistance regarding registration procedures, enrollment verifications, and photo identification cards. Information and requests for transcripts and applications for Pennsylvania residency qualification are available online at www.temple.edu/registrar.

**Student Financial Services**

(See Bursar and Financial Aid above.)

**Veteran Affairs**

West Hall Lower Level 10  
267-468-8102 or 215-204-6130  
tuvets@temple.edu  
www.temple.edu/veterans

Making the transition from military to college life can be challenging. To assist with this transition, Temple University Veteran Affairs works with the various university departments to plan and implement educational and social programs to help veteran students succeed at Temple University. The Ambler Campus has a Veterans’ Suite in Bright Hall for students to have a place to meet and study. For questions regarding the certification process and veterans benefits, contact the Temple University Certifying Officer (p. 33) in the Office of the University Registrar at 215-204-7378. For additional information on benefits, go to www.benefits.va.gov/gibill/ (http://www.benefits.va.gov/gibill)

**Special Facilities and Programs**

**Aquaponics Laboratory**

Michael Bavas, Advisor, Temple Ambler Aquaponics  
Thomas Bilotta, Faculty Liaison  
West Hall Lower Level  
267-468-8390  
mbavas@temple.edu

Aquaponics is the cultivation of plants and aquatic animals in a self-sustaining, symbiotic environment. Students in the Temple Ambler Aquaponics organization and staff members have created a fully-developed aquaponics garden, which has taken root in the lower level of West Hall. The lab is an interactive space for students to learn in conjunction with credit and non-credit classes. The facility also serves as a teaching model for community organizations, businesses, and schools to learn to aquaponically grow their own food. Tours are provided for the community. The Aquaponics Laboratory is regulated under AALAC (Association for Assessment and Accreditation of Laboratory Animal Care) guidelines ensuring the ethical treatment of aquaculture for education purposes.

**Ambler Arboretum of Temple University**

Anne Brennan, Horticulture and Ambler Arboretum Supervisor  
Baldev S. Lamba, M.L.A. Academic Director  
267-468-8400  
http://ambler.temple.edu/arboretum

The Temple University Ambler Campus has a long history and rich tradition of horticulture and landscape design. Established as the Pennsylvania School of Horticulture for Women in 1911, the 187-acre campus represents a unique mix of natural and designed landscapes. The gardens and campus serve as excellent outdoor teaching laboratories for numerous classes and as a source of inspiration for students, faculty, and visitors.

The Ambler Campus was officially designated an arboretum in March 2000. This historic, public garden, now known as the Ambler Arboretum of Temple University, continues to develop as a living laboratory. As the home of Temple University's Department of Landscape Architecture and Horticulture, the Ambler Campus has a myriad of learning gardens, including a ground cover garden, native plant garden, formal gardens, green roof garden, rock wall, woodland garden, sustainable wetland garden, trial garden, the Viola Anders Herb Garden, the Philip A. and Barbara F. Albright Winter Garden, the Ernesta Ballard Healing Garden with labyrinth, the Colibraro Conifer Garden, and large perennial borders. The arboretum's three areas of focus are sustainability, the health benefits of gardens, and the history of women in horticulture, agriculture, and design.

**Athletic Facilities**

http://ambler.temple.edu/athletics-and-wellness/athletics

Temple University Ambler is the full-time home for Temple's men's and women's soccer teams. The NCAA Division I teams practice and play all home games on fields located on the track bound by Meetinghouse Road, Butler Pike, and Woods Drive. All games and practices take place during the day. Admission is free to all home games. The Intercollegiate Athletics Field House, located near the fields, has “green roof” structures, developed by Temple University with the help of a $50,000 grant from PECO Energy. A green roof is a living biological community of plants that provides an environmentally-sound alternative to a traditional roof system. The green roof garden allows for educational and research opportunities for students and faculty.
**Auditorium**

The 300-seat Learning Center Auditorium, with smart technology and performance space, provides opportunities to offer cultural, educational, and entertaining events for our students and the surrounding community. In this venue, Ambler Campus, once home to the Temple University Music Festival and Institute, again can host music and dance performances as well as lectures.

**Center for Sustainable Communities (CSC) at Temple University Ambler**

Jeffrey Featherstone, Ph.D., Director  
Susan E. Spinella Sacks, M.S., Assistant Director  
Md. Mahbubur Meenar, Ph.D., Assistant Director, Geographic Information Systems Operations and Research  
West Hall, Second Floor  
www.temple.edu/ambler/csc

The Center for Sustainable Communities develops and promotes new approaches for protecting and preserving quality of life through sustainable development, balancing the relationship between environmental integrity, economic prosperity, and social equity. It was designed to build on Temple University Ambler's strengths in horticulture, landscape architecture, and planning and to draw upon the expertise of all Temple University faculty. A working resource for government agencies, community organizations, and developers, the center provides objective information and services to improve decision-making relative to land use and water resources planning, in addition to conducting interdisciplinary research and offering educational and community outreach programs.

**Criminal Justice Training Programs (CJTP)**

Anthony J. Luongo, Director-CJTP; Executive Director-Temple University Law Enforcement Academy  
215-204-7930  
anthony.luongo@temple.edu  
http://www.temple.edu/cjtp/

Criminal Justice Training Programs, a division of the Department of Criminal Justice, is an interdisciplinary unit that has conducted professional training for a variety of criminal justice agencies and occupations since 1968. Each year, more than 3,000 criminal justice employees attend programs offered by CJTP, including police personnel, sheriffs and deputy sheriffs, constables, school security officers, park rangers, and court staff. Other activities include the development of training curricula and the delivery of continuing education and non-credit classes including distance-learning. Most recently, CJTP has been involved in the development of "ProRanger Philadelphia," an academic and technical skills training and paid internship program that is cooperatively administered by the National Park Service and Temple University. The program was established to recruit, train, and employ law enforcement park rangers for the National Park Service. Upon graduation from Temple University and successfully completing the ProRanger program, which includes a federally-accredited law enforcement training component, participants are eligible for permanent career tenure law enforcement park ranger positions with the National Park Service. Current students in any major who are interested in federal law enforcement are encouraged to find out about the ProRanger program (http://www.temple.edu/provost/university-college/proranger), and students completing their degree programs are eligible to attend the Temple Police Academy (http://www.cla.temple.edu/cjtp) in preparation for a career in law enforcement.

**EarthFest**

Susan E. Spinella Sacks, Coordinator; Assistant Director, Center for Sustainable Communities  
James Duffy, Co-Coordinator; Public Relations and Web site Coordinator  
Rachel Berger, Co-Coordinator; Marketing and Special Events Coordinator  
267-468-8108  
duffyj@temple.edu  
http://ambler.temple.edu/about/earthfest

Hosted by the Center for Sustainable Communities in the School of Environmental Design, EarthFest is an outdoor educational celebration of Earth Day held each year at Temple University Ambler. The mission of EarthFest is to promote environmental awareness using sustainable concepts, methods, and practices to protect and preserve our environment. Organizations, businesses, colleges, high schools, middle schools, elementary schools, and individuals demonstrate sustainable concepts and technologies. Thousands of students from all over the region come together and spend time learning about the world in which we live and the interconnected systems on which the lives of people and animals depend. This event is central to Ambler's values of student-centered learning, respect for the environment, and community engagement.

**Greenhouse**

Anne Brennan, Horticulture and Ambler Arboretum Supervisor  
267-468-8191  
http://ambler.temple.edu/arboretum/gardens

The Greenhouse at Temple University Ambler provides students with a first-class facility to study plant and soil science. The energy-efficient greenhouse includes computerized climate controls and thermal blankets to protect the plants in the winter and shade them in the summer. Modern fertilizer injection systems water and fertilize plants simultaneously. In addition to being used for coursework, the greenhouse provides faculty and students with a facility to conduct horticulture research that is at the forefront of the industry.
School of Environmental Design
www.cla.temple.edu/sed

The Ambler Campus is the home of the School of Environmental Design which includes the Department of Community and Regional Planning, the Department of Landscape Architecture and Horticulture, and the Center for Sustainable Communities. Ambler Campus has been connected to sustainable concepts and environmental stewardship for over a century. The School of Environmental Design upholds the environmental traditions established by the Pennsylvania School of Horticulture for Women founded in 1911 and carried forward by its founding Department of Landscape Architecture and Horticulture. See the School of Environmental Design (p. 658) section of this Bulletin.

Temple Infant and Child Laboratory
Kathy Hirsh-Pasek, Ph.D., Co-Director
Nora Newcombe, Ph.D., Co-Director
Haines House
267-468-8610
infntlab@temple.edu
http://www.temple.edu/infantlab/

The Temple University Ambler Infant and Child Laboratory invites parents and their children to shape the future by participating in research at the frontiers of science. The lab is directed by nationally-recognized child development authorities and professors Dr. Kathy Hirsh-Pasek and Dr. Nora Newcombe. Faculty and staff provide fun-filled activities for children who become part of cutting-edge scientific discoveries. Parents learn more about their children's first words and ability to create mental maps. At the lab, infants, toddlers, and older children teach scientists new ways to optimize education and advance learning.

Student Life

Office of Student Life
Bright Hall 101
267-468-8425
http://ambler.temple.edu/campus-life/clubs-and-organizations

The Office of Student Life coordinates the New Student Orientation program, offering orientation sessions for incoming freshmen and an online orientation for new transfer students. As part of this orientation, academic advisors assist students with academic planning and registration.

For current students, this office supports and complements the university's academic mission by promoting social, cultural, educational, and developmental programs for the students at Ambler. The office provides opportunities through campus-wide programming and student organizations for students to develop special skills and interests, to interact regularly with other students, to plan and manage events, to participate in leadership training and self-governance, and to become involved in community-service projects.

Recreation Services

Gymnasium
267-468-8151
Pool
267-468-8152
http://ambler.temple.edu/athletics-and-wellness/recreation

Recreational sports opportunities include intramurals, open recreation, aquatic programs, aerobics, and special events. A wide variety of activities are offered, ranging from structured, competitive leagues to self-directed fitness avenues. Facilities include an outdoor pool, a fitness room with both cardiovascular and free weight equipment, and basketball, tennis, and volleyball courts. Students may also participate in Main Campus recreational activities.

Student Activities Office
Bright Hall Lounge
267-468-8427
http://ambler.temple.edu/campus-life/clubs-and-organizations

Students may obtain information about student activities including the campus activities calendar, ticket sales for athletic and entertainment events, bus schedules, off-campus housing, and general campus information.

Student Organizations
Bright Hall 101
267-468-8425
There are about 30 student organizations on campus. Students are encouraged to join a professional or social organization to gain valuable leadership experience, meet and network with other students, organize fundraisers, and participate in service learning opportunities and events. For a full list of organizations, refer to the web site above.

For information about student organizations in the Fox School of Business and Management, refer to that section of the *Bulletin*.

**Student Government Association**

Bright Hall, 1st Floor  
267-468-8429  
http://ambler.temple.edu/campus-life/clubs-and-organizations

The Ambler Student Government Association (A.S.G.A.) enables Ambler students to seek solutions to their concerns pertaining to all aspects of the campus by serving as a liaison between the student body and university administration.

**Student Leadership Awards**

Awards to outstanding students and student groups are presented annually at the end of the spring semester. The Office of Student Life has more information on leadership awards (http://ambler.temple.edu/admissions/costs-aid-and-scholarships/scholarships-ambler-campus/student-leadership-awards).

**Student Media**

Bright Hall, 1st Floor  
Newspaper  
267-468-8430  
Radio Station  
267-468-8416  
http://ambler.temple.edu/campus-life/clubs-and-organizations

The *Temple Column* (newspaper) and WRFT-AM 1610 AM (radio station) are managed and operated entirely by students as part of the Ambler Student Media Bureau. These organizations provide communications students with challenging opportunities to become involved in various aspects of mass media production such as marketing, advertising, and management for the *Temple Column*, WRFT, and TUTV, Temple University's cable television channel. Students in all majors are welcomed and encouraged to participate.

**Administration**

*For contact information or updates, go to ambler.temple.edu/about/directory*

(See the School of Environmental Design (p. 658) section of this *Bulletin* for a listing of faculty and administrators in the Departments of Community and Regional Planning and Landscape Architecture and Horticulture.)

Vicki L. McGarvey, Vice Provost for University College and Acting Director, Temple University Ambler, Ed.D., University of Pennsylvania  
Crisbel Baez, Manager of Administration, M.L.A., Temple University  
Bonnie Frumer, Assistant Dean for Curriculum, M.A., Temple University  
Rhonda E. Geyer, Director, Non-Credit Programs, B.A., Mansfield University  
Saul Katzman, Director of Finance and Operations, B.B.A., Temple University  
Kathleen Kelly, Assistant Director-Academic Services and Administration  
Wanda Lewis-Campbell, Assistant Dean for Student Life, Ed.D., Temple University  
Linda M. Lowe, Director of Development and Alumni Affairs, B.A., Duquesne University  
Reid Overturf, Manager of Technical Support, Computer Services  
Elizabeth A. Reap, Assistant Director of Financial Aid, Student Financial Services, M.Ed., Temple University  
Laura S. Reddick, Associate Director for Adult and Veteran Student Recruitment, M.A., Antioch University  
Craig J. Roncace, Facilities Manager, M.B.A., Temple University  
Sandra Thompson, Head, Ambler Campus Library, M.L.S., Drexel University
James Van Blunk, Senior Associate Director of Admissions, M.S.Ed., Saint Joseph’s University

Janine C. Warnas, Director-Academic Advising, M.S., Gwynedd-Mercy College

Marcia Whitaker, Assistant Director, Scheduling

Brent Whiting, Director Information Systems, Academic Computer Services, B.S., Temple University

Program Coordinators/Advisors
(See the School of Environmental Design (p. 658) section of this Bulletin for a listing of faculty and advisors in the Departments of Community and Regional Planning and Landscape Architecture and Horticulture.)

Deidre M. Beiter, Coordinator, Constables’ Training Program, B.A., Lake Erie College

Cynthia Belliveau, Coordinator of Adult and Organizational Development, Ph.D., Temple University

Robert Deegan, Director, Temple University Police Academy, A.S., Yuba Community College

Lucille D’Emilio-Wilkinson, Academic Advisor II/ Career Coordinator, M.A., La Salle University

Jeffrey Featherstone, Director, Center for Sustainable Communities, Ph.D., Temple University

Caitlin Forehand, Academic Advisor I, Fox School of Business: Academic Services, M.S.Ed., Baylor University

Kathryn Hirsh-Pasek, Co-Director, Infant and Child Lab, Ph.D., University of Pennsylvania

Cheryl Irons, Coordinator of Criminal Justice, J.D., Ph.D., Temple University

Baldev S. Lamba, Chair and Associate Professor, Department of Landscape Architecture and Horticulture, School of Environmental Design; M.L.A., University of Pennsylvania

Wendy Lebing, Assistant Dean, QA/RA Program, M.A.L.D., Tufts University; M.S., Temple University

Cheryl Leeser, Academic Advisor II, M.A., Immaculata College

Mia K. Luehrmann-Cowan, Assistant Dean, College of Science and Technology, Ph.D., University of Illinois, Urbana

Anthony J. Luongo, Director, Criminal Justice Training Programs, M.A., Temple University

Lynn A. Mandarano, P.E., Acting Chair and Associate Professor, Department of Community and Regional Planning, Ph.D., University of Pennsylvania

Kate Margulis, Lab Coordinator, Infant and Child Laboratory, B.A., Smith College

Jelani Medford, Study Coordinator, Infant and Child Laboratory, B.A., Williams College

Md. Mahbubur Meenar, Assistant Director, Geographic Information Systems Operations and Research, Center for Sustainable Communities, Ph.D., Temple University

Nora Newcombe, Co-Director, Infant and Child Lab, Ph.D., Harvard University

Elvita Quiñones, Associate Director of Advising, Fox School of Business: Academic Services, M.S., Eastern University

John Sorrentino, Coordinator of Economics, Associate Professor, Ph.D., Purdue University

Susan E. Spinella Sacks, Assistant Director, Center for Sustainable Communities, M.S., Temple University

Christie Willard, Coordinator, Deputy Sheriffs’ Training Program, M.S., West Chester University

Staff
(See the School of Environmental Design (p. 658) section of this Bulletin for a listing of staff in the Departments of Community and Regional Planning and Landscape Architecture and Horticulture.)

Michael Bavas, Senior Technical Support Specialist, Computer Services, M.I.S., Kennedy Western University

Don Baldino, Evening Librarian, M.S.L.S., Drexel University

Rachel Berger, Coordinator, Marketing and Special Events, M.S., Temple University
Anne Brennan, Horticulture and Arboretum Supervisor, ISA Certified Arborist, B.S., The Pennsylvania State University

Dorothy Busillo, Administrative Assistant and Meeting Coordinator, Temple University Fort Washington, B.S., Millersville University

James Duffy, Public Relations and Web Site Coordinator, M.S.Ed., Temple University

Andrea Goldstein, Librarian, M.S.L.S., Drexel University

Lee Hardin, Senior Instructional Support Specialist, Computer Services, Temple University Ambler and Main Campus, M.S., Bloomsburg University

Novel Kim, Senior Technical Support Specialist, Academic Computer Services, M.Div., Westminster Theological Seminary

Barbara Kirsch, Coordinator of Financial Services, A.A.S., Montgomery County Community College

Brian McDonnell, Manager, Barnes and Noble Bookstore, B.A., Saint Joseph's University

Sonia Medina, Office Manager, Academic Advising, B.A., Temple University

Paul Myers, Recreation Specialist, M.Ed., East Carolina University

Larry O'Reilly, Manager of Technical Support, Computer Services, Temple University Fort Washington and Center City, B.B.A., Temple University

Debra Powell-Wright, Administrative Coordinator, Admissions, B.A., Antioch University

Karen Pyle, Media Coordinator of Classroom Technology Support, B.A., Virginia Polytechnic Institute and State University

Kathleen Rickards, Assistant Director of Enrollment Management, Fox School of Business and Management, B.B.A., Temple University

Gary Rogers, Director of Food Services for Sodexo

Shawn Ta, Senior Technical Support Specialist, Academic Computer Services, B.S., Temple University

Michelle Whiting, Administrative Specialist, Finance and Operations

Collin Wood, Assistant Facilities Manager, B.A., The Pennsylvania State University
Fort Washington

Temple University Fort Washington (TUFW)
425 Commerce Drive
Fort Washington, PA 19034
267-468-8500
http://fortwashington.temple.edu

The Temple University Fort Washington Graduate and Professional Education Center is the teaching site for some of Temple University Ambler’s graduate programs. Located in the Fort Washington Office Park, the center has about 350 attending students and features corporate-style classrooms, five (5) smart classrooms with wireless infrastructure, video-conference rooms, and a large 30-seat computer classroom. Students may complete master’s degrees in various graduate-level program areas.

The Office of Non-Credit and Continuing Education, located at Ambler campus, provides hundreds of non-credit courses throughout the year and offers them at the Fort Washington, Ambler, and Center City campuses of Temple. From certificates in meeting planning and digital photography to summer education camps for young learners, the non-credit courses are designed to enhance professional skills and enrich personal interests. Workshops are also available to prepare for the SAT.

Temple University Fort Washington's Lifelong Learning Society is comprised of a series of courses offered in the daytime during the fall and spring semesters for adults ages 50 and up with an interest in furthering their education. These personal enrichment courses range from explorations of classical music to discussions of current events.
Health Sciences Center

3307 N. Broad Street
Philadelphia, PA 19140-5101
Phone: 215-707-4800
Fax: 215-707-7819
e-mail: chp@temple.edu

Programs and services of the Lewis Katz School of Medicine, the Maurice H. Kornberg School of Dentistry, the School of Pharmacy, the College of Public Health, and Temple University Hospital are at the Health Sciences Center. Buildings and facilities, covering some 20 acres, extend to either side of North Broad Street from Allegheny Avenue to above Tioga Street. Public transportation to the campus includes SEPTA bus routes 4 and 16 on Broad Street, the Broad Street subway (Allegheny stop to the south, Erie stop to the north); the North Broad and the North Philadelphia stations of the Regional High-Speed transit lines are between the Health Sciences Center and Main Campus.

The Maurice H. Kornberg School of Dentistry is located at 3223 North Broad Street. The School of Pharmacy is located at 3307 North Broad Street. Many of the facilities of the Lewis Katz School of Medicine, including the Medical School Library and Temple University Hospital, are located on North Broad Street between Ontario and Tioga Streets. The Student Faculty Conference Center, on the southwest corner of Broad and Ontario Streets, provides a wide range of facilities, services, and educational programs. The Office of Student Activities provides educational, recreational, and auxiliary services, coordinates lounges and study areas, recreation classes, ping pong, pinball machines, basketball and volleyball intramurals, tennis, popular films, a cafeteria, art gallery, and seminars. The lower basement contains racquetball courts, weight rooms, and complete locker room facilities with saunas. The fourth floor houses a full continuing education and conference center. For more information, call 215-707-4017.

The School of Podiatric Medicine, part of the Health Sciences Center, is located at 8th and Race Streets.

Each of the schools and colleges located at the Health Sciences Center offers student and academic services. For a specific program or service of the undergraduate schools, refer to the appropriate section of this Bulletin, or inquire at the Office of the Dean. For information about the schools of Medicine and Dentistry, contact their respective dean's offices.

Housing and Dining Options

Residential housing is provided on the Main Campus and is accessible by a Temple University shuttle bus or convenient public transportation. Dining options are available at the Student Faculty Conference Center, the hospital cafeteria, and the Main Campus dining centers.

Contact information

Maurice H. Kornberg School of Dentistry
3223 North Broad Street
Philadelphia, PA 19140
Amid I. Ismail, BDS, MPH, MBA, DrPH, diplomate ABDPH, Dean
215-707-2803
http://dentistry.temple.edu/

Lewis Katz School of Medicine
3420 North Broad Street
Philadelphia, PA 19140
Larry R. Kaiser, MD, FACS, Dean
215-707-7000
http://www.temple.edu/medicine/

Temple University School of Podiatric Medicine
148 North 8th Street
Philadelphia, PA 19107
John Mattiacci, DPM, Dean
215-629-0300
800-220-FEET
http://podiatry.temple.edu

Temple University School of Pharmacy
3307 North Broad Street
Philadelphia, PA 19140
Peter H. Doukas, PhD, Dean
215-707-4990
http://pharmacy.temple.edu/
Main Campus

Founded 1884

Peter R. Jones
Senior Vice Provost for Undergraduate Studies
215-204-7000 (general number)
www.temple.edu

Located one mile north of Center City Philadelphia, Temple’s 115-acre Main Campus serves students from the Delaware Valley area, from throughout the United States, and from 103 foreign nations. There are approximately 27,100 undergraduates and 8,450 graduate and professional school students attending classes on the Main Campus.

The Main Campus can be reached easily by public transportation using SEPTA bus routes 4 or 16 on Broad Street, the Broad Street Subway (Cecil B. Moore Avenue stop), AMTRAK at North Broad Street Station, and SEPTA Commuter Rail Lines at the Temple/Cecil B. Moore Station, Ninth and Berks Streets.

The major facilities of the Main Campus are located between 10th and 16th Streets and between Oxford and Diamond Streets. Ten Temple schools and colleges with undergraduate programs have their central administrative offices at the Main Campus, as well as most of their classrooms. These include:

- The Fox School of Business and Management;
- The School of Media and Communication;
- The College of Education;
- The College of Liberal Arts;
- The College of Science and Technology;
- The College of Engineering;
- The School of Social Work;
- The School of Tourism and Hospitality Management
- The Tyler School of Art
- The Center for the Performing and Cinematic Arts, which consists of the Esther Boyer College of Music and Dance and the School of Theater, Film and Media Arts

The Graduate School and the James E. Beasley School of Law are also located on Main Campus. Many of these schools and colleges offer programs and courses on other campuses and at various extension centers. Those offerings are described in each individual college section and are listed on the Academic Programs chart (p. 2047).

Programs Offered

All of the programs listed in the Academic Programs chart (p. 2047) are offered on the Main Campus except those of the School of Environmental Design (Landscape Architecture, Horticulture, and Community Development); most of the programs of the College of Public Health, the Maurice H. Kornberg School of Dentistry, the Lewis Katz School of Medicine, and the School of Pharmacy, which are offered at the Health Sciences Center only; the programs of the School of Podiatric Medicine, which are offered at 8th and Race Streets; and those programs only offered in Temple University Japan.

Physical Facilities

In addition to housing the major classroom and administrative facilities of ten of the schools and colleges of Temple, the Main Campus is also the central location of the university's Library System (http://library.temple.edu) and Computer Center. Other facilities include two stages for theatrical productions (Tomlinson Theater and Randall Theater), two music recital halls (Klein Recital Hall and Rock Hall), a dance laboratory theater (Conwell Dance Lab), and the Temple Performing Arts Center (http://templeperformingartscenter.org).

The Main Campus is home to the Media Learning Center for the study of Critical Languages and other self-study courses and the Presser Learning Center, a nationally-known multimedia laboratory for teacher education in music. The university's 24-hour classical and jazz radio station, WRTI-FM (http://www.wrti.org), is located at the Entertainment and Community Education Center, behind the Liacouras Center at 1509 Cecil B. Moore Avenue, Third Floor, Philadelphia, PA 19121-3410.

The Liacouras Center (http://www.liacourascenter.com), a venue for sports, entertainment, cultural, and educational activities, consists of a 10,200-seat concert and convocation center and is home to the Temple Owls Basketball teams, the Esther Boyer Theater, the Independence Blue Cross Student Recreation Center, the Entertainment and Community Education Center, and a 1,200-car garage.
The world-class TECH Center (http://www.temple.edu/cs/techcenter), located on 12th and Montgomery, features many technology resources available to students. The facility includes hundreds of computers, a help desk, the university Welcome Center, faculty wing, specialty labs, an internet lounge, social spaces, and private breakout rooms for studying.

The Howard Gittis Student Center (http://www.temple.edu/studentaffairs/studentcenters/hgsc) includes the Valaida S. Walker Food Court, a Barnes & Noble Bookstore, The UPS Store, Philadelphia Federal Credit Union, an information center, the student newspaper, Temple Student Government Offices, Main Campus Program Board, the school yearbook, the Office of the Dean of Students, television lounge, quiet lounge and student organizational space.

Recreation (http://www.temple.edu/studentaffairs/campusrec) facilities include a student fitness complex in the Independence Blue Cross Student Recreation Center, with free weights and racquetball courts; two Olympic-size swimming pools, weight-training rooms, including a cardiovascular fitness center, in the newly renovated Pearson McGonigle Halls; an eight-lane, 400-meter outdoor track; an indoor track in the Independence Blue Cross Student Recreation Center; a lighted outdoor recreation and sports complex that includes four acres of artificial turf and a 4,500 seat arena. The Main Campus also has a student recreation facility consisting of a 39,000-square foot Student Pavilion with lighted tennis courts and an outdoor in-line skating surface. Main campus also houses TU Fitness (TUF), a fitness facility with over 16,000 square feet of space that includes cardio equipment, strength training equipment, an 11-piece selectorized equipment circuit, and a stretching area.

Tuttleman Learning Center is a hub for emerging learning technologies, with flexible classrooms, distance learning sites, student lounges, and personalized areas for small group activities, and is home to the University Writing Center, the University Honors Program, and International Programs.

Liacouras Walk, a major pedestrian way running through the center of campus, provides retail shops, food service, and the Conwell Inn. The Academic Resource Center, Math and Science Resources Center, and the Academic Advising Centers for the College of Liberal Arts and the College of Science and Technology are located at 1810 Liacouras Walk. The Academic Advising Center for the College of Public Health is located at 1938 Liacouras Walk.
Temple University Center City
1515 Market Street
215-204-TUCC
www.temple.edu/tucc/

Located just across the street from City Hall and surrounded by the home offices of major national corporations, Temple University Center City (TUCC) offers an outstanding selection of undergraduate and graduate courses and full degree programs in the evening, as well as stimulating non-credit workshops and seminars during the day, in the evening, and on weekends.

Administration
William E. Parshall, M.P.A., Director
William H. Schreiber, M.A., Associate Director

Credit Programs
Most of Temple University's schools and colleges offer courses at TUCC. It is possible to complete the following undergraduate degree programs at TUCC in the evening:

- Accounting
- English

Student Services

Hours of Operation
During the semester the TUCC administration office (suite 215) is open 8:30 a.m. to 8:00 p.m., Monday through Thursday, and 8:30 a.m. to 5:00 p.m. on Friday. When Temple University is not in session, please call 215-204-TUCC for hours.

Academic Advising and Registration
TUCC's Advising Coordinator can give you the information and support you need to succeed. Office hours are scheduled into the evening so that you can make an appointment during your lunch hour or after work. You can also discuss transfer options and career-related topics. Call 215-204-4358 for information or an appointment. If you are admitted to a degree program, you must be advised by a representative of your school or college. If you are a student in the College of Liberal Arts, send an e-mail message to prob@temple.edu and specify that you want an appointment at TUCC. If you are a student in the Fox School of Business & Management (FSBM), use the FSBM Online Appointment System, accessed through the FSBM Center for Undergraduate Advising (http://www.fox.temple.edu/cms_academics/dept/advising) web site. Specify that you want an appointment at TUCC.

The Bookstore
The Café/Bookstore offers Starbucks coffee, food items and a wide range of Temple branded merchandise. Textbooks are available each semester. Call 215-204-1527 for more information.

Hours of Operation:
Monday - Thursday, 7:00 a.m. - 8:00 p.m.
Friday, 7:00 a.m. - 6:00 p.m.
Saturday, 10:00 a.m. - 4:00 p.m.
Sunday, Closed.

Career Advising
TUCC's Advising Coordinator can help you with career-related information. You can obtain information regarding your options and help to get you going in the direction that is right for you. Call 215-204-4358 for an appointment.

Center City Technology Center
Using a computer or accessing library information is as easy as a trip to the Center City Technology Center located on the fourth floor. The staff will assist you in using personal computers or in conducting library research. It is also possible to establish an e-mail account, obtain language tapes, and reserve audio-visual materials through the center. Faculty can place books and articles on semester reserve. Call 215-204-1521 for more information about available resources or hours of operation.

Student Photo ID Cards
Students registering for the first time can have a photo ID card made in the TUCC administration office (suite 215). Call 215-204-TUCC for more information or hours of operation. Students who have lost their photo ID card can obtain a replacement card for a $20 fee.
Parking
As a service to our students, TUCC has negotiated parking discounts with participating garages at the listed locations. TUCC has no business relationship with these garages and does not play any role in making their policies. In order to receive the discount, students must have their parking ticket validated and show their Temple ID card. The validation and list of participating garages are available at the security desk in the ground floor lobby area. A list of participating garages is also available on the TUCC (http://www.temple.edu/tucc) web site in the “Services” section.

Facilities
The TUCC campus occupies six floors at 1515 Market Street. All together there are over 60 classrooms, conference rooms, and computer classrooms.

Meeting and Training Space
The next time your organization needs meeting or training space, consider Temple University Center City. We offer classrooms, conference rooms, and computer labs in a wide range of capacities and a variety of configurations. Every room is equipped with spacious white boards and a ceiling-mounted LCD projector, and a good selection of media equipment is available to enhance your event. All rooms have large windows that provide lots of natural light and beautiful views. Our clients value our convenient center city location and the professional quality of the space. Affordable rates make it an attractive option to non-profit organizations and government agencies, and you are free to choose your own caterer. Rooms can be rented for half or full days. Call 215-204-4357 for additional information or to meet with a representative and see the space.

Copy Machine
A copy machine for student use is available in the café area on the fourth floor. It accepts both Diamond Dollars and cash. Call 215-204-7271 if there is a problem with the machine.

Information Kiosks
An information kiosk, located in Suite 215, allows you to obtain information from Temple web sites. Currently enrolled degree seeking students can use the Self Service Banner (SSB) site to access records and process registration and payment transactions.

Lounges and Café areas
Lounges and café areas are located on all floors and provide a good place to relax or study.

Coffee and Refreshments
There is a coffee vending machine in the fifth floor café area.

TTY
A TTY (text telephone) machine (215-204-1900) is available on the second floor for staff and student use.

Vending Machines
Vending machines are located in the lounge areas on the second floor, and in the café areas on the third, fourth, and fifth floors. Call 215-204-7271 if there is a problem with the machines.

Internet Access
Wireless Internet access is available throughout the TUCC campus. In addition, Ethernet connections and power outlets are located around the perimeter of all lounge and café areas. For more information, contact Center City Technology Center, 215-204-1521.

Non-Credit Programs
The following constitute non-credit programs at TUCC. For detailed information on these programs, see the Special Programs (p. 28) section of this Bulletin.

Real Estate Institute
Non-credit real estate programs for professionals and consumers. Call 215-204-1539 for more information.

Music Prep
Dynamic non-credit music and dance programs for infants through adults. Call 215-204-1512 for more information.

Osher Lifelong Learning Institute at Temple University (OLLI)
OLLI is a membership organization that offers non-credit learning and enrichment programs for retirees. Call 215-204-1505 for more information.
Temple University Harrisburg

Link Martin, M.S.W.
Director
Temple University Harrisburg
234 Strawberry Square
Harrisburg, PA 17101
717-232-6400
harrisburg.temple.edu/

Lynn Notestine, M.S.W.
Associate Director
Temple University Harrisburg
234 Strawberry Square
Harrisburg, PA 17101
717-232-6400

At Temple Harrisburg, you will find an active community of adult learners interested in improving their professional knowledge and skills. Temple Harrisburg is engaged in improving the central Pennsylvania community through academic degrees, certificate programs, and professional development programs.

The mission of Temple University Harrisburg (TUH) is to serve as the leading academic and professional development center in the areas of social work, public education, public policy and public service in central Pennsylvania.

The campus location in the capital region allows the opportunity to share Temple’s commitment to social justice, innovative research and community service with legislative, governmental decision makers and the public. TUH strives to support the university’s role in the public discourse on social and policy issues through the provision of excellent graduate programs, professional development opportunities, public policy discussion and innovative research.

For further information regarding the programs highlighted below, please see the TUH web site at the following address: harrisburg.temple.edu/

Graduate Degree Programs

- Master of Science in Community and Regional Planning (CRP)
- Master of Public Health (MPH)
- Master of Social Work (MSW)
- Master of Public Policy

Certificate Programs

- CRP-Sustainable Community Planning & Transportation Planning
- Post Graduate Certificate in Play Therapy
- Certificate in Urban Education
- Certificate in Teaching in Higher Education
- Certificate in Military Counseling
- Clinical Supervision
- Strengths-based Leadership Certificate

Non-Credit Programs/Professional Development

- Credential for Strengths-based Family Workers
- Nonprofit Evaluation Services and Training (NEST) Program
- Non Profit Management Training Program & Enhancing Communities Lunch Series
- International Nonprofit Training and Leadership Training Program (INTL)
- Institute on Protective Services
- Certified Investigator Training Program
- Institute on Adolescent Sexual Health
- Teacher Professional Development
- Personal Care Home Administrator Training
- Medication Administration Training Program
• Community Health Worker Training Program
• Intensive English Language Program

Undergraduate Programs

Capital Semester
The Institute for Public Affairs sponsors an internship semester each fall in association with TUH. Students have the opportunity to explore government affairs, policymaking and implementation first-hand at the State Capital.

The Freshman Year at Temple Harrisburg
The Freshman Year at Temple University Harrisburg (FYTH) is designed to offer Temple General Education courses to full-time admitted students at the Harrisburg campus. The purpose of the program is to allow students from the Central Pennsylvania area the opportunity to live and work near home while completing their initial year as full time Temple students. The first year will prepare students with skills necessary to be successful at the undergraduate level. Staying small in Harrisburg will allow students to establish relationships and connections with other students and main campus staff prior to arriving. The program is designed to give students a 4 day weekend and a 3 day intensive class schedule. The program will also incorporate various social and co-curricular activities that would allow students to experience the main campus and ease their transition.

Facilities
The Temple University Strawberry Square facility is 35,650 square feet located across from the capitol in an office/shopping complex and offers a wide range of classrooms, conference rooms and computer labs equipped with the latest technology for meeting, video conferencing and presentation needs.
Tuition and Fees

Payment of Tuition

David Glezerman, Assistant Vice President and Bursar
115 Carnell Hall
215-204-7269
david.glezerman@temple.edu
bursar.temple.edu

Registration for courses is not optional, and students must not attend courses for which they are not registered. Once a student registers for a course--or is registered by an advisor at the student's request--the student remains financially obligated for the course unless and until he or she drops the course by the prescribed deadlines for dropping and adding courses. Prior to registering for the first time each semester, students are required to accept Temple University's Financial Responsibility Agreement, which outlines the financial terms and conditions associated with course registration.

Students may drop courses and otherwise modify their registrations in Self-Service Banner (SSB) or by working with an academic advisor. Please see the Academic Calendars (http://www.temple.edu/registrar/documents/calendars) on the Office of the University Registrar's web site for add/drop and withdrawal deadlines for each semester and summer session.

Once registered, students must pay tuition and fees according to the Bursar's Office billing schedule (http://bursar.temple.edu/billing/billing-schedule). Failure to satisfy billing and financial obligations may result in withholding of official transcripts and diplomas; denial of the right to register for future sessions; and the assessment of late fees and collection costs.

Students who are not planning to attend the semester must drop their course registration. Students who do not drop classes by the end of the official drop/add period (See Academic Calendar for specific dates) remain financially obligated for the balance due. Instructors are advised to issue letter grades (typically "F") for students who have not been attending but are on their roster of registered students.

Students who drop classes by the end of the drop/add period of a semester or summer session will have their courses dropped. This will relieve them of academic responsibility and in most instances financial responsibility associated with the course.

Students who withdraw from classes after the drop/add period are responsible for full payment of all tuition and fee charges, along with any payment plan fees, and late payment charges. These courses will be recorded on the transcript with the notation of "W," indicating that the student withdrew. Unpaid tuition balances may be referred for collection, and students may be held liable for paying all associated collection costs and/or legal fees.

Students who do not withdraw by the published deadline are responsible for payment of all tuition and fee and/or collection costs. Temple University will first apply all payments received to the oldest outstanding balance, if applicable, then to the current semester charges.

Temple University notifies students via their TUmail account to view their electronic bills in TUpay. Students are required to pay at least the minimum amount due on their bills on or before the due date on their bill.

Acceptable forms of payment include: tuition remission forms, checks (paper and electronic), cash, credit cards, and money orders. Checks or money orders should be made payable to Temple University. Credit cards accepted for online payment only through TUpay include: MasterCard, American Express, Discover and Visa. Please note that credit card payments are subject to a 2.75% convenience fee by the university’s processor.

Payment must be received by the billing due date to assure proper crediting and to remain in good financial standing.

Payment Plans

Students are encouraged to pay the total account balance by the bill due date. In doing so, students avoid any payment plan fees and late payment fees. However, if students are unable to do so, Temple University offers two payment plans to assist students and their families.

Please note that payment plans are offered for the fall and spring semesters only. Payment plans are not offered in the summer semesters.

For the first bill of the fall and spring semester, students are billed with a minimum amount due that represents 50% of current term charges. Students who elect this payment option and do not pay the total account balance will be automatically enrolled in the University's Deferred Payment Plan and assessed a $25 non-refundable payment plan fee.

For the second bill of the fall and spring semester, students are billed for the remaining balance. Students who do not pay the total account balance in full by the due date are indicating that they wish to remain in the University's Deferred Payment Plan and will be assessed a $20 non-refundable payment plan fee.

The University also offers the Temple Installment Payment Plan (TIPP) for those students who need an extended payment option. The plan allows students to make up to ten regularly scheduled monthly payments starting in May towards their future charges (five payments for fall and five payments...
for spring). The application fee for this payment plan is $50 for the year. For more information about this plan, offered through Higher Education Services (HES), go to bursar.temple.edu.

Financial Counseling
Students who need assistance in financing their education should see a Financial Counselor in the Department of Student Financial Services (Ground Floor, Conwell/Carnell Hall) or call 215-204-2244 for an appointment. For more information on financing your education, visit the MONEY MATTERS (http://slmm.temple.edu) web site.

Student Loan Counseling
All students who receive federal student loans are required by federal regulations to receive loan counseling when first receiving a loan and prior to leaving the university.

The Credit and Collections unit in the Bursar’s Office is responsible for completing loan counseling for all students who are receiving federal student loans for the first time (entrance interviews). In addition, this staff can assist students with related financial planning that would help them in completing their education at Temple. Students can complete the online entrance interview (http://www.fc.campusoncall.com/cgi-bin/home.pl?FromAdmin=1&campus=temple) or call 215-204-5549 for additional information.

Students who are graduating must complete an online exit interview (http://www.fc.campusoncall.com/cgi-bin/home.pl?FromAdmin=1&campus=temple) or contact the Credit and Collections unit in the Bursar's Office, Second Floor, Carnell Hall, at 215-204-5549.

Assessing Tuition Charges
Tuition assessment at Temple University is based on full-time or part-time status; student college; student level status (undergraduate, graduate, or professional); student class level for undergraduates; and in-state/out-of-state residency status. The level of the courses is not a factor in how students are assessed.

All students are placed into one of the University’s schools or colleges, based on their major or program.

Full-Time Status
Undergraduate students are considered full-time students when carrying between 12-17 semester hours (s.h.). Credits in excess of 17 s.h. are additionally assessed at the per semester credit hour tuition rate.

International students, holders of non-immigrant visas, are required to pay out-of-state tuition fees and register as full-time students.

There is no distinction between full-time and part-time graduate tuition rates. All graduate students are assessed at a credit hour rate, regardless of the number of credit hours they are taking.

Part-Time Status
Undergraduates are considered part-time students when taking fewer than 12 s.h. per semester. Tuition is charged by the semester credit hour for part-time undergraduates.

In-State/Out-of-State Residency Status
A student is classified as a Pennsylvania resident for tuition purposes if his or her permanent, legal residence is in Pennsylvania. In-state residency is generally established within the context of the following overall guidelines:

• An individual who has not lived in Pennsylvania for a continuous 12-month period immediately prior to registration as a student at a Pennsylvania college or university is presumed not to be a Pennsylvania resident. A student may rebut this presumption with convincing evidence.

• A student under 22 years of age is presumed to have the residency of his or her parents or legal guardians. A student may rebut this presumption by presenting convincing evidence of emancipation and independent domicile.

• A student who receives financial aid based on residence in a state other than Pennsylvania will not be considered a resident of Pennsylvania.

• A student who is not a United States citizen or does not have an immigrant visa is presumed not to be a resident of Pennsylvania for tuition purposes; however, a student may rebut this presumption with clear and convincing evidence.

Visit the Office of the University Registrar’s web site for more information about residency (http://www.temple.edu/registrar/students/registration/residency) and a copy of the Resident Tuition Eligibility Guidelines. Specific questions pertaining to Pennsylvania residency status should be directed to the Office of the University Registrar at 215-204-1131 or resident.tuition@temple.edu.

Tuition Schedule
The Bursar’s Office’s web site contains the latest tuition schedule (http://bursar.temple.edu/tuition-and-fees). It also contains a tuition calculator (http://bursar.temple.edu/tuition-and-fees/tuition-rates), which provides an estimate of your tuition rate by selecting your specific student characteristics, such as school or college, student level, residency, etc.
University-Wide Fees


Please note that Tuition and Fees are subject to change by action of the university's Board of Trustees.

**Temple University 2015-2016 Tuition Rate Schedule by School/College:**

<table>
<thead>
<tr>
<th>School/College</th>
<th>Pennsylvania Residents</th>
<th>Out-of-State Residents</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>UNDERGRADUATE and GRADUATE:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College of Liberal Arts (includes School of</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental Design)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Undergraduate:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Lower Division:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time Undergraduate</td>
<td>$14,398</td>
<td>$24,704</td>
</tr>
<tr>
<td>Full-time Undergraduate including University services fee</td>
<td>$15,188</td>
<td>$25,494</td>
</tr>
<tr>
<td>Part-time Undergraduate (per credit hour)</td>
<td>$555</td>
<td>$881</td>
</tr>
<tr>
<td><strong>Upper Division:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time Undergraduate</td>
<td>$15,398</td>
<td>$25,704</td>
</tr>
<tr>
<td>Full-time Undergraduate including University services fee</td>
<td>$16,188</td>
<td>$26,494</td>
</tr>
<tr>
<td>Part-time Undergraduate (per credit hour)</td>
<td>$590</td>
<td>$916</td>
</tr>
<tr>
<td><strong>Graduate:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graduate (per credit hour)</td>
<td>$853</td>
<td>$1,169</td>
</tr>
<tr>
<td><strong>College of Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Undergraduate:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Lower Division:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time Undergraduate</td>
<td>$14,398</td>
<td>$24,704</td>
</tr>
<tr>
<td>Full-time Undergraduate including University services fee</td>
<td>$15,188</td>
<td>$25,494</td>
</tr>
<tr>
<td>Part-time Undergraduate (per credit hour)</td>
<td>$555</td>
<td>$881</td>
</tr>
<tr>
<td><strong>Upper Division:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time Undergraduate</td>
<td>$15,398</td>
<td>$25,704</td>
</tr>
<tr>
<td>Full-time Undergraduate including University services fee</td>
<td>$16,188</td>
<td>$26,494</td>
</tr>
<tr>
<td>Part-time Undergraduate (per credit hour)</td>
<td>$590</td>
<td>$916</td>
</tr>
<tr>
<td><strong>Graduate:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graduate (per credit hour)</td>
<td>$853</td>
<td>$1,169</td>
</tr>
<tr>
<td><strong>College of Education Program in Jamaica</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doctoral - 2012 Cohort</td>
<td>$1,074</td>
<td>$1,074</td>
</tr>
<tr>
<td>Masters - 2015 Cohort</td>
<td>$1,191</td>
<td>$1,191</td>
</tr>
<tr>
<td><strong>School of Media and Communication</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Undergraduate:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Lower Division:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time Undergraduate</td>
<td>$15,598</td>
<td>$25,904</td>
</tr>
<tr>
<td>Full-time Undergraduate including University services fee</td>
<td>$16,388</td>
<td>$26,694</td>
</tr>
<tr>
<td>Part-time Undergraduate (per credit hour)</td>
<td>$603</td>
<td>$929</td>
</tr>
<tr>
<td><strong>Upper Division:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time Undergraduate</td>
<td>$16,598</td>
<td>$26,904</td>
</tr>
<tr>
<td>Full-time Undergraduate including University services fee</td>
<td>$17,388</td>
<td>$27,694</td>
</tr>
<tr>
<td>Part-time Undergraduate (per credit hour)</td>
<td>$638</td>
<td>$964</td>
</tr>
<tr>
<td><strong>Graduate:</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Graduate (per credit hour) | $933 | $1,249

Tyler School of Art
Fine Arts (BFA/MFA)
Undergraduate:
Lower Division:
- Full-time Undergraduate | $20,168 | $31,988
- Full-time Undergraduate including University services fee | $20,958 | $32,778
- Part-time Undergraduate (per credit hour) | $653 | $977
Upper Division:
- Full-time Undergraduate | $21,168 | $32,988
- Full-time Undergraduate including University services fee | $21,958 | $33,778
- Part-time Undergraduate (per credit hour) | $688 | $1,012
Graduate:
- Graduate (per credit hour) | $1,015 | $1,349

Architecture
Undergraduate:
Lower Division:
- Full-time Undergraduate | $17,824 | $28,586
- Full-time Undergraduate including University fees | $18,614 | $29,376
- Part-time Undergraduate (per credit hour) | $655 | $981
Upper Division:
- Full-time Undergraduate | $18,824 | $29,586
- Full-time Undergraduate including University services fee | $19,614 | $30,376
- Part-time Undergraduate (per credit hour) | $690 | $1,016
Graduate:
- Graduate (per credit hour) | $997 | $1,313

All Other Programs
Undergraduate:
Lower Division:
- Full-time Undergraduate | $14,398 | $24,704
- Full-time Undergraduate including University services fee | $15,188 | $25,494
- Part-time Undergraduate (per credit hour) | $555 | $881
Upper Division:
- Full-time Undergraduate | $15,398 | $25,704
- Full-time Undergraduate including University service fees | $16,188 | $26,494
- Part-time Undergraduate (per credit hour) | $590 | $916
Graduate:
- Graduate (per credit hour) | $853 | $1,169

Center for the Arts
Boyer College of Music and Dance and School of Theater, Film and Media Arts
Boyer College of Music and Dance
Undergraduate:
Lower Division:
- Full-time Undergraduate | $16,708 | $27,846
- Full-time Undergraduate including University service fees | $17,498 | $28,636
## Tuition and Fees

### Part-time Undergraduate (per credit hour)

<table>
<thead>
<tr>
<th>Division</th>
<th>Lower</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>School of Theater, Film and Media Arts</strong></td>
<td>$634</td>
<td>$958</td>
</tr>
<tr>
<td><strong>Graduate:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graduate (per credit hour)</td>
<td>$967</td>
<td>$1,282</td>
</tr>
</tbody>
</table>

### School of Theater, Film and Media Arts

#### Undergraduate:

<table>
<thead>
<tr>
<th>Division</th>
<th>Lower</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lower Division:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time Undergraduate</td>
<td>$15,598</td>
<td>$25,904</td>
</tr>
<tr>
<td>Full-time Undergraduate including University services fee</td>
<td>$16,388</td>
<td>$26,694</td>
</tr>
<tr>
<td>Part-time Undergraduate (per credit hour)</td>
<td>$603</td>
<td>$929</td>
</tr>
<tr>
<td><strong>Upper Division:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time Undergraduate</td>
<td>$16,598</td>
<td>$26,904</td>
</tr>
<tr>
<td>Full-time Undergraduate including University services fee</td>
<td>$17,388</td>
<td>$27,694</td>
</tr>
<tr>
<td>Part-time Undergraduate (per credit hour)</td>
<td>$638</td>
<td>$964</td>
</tr>
<tr>
<td><strong>Graduate:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graduate (per credit hour)</td>
<td>$933</td>
<td>$1,249</td>
</tr>
</tbody>
</table>

### Fox School of Business and Management

#### Undergraduate:

<table>
<thead>
<tr>
<th>Division</th>
<th>Lower</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lower Division:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time Undergraduate</td>
<td>$18,590</td>
<td>$32,190</td>
</tr>
<tr>
<td>Full-time Undergraduate including University services fee</td>
<td>$19,380</td>
<td>$32,980</td>
</tr>
<tr>
<td>Part-time Undergraduate (per credit hour)</td>
<td>$717</td>
<td>$1,145</td>
</tr>
<tr>
<td><strong>Upper Division:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time Undergraduate</td>
<td>$19,590</td>
<td>$33,190</td>
</tr>
<tr>
<td>Full-time Undergraduate including University services fee</td>
<td>$20,380</td>
<td>$33,980</td>
</tr>
<tr>
<td>Part-time Undergraduate (per credit hour)</td>
<td>$752</td>
<td>$1,180</td>
</tr>
</tbody>
</table>

**Online Bachelor of Business Administration (OBBA)**

| Undergraduate (per credit hour) | $752 | $752 |

**Graduate:**

| Master of Business Administration (GMBA) | Graduate (per credit hour) | $1,125 | $1,577 |
| Master of Business Administration (PMBA) | Graduate (per credit hour) | $1,125 | $1,125 |
| Executive Master of Business Administration (EMBA) | Class of 2016 (per credit hour) | $1,925 | $1,925 |
|                                         | Class of 2017 (per credit hour) | $1,979 | $1,979 |

**Online Master of Business Administration (OMBA)**

| Graduate (per credit hour) | $1,245 | $1,245 |

**Master of Accountancy (Macc)**

| Graduate (per credit hour) | $1,082 | $1,082 |

**Master of Science - Professional Finance Suite (MS-FARM, MSFE, MSIM)**

| Graduate (per credit hour) | $1,082 | $1,082 |
**Master of Science in IT Auditing and Cyber Security (MS-ITACS)**
Graduate (per credit hour) 3 \(\$1,082\) \(\$1,082\)

**Master of Science in Digital Innovation in Marketing (MS-DIM)**
Graduate (per credit hour) 3 \(\$1,082\) \(\$1,082\)

**Master of Science (all other MS programs not listed above)**
Graduate (per credit hour) 3 \(\$1,082\) \(\$1,511\)

**Doctor of Philosophy (PhD)**
Graduate (per credit hour) 3 \(\$1,082\) \(\$1,511\)

**Executive Doctor of Business Administration Program (EDBA)**
Graduate (per credit hour) \(\$2,300\) \(\$2,300\)

**College of Engineering**

<table>
<thead>
<tr>
<th>Undergraduate:</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lower Division:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time Undergraduate</td>
<td>($16,642)</td>
<td>($26,892)</td>
</tr>
<tr>
<td>Full-time Undergraduate including University services fees</td>
<td>($17,432)</td>
<td>($27,682)</td>
</tr>
<tr>
<td>Part-time Undergraduate (per credit hour) 2</td>
<td>($629)</td>
<td>($951)</td>
</tr>
<tr>
<td><strong>Upper Division:</strong> 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time Undergraduate</td>
<td>($17,642)</td>
<td>($27,892)</td>
</tr>
<tr>
<td>Full-time Undergraduate including University services fee</td>
<td>($18,432)</td>
<td>($28,682)</td>
</tr>
<tr>
<td>Part-time Undergraduate (per credit hour) 2</td>
<td>($664)</td>
<td>($986)</td>
</tr>
<tr>
<td><strong>Graduate:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graduate (per credit hour) 2</td>
<td>($968)</td>
<td>($1,283)</td>
</tr>
</tbody>
</table>

**College of Public Health**

<table>
<thead>
<tr>
<th>Undergraduate:</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lower Division:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time Undergraduate</td>
<td>($17,178)</td>
<td>($28,848)</td>
</tr>
<tr>
<td>Full-time Undergraduate including University services fee</td>
<td>($17,968)</td>
<td>($29,638)</td>
</tr>
<tr>
<td>Part-time Undergraduate (per credit hour) 2</td>
<td>($643)</td>
<td>($1,003)</td>
</tr>
<tr>
<td><strong>Upper Division:</strong> 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time Undergraduate</td>
<td>($18,178)</td>
<td>($29,848)</td>
</tr>
<tr>
<td>Full-time Undergraduate including University services fee</td>
<td>($18,968)</td>
<td>($30,638)</td>
</tr>
<tr>
<td>Part-time Undergraduate (per credit hour) 2</td>
<td>($678)</td>
<td>($1,038)</td>
</tr>
<tr>
<td><strong>Graduate:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graduate (per credit hour) 2</td>
<td>($881)</td>
<td>($1,212)</td>
</tr>
</tbody>
</table>

**School of Social Work**

<table>
<thead>
<tr>
<th>Undergraduate:</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lower Division:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time Undergraduate</td>
<td>($14,398)</td>
<td>($24,704)</td>
</tr>
<tr>
<td>Full-time Undergraduate including University services fee</td>
<td>($15,188)</td>
<td>($25,494)</td>
</tr>
<tr>
<td>Part-time Undergraduate (per credit hour) 2</td>
<td>($555)</td>
<td>($881)</td>
</tr>
<tr>
<td><strong>Upper Division:</strong> 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time Undergraduate</td>
<td>($15,398)</td>
<td>($25,704)</td>
</tr>
<tr>
<td>Full-time Undergraduate including University services fee</td>
<td>($16,188)</td>
<td>($26,494)</td>
</tr>
<tr>
<td>Part-time Undergraduate (per credit hour) 2</td>
<td>($590)</td>
<td>($916)</td>
</tr>
</tbody>
</table>
### Tuition and Fees

**Graduate:**

<table>
<thead>
<tr>
<th></th>
<th>Graduate (per credit hour)²</th>
<th>$853</th>
<th>$1,169</th>
</tr>
</thead>
</table>

**College of Science and Technology**

**Undergraduate:**

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lower Division:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time Undergraduate</td>
<td>$16,496</td>
<td>$26,784</td>
<td></td>
</tr>
<tr>
<td>Full-time Undergraduate including University services fee</td>
<td>$17,286</td>
<td>$27,574</td>
<td></td>
</tr>
<tr>
<td>Part-time Undergraduate (per credit hour)²</td>
<td>$634</td>
<td>$958</td>
<td></td>
</tr>
<tr>
<td><strong>Upper Division:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time Undergraduate</td>
<td>$17,496</td>
<td>$27,784</td>
<td></td>
</tr>
<tr>
<td>Full-time Undergraduate including University services fee</td>
<td>$18,286</td>
<td>$28,574</td>
<td></td>
</tr>
<tr>
<td>Part-time Undergraduate (per credit hour)²</td>
<td>$669</td>
<td>$993</td>
<td></td>
</tr>
</tbody>
</table>

**Graduate:**

|                       | Graduate (per credit hour)² | $967 | $1,282 |

**School of Tourism & Hospitality Management**

**Undergraduate:**

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lower Division:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time Undergraduate</td>
<td>$18,590</td>
<td>$32,190</td>
<td></td>
</tr>
<tr>
<td>Full-time Undergraduate including University services fee</td>
<td>$19,380</td>
<td>$32,980</td>
<td></td>
</tr>
<tr>
<td>Part-time Undergraduate (per credit hour)²</td>
<td>$717</td>
<td>$1,145</td>
<td></td>
</tr>
<tr>
<td><strong>Upper Division:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time Undergraduate</td>
<td>$19,590</td>
<td>$33,190</td>
<td></td>
</tr>
<tr>
<td>Full-time Undergraduate including University services fee</td>
<td>$20,380</td>
<td>$33,980</td>
<td></td>
</tr>
<tr>
<td>Part-time Undergraduate (per credit hour)²</td>
<td>$752</td>
<td>$1,180</td>
<td></td>
</tr>
</tbody>
</table>

**Graduate:**

|                       | Graduate (per credit hour)² | $1,142 | $1,602 |

**University Studies**

**Undergraduate:**

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lower Division:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time Undergraduate</td>
<td>$14,398</td>
<td>$24,704</td>
<td></td>
</tr>
<tr>
<td>Full-time Undergraduate including University services fee</td>
<td>$15,188</td>
<td>$25,494</td>
<td></td>
</tr>
<tr>
<td>Part-time Undergraduate (per credit hour)²</td>
<td>$555</td>
<td>$881</td>
<td></td>
</tr>
<tr>
<td><strong>Upper Division:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time Undergraduate</td>
<td>$15,398</td>
<td>$25,704</td>
<td></td>
</tr>
<tr>
<td>Full-time Undergraduate including University services fee</td>
<td>$16,188</td>
<td>$26,494</td>
<td></td>
</tr>
<tr>
<td>Part-time Undergraduate (per credit hour)²</td>
<td>$590</td>
<td>$916</td>
<td></td>
</tr>
</tbody>
</table>

**Non-Matriculated Students (Continuing Studies)**

**Undergraduate:**

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lower Division:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time Undergraduate</td>
<td>$14,398</td>
<td>$24,704</td>
<td></td>
</tr>
<tr>
<td>Full-time Undergraduate including University services fee</td>
<td>$15,188</td>
<td>$25,494</td>
<td></td>
</tr>
<tr>
<td>Part-time Undergraduate (per credit hour)²</td>
<td>$555</td>
<td>$881</td>
<td></td>
</tr>
<tr>
<td><strong>Upper Division:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time Undergraduate</td>
<td>$15,398</td>
<td>$25,704</td>
<td></td>
</tr>
<tr>
<td>Full-time Undergraduate including University services fee</td>
<td>$16,188</td>
<td>$26,494</td>
<td></td>
</tr>
<tr>
<td>Program</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Part-time Undergraduate (per credit hour)</strong></td>
<td>$590</td>
<td>$916</td>
<td></td>
</tr>
<tr>
<td><strong>Graduate:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graduate (per credit hour)</td>
<td>$853</td>
<td>$1,169</td>
<td></td>
</tr>
<tr>
<td><strong>PROFESSIONAL:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kornberg School of Dentistry</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time</td>
<td>$50,518</td>
<td>$58,722</td>
<td></td>
</tr>
<tr>
<td>Full-time including University services fee</td>
<td>$51,308</td>
<td>$59,512</td>
<td></td>
</tr>
<tr>
<td>Graduate (per credit hour)</td>
<td>$739</td>
<td>$1,017</td>
<td></td>
</tr>
<tr>
<td>Advanced DMD Program</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time</td>
<td>$60,000</td>
<td>$60,000</td>
<td></td>
</tr>
<tr>
<td>Full-time including University services fee</td>
<td>$60,790</td>
<td>$60,790</td>
<td></td>
</tr>
<tr>
<td>Advanced Standing Doctor of the Medicine of Dentistry Program for Faculty who are Graduates of Non-US/Canadian Dental Schools</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Per semester/per credit hour</td>
<td>$899</td>
<td>$899</td>
<td></td>
</tr>
<tr>
<td>Beasley School of Law</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time - Day Juris Doctor</td>
<td>$22,496</td>
<td>$35,496</td>
<td></td>
</tr>
<tr>
<td>Full-time - Day Juris Doctor including University services fee</td>
<td>$23,286</td>
<td>$36,286</td>
<td></td>
</tr>
<tr>
<td>Full-time - Evening Juris Doctor</td>
<td>$17,998</td>
<td>$28,404</td>
<td></td>
</tr>
<tr>
<td>Part-time Juris Doctor - per credit hour</td>
<td>$870</td>
<td>$1,451</td>
<td></td>
</tr>
<tr>
<td>In addition to any University wide fees, Juris Doctor students, full- and part-time, are assessed a Student Bar Association fee of $50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S.J.D. Program</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Part-time - per credit hour</td>
<td>$741</td>
<td>$1,311</td>
<td></td>
</tr>
<tr>
<td>International Masters of Law (LL.M)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time</td>
<td>$26,070</td>
<td>$26,070</td>
<td></td>
</tr>
<tr>
<td>Full-time including University services fee</td>
<td>$26,860</td>
<td>$26,860</td>
<td></td>
</tr>
<tr>
<td>Part-time - per credit hour</td>
<td>$1,216</td>
<td>$1,216</td>
<td></td>
</tr>
<tr>
<td>Master of Law in Trial Advocacy (LL.M)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time</td>
<td>$25,000</td>
<td>$25,000</td>
<td></td>
</tr>
<tr>
<td>Graduate Tax Program</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Part-time - per credit hour</td>
<td>$800</td>
<td>$1,032</td>
<td></td>
</tr>
<tr>
<td>Summer Abroad: Rome</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuition</td>
<td>$3,350</td>
<td>$3,350</td>
<td></td>
</tr>
<tr>
<td>Including an assessed $300 Program fee</td>
<td>$3,650</td>
<td>$3,650</td>
<td></td>
</tr>
<tr>
<td>Law: Temple Summer Professional Experience Curriculum (T-Spec)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuition</td>
<td>$3,500</td>
<td>$3,500</td>
<td></td>
</tr>
<tr>
<td>Including an assessed $250 Program fee</td>
<td>$3,750</td>
<td>$3,750</td>
<td></td>
</tr>
<tr>
<td>Law Summer Washington DC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuition</td>
<td>$4,250</td>
<td>$4,250</td>
<td></td>
</tr>
<tr>
<td>Including an assessed $500 Program fee</td>
<td>$4,750</td>
<td>$4,750</td>
<td></td>
</tr>
<tr>
<td>Temple - China (15 months tuition)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuition</td>
<td>$22,880</td>
<td>$22,880</td>
<td></td>
</tr>
<tr>
<td>School of Pharmacy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doctor of Pharmacy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time</td>
<td>$30,880</td>
<td>$35,134</td>
<td></td>
</tr>
<tr>
<td>Full-time including University services fee</td>
<td>$31,670</td>
<td>$35,924</td>
<td></td>
</tr>
<tr>
<td>Part-time - per credit hour</td>
<td>$839</td>
<td>$1,016</td>
<td></td>
</tr>
<tr>
<td>All Pharmacy Graduate (including M.S. in Quality Assurance)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Tuition and Fees

#### Per Credit Hour

<table>
<thead>
<tr>
<th>School of Podiatric Medicine</th>
<th>$1,001</th>
<th>$1,267</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-time</td>
<td>$36,276</td>
<td>$37,900</td>
</tr>
<tr>
<td>Full-time including University services fee</td>
<td>$37,066</td>
<td>$38,690</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lewis Katz School of Medicine</th>
<th>$47,662</th>
<th>$53,468</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-time</td>
<td>$47,662</td>
<td>$53,468</td>
</tr>
<tr>
<td>Full-time including University services fee</td>
<td>$48,452</td>
<td>$54,258</td>
</tr>
<tr>
<td>Graduate (per credit hour)²</td>
<td>$853</td>
<td>$1,169</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Saint Luke’s Regional Campus</th>
<th>$47,662</th>
<th>$53,468</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-time</td>
<td>$47,662</td>
<td>$53,468</td>
</tr>
<tr>
<td>Full-time including University services fee</td>
<td>$48,452</td>
<td>$54,258</td>
</tr>
</tbody>
</table>

¹ Upper division is defined as undergraduate students with a minimum of 60 earned credits, regardless of how obtained.

² See below for the credit hour assessment of the University Services Fee

³ Additional fees apply - please consult the Fox School of Business & Management web site

### Description of Special Charges and Fees

Students may be required to pay some or all of the following (subject to change):

#### Application Fee

$50.00 for online or paper application for admission, $20.00 for students applying for readmission.

#### Matriculation Fee

A one-time charge is assessed of all first-year students who are degree-seeking candidates in their initial semester after admittance. This fee includes the student orientation program. The rate for undergraduate students is $185.00 and the rate for graduate students is $55.00. Professional students should check with their respective college as the rates vary per school.

#### University Services Fee

All students are assessed the non-refundable University Services Fee every semester. The University Services Fee is a single, comprehensive fee that helps fund a number of university services, including:

- Funding for state-of-the-art computer equipment and technologies to provide support for the students’ academic experiences, including e-mail access and modern lab facilities;
- Access to all student activities, events and recreational facilities;
- Expansion and maintenance of recreational and academic facilities to enhance and improve student life;
- Availability of basic student health and treatment services provided by nurses and physicians on campus.

The fee structure for the fall and spring semesters is:

- Enrolled for 9 or more credits: $395.00
- Enrolled for 5.0 to 8.9 credits: $287.00
- Enrolled for 1.0 to 4.9 credits: $140.00

The fee structure for each summer semester is:

- Enrolled for 9 or more credits: $204.00
- Enrolled for 5.0 to 8.9 credits: $155.00
- Enrolled for 1.0 to 4.9 credits: $91.00

Please direct all questions about the University Services Fee to the Office of Student Financial Services at 215-204-2244 or sfs@temple.edu.

#### Course Fees

Certain courses charge additional fees such as lab fees, etc. The charge is assessed at the time of registration for that particular course.
Late Registration Fee Policy
All students will be assessed a $100.00 late registration fee for initial registrations beginning the first day of the term. No new registrations or registration revisions will be processed after the end of the twelfth week of classes during the fall and spring semesters and after the end of the fourth week of summer sessions.

Late Payment Fee
Tuition payments not received by the final semester due date will be subject to a $100.00 late payment fee. Students who fail to pay their initial semester bills by the due date will automatically be enrolled in the University's Deferred Payment Plan and assessed the appropriate payment plan fees as noted above in the "Payment Plans" section.

Returned Check Penalty
If a paper or electronic check payment is returned by the bank because of insufficient funds, a closed account, an invalid account number or other reasons, a $25.00 returned check fee will be assessed. If an account indicates a history of returned checks, the University reserves the right to suspend a student's check payment privileges. Returned checks that remain unpaid and/or cases where there are multiple returned checks may be referred to the University Disciplinary Committee and/or Temple University Campus Safety Services for further action.

Transcript Fee
Consult the Office of the University Registrar's web site (http://www.temple.edu/registrar) for ordering instructions.

Health Insurance
Group medical insurance to defray certain medical expenses at hospitals is offered to full-time students during a limited period of time at the start of each semester. Students should consult the Human Resources Benefits Department (http://www.temple.edu/hr/students) or call Velda Fletcher-Jones at 215-926-2270 for details concerning costs and application procedures. International students are required to buy medical insurance or show proof of comparable coverage to the Human Resources Benefits Department.

Tuition and Fees Policy
I. Policy
A. Tuition charges and fees are based upon the student’s enrollment status in the respective schools or colleges. Refunds are made in accordance with the student's academic records.

B. Students will be charged 100% of their semester bill unless a course drop form is processed by a registration office of the university or the student successfully drops courses through Self Service Banner by the Drop/Add deadline date. See www.temple.edu/registrar/documents/calendars/ for add/drop and withdrawal deadlines for each semester and summer session. Students who process their course drops by the deadline date will be issued a 100% refund.

C. No complete financial credit will be made if a student does not process course drops for all registered classes.

D. Students who are still registered for classes after the Drop/Add deadline date are responsible for paying all related tuition and fees.

II. Exceptions
A. Failure to Process Withdrawal Form by Deadline
Under extreme, extenuating circumstances, an appeal may be made to the Office of the University Registrar and the Tuition Review Committee if the drop transaction is not completed by the deadline, and the student did not attend classes after the deadline date. All appeals must be accompanied by the following information:

1. A letter explaining the extenuating circumstances of the appeal.
2. A properly-signed schedule revision or official withdrawal form available from the Dean’s Office.
3. Supporting documentation that will establish that the student never attended the semester in question or that he/she did not attend beyond the official refund period.
4. Appeals for retroactive course deletions must be filed within one (1) year from the end date of the semester for refunds to be considered. If the above conditions are met, the Office of the University Registrar will direct the removal of the semester's records from the academic history. This automatically results in a 100% refund of tuition and fee charges for the semester.

B. Death of a Student
In the event of death during a semester, the student's account will be credited with a 100% refund of tuition and fee charges for the semester.

C. Serious Illness Which Prevents a Student from Attending All Classes
In the event of a serious personal or family member's illness, the following steps can be taken:
1. The student should provide the Office of the University Registrar with:
   a. A letter from the student listing the reason(s) for their refund request (i.e., personal or family illness, etc.).
   b. Certification from a licensed physician verifying that the student or family member was ill. In the case of the student's illness, the certification should indicate that the illness prevented the student from attending all classes, and
   c. Letter(s) from the student's instructor(s) or department chairperson(s) that, based on the actual or anticipated length of the student's leave, the course work cannot be completed within the current term and the last day of attendance.
   d. The student must withdraw from all registered courses. NOTE: For purposes of this policy, a family member is defined as the student's parents, spouse, child(ren), or any other family member noted under the federal Family Leave Act.

2. When the above criteria in C.1 are met, the student's bill will reflect an adjusted tuition charge in accordance with the attached schedule. A credit will be issued on a pro-rated basis after:
   a. Confirming that the student has no other outstanding balances, and
   b. Having the Department of Student Financial Services adjust any financial aid awards, where applicable, in accordance with state and federal regulations. NOTE: Student refunds will be issued as a credit towards tuition and fees for future registrations up to one (1) year after the end of the semester in which the withdrawal took place. Unused credits will be forfeited after that time.

3. The effective date for all medical credits will be based on the earlier of either:
   a. The official date of withdrawal, as established by the Office of the University Registrar, or
   b. The physician's date of certification, if the student is physically unable to complete a withdrawal by the end of the semester.

4. Refunds or credits resulting from the death or serious illness of the student will not require the deletion of courses from the student's academic records. The student's record will reflect excused withdrawals ('WE').

D. Employment Change/Relocation

1. If a student must withdraw from classes because of a job change or shift in work hours that prevents the student from attending classes, the student may request a pro-rata credit, based on the actual withdrawal date and in accordance with the Fee Schedule of Adjusted Tuition Charges, if documentation from the employer is provided showing that the individual is no longer able to take classes because of a change in job scheduling or relocation.

2. This provision applies solely for the student and only after the student has totally withdrawn from all registered courses.

III. Authority

A. The Office of the University Registrar will have authority for determining the student's academic records.

B. The Office of the University Registrar will have authority for approving financial exceptions to the policy.

C. Appeals of any decision outlined under this policy will be made to the Office of the University Registrar, whose decision is final.

Tuition and Fees Refund Policy

Fee Schedule of Adjusted Tuition Charges in the Event of an Exception to the General Policy

<table>
<thead>
<tr>
<th>Date of Official Withdrawal</th>
<th>Adjusted Tuition/Charges You Pay</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall and Spring Semesters</strong></td>
<td></td>
</tr>
<tr>
<td>1st through 7th calendar day after the end of the Drop/Add deadline date</td>
<td>30%</td>
</tr>
<tr>
<td>8th through 14th calendar day after the end of the Drop/Add deadline date</td>
<td>40%</td>
</tr>
<tr>
<td>15th through 21st calendar day after the end of the Drop/Add deadline date</td>
<td>50%</td>
</tr>
<tr>
<td>22nd through 28th calendar day after the end of the Drop/Add deadline date</td>
<td>60%</td>
</tr>
<tr>
<td>29th through 35th calendar day after the end of the Drop/Add deadline date</td>
<td>70%</td>
</tr>
<tr>
<td>36th through 42nd calendar day after the end of the Drop/Add deadline date</td>
<td>80%</td>
</tr>
<tr>
<td>43rd through 49th calendar day after the end of the Drop/Add deadline date</td>
<td>90%</td>
</tr>
<tr>
<td>Thereafter</td>
<td>100%</td>
</tr>
<tr>
<td><strong>1st and 2nd Summer Semesters</strong></td>
<td></td>
</tr>
<tr>
<td>1st through 3rd calendar day after the end of the Drop/Add deadline date</td>
<td>30%</td>
</tr>
<tr>
<td>4th through 7th calendar day after the end of the Drop/Add deadline date</td>
<td>40%</td>
</tr>
<tr>
<td>8th through 10th calendar day after the end of the Drop/Add deadline date</td>
<td>50%</td>
</tr>
<tr>
<td>11th through 14th calendar day after the end of the Drop/Add deadline date</td>
<td>60%</td>
</tr>
<tr>
<td>15th through 17th calendar day after the end of the Drop/Add deadline date</td>
<td>70%</td>
</tr>
<tr>
<td>18th through 21st calendar day after the end of the Drop/Add deadline date</td>
<td>80%</td>
</tr>
<tr>
<td>22nd through 24th calendar day after the end of the Drop/Add deadline date</td>
<td>90%</td>
</tr>
<tr>
<td>Thereafter</td>
<td>100%</td>
</tr>
</tbody>
</table>
Financial Aid

Student Financial Services
Craig Fennell, Director
Conwell Hall, Ground Floor
215-204-2244
http://sfs.temple.edu/
sfs@temple.edu

Application Procedures

Documents Needed to Apply

The Free Application for Federal Student Aid (FAFSA) is the only document required by Student Financial services and **MUST** be filed each year. Applications are available at all Student Financial Services (SFS) locations and also may be filed online at www.fafsa.ed.gov (http://www.fafsa.ed.gov). The federal code for Temple University is 003371. Locations and phone numbers for Temple University's SFS offices are listed at http://sfs.temple.edu/.

Application Deadline

March 1st

Priority consideration is given to new and renewal applications received by the federal processor by this date. Late applicants will be considered, but all funding sources may not be available.

Verification

Federal regulations require that the Office of Student Financial Services reviews all student financial aid applications (FAFSA information) for accuracy. The Office of Student Financial Services is required to resolve any conflicting information, inconsistencies or errors made on FAFSA applications to ensure the integrity of federal student financial aid programs.

Temple University operates as a Quality Assurance School in association with the U.S. Department of Education. As a result, please **do not** submit verification documents unless the University's Office of Student Financial Services contacts you.

Submission of requested verification documents is required within thirty days. If all documents are not received by the deadline, all federal and university need-based aid will be removed from the award.

Your financial package will be outlined in an award letter mailed to your home (freshman and transfer students only). Continuing students will receive an e-mail notification to view the award letter online on the Financial Aid Channel located on Temple's TPortal (https://tuportal4.temple.edu/cp/home/displaylogin).

International Students


Please contact the Office of International Student and Scholars Services for more information (www.temple.edu/isss/).

Academic Requirements

Applicants for Federal, State, and University financial aid programs administered by Temple University must be accepted for admission or currently enrolled as a matriculated student in a degree program.

A student may apply for a Direct Subsidized/Unsubsidized Loan, or a parent may apply for a PLUS Loan on behalf of a dependent student for coursework that is documented as a prerequisite for admission into a degree-seeking program. If enrolled at least half time in these prerequisite courses, the student is eligible for loans for one consecutive 12 month period.

Satisfactory Academic Progress

Financial aid funds are restricted to students who make satisfactory academic progress. The qualitative standard is defined as being in good academic standing as defined by the school or college in which the student is enrolled. The quantitative component of the satisfactory academic progress standard requires students to successfully complete 67% of all attempted credits. For more information, see http://sfs.temple.edu/apply/steps-financial-aid/eligibility-determination/academic-progress-standards.
Enrollment Status

Some financial aid programs are restricted to full-time students. Other aid programs are available to both full-time and part-time students. (NOTE: High school students accepted under the Early Admissions Program are not eligible for financial aid until they receive their high school diploma.)

Students should be aware that dropping and adding courses can affect financial aid eligibility, and they must notify the Office of Student Financial Services of any change in enrollment status.

Academic Dismissal/Reinstatement

Eligibility for financial aid, including federal work-study, ends if a student is academically dismissed or ceases to be enrolled.

Financial Aid Eligibility -- Need Analysis

Some financial aid is offered to students based on financial need. Need is determined by the following formula:

\[
(\text{Estimated cost of attendance}) - (\text{Expected Family Contribution}) - (\text{Expected Financial Aid}) = \text{Need}
\]

The Expected Family Contribution (EFC) is determined by a federal formula based on information reported on the student's FAFSA application. The EFC is the number that's used to determine a student's eligibility for federal student financial aid. This number results from the financial information a student and/or parent provided in the FAFSA application. The student's EFC is reported to the student on the Student Aid Report (SAR).

The result of a need determination is met by a combination of awards called a financial aid package.

Other sources exist that may be available to students for educational assistance. Some of these are private scholarship programs, Cooperative Education programs, Veterans Administration benefits, public assistance, and Social Security benefits. If outside assistance is received, financial aid awarded by the university may be adjusted.

Independent Student Definition

2015-2016 Financial Aid Applicants: Federal regulations define an independent student if he/she meets one of thirteen criteria listed in Step 3 of the student section of the FAFSA.

Federal regulations require that a student not meeting the definition of independent apply as a dependent. These students must provide income, asset, and household information for themselves and their parent(s), (including stepparent(s)).

Educational Budget

Financing a college education takes planning and budgeting. Students should try to plan ahead, anticipating costs and resources, and should request aid for the entire academic year. The basic budget for a year at Temple should include tuition and fees, books and supplies, living expenses, and transportation. Tuition shown in the following example is for undergraduates attending Main Campus. Financial aid awards will be adjusted accordingly for programs having different tuition rates. The figures in the table are based on estimates from the U.S. Bureau of Labor Statistics. The economy and one's style of living may make actual costs higher or lower.

Sample Budget for the 2015-2016 Academic Year

<table>
<thead>
<tr>
<th></th>
<th>In-state</th>
<th>Out-of-state</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuition and Fees</td>
<td>$15,286</td>
<td>$26,340</td>
</tr>
<tr>
<td>Room and Board</td>
<td>$12,336</td>
<td>$12,336</td>
</tr>
<tr>
<td>Books/Supplies (Estimated)</td>
<td>$1,300</td>
<td>$1,300</td>
</tr>
<tr>
<td>Living Expenses/Transportation/Personal/Miscellaneous (Estimated)</td>
<td>$4,304</td>
<td>$5,288</td>
</tr>
<tr>
<td>Totals</td>
<td>$33,226</td>
<td>$45,264</td>
</tr>
</tbody>
</table>

NOTE: Actual rates may vary depending on college, school, program, housing location and meal plan selected. Tuition rate is an estimate at time of publishing.

Financial Aid Notification and Refund Policy

Applicants are notified of aid eligibility by letter or electronic letter after applications have been reviewed. Financial aid may consist of a combination of grant, loan, and/or work assistance.
Recipients receiving aid in excess of institution charges will receive a refund. Checks are issued according to the university’s established schedule, starting just prior to the first week of classes each semester. Students are encouraged to sign up for direct deposit to expedite the receipt of refund payment. This can be done online via the TUportal (https://tuportal4.temple.edu/cp/home/displaylogin).

Student Employment

Academic Year
The Federal Work Study (FWS) program at Temple promotes part-time employment of college students with demonstrated financial need. FWS is awarded as part of the student’s financial aid package, but the award is not credited to the student’s tuition account.

Employment may be within the university or at other public and private non-profit organizations. All university work-study job openings are posted on StudentJobs@Temple. Students can reach StudentJobs@Temple via the TUPortal (https://tuportal4.temple.edu/cp/home/displaylogin).

FWS jobs which are available from Off Campus employers are listed on the Work Study Job Bank of the Student Financial Services (SFS) web site at http://sfs.temple.edu/.

Summer Sessions
Summer Federal Work-Study Program awards need-based funds to full-time students currently enrolled in degree or certificate programs who have a current FAFSA on file. Summer positions are posted in the same manner as the regular academic year. University employers list openings on StudentJobs@temple.edu. Off campus openings are posted on the “Work Study Job Bank” link on the SFS web site: http://sfs.temple.edu/. You must arrange your own employment. You must complete a separate Temple Summer Financial Aid application. Summer Financial Aid applications are available by selecting the “Forms” link from the SFS home page.

Grants, Scholarships and Loans

The following grants and scholarships have individual eligibility requirements and procedures. Be sure to read the requirements for each carefully.

Temple University Grants
Temple University Grants are institutional funds available to students as a way of supplementing other aid sources. These funds are awarded based on need, as determined by the Free Application for Federal Student Aid (FAFSA), with priority given to applicants whose FAFSA is received by the federal processor by March 1.

Fly in 4
Fly in 4 is a partnership between incoming students and the university to promote graduation in four years. Graduating in four years reduces student debt and helps control college costs.

The Fly in 4 $4,000 annual grants are provided to 500 incoming freshman and eligible transfer students with the greatest demonstrated financial need.

Temple University Scholarships
Entering freshmen with excellent high school grades and test scores are offered four-year academic merit scholarships. The award is made by the Office of Undergraduate Admissions at the time of acceptance based on the admission application.

New transfer students with strong grades earned at their transfer institutions are offered three-year academic merit scholarships. The award is made by the Office of Undergraduate Admissions at the time of acceptance based on the admission application.

Additional details are provided on the Undergraduate Admissions web site at http://admissions.temple.edu/cost-and-aid.

Athletic Scholarships
Athletic scholarships are available in all varsity sports. The number of scholarships, requirements, standards, and awards are controlled by Temple University and by the National Collegiate Athletic Association (NCAA). For further information, contact the Department of Intercollegiate Athletics, 215-204-2571.

ROTC Scholarships and Grants
See Military Science (p. 44) in the Academic Opportunities section of this Bulletin.

State and Federal Grant Programs
To be eligible for the following grants, students must complete the Free Application for Federal Student Aid (FAFSA).
Pennsylvania State Grant (PHEAA)
The Commonwealth of Pennsylvania funds a grant program for undergraduate Pennsylvania residents who will be matriculated students enrolled full-time (12 or more credit hours per semester) and part-time (6-11 credits) during the academic year. This program is administered by the Pennsylvania Higher Education Assistance Agency (PHEAA). Please see more information at www.pheaa.org/funding-opportunities/state-grant-program/index.shtml (http://www.pheaa.org/funding-opportunities/state-grant-program/index.shtml).

Non-Pennsylvania residents should check with their respective state agency for state grant information. The U.S. Department of Education provides a full list of higher education agencies by state at http://www2.ed.gov/about/contacts/state/index.html.

Students residing in states other than Pennsylvania can contact their state education department directly to inquire about scholarship and grant opportunities. A directory of state educational grant agencies can also be found online through the U.S. Department of Education (http://www2.ed.gov/about/contacts/state).

Not all state grant programs are transferable if a student is attending a school outside of their home state.

Federal Pell Grants
To be eligible for a Pell Grant, one must be a matriculated student enrolled in an undergraduate degree program who has not earned a bachelor's or professional degree. Notification of awards will be made in the student's award letter.

Federal Supplemental Educational Opportunity Grant (FSEOG)
FSEOG is a federal grant program administered by the university. Awards are based on exceptional need and availability of funds.

Student Loans
Federal Perkins Loans
Perkins Loans are made by the university from funds provided by the Federal government. These loans are included as part of the financial aid package. The amount of the loan is based on the student's need and availability of funds.

Federal Direct Student Loans
Direct Loans are available to undergraduate students enrolled for at least six (6) credits per semester.

Annual Subsidized Limits:
- 1st Year Undergraduates = $3,500
- 2nd Year Undergraduates = $4,500
- Remaining Undergraduate Years = $5,500
- Preparatory Coursework Needed to Enroll as Undergraduate = $2,625

Annual Unsubsidized Limits:
- Dependent undergraduates whose parents can borrow PLUS = $2,000
- 1st and 2nd year undergraduate dependent students whose parents cannot borrow PLUS and independent students = $6,000
- Remaining undergraduate years for dependent students whose parents cannot borrow PLUS and independent students = $7,000

Direct Parent Loans for Undergraduate Students (PLUS)
PLUS loans are available to the parents of undergraduate students. A credit check is required for eligibility for the Parent PLUS loan. Parents may borrow amounts not to exceed the cost of attendance.

Nursing Student Loans (NSL)
NSL are made by the university from funds provided by the federal government. These loans are included as part of the financial aid package. The amount of the loan is based on the student's need and availability of funds. Students may borrow up to $2,500 per academic year.

Pharmacy Health Profession Loans
Pharmacy Health Profession Loans are made by the university based on demonstrated financial need. Funds are provided by the federal government. Pharmacy students may borrow a maximum of $2,500 plus the cost of tuition.

Alternative Educational Loans
Student loans are available from private lenders. The majority of the lenders of these loans require the student borrower to have a credit worthy cosigner, and the interest rate is variable and determined by the credit score of the borrower and cosigner. These loans also require school certification,
and the student must be enrolled at least half time and making satisfactory academic progress. Consult with the lender for specific eligibility requirements.

**Entrance/Exit Interviews**

Federal law requires that every student borrowing from the programs listed above complete entrance counseling online at www.studentloans.gov (http://www.studentloans.gov) for first time borrowers at Temple University. An exit interview will be required just prior to graduation or if a student attends less than half time or takes a leave of absence.

Direct loan funds will not be released without the entrance counseling requirement. Any student withdrawing from the university before graduation must complete an exit interview.

More information is available on the Bursar's Office web site at http://bursar.temple.edu/loan-services/loan-counseling.

**Other Programs**

A number of Temple's schools and colleges have privately-sponsored scholarships available for students in their programs. Details may be found in the individual school or college descriptions.

In addition to the scholarships available through Temple University, a wide range of scholarships, fellowships, and internships are available on a competitive basis to students during and immediately after their undergraduate careers. The Office of the Senior Vice Provost for Undergraduate Studies provides information about these opportunities and support for students interested in preparing applications. For more information, go to www.temple.edu/vpus/opportunities/index.htm#scholarships.
Academic Programs

For a complete list of academic programs offered at Temple University, refer to the Academic Programs Chart (p. 2047).

Specific information on undergraduate academic programs is located within the individual schools, colleges and divisions (p. 179). Additional information is located in the following sections:

- University General Education Curriculum (p. 143)
- Writing Intensive Course Requirements (p. 142)
- Intercollegial Programs (p. 160)
- Temple University Japan Campus (p. 165).

Attention New Freshmen and Transfer Students

All new undergraduate students are required to complete the university's General Education (GenEd (p. 143)) curriculum.

New freshmen starting in the 2015-2016 academic year are required to complete the GenEd (p. 143) curriculum. Students who have fewer than 15 transferrable credits are considered freshmen. Additionally, students whose transfer credits were earned while in high school, regardless of the number of transfer credits, are considered freshmen.

New transfer students starting in the 2015-2016 academic year are required to complete the GenEd (p. 143) curriculum. Students who attempted 15 or more transferrable credits after high school and prior to being admitted to Temple University are considered transfer students.

Attention Current Students

Current students who started at Temple University before Fall 2015 should refer to the Archives (http://bulletin.temple.edu/archives) to find the requirements of their program of study for their Bulletin year.

Writing Intensive Courses

For most professionals - doctors, accountants, social workers, educators, policy-makers, performers, etc. - writing is an important part of work-life, and writing well often paves the way to professional success. But the kinds of writing that are valued in the professions are typically different from the kinds of writing that students use in school. The writing-intensive course program at Temple University is designed to provide students with a window into the types of writing they may be expected to produce after graduation. To this end, departments and programs have designated specific writing-intensive courses that are part of the major; in these writing courses, students study, write and revise texts that are similar to what they will encounter in their post-Temple careers.

All undergraduate students must complete at least two writing-intensive courses for a total of at least six credits. The writing-intensive course credits are counted as part of the major; they are not General Education (GenEd) or elective credits.

The specific courses that are required for particular majors can be found within this Undergraduate Bulletin. Writing-intensive courses are identified by the last two digits of the course number: courses numbered xx96, xx97, and xx98 are writing-intensive. These courses can also be identified by the Course Attribute of “WI.”

The writing-intensive courses must be completed at Temple University. Students may not transfer in credits to satisfy this requirement. Students who have problems completing their writing-intensive course requirements should contact their advisors.

A list of all approved writing-intensive courses appears on the web site of the Office of the Senior Vice Provost for Undergraduate Studies (http://www.temple.edu/vpus/resources/core/writingintensive.html). Not all courses are offered every semester. Students must complete the writing-intensive courses that are specified by their major. More information about the writing-intensive course program is available at the Writing Center (http://www.temple.edu/writingctr/writing-intensive-courses) web site.
The General Education (GenEd) Program serves as Temple University’s liberal education requirements for all undergraduate students and provides a foundation for learning and development practices that help students succeed academically and professionally.

A recent survey of more than 300 employers nationwide conducted by the Association of American Colleges and Universities indicated that the majority of employers seek graduates with 4-year degrees with a mix of deep disciplinary skills and knowledge and a broad base of skills and abilities. Skills and abilities which employers ranked most important for schools and colleges to develop included communication skills, critical thinking skills, the ability to apply abstract theories and ideas to concrete experiences and practices, and problem-solving skills.

Program Competencies
GenEd facilitates linkages by stressing the development of eight competencies rather than content knowledge. The Program in General Education provides opportunities for students to engage in:

Critical Thinking

*Think Critically*

Within GenEd, students who think critically recognize an object of investigation, frame questions about it, and interrogate assumptions—explicit or implicit. Critical thinking includes the evaluation of evidence, analysis and synthesis of multiple sources, and reflection on varied perspectives. Critical thinking generates a well-developed investigation that incorporates supporting and countering claims. A student engaged in critical thinking produces an informed account, a hypothesis for further study, or the solution to a problem.

Contextualized Learning

*Understand historical and contemporary issues in context*

Within GenEd, students who contextualize learning understand and integrate historical, contemporary, and cultural phenomena and their underlying principles in two broad applications. First, contextual learners recognize the interaction of complex forces that give rise to specific phenomena. Second, contextual learners understand and analyze related events, artifacts, practices and concepts across geographic, chronological and cultural boundaries.

Interdisciplinary Thinking

*Understand and apply knowledge in and across disciplines*

Within GenEd, students who use interdisciplinary thinking recognize the world presents problems, topics, or issues too complex to be satisfactorily addressed though a single lens. Thus, interdisciplinary thinkers apply multiple perspectives, paradigms, and frameworks to problems, topics, or issues.

Communication Skills

*Communicate effectively orally and in writing*

Within GenEd, students who communicate effectively use spoken and written language to construct a message that demonstrates the communicator has established clear goals and has considered her or his audience. Effective messages are organized and presented in a style appropriate to the context.

Scientific & Quantitative Reasoning

Within GenEd, students who exercise quantitative and scientific reasoning use and apply these reasoning processes to explain phenomena in the context of everyday life. Quantitative reasoning includes statistical and/or logical problem-solving, the relationships between quantities, and the use and misuse of quantitative data. Scientific reasoning introduces students to the evolution and interdependence of science and technology and includes problem identification, hypothesis evaluation, experimentation, interpretation of results and the use and misuse of scientific data.

Civic Engagement

*Function as an engaged citizen in a diverse and globalized world*

Within GenEd, students open to civic engagement view themselves as connected to local and global communities where they participate in activities that address issues of public concern. Critically engaged students define issues, pose, probe, and solve problems with an awareness of and an inclusion of the diverse values and interests.

Information Literacy

*Identify, access and evaluate sources of information*
Within GenEd, information literacy encompasses a broad spectrum of abilities, including the ability to recognize and articulate information needs; to locate, critically evaluate, and organize information for a specific purpose; and to recognize and reflect on the ethical use of information.

**Lifelong Learning**

*Promote a lasting curiosity*

GenEd cultivates these skills and abilities throughout the required undergraduate curriculum, and students will experience these ways of being through readings, discussions, activities, and classes throughout GenEd.

The GenEd program attempts to foster the development of such skills through its curriculum by providing students multiple opportunities to exercise, in multiple contexts and settings, their communication, critical thinking, and problem-solving skills and we attempt to do so by helping students make connections from academic knowledge to experience.

“The Philadelphia Experience” has become a hallmark of the new GenEd, with many courses taking students into the city for direct encounters connected to their studies. A science course takes students to the Waterworks to study 19th century sewage treatment. A course in educational policy takes students into schools and community centers. A course in sustainability challenges them to design a solution for storm-water run-off. A course in creativity assigns them to go to First Friday to interview an artist.

These and other modes of stretching and contextualizing traditional disciplinary content prepare students to deal with a rapidly globalizing world, in which the resolution of complicated issues increasingly calls upon the ability to see a problem from many angles and to synthesize divergent perspectives.

Ultimately, GenEd is about equipping our students to make connections between what they learn, their lives and their communities.

Find out more about General Education at [http://gened.temple.edu](http://gened.temple.edu)

### Program Framework

The General Education curriculum introduces students to nine areas of learning and a total of eleven courses, divided into Foundation courses and Breadth courses.

**Foundation Courses**

<table>
<thead>
<tr>
<th>General Education Attribute</th>
<th>Area</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>GW</td>
<td>Analytical Reading &amp; Writing</td>
<td>1 course, 4 credit hours</td>
</tr>
<tr>
<td>GQ</td>
<td>Quantitative Literacy</td>
<td>1 course, 4 credit hours</td>
</tr>
<tr>
<td>GY</td>
<td>Mosaic I</td>
<td>1 course, 3 credit hours</td>
</tr>
<tr>
<td>GZ</td>
<td>Mosaic II</td>
<td>1 course, 3 credit hours</td>
</tr>
</tbody>
</table>

**Course Sequencing**

Students are advised to take the three-semester sequence formed by *Analytical Reading & Writing, Mosaic I* and *Mosaic II* as soon as possible after entering Temple in order and in successive semesters.

GenEd also considers Quantitative Literacy a foundational course. Accordingly, students are advised to take a GenEd Quantitative Literacy course as soon as possible after entering Temple and before enrolling in Science & Technology courses.

**Breadth Courses**

<table>
<thead>
<tr>
<th>General Education Attribute</th>
<th>Area</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>GA</td>
<td>Arts</td>
<td>1 course, 3 or 4 credit hours</td>
</tr>
<tr>
<td>GB</td>
<td>Human Behavior</td>
<td>1 course, 3 credit hours</td>
</tr>
<tr>
<td>GD</td>
<td>Race &amp; Diversity</td>
<td>1 course, 3 credit hours</td>
</tr>
<tr>
<td>GG</td>
<td>World Society</td>
<td>1 course, 3 credit hours</td>
</tr>
<tr>
<td>GS</td>
<td>Science &amp; Technology</td>
<td>2 courses, 3 credit hours each</td>
</tr>
<tr>
<td>GU</td>
<td>U.S. Society</td>
<td>1 course, 3 credit hours</td>
</tr>
</tbody>
</table>

**Finding GenEd Courses**

Each General Education area has a list of courses that satisfy the requirements for that area. Descriptions of the areas and their approved courses can be found by clicking on the links under the General Education heading on the right side of this web page, and at [http://gened.temple.edu](http://gened.temple.edu) (select “Students”, then “Courses”). Students may also download a 2015-2016 orientation booklet ([http://gened.temple.edu/students/requirements](http://gened.temple.edu/students/requirements)) with course descriptions.
To find GenEd courses offered in a given semester or term, students may locate the information in two primary ways:

- Go directly to the Class Schedule Search (https://www.temple.edu/apply/common/cdcheck.asp) page on the university's web site.
- Go to Self-Service Banner (SSB), which is available on the TUportal (https://tuportal3.temple.edu/cp/home/displaylogin). Students must log onto the TUportal with their username and password. Select the Student tab from the SSB page. Clicking the Registration button will allow users to select and Look Up Classes.

Select the relevant term or semester from the drop down box to begin a search. Students may select one or many criteria in searching for specific classes; however the more criteria selected, the fewer the number of courses returned.

To get all of the courses fulfilling a GenEd area, in the Subject box, select Accounting and hold the SHIFT key and select Women's Studies to highlight all subject areas. Scroll to the bottom of the page to the Course Attributes box to select the relevant GenEd area, and hit the Class Search button at the bottom of the page. The results will list all relevant courses in the selected GenEd area for the selected term.

General Education Policies and Requirements

In general, students should be aware of the following:

Every Temple undergraduate fulfills the requirements of the General Education Curriculum in some way.

- Students entering Temple with fewer than 45 transfer credits complete the full General Education Curriculum.
- Students with 45 or more transferable credits satisfy the 45+ GenEd Curriculum. (See Transfer Students and the University General Education Curriculum (p. 23))
- Students with an Associate degree approved for GenEd-to-GenEd, Core-to-GenEd, or Core-to-Core Transfer meet most GenEd requirements with the general education courses taken for the Associate degree. Associate degrees are approved for GenEd-to-GenEd, Core-to-GenEd, and Core-to-Core Transfer by two university-wide faculty committees. See Transfer Students and the University General Education Curriculum (p. 23) for information on the policy and a list of approved community college Associate degrees.

A GenEd course counts in one GenEd area only.

All GenEd courses must be completed with a grade of C- or higher to satisfy a GenEd requirement.

All GenEd course numbers begin with "08XX." GenEd Honors course numbers begin with "09XX." Students may use only Temple University courses at the 0800- and 0900-levels or specified waiver courses to satisfy General Education requirements. See the Transfer Students and the University General Education Curriculum (p. 23) section of this Bulletin for information on completing GenEd requirements with transfer credits.

In GenEd, courses may be offered in multiple departments. These courses, regardless of the sponsoring department, are the same course and will have the same number and course title.

Repeat & Withdraw Policy

Students should be aware that opportunities are limited for repeating a course to replace a failing grade under University policy. Repeating a Course (#0.2.10.12) (http://policies.temple.edu/getdoc.asp?policy_no=02.10.12) prohibits students from retaking a course more than twice unless the course is specifically designated as a course that may be taken for credit multiple times.

If in the allotted number of repeats, undergraduate students are unable to successfully complete the following university requirements (including their course equivalencies), they will be required to meet with their advisor prior to registering for any further classes:

- GW Analytical Reading & Writing
- GY Mosaic: Humanities Seminar I
- GZ Mosaic: Humanities Seminar II

If a student drops a class after the official drop/add period, a "W" will appear on the student's transcript to indicate the student withdrew from the course. A course withdrawal or a "W" is counted as an attempted repeat.

Departments, Majors, Minors and GenEd

GenEd courses may not be required introductions to a specific major or minor. A GenEd course may be accepted by a major or minor to fulfill elective requirements.

Departments and colleges may not single out a specific GenEd course as a requirement.

A curriculum or degree program may identify a GenEd course as part of an array for its majors or minors. (An array is defined as a set of options from which the student may choose. The array must present at least three options for any one course chosen.) Courses in an approved array may satisfy both the General Education requirement and the degree, minor or certificate requirement.
A student may use no more than two courses from a single department to satisfy GenEd requirements. (Foundation and transfer courses are excluded.)

**Early Progress Reports**

All GenEd course instructors will submit Academic Progress Reports.

**Credit/No Credit**

Students may not take GenEd courses for credit/no credit.

**General Education Waivers**

Select waivers have been adopted in recognition of repetitive and substantial exposure to key habits of mind, skills, and/or bodies of knowledge and for which programs have submitted requests.

Once a student fulfills a GenEd requirement with an approved waiver – a placement test, course or series of courses – the waiver follows the student. Advisors will need to process DARS exceptions for students who complete a waiver identified with a particular major/school/college but are not in the identified major/school/college.

If a waiver for a GenEd requirement is comprised of a series of courses, students must successfully complete all courses to receive the waiver. Courses must be completed with a C- or better to satisfy GenEd waiver requirements. Departments, schools and/or colleges may stipulate a higher grade to satisfy its own requirements.

**Quantitative Literacy (GQ)**

Students considering undergraduate degrees with advanced mathematical or statistical requirements may satisfy the GenEd Quantitative Literacy requirement through alternative coursework.

This requirement may be satisfied by successfully completing one of the following:

- Any General Education Quantitative Literacy (GQ) course.
- MATH 1031, MATH 1038, MATH 1041, MATH 1042, MATH 1941, MATH 1942, or MATH 2043.
- STAT 2101, STAT 2103, STAT 2901, STAT 2903 or an equivalent transfer course (primarily for FSBM and STHM majors and FSBM minors).
- Completion of a three-course sequence to include MATH 1015, MATH 1021 or EDUC 1017, and ECED 3107 (primarily for Early Childhood Education majors). All courses must be completed to receive waiver.
- Completion of a four-course sequence to include MATH 1015, MATH 1021, MATH 1022, and MAES 3145 or MGRE 3145 (primarily for Middle Grades Education majors concentrating in Language Arts, Science, Science and Language Arts, and Social Studies). All courses must be completed to receive waiver.

Courses must be completed with a C- or better to satisfy GenEd waiver requirements.

Department/schools/colleges may stipulate a higher grade to satisfy department/school/college requirements. Consult an academic advisor for more information.

**Arts (GA)**

Students pursuing undergraduate degrees in the Boyer College of Music and Dance and the Tyler School of Art may be exempted from the GenEd Arts requirement upon completion of collegiate requirements.

**Boyer College of Music and Dance**

Students may satisfy the GA requirement by completing one of the following four-course sequences:

- DANC 1811, DANC 2813, DANC 2814, and DANC 3812. All courses must be completed to receive waiver.
- MUST 1711, MUST 1712, MUST 2711, and MUST 2712. All courses must be completed to receive waiver.
- A transfer course or courses equivalent to the waivers described in the bullets above.

Courses must be completed with a C- or better to satisfy GenEd waiver requirements.

Department/schools/colleges may stipulate a higher grade to satisfy department/school/college requirements. Consult an academic advisor for more information.

**Tyler School of Art**

Students in the following degree programs at Tyler School of Art may satisfy the GA requirement by successfully completing a specified multi-course sequence:

- Bachelor of Arts Visual Studies
• Bachelor of Science Art Education
• Bachelor of Fine Arts

ARTH 1156, and FDPR 1511 or VS 1151. All courses must be completed with a C- or better to receive waiver.

TUJ students in the BA in Art degree program may satisfy the GA requirement by successfully completing the following set of courses:

ARTU 1101, ARTU 1201, ARTU 1401 and ARTU 1501. All courses must be completed with a C- or better to receive waiver. Note that this specific waiver is only for TUJ students in the BA in Art degree program.

Department/schools/colleges may stipulate a higher grade to satisfy department/school/college requirements. Consult an academic advisor for details.

School of Theater, Film and Media Arts
Students may satisfy the GA requirement by successfully completing the following three-course sequence:

THTR 1003, THTR 1096, and THTR 1231. All courses must be completed with a C- or better to receive the waiver.

Human Behavior (GB)
Students pursuing undergraduate and/or professional degrees in Education may be exempted from the GenEd Human Behavior requirement upon completion of collegiate and/or degree requirements.

A student successfully satisfies the GenEd Human Behavior requirement upon completion of one of the following multi-course sequences:

• EDUC 2109, SPED 2231, and ENES 3338. All courses must be completed with a C- or better to receive waiver.
• EDUC 2179; SCES 2189 or MAES 2189; SCES 4189 or MAES 4189; and SECE 3796. All courses must be completed with a C- or better to receive waiver.
• ECED 2101, ECED 3209, and SPED 2231. All courses must be completed with a C- or better to receive waiver.

Consult an academic advisor for more information.

Science & Technology (GS)
Many majors and programs of study require substantive studies of science to develop the expertise necessary in their fields. The sciences include studies of anatomy and physiology in human health, chemistry as the basis of human health, matter and motion, and natural phenomena. General Education would like to accommodate those students interested in pursuing such studies and have developed, in conjunction with the College of Science & Technology, a number of two-semester course sequences that would exempt students from the GenEd Science & Technology requirement.

Therefore, students considering undergraduate degrees with scientific, engineering or technical components may satisfy the GenEd Science & Technology requirement through alternative coursework. (See waiver information below.)

A student successfully satisfies the GenEd Science & Technology requirement upon completion with a C- or better any of the following two-course sequences:

• BOT 1111 — HORT 2114
• BIOL 1011 — BIOL 1012
• BIOL 1111 — BIOL 2112
• BIOL 1911 — BIOL 2912 (honors)
• CHEM 1021 & CHEM 1023 — CHEM 1022 & CHEM 1024
• CHEM 1031 & CHEM 1033 — CHEM 1032 & CHEM 1034
• CHEM 1951 & CHEM 1953 — CHEM 1952 & CHEM 1954 (honors)
• EES 1001 — EES 2011
• EES 1001 — EES 2021
• EES 1001 — EES 2022
• EES 1001 — EES 2061
• EES 2001 — EES 2011
• EES 2001 — EES 2021
• EES 2001 — EES 2022
• EES 2001 — EES 2061
• KINS 1221 — KINS 1222
• KINS 1223 — KINS 1224
• PHYS 1001 — PHYS 1004
- PHYS 1021 — PHYS 1022
- PHYS 1061 — PHYS 1062
- PHYS 2021 — PHYS 2022
- PHYS 2921 — PHYS 2922

Students who change their course of study prior to completing the second course of any of the specified two-course sequence, may complete their GenEd Science & Technology requirement by earning a C- or better with:

- One GenEd GS course and one course from either List I or List II, or
- One course from List I and one course from List II

### List I
- BOT 1111
- BIOL 1011
- BIOL 1111
- BIOL 1911 (honors)
- CHEM 1021 & CHEM 1023
- CHEM 1031 & CHEM 1033
- CHEM 1951 & CHEM 1953 (honors)
- EES 1001
- EES 2001
- KINS 1221
- KINS 1223
- PHYS 1001
- PHYS 1021
- PHYS 1061
- PHYS 2021
- PHYS 2921

### List II
- HORT 2114
- BIOL 1012
- BIOL 2112
- BIOL 2912 (honors)
- CHEM 1022 & CHEM 1024
- CHEM 1032 & CHEM 1034
- CHEM 1952 & CHEM 1954 (honors)
- EES 2011
- EES 2021
- EES 2022
- EES 2061
- KINS 1222
- KINS 1224
- PHYS 1004
- PHYS 1022
- PHYS 1062
- PHYS 2022
- PHYS 2922

Consult an academic advisor for more information.

**Global/World Society (GG)**

The Global/World Society requirement may be waived if:
- a student successfully completes (with a C- or better) credit-bearing coursework worth at least three semester hours in an approved summer or semester study abroad program with a minimum stay abroad of 28 days.
- a student provides a transcript with an international study abroad experience in which at least three semester hours of coursework transferred to Temple.
- a student is a Foreign National student and whose permanent residence is outside of US boundaries.

Consult an academic advisor for details.

**Analytical Reading & Writing (GW)**

**Requirement:** One 4-credit hour course.

**Writing Placement Exam.** The Writing Placement Exam is required for all first-year students, transfer and non-matriculating students who have not successfully completed a credit-bearing, college-level composition course with a grade of C- or better.

The placement exam will indicate if the student should register for ENG 0701, ENG 0802, or be exempted from the course. May also be ENG 0711 or ENG 0812, which are the ESL versions.

This course should be taken as soon as possible—ideally in the first semester, but certainly in the first year.

**Analytical Reading & Writing** is intended to teach students how to:

- Organize ideas in a coherent and logical manner;
- Connect multiple texts through an issue or an idea;
- Identify authors’ key arguments;
- Create and defend arguments of one’s own; and
- Demonstrate correct grammar, syntax and acknowledgment of sources.

**Analytical Reading & Writing Courses**

- Analytical Reading & Writing
- English as a Second Language (ESL) Analytical Reading & Writing
- Honors Analytical Reading & Writing

**Arts (GA)**

**Requirement:** One 3-credit or 4-credit hour course.

GenEd Arts courses develop artistic literacy. Courses may be centered on one of the arts (e.g. dance, fine arts, music), may be interdisciplinary in nature (e.g. creative writing and theater, film and dance), or may address larger themes (e.g. creativity, the arts and political statement, technology and the arts), but all Arts courses make some connection to other perspectives, disciplines, or subject areas.

GenEd Arts courses are intended to teach students how to:

- Experience and respond to a work of art or creative process;
- Recognize or interpret a work of art or creative process in its social, historical and cultural context;
- Describe or evaluate a work of art or creative process using appropriate terminology;
- Demonstrate an “appreciation” for the value of art in our lives and in society; and
- Function as a member of an audience.

**Arts Courses**

Below, you will find a list of GenEd courses in this area.

Please be advised that GenEd offerings vary from semester to semester and that all GenEd courses will not be offered every semester. For the most current list of GenEd offerings, please consult the Class Schedule.

In addition, a single GenEd course may be offered by more than one department. GenEd courses offered by more than one department will have the same course number and the same course title. A student may not take the same course from multiple departments and earn credit toward graduation. However, if a student wishes to replace her/his grade in a GenEd course, s/he may replace the grade with any course bearing the same course number and the same course title regardless of department.
• Arts of the Western World: The Visual Experience
• Arts in Cultural Context
• Creative Acts
• Dramatic Imagination: The Performing Arts in Society
• Exploring Music
• Greek Theater & Society
• Philadelphia Arts & Culture
• Shakespeare and Music
• Shakespeare in the Movies
• Shall We Dance? Dance as Narrative in American Film
• The Art of Acting
• The Art of Listening
• The Art of Sacred Space
• The Creative Spirit: A Multidisciplinary View
• The Future of Your TV
• The History of Art in Rome (Rome Campus only)
• The Jazz Century in America
• The Meaning of the Arts
• World Musics & Cultures
• Honors Art of Acting
• Honors Art of Sacred Space
• Honors Creative Acts
• Honors Greek Theater & Society
• Honors: Philadelphia Arts & Culture
• Honors Shakespeare in the Movies
• Honors Shall We Dance? Dance as Narrative in American Film
• Honors: The Art of Listening
• Honors The Creative Spirit: A Multidisciplinary View
• Honors The Meaning of the Arts
• Honors Transnational Cinema
• Honors World Musics & Cultures

Waiver

Students pursuing undergraduate degrees in the Boyer College of Music and Dance and the Tyler School of Art may be exempted from the GenEd Arts requirement upon completion of collegiate requirements.

Boyer College of Music

Students may satisfy the GA requirement by successfully completing one of the following four-course sequences:

• DANC 1811, DANC 2813, DANC 2814, and DANC 3812. All courses must be completed to receive waiver.
• MUST 1711, MUST 1712, MUST 2711, and MUST 2712. All courses must be completed to receive waiver.
• A transfer course or courses equivalent to the waivers described in the bullets above.

Courses must be completed with a C- or better to satisfy GenEd waiver requirements.

Department/schools/colleges may stipulate a higher grade to satisfy department/school/college requirements.

Tyler School of Art

Students in the following degree programs at Tyler School of Art may satisfy the GA requirement by successfully completing a specified multi-course sequence:

• Bachelor of Arts Visual Studies
• Bachelor of Science Art Education
• Bachelor of Fine Arts
ARTH 1156, and FDPR 1511 or VS 1151. All courses must be completed with a C- or better to receive waiver.

TUJ students in the BA in Art degree program may satisfy the GA requirement by successfully completing the following set of courses:

ARTU 1101, ARTU 1201, ARTU 1401 and ARTU 1501. All courses must be completed with a C- or better to receive waiver. Note that this specific waiver is only for TUJ students in the BA in Art degree program.

Department/schools/colleges may stipulate a higher grade to satisfy department/school/college requirements.

Consult an academic advisor for details.

School of Theater, Film and Media Arts

Students may satisfy the GA requirement by successfully completing the following three-course sequence:

THTR 1003, THTR 1096, and THTR 1231. All courses must be completed with a C- or better to receive the waiver.

Global/World Society (GG)

Requirement: One 3-credit hour course.

GenEd Global/World Society courses explore societies and cultures outside of the United States. These courses take one of two approaches. Some concentrate on a single nation or region, examining in depth its political, social, historical, cultural, artistic, literary, geographic, and/or economic landscape. Others investigate globalization and its effects across nations and regions.

Global/World Society courses are intended to teach students how to:

- Understand the influences (e.g. political, social, historical, cultural, artistic, literary, geographic, economic) on world societies or processes (e.g. globalization) linking world societies;
- Access and analyze materials related to world societies and cultures;
- Develop observations and conclusions about selected themes in world societies and cultures;
- Construct interpretations using evidence and critical analysis; and
- Communicate and defend interpretations.

Global/World Society Courses

Below, you will find a list of GenEd courses in this area.

Please be advised that GenEd offerings vary from semester to semester and that all GenEd courses will not be offered every semester. For the most current list of GenEd offerings, please consult the Class Schedule (https://www.temple.edu/apply/common/cdcheck.asp).

In addition, a single GenEd course may be offered by more than one department. GenEd courses offered by more than one department will have the same course number and the same course title. A student may not take the same course from multiple departments and earn credit toward graduation. However, if a student wishes to replace her/his grade in a GenEd course, s/he may replace the grade with any course bearing the same course number and the same course title regardless of department.

- Advertising and Globalization
- Border Crossings: Gendered Dimensions of Globalization
- Confronting Empire: Voices of Resistance
- Development and Globalization
- Education for Liberation Here and Abroad
- Evolution of Culture
- Gender and World Societies
- Global Cities
- Global Slavery
- Imaginary Cities
- Jewish Diaspora in Latin America
- Latin American Media
- Latino Immigration
- Law Beyond Borders
- Philadelphia Dance Experience
- Religion in the World
• The Detective Novel
• The Global Crisis: Power, Politics and the Making of Our Times
• Turning Points in Human History: The Ancient World
• Turning Points in Human History: The Modern World
• War and Peace
• World Affairs
• World Performances
• World Regions and Cultures: Diversity and Interconnections
• World Society in Literature & Film
• Honors Advertising and Globalization
• Honors Fate, Hope, and Action: Globalization Today
• Honors Imaginary Cities
• Honors Religion in the World
• Honors War and Peace
• Honors Women in Modern Bengali Film
• Honors World Affairs
• Honors World Performances
• Honors World Society in Literature & Film

Waiver: The Global/World Society requirement may be waived if:

• a student successfully completes (with a C- or better) credit-bearing coursework worth at least three semester hours in an approved summer or semester study abroad program with a minimum stay abroad of 28 days.
• a student provides a transcript with an international study abroad experience in which at least three semester hours of coursework transferred to Temple.
• a student is a Foreign National student and whose permanent residence is outside of US boundaries.

Consult an academic advisor for details.

**Human Behavior (GB)**

**Requirement:** One 3-credit hour course.

GenEd Human Behavior courses address the relationships between individuals and communities. Courses may focus on the relationship between individuals and communities in general or may engage those relationships from specific perspectives (such as art, music, education, religion, economics, politics or education), or look at them within specific themes (such as food & eating, crime, crisis, sexuality, or adolescence).

Human Behavior courses are intended to teach students how to:

• Understand relationships between individuals and communities;
• Understand theories or explanations of human behavior used to describe social phenomena;
• Examine the development of individuals' beliefs, behaviors, and assumptions and how these affect individuals and communities;
• Apply one disciplinary method to understand human behavior or explain social phenomena;
• Access and analyze materials related to individuals, communities or social phenomena; and
• Compare and contrast similar social phenomena across individuals or communities.

**Human Behavior Courses**

Below, you will find a list of GenEd courses in this area.

Please be advised that GenEd offerings vary from semester to semester and that all GenEd courses will not be offered every semester. For the most current list of GenEd offerings, please consult the Class Schedule (https://www.temple.edu/apply/common/cdcheck.asp).

In addition, a single GenEd course may be offered by more than one department. GenEd courses offered by more than one department will have the same course number and the same course title. A student may not take the same course from multiple departments and earn credit toward graduation. However, if a student wishes to replace her/his grade in a GenEd course, s/he may replace the grade with any course bearing the same course number and the same course title regardless of department.

• Ancient War Games: Sport and Spectacle in Greece and Rome
• Asian Behavior & Thought
• Bilingual Communities
• Creativity and Organizational Innovation
• Criminal Behavior
• Disability Identity
• Eating Cultures
• Emotional Intelligence and Leadership
• Guerrilla Altruism: A Mini-Manual of Subversive Activism
• Human Behavior and the Photographic Image
• Human Ecology
• Human Sexuality
• Identity & Crisis
• Interpersonal Communication: Critical Competencies for Professional and Personal Success
• Kids, Community and Controversy
• Language in Society
• Law and Literature, Law in Fact
• Marginalized Citizenship: Disability and Sexuality
• The Meaning of Madness
• Philosophy of the Human
• Sexual Orientation, Gender Identity and the Law
• The Quest for Utopia
• Tweens and Teens
• Understanding Justice
• Workings of the Mind
• Youth Cultures
• Honors Ancient War Games: Sport and Spectacle in Greece and Rome
• Honors Asian Behavior & Thought
• Honors Bilingual Communities
• Honors Criminal Behavior
• Honors Eating Cultures
• Honors Guerrilla Altruism: A Mini-Manual of Subversive Activism
• Honors Human Sexuality
• Honors Language in Society
• Honors Meaning of Madness
• Honors Philosophy of the Human
• Honors: The Quest for Utopia
• Honors Sexual Orientation, Gender Identity and the Law
• Honors Tweens and Teens
• Honors Workings of the Mind
• Honors Youth Cultures

**Waiver:** Students pursuing undergraduate degrees in education, including art, middle or secondary certifications, may be exempted from the GenEd Human Behavior requirement upon completion of collegiate requirements.

A student will be waived from the GenEd Human Behavior requirement upon completion of one of the following multi-course sequences:

- EDUC 2109, SPED 2231, and ENES 3338. All courses must be completed with a C- or better to receive waiver.
- EDUC 2179; SCES 2189 or MAES 2189; SCES 4189 or MAES 4189; and SECE 3796. All courses must be completed with a C- or better to receive waiver.
- ECED 2101, ECED 3209, and SPED 2231. All courses must be completed with a C- or better to receive waiver.

Consult an academic advisor for more information.
**Mosaic (GY & GZ)**

**Requirement:** Mosaic: Humanities Seminar I (3 credits) and Mosaic: Humanities Seminar II (3 credits). Students normally should take Mosaic I in the semester immediately following the completion of Analytical Reading & Writing, and Mosaic II immediately after completing Mosaic I.

In these small discussion-based classes, students will be guided through a thematic approach to primary texts from great world cultural and intellectual traditions. Themes such as "journeys," or "faith" or "money" are the basis for reading and understanding a set of important texts from different time periods and different cultures. For example, as students explore the theme of "power," they will start with Homer's *Iliad* and the Declaration of Independence. Expanding on this theme, they will read 18th-century political philosopher John Locke and 20th-century American civil rights leader Martin Luther King Jr., while weaving in important texts from China and the Middle East. As students interrogate the theme of "power," they will be making connections across different time periods, cultures, and types of writing.

The Mosaic sequence will be enhanced by the addition of "texts" from great world musical, artistic and architectural traditions, allowing students to grapple with important themes in a richer multidisciplinary and multicultural fashion.

Mosaic courses build upon the communication and critical thinking skills students developed in the Analytical Reading & Writing course, particularly the ability to make connections and arguments across different texts. That is why it is so important to take the Analytical Reading & Writing course before taking Mosaic.

Upon completion of the Mosaic sequence, students will be able to:

- Read in its entirety an unfamiliar and problematic written text (theoretically, historically, or culturally challenging);
- Recognize abstractions, large ideas, and implications associated with difficult written texts;
- Make connections across disciplines, history and cultural boundaries;
- Construct positions, arguments, and interpretations through textual analysis and evaluation; and
- Produce thoughtful writing that reflects persuasive position and the conventions of academic discourse.

**Mosaic Courses**

- Mosaic: Humanities Seminar I
- Mosaic: Humanities Seminar II
- Honors Mosaic: Humanities Seminar I
- Honors Mosaic: Humanities Seminar II

**Quantitative Literacy (GQ)**

**Requirement:** One 4-credit hour course.

**Math Placement Exam.** The Mathematics Placement Exam is required for all first-year students, transfer and non-matriculating students who have not successfully completed a credit-bearing, college-level Math course with a grade of C- or better. The placement exam will indicate if the student may register for either a Quantitative Literacy course or a higher-level math course. The student may also be placed into a lower-level math course.

A student placed in MATH 0701 is required to complete successfully MATH 0701 before enrolling in a GenEd Quantitative Literacy course or GenEd Science & Technology courses, as these courses require students to understand and perform basic computational skills.

GenEd Quantitative Literacy courses present mathematical thinking as a tool for solving everyday problems and as a way of understanding how to represent aspects of a complex world. They are designed to prepare students as citizens and voters to have the ability to think critically about quantitative statements, to recognize when they are misleading or false, and to appreciate how they relate to significant social or political issues. While computation may be part of a Quantitative Literacy course, the primary focus is not computational skills.

Quantitative Literacy courses are intended to teach students how to:

- Understand quantitative models that describe real world phenomena and recognize limitations of those models;
- Perform simple mathematical computations associated with a quantitative model and make conclusions based on the results;
- Recognize, use, and appreciate mathematical thinking for solving problems that are part of everyday life;
- Understand the various sources of uncertainty and error in empirical data;
- Retrieve, organize, and analyze data associated with a quantitative model; and
- Communicate logical arguments and their conclusions.

**Quantitative Literacy Courses**

Below, you will find a list of GenEd courses in this area.
Please be advised that GenEd offerings vary from semester to semester and that all GenEd courses will not be offered every semester. For the most current list of GenEd offerings, please consult the Class Schedule (https://www.temple.edu/apply/common/cdcheck.asp).

In addition, a single GenEd course may be offered by more than one department. GenEd courses offered by more than one department will have the same course number and the same course title. A student may not take the same course from multiple departments and earn credit toward graduation. However, if a student wishes to replace her/his grade in a GenEd course, s/he may replace the grade with any course bearing the same course number and the same course title regardless of department.

- Critical Reasoning and Problem Solving
- Digital Mapping: From Mercator to Mashups
- Investing for the Future
- Math for a Digital World
- Mathematical Patterns
- Quantitative Methods in the Social Sciences
- Statistical Reasoning & Games of Chance
- Statistics in the News
- Honors Digital Mapping: From Mercator to Mashups
- Honors Investing for the Future
- Honors Math for a Digital World
- Honors Mathematical Patterns
- Honors Quantitative Methods in the Social Sciences

**Waiver:** Students considering undergraduate degrees with advanced mathematical or statistical requirements may satisfy the GenEd Quantitative Literacy requirement through alternative coursework.

A student will be waived from the GenEd Quantitative Literacy requirement upon completion of any of the following:

- MATH 1031, MATH 1038, MATH 1041, MATH 1042, MATH 1941, MATH 1942, or MATH 2043.
- STAT 2101, STAT 2103, STAT 2901, STAT 2903 or an equivalent transfer course (primarily for FSBM and STHM majors and FSBM minors).
- Completion of a three-course sequence to include MATH 1015, MATH 1021 or EDUC 1017, and ECED 3107 (primarily for Early Childhood Education majors). All courses must be completed to receive waiver.
- Completion of a four-course sequence to include MATH 1015, MATH 1021, MATH 1022, and MAES 3145 or MGRE 3145 (primarily for Middle Grades Education majors concentrating in Language Arts, Science, Science and Language Arts, and Social Studies). All courses must be completed to receive waiver.

Courses must be completed with a C- or better to satisfy GenEd waiver requirements.

Department/schools/colleges may stipulate a higher grade to satisfy department/school/college requirements.

Consult an academic advisor for details.

**Race & Diversity (GD)**

**Requirement:** One 3-credit hour course.

Race & Diversity courses develop a sophisticated understanding of race and racism as dynamic concepts, pointing to the ways in which race intersects with other group identifications such as gender, class, ethnicity, religion, age, sexual orientation or disability.

Race & Diversity courses are intended to teach students how to:

- Recognize the ways in which race intersects with other group identifications or ascriptions: gender, class, ethnicity, sexual orientation, religion, disability, age;
- Understand the relationships among diversity, justice and power;
- Explore what it means for individuals and institutions to exist in a multi-racial, multi-cultural world;
- Investigate the various forms race and racism has taken in different places and times; and
- Discuss race matters with diverse others in relation to personal experience.

**Race & Diversity Courses**

Below, you will find a list of GenEd courses in this area.
Please be advised that GenEd offerings vary from semester to semester and that all GenEd courses will not be offered every semester. For the most current list of GenEd offerings, please consult the Class Schedule (https://www.temple.edu/apply/common/cdcheck.asp).

In addition, a single GenEd course may be offered by more than one department. GenEd courses offered by more than one department will have the same course number and the same course title. A student may not take the same course from multiple departments and earn credit toward graduation. However, if a student wishes to replace her/his grade in a GenEd course, s/he may replace the grade with any course bearing the same course number and the same course title regardless of department.

- African Americans, Equality and the Law: Weapon or Tool?
- Classics of African American Theater
- Dimensions of Diversity: What's Brewing in the Melting Pot?
- Embodying Pluralism
- Ethnicity and the Immigrant Experience in the U.S.
- Immigration and the American Dream
- Politics of Identity in America
- Race & Ethnicity in American Cinema
- Race & Identity in Judaism
- Race & Poverty in the Americas
- Race, Identity and Experience in American Art
- Race in the Ancient Mediterranean
- Race on the Stage
- Representing Race
- The History & Significance of Race in America
- Honors African Americans, Equality and the Law: Weapon or Tool?
- Honors Ethnicity and the Immigrant Experience in the U.S.
- Honors Immigration and the American Dream
- Honors Politics of Identity in America
- Honors Race & Ethnicity in American Cinema
- Honors Race & Identity in Judaism
- Honors Race & Poverty in the Americas
- Honors Race, Identity and Experience in American Art
- Honors Race in the Ancient Mediterranean
- Honors Representing Race
- Honors: The History & Significance of Race in America

**Science & Technology (GS)**

**Requirement:** Two 3-credit hour courses.

GenEd Science & Technology courses present scientific process in context, helping students understand how scientific phenomena and/or technological change affects human life and the planet.

Science & Technology courses are intended to teach students how to:

- Understand and describe the scientific process;
- Understand the sequential nature of science and technology;
- Recognize, use and appreciate scientific or technological thinking for solving problems that are part of everyday life;
- Understand and communicate how technology encourages the process of discovery in science and related disciplines; and
- Retrieve, organize, and analyze data associated with a scientific or technological model.

**Science & Technology Courses**

Below, you will find a list of GenEd courses in this area.

Please be advised that GenEd offerings vary from semester to semester and that all GenEd courses will not be offered every semester. For the most current list of GenEd offerings, please consult the Class Schedule (https://www.temple.edu/apply/common/cdcheck.asp).

In addition, a single GenEd course may be offered by more than one department. GenEd courses offered by more than one department will have the same course number and the same course title. A student may not take the same course from multiple departments and earn credit toward
General Education

157

graduation. However, if a student wishes to replace her/his grade in a GenEd course, s/he may replace the grade with any course bearing the same course number and the same course title regardless of department.

• Brain Matters
• Chemistry of Wine
• Cyberspace & Society
• Data Science
• Digital World 2020
• Disasters: Geology vs. Hollywood
• DNA: Friend or Foe
• Ethical Issues in Biomedical Science, Engineering and Technology
• Evolution & Extinctions
• Exploring the Cosmos
• Geology of the National Parks
• Green vs. Gray: Improving and Sustaining Urban Ecosystems
• How Things Work: The Physics of Everyday Life
• Nature Has No Reverse
• Powering the Future
• Sustainable Design
• Sustainable Environments
• Technology Transformations
• The Bionic Human
• The Environment
• The Science of Sound
• Honors Bionic Human
• Honors Cyberspace & Society
• Honors DNA: Friend or Foe
• Honors Geology of the National Parks
• Honors Powering the Future
• Honors: The Environment

Waiver: Students considering undergraduate degrees with scientific, engineering or technical components may satisfy the GenEd Science & Technology requirement through alternative coursework identified below.

A student will be waived from the GenEd Science & Technology requirement upon completion of any of the following two-course sequences:

• BOT 1111 — HORT 2114
• BIOL 1011 — BIOL 1012
• BIOL 1111 — BIOL 2112
• BIOL 1911 — BIOL 2912 (honors)
• CHEM 1021 & CHEM 1023 — CHEM 1022 & CHEM 1024
• CHEM 1031 & CHEM 1033 — CHEM 1032 & CHEM 1034
• CHEM 1951 & CHEM 1953 — CHEM 1952 & CHEM 1954 (honors)
• EES 1001 — EES 2011
• EES 1001 — EES 2021
• EES 1001 — EES 2022
• EES 1001 — EES 2061
• EES 2001 — EES 2011
• EES 2001 — EES 2021
• EES 2001 — EES 2022
• EES 2001 — EES 2061
• KINS 1221 — KINS 1222
• KINS 1223 — KINS 1224
• PHYS 1001 — PHYS 1004
• PHYS 1021 — PHYS 1022
Students who change their course of study prior to completing the second course of any of the specified two-course sequence may complete their GenEd Science & Technology requirement in two ways:

- One GenEd GS course and one course from either List I or List II
- One course from List I and one course from List II

List I
- BOT 1111
- BIOL 1011
- BIOL 1111
- BIOL 1911 (honors)
- CHEM 1021 & CHEM 1023
- CHEM 1031 & CHEM 1033
- CHEM 1951 & CHEM 1953 (honors)
- EES 1001
- EES 2001
- KINS 1221
- KINS 1223
- PHYS 1001
- PHYS 1021
- PHYS 1061
- PHYS 2021
- PHYS 2921

List II
- HORT 2114
- BIOL 1012
- BIOL 2112
- BIOL 2912 (honors)
- CHEM 1022 & CHEM 1024
- CHEM 1032 & CHEM 1034
- CHEM 1952 & CHEM 1954 (honors)
- EES 2011
- EES 2021
- EES 2022
- EES 2061
- KINS 1222
- KINS 1224
- PHYS 1004
- PHYS 1022
- PHYS 1062
- PHYS 2022
- PHYS 2922

Consult an academic advisor for more information.

U.S. Society (GU)

Requirement: One 3-credit hour course.

GenEd U.S. Society courses strengthen students’ understanding of the history, society, culture and political systems of the United States.
They are intended to teach students how to:

- Access and analyze historical, analytical, and cultural materials;
- Develop observations and conclusions about selected themes in U.S. society and culture;
- Construct interpretations using evidence and critical analysis;
- Communicate and defend interpretations; and
- Analyze the ways difference and heterogeneity have shaped the culture and society of the U.S.

**U.S. Society Courses**

Below, you will find a list of GenEd courses in this area.

Please be advised that GenEd offerings vary from semester to semester and that all GenEd courses will not be offered every semester. For the most current list of GenEd offerings, please consult the Class Schedule (https://www.temple.edu/apply/common/cdcheck.asp).

In addition, a single GenEd course may be offered by more than one department. GenEd courses offered by more than one department will have the same course number and the same course title. A student may not take the same course from multiple departments and earn credit toward graduation. However, if a student wishes to replace her/his grade in a GenEd course, s/he may replace the grade with any course bearing the same course number and the same course title regardless of department.

- American Military Culture
- American Revolutions
- Contemporary American Social Movements
- Dissent in America
- Doing Justice
- Education in the Global City
- First Person America
- Founding Philadelphia
- Gender in America
- Higher Education and American Life: Mirror to a Nation
- Justice in America
- Landscape of American Thought
- Law and American Society
- Living for Change: Autobiographies of Women in Radical Social Movements
- People, Places, and Environment
- Religion in Philadelphia
- Sounds of a Revolution
- Sport & Leisure in American Society
- The American Economy
- The Making of American Society: Melting Pot or Culture Wars?
- The United States Constitution and Popular Culture
- Urban Dynamics: Global, Regional, and Local Connections
- Honors Architecture & the American Cultural Landscape
- Honors: Contemporary American Social Movements
- Honors: Dissent in America
- Honors: Doing Justice
- Honors: First Person America
- Honors Higher Education and American Life: Mirror to a Nation
- Honors: Justice in America
- Honors: Landscape of American Thought
- Honors: Law and American Society
- Honors: Living for Change: Autobiographies of Women in Radical Social Movements
- Honors: Religion in Philadelphia
- Honors: Sounds of a Revolution
- Honors: Sport & Leisure in American Society
Intercollegial Programs

Temple University offers intercollegial and interdisciplinary academic programs that involve students and departments in more than one of the university's schools, colleges and divisions. These programs provide students with opportunities to cross the boundaries of traditional academic disciplines, combine a variety of perspectives, and take advantage of faculty expertise in different departments throughout the University. The programs are designed to accommodate students' interests and prepare students for success in a variety of career fields. The schools, colleges and divisions collaborating in these programs are indicated in each description. Each college’s degree requirements are described in the Schools, Colleges, and Divisions section of this Bulletin. Students should consult the contact person of an intercollegial program for more information about both collegial policies and requirements, as well as the program itself.

- Digital Media Technologies (p. 160)
- Environmental Programs (p. 161)
- Mathematical Economics (p. 161)

Digital Media Technologies

Sally Kyvernitis, CIS Faculty Advisor
Science Education and Research Center, Room 330
215-204-2030
sallyk@temple.edu

Dr. Nancy Morris, MSP Chairperson, Contact for MSP Requirements
Annenberg Hall, Room 205
215-204-8394
nancy.morris@temple.edu

The Digital Media Technologies Minor is an interdisciplinary minor offered through the Department of Media Studies and Production (MSP) within the School of Media and Communication and the Computer and Information Sciences (CIS) Department within the College of Science and Technology. This minor is designed to expand students' knowledge of the information age and enable them to share communications over the internet using fast evolving, emerging technologies.

The minor is available to undergraduate students in Media Studies and Production, Computer & Information Science, as well as other departments and colleges. Upon completion of the minor, students should be able to demonstrate the following competencies:

- Use technology to integrate internet content with computers and mobile devices.
- Design and implement content for various digital media, utilizing database technologies.
- Critically analyze decisions made regarding the use of technology, specifically in the social and ethical domains.
- Understand the impact of current and emerging technologies on communications, both locally and globally.
- Create effective written communications make professional presentations.
- Analyze and solve problems efficiently.

Transfer credits are not accepted for credit for the minor.

Minor Requirements

- Students with a GPA of 2.00 or more may declare this major by contacting either CST advising (215-204-2890) or MSP advising (215-204-5273). See additional Grade Requirements below.
- Five (5) of the Digital Media Technologies minor courses must be distinct from the student’s major. Students should see their CST or MSP advisor for course substitutions.

Four Required Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSP 1701</td>
<td>Introduction to Media Technology</td>
<td>3</td>
</tr>
<tr>
<td>CIS 1052</td>
<td>Introduction to Web Technology and Programming</td>
<td>4</td>
</tr>
<tr>
<td>CIS 1056</td>
<td>Advanced Web Technology and Programming</td>
<td>4</td>
</tr>
<tr>
<td>MSP 2741</td>
<td>Introduction to Internet Studies and Web Authoring</td>
<td>3</td>
</tr>
</tbody>
</table>

Two Electives:

Select two courses from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSP 4741</td>
<td>Emergent Media Production</td>
</tr>
<tr>
<td>MSP 4221</td>
<td>Information Technology Policy</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSP 1701</td>
<td>Introduction to Media Technology</td>
<td>3</td>
</tr>
<tr>
<td>CIS 1052</td>
<td>Introduction to Web Technology and Programming</td>
<td>4</td>
</tr>
<tr>
<td>CIS 1056</td>
<td>Advanced Web Technology and Programming</td>
<td>4</td>
</tr>
<tr>
<td>MSP 2741</td>
<td>Introduction to Internet Studies and Web Authoring</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSP 4741</td>
<td>Emergent Media Production</td>
</tr>
<tr>
<td>MSP 4221</td>
<td>Information Technology Policy</td>
</tr>
</tbody>
</table>
MSP 4252  Law and Ethics of Digital Media
MSP 4541  Mobile Media
MSP 4614  Creating a Media Business

Total Credit Hours  21-23

1  MSP majors can take MSP 2701 or MSP 2751 instead of MSP 1701.
2  CST students cannot get credit for CIS 1052 Introduction to Web Technology and Programming if they have already completed CIS 2168 Data Structures, but they can substitute CIS 2308 Web Application Programming, CIS 3344 Advanced Web Application Design and Scripting or CIS 3515 Introduction to Mobile Application Development (as long as they meet the 5 distinct course rule mentioned above).
3  CST students cannot get credit for CIS 1056 if they have already completed CIS 2168 Data Structures. These students can substitute CIS 1068 - this can be the one course that is double-counted for the CIS major as well as the Digital Media Minor.

Elective Requirements:
• For MSP students, at least one (1) CIS elective is required.
  For CIS students, at least one (1) MSP elective is required.
  For students of other backgrounds, at least one (1) MSP and one (1) CIS elective are required.
• Total elective credits will vary between 7-9.
• Permitted Substitute Elective: BIOL 3333
• All prerequisites must be completed (or permission by instructor received) to enroll in minor courses.

Most students take CIS 2305 Mobile Computing Technologies for their CIS 2000+ course requirement because CIS 2305 accepts the CIS 1052 - CIS 1056 sequence as prerequisite.

Grade Requirements
• Minor credit is not given for grades below C.
• Students with averages under 2.00 for more than two semesters will be dropped from the program.
• Students must maintain at least a 2.00 grade point average in the program to successfully complete.

Environmental Programs

Christina Rosan
Director of Environmental Studies for B.A.
Gladfelter Hall, Room 320
215-204-9327
cdrosan@temple.edu

Dr. Laura Toran
Director of Environmental Sciences for B.S.
Beury Hall, Room 223
215-204-2352
ltoran@temple.edu

The University offers two degrees in the Environmental Program: a Bachelor of Science degree that emphasizes scientific courses needed to understand environmental problems, and a Bachelor of Arts degree that emphasizes policy and societal impacts. The College of Science and Technology offers the Bachelor of Science in Environmental Science and the College of Liberal Arts offers the Bachelor of Arts in Environmental Studies. A minor also is offered through the College of Liberal Arts.

Bachelor of Science Requirements for Environmental Science
Please see the College of Science and Technology Bulletin page for details on the requirements for the Bachelor of Science degree in Environmental Science (p. 1067).

Bachelor of Arts Requirements for Environmental Studies
Please see the College of Liberal Arts Bulletin page for details on the requirements for the Bachelor of Arts degree in Environmental Studies (p. 830).

Requirements for the Minor in Environmental Studies in CLA
Please see the College of Liberal Arts Bulletin page for details on the requirements for the minor in Environmental Studies (p. 835).

Mathematical Economics

Dr. Edward Letzter, Chair, Mathematics
Wachman Hall, Room 638
The Departments of Economics and Mathematics offer the Bachelor of Arts in Mathematical Economics program as a platform for systematic concentration in the mathematical approach to economics. Economics has progressed in the last several decades by making extensive use of mathematical techniques. As a result, students who wish to pursue graduate study in economics, finance, accounting and other disciplines that make an extensive use of economics need a thorough grounding in both economics and mathematics. The Mathematical Economics curriculum provides this grounding with a broad selection of courses that cover all important areas of economics and the mathematical tools required for a critical, deep mastery of these areas. This program is especially recommended for those students who intend to pursue graduate studies in Economics.

Bachelor of Arts

Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)
   - MATH 0701 and/or ENG 0701, if required by placement testing.
   - All Temple students must take a minimum of two writing-intensive courses as part of their major. Following is a list of courses that can be used to satisfy the writing-intensive requirement:
     - ECON 3596 Energy, Ecology, and Economy 3
     - ECON 3597 Health Economics 3
     - ECON 3598 Economics Writing Seminar 3
     - MATH 3096 Introduction to Modern Algebra 3
     - MATH 3098 Modern Algebra 3
     - MATH 4096 Senior Problem Solving 3
   - Students must complete the General Education (GenEd) requirements.
     - The General Education Curriculum consists of approximately 31-32 s.h. See the General Education (p. 143) section of the Undergraduate Bulletin for the GenEd curriculum.
     - Students who complete this major typically receive a waiver for 1 Quantitative Literacy (GQ) GenEd course.

2. College Requirements
   - 90 credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).
   - 45 Upper-Level (2000+) credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).
   - Second (2nd) Level of a Foreign Language (1002).

3. Major Requirements for Bachelor of Arts (61-62 s.h.)

Computer & Information Science
Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 1053</td>
<td>Programming in Matlab</td>
</tr>
<tr>
<td>CIS 1057</td>
<td>Computer Programming in C</td>
</tr>
<tr>
<td>CIS 1068</td>
<td>Program Design and Abstraction</td>
</tr>
<tr>
<td>CIS 1968</td>
<td>Honors Program Design and Abstraction (F)</td>
</tr>
</tbody>
</table>

Mathematics
Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1038</td>
<td>Calculus I with Lab ¹</td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
</tr>
</tbody>
</table>
### Intercollegial Programs

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1941</td>
<td>Honors Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1042</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 1942</td>
<td>Honors Calculus II</td>
<td></td>
</tr>
<tr>
<td>MATH 2043</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 2943</td>
<td>Honors Calculus III</td>
<td></td>
</tr>
<tr>
<td>MATH 2101</td>
<td>Linear Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MATH 3031</td>
<td>Probability Theory I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 3032</td>
<td>Mathematical Statistics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 3043</td>
<td>Numerical Analysis I (F)</td>
<td>3-4</td>
</tr>
<tr>
<td></td>
<td>3 Mathematics electives at the 3000 level or above</td>
<td>9</td>
</tr>
</tbody>
</table>

#### Economics

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 1102</td>
<td>Microeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>or ECON 1902</td>
<td>Honors Microeconomic Principles</td>
<td></td>
</tr>
<tr>
<td>ECON 3501</td>
<td>Intermediate Microeconomic Analysis</td>
<td>3</td>
</tr>
<tr>
<td>ECON 3502</td>
<td>Intermediate Macroeconomic Analysis</td>
<td>3</td>
</tr>
<tr>
<td>ECON 3503</td>
<td>Introduction to Econometrics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 3598</td>
<td>Economics Writing Seminar</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>2 economics electives at the 3000 level or above, with permission from advisor</td>
<td>6</td>
</tr>
<tr>
<td>ECON 3504</td>
<td>Mathematical Economics</td>
<td>3</td>
</tr>
<tr>
<td>or ECON 3521</td>
<td>Economics of Risk and Uncertainty</td>
<td></td>
</tr>
</tbody>
</table>

### Total Credit Hours

61-62

1. Students who choose MATH 1038 must also take the linked course MATH 1039.
2. MATH 2111 can fulfill one of the Mathematics electives, but it must be taken prior to MATH 3098 and MATH 3141.

(F) - Fall only course.

### Distinction in Major

For distinction in Mathematical Economics a student must have an overall GPA of 3.25 or higher. A student must also have a GPA of 3.50 or higher in the 3000+ Mathematics courses, and a GPA of 3.60 or higher in the 3000+ Economics courses.

### Suggested Academic Plan

#### Bachelor of Arts in Mathematical Economics

#### Requirements for New Students starting in the 2015-2016 Academic Year

### Year 1

#### Fall

Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 1053</td>
<td>Programming in Matlab</td>
<td>4</td>
</tr>
<tr>
<td>CIS 1057</td>
<td>Computer Programming in C</td>
<td></td>
</tr>
<tr>
<td>CIS 1068</td>
<td>Program Design and Abstraction</td>
<td></td>
</tr>
<tr>
<td>CIS 1968</td>
<td>Honors Program Design and Abstraction (F)</td>
<td></td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1038</td>
<td>Calculus I with Lab¹</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
<td></td>
</tr>
<tr>
<td>MATH 1941</td>
<td>Honors Calculus I</td>
<td></td>
</tr>
</tbody>
</table>

General Education/Elective Credits

7

#### Term Credit Hours

15

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 1102 or 1902</td>
<td>Microeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1042 or 1942</td>
<td>Calculus II</td>
<td>4</td>
</tr>
</tbody>
</table>

General Education/Elective Credits

9

#### Term Credit Hours

16
### Year 2
#### Fall
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 3501</td>
<td>Intermediate Microeconomic Analysis</td>
<td>3</td>
</tr>
<tr>
<td>MATH 2043 or 2943</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>
#### Spring
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 3502</td>
<td>Intermediate Macroeconomic Analysis</td>
<td>3</td>
</tr>
<tr>
<td>MATH 2111</td>
<td>Basic Concepts of Math</td>
<td>3</td>
</tr>
<tr>
<td>3000+ Mathematics Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

### Year 3
#### Fall
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>3000+ Economics Elective, with permission from advisor</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>MATH 2101</td>
<td>Linear Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MATH 3031</td>
<td>Probability Theory I</td>
<td>3</td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>
#### Spring
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 3504 or 3521</td>
<td>Mathematical Economics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 3032</td>
<td>Mathematical Statistics</td>
<td>3</td>
</tr>
<tr>
<td>3000+ Mathematics Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

### Year 4
#### Fall
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 3503</td>
<td>Introduction to Econometrics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 3043</td>
<td>Numerical Analysis I (F)</td>
<td>3-4</td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>
#### Spring
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 3598</td>
<td>Economics Writing Seminar [WI]</td>
<td>3</td>
</tr>
<tr>
<td>3000+ Economics Elective, with permission from advisor</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>3000+ Mathematics Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

**Total Credit Hours:** 123

(F) - Fall only course

1. Students who choose MATH 1038 must also take the linked course MATH 1039.
2. MATH 2111 can fulfill one of the Mathematics electives, but it must be taken prior to MATH 3098 and MATH 3141.
3. One of the Mathematics electives must be a writing-intensive course in order to satisfy the University requirement that each student must fulfill two writing-intensive courses within the major.
Temple University, Japan Campus

The Temple University, Japan Campus (TUJ), located in Tokyo, offers the following programs, which are not offered at any other Temple campus:

- Associate in Arts in General Program (p. 165)
- Bachelor of Arts in General Program (p. 166)
- Bachelor of Arts in International Affairs (p. 168)
- Bachelor of Arts in Japanese (p. 171)
- Bachelor of Arts in Psychological Studies (p. 173)
- Bachelor of Science in International Business Studies (p. 175)

For more information about the TUJ programs, click on the links above.

For more information about TUJ, go to the TUJ web site (http://www.tuj.ac.jp/ug).

Associate in Arts in General Program

(College of Liberal Arts)

The Associate in Arts (A.A.) degree in General Program, which is only offered on the Temple University, Japan Campus, is awarded by the College of Liberal Arts.

Requirements

The Associate in Arts (A.A.) degree requires a minimum of 62 credits distributed according to University policy, with at least a 2.0 cumulative GPA. A minimum 2.0 GPA must also be maintained in all General Education and all College of Liberal Arts (CLA) courses.

Non-CLA Courses

A.A. candidates must complete a minimum of 45 credit hours within CLA disciplines. A.A. candidates may count a maximum of 17 non-CLA credits toward the A.A. degree.

Preparatory Courses

A maximum of 9 credit hours of the preparatory course works (numbered 0700 - 0799) may be applied to the A.A. degree.

Suggested Academic Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 0802 or 0812</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Foreign Language 1001 - first level</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring</th>
<th></th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IH 0851</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>Foreign Lanaguge 1002 - second level</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IH 0852</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3-4</td>
</tr>
<tr>
<td>CLA 2000+ Upper Level Course (Humanities)</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>
CLA 2000+ Upper Level Course (Social Science) 3
Select one of the following: 3-4
Foreign Lanaguage - third level
GenEd Global/World Society Course
Internationally-Focused Course from Approved List

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15-17</th>
</tr>
</thead>
</table>

**Spring**

- GenEd Breadth Course 3
- GenEd Breadth Course 3
- CLA 2000+ Upper Level Course (Humanities) 3
- CLA 2000+ Upper Level Course (Social Science) 3
- One 0800-4999 Elective in any School or College 4

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Credit Hours</td>
<td>62-64</td>
</tr>
</tbody>
</table>

1 One of these CLA Upper Level Courses must be Writing Intensive (WI).

**Bachelor of Arts in General Program**

*(College of Liberal Arts)*

Students at Temple University, Japan Campus may, in consultation with the Major Coordinator and the Academic Advising Center, design an interdisciplinary major in the humanities (art history, Chinese, English, Japanese, Korean, philosophy, religion) or the Social Sciences (American studies, Asian studies, economics, history, political science, psychology).

The successful completion of the approved sequence of courses will lead to a Bachelor of Arts in General Program. A General Program major allows students to benefit from all the academic fields available at the Japan campus and to create an area of study that embraces an intellectual theme, such as environmental and population control, human rights, war and peace, or moral and ethical responsibilities.

The Bachelor of Arts in General Program is awarded by the College of Liberal Arts.

**Summary of Requirements for the Degree**

1. **University and College of Liberal Arts (CLA) Requirements**
   - All Temple students must take a minimum of two writing-intensive courses as part of the major.
   - Students must complete the General Education (p. 143) curriculum.
   - Students must follow CLA requirements as specified in the CLA College Requirements (p. 755) section of the Undergraduate Bulletin.

2. **Major Concentration** (Social Science Division or Humanities Division) (15 credits)
   Select one discipline from either the Social Science or Humanities division within the College of Liberal Arts.
   - Five (5) courses must be taken from the selected liberal arts discipline.
   - At least three (3) of these five (5) courses must be upper level (2000+).

3. **Interdisciplinary Electives** within the Selected Study Division (21 credits)
   In consultation with an Academic Advisor and/or Major Coordinator, select seven (7) courses from either the Social Science or Humanities division.
   - These courses must be from either the Social Science or Humanities division to which the selected concentration belongs.
   - Courses selected for this requirement area must be from at least (3) different disciplines within the selected division.

4. **Opposite Division Electives** (9 credits)
   In consultation with an Academic Advisor and/or Major Coordinator, select three (3) courses from the study division opposite from the selected concentration.
   - All three (3) courses selected for this requirement area must be upper level (2000+).

1 Of the twelve (12) courses selected for the Major Concentration and Interdisciplinary Electives requirements, at least seven (7) courses must be upper level (2000+) including two (2) writing intensive courses.
## Suggested Academic Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>ENG 0802 or 0812 Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>Foreign Language 1001 (first level)</td>
<td>4</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>15</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>IH 0851 Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>Foreign Language 1002 (second level)</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>Major Elective 1xxx (Track Concentration Department)</td>
<td>3</td>
</tr>
<tr>
<td>Major Elective 1xxx (Track Non-Concentration Department)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>16</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>IH 0852 Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>Major Elective 1xxx (Track Concentration Department)</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3-4</td>
</tr>
<tr>
<td>Foreign Language (third level)</td>
<td></td>
</tr>
<tr>
<td>GenEd World Society Course</td>
<td></td>
</tr>
<tr>
<td>Internationally Focused Course from Approved List</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>16</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3-4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>Major Elective 2000+ (Track Non-Concentration Department 2)</td>
<td>3</td>
</tr>
<tr>
<td>One Elective in any School or College</td>
<td>3-4</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>16</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>One CLA/CST 2000+ course</td>
<td>3</td>
</tr>
<tr>
<td>Major Elective 2000+ (Track Non-Concentration Department 3)</td>
<td>3</td>
</tr>
<tr>
<td>Major Elective 2000+ (Track Concentration Department)</td>
<td>3</td>
</tr>
<tr>
<td>One CLA/CST 2000+ course</td>
<td>3</td>
</tr>
<tr>
<td>One CLA/CST 0800-4999 Course</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>15</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>One CLA/CST 2000+ course</td>
<td>3</td>
</tr>
<tr>
<td>Major Elective 2000+ (Track Non-Concentration Department X)</td>
<td>3</td>
</tr>
<tr>
<td>Major Elective 2000+ (Track Concentration Department)</td>
<td>3</td>
</tr>
<tr>
<td>One CLA/CST 2000+ course</td>
<td>3</td>
</tr>
<tr>
<td>Major Elective 2000+ (Outside Track, SS for HU or HU for SS)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 4</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Bachelor of Arts in International Affairs
(College of Liberal Arts)

The International Affairs (IA) major at Temple University, Japan Campus is an interdisciplinary major in the College of Liberal Arts. It is closely related to political science and emphasizes issues affecting relations between East Asia (Japan, China, Korea) and the United States. This major requires 10 courses (approximately 30 semester hours) divided into 5 core courses and 4 electives in the major, a capstone course, an internship of 3-6 semester hours, an East Asian area studies requirement, and an East Asian language requirement.

Summary of Requirements for the Degree

1. University and College of Liberal Arts (CLA) Requirements
   - All Temple students must take a minimum of two writing-intensive courses as part of the major.
   - Students must complete the General Education (p. 143) curriculum.
   - Students must follow CLA requirements as specified in the CLA College Requirements (p. 755) section of the Undergraduate Bulletin.

2. Major Requirements

   Major Core Courses
   - POLS 1201 Foreign Governments and Politics 3
   - POLS 1301 International Politics 3
   - Select one of the following: 3-6
     - ECON 1101 Macroeconomic Principles
     - & ECON 1102 and Microeconomic Principles
     - ECON 1103 Global Economics Issues
   - Select one of the following: 3
     - HIST 1702 World History Modern
     - GUS 1031 Geography of World Affairs
   - Select one of the following: 3
     - HIST 2804 Peace, Conflict, and Social Change
     - HIST 3228 America's Rise to Globalism
     - HIST 3229 Superpower America
     - HIST 3811 World Economy Since 1945

   Upper Level Political Science Requirements
   - Select 2 upper level (2000+) Political Science courses in consultation with the Academic Advisor and/or Major Coordinator 6
   - POLS 4000+ Writing Intensive Course (WI) 3

   Interdisciplinary Requirements
   - Select 2 courses in Social Science or other related disciplines in consultation with the Academic Advisor and/or Major Coordinator 6

   East Asian Studies Requirements
   - Select 3 courses that exclusively focus on East Asia in Social Science or other related disciplines in consultation with the Academic Advisor and/or Major Coordinator 9
   - Asian Studies 4000+ Writing Intensive course (WI) 3
### Non-USA / Non-East Asian Studies Requirements
Select 2 courses that focus on non-USA, non-East Asian regions in Social Science or other disciplines in consultation with the Academic Advisor and/or Major Coordinator

| Credit Hours | 6 |

### Internship
Complete at least one internship for at least 3 credits, upon approval by the Major Coordinator

| Credit Hours | 3 |

### East Asian Language Requirements

#### Select one of the following first level courses:

<table>
<thead>
<tr>
<th>Credit Hours</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHI 1001</td>
<td>Chinese Elements I</td>
</tr>
<tr>
<td>JPNS 1001</td>
<td>Japanese Elements I</td>
</tr>
<tr>
<td>KRN 1001</td>
<td>Korean Elements I</td>
</tr>
</tbody>
</table>

#### Select one of the following second level courses:

<table>
<thead>
<tr>
<th>Credit Hours</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHI 1002</td>
<td>Chinese Elements II</td>
</tr>
<tr>
<td>JPNS 1002</td>
<td>Japanese Elements II</td>
</tr>
<tr>
<td>KRN 1002</td>
<td>Korean Elements II</td>
</tr>
</tbody>
</table>

#### Select one of the following third level courses:

<table>
<thead>
<tr>
<th>Credit Hours</th>
<th>3-4</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHI 2001</td>
<td>Chinese Intermediate I</td>
</tr>
<tr>
<td>KRN 2001</td>
<td>Korean Intermediate I</td>
</tr>
<tr>
<td>JPNS 2001</td>
<td>Intermediate Japanese I</td>
</tr>
<tr>
<td>JPNS 2701</td>
<td>TUJ - Japanese Intermediate I</td>
</tr>
</tbody>
</table>

#### Select one of the following fourth level courses:

<table>
<thead>
<tr>
<th>Credit Hours</th>
<th>3-4</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHI 2002</td>
<td>Chinese Intermediate II</td>
</tr>
<tr>
<td>KRN 2002</td>
<td>Korean Intermediate II</td>
</tr>
<tr>
<td>JPNS 2002</td>
<td>Intermediate Japanese II</td>
</tr>
<tr>
<td>JPNS 2702</td>
<td>TUJ - Japanese Intermediate II</td>
</tr>
</tbody>
</table>

**Total Credit Hours**

| Credit Hours | 65-70 |

### Suggested Academic Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

#### Year 1

##### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 0802 or 0812</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following first-level Foreign Language courses:</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>JPNS 1001</td>
<td>Japanese Elements I [LC]</td>
<td></td>
</tr>
<tr>
<td>CHI 1001</td>
<td>Chinese Elements I</td>
<td></td>
</tr>
<tr>
<td>KRN 1001</td>
<td>Korean Elements I</td>
<td></td>
</tr>
</tbody>
</table>

**Term Credit Hours**

| Credit Hours | 15 |

##### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IH 0851</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>POLS 1201</td>
<td>Foreign Governments and Politics</td>
<td>3</td>
</tr>
<tr>
<td>POLS 1301</td>
<td>International Politics</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following second-level Foreign Language courses:</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>JPNS 1002</td>
<td>Japanese Elements II [LC]</td>
<td></td>
</tr>
<tr>
<td>CHI 1002</td>
<td>Chinese Elements II [LC]</td>
<td></td>
</tr>
<tr>
<td>KRN 1002</td>
<td>Korean Elements II</td>
<td></td>
</tr>
</tbody>
</table>

**Term Credit Hours**

| Credit Hours | 16 |

#### Year 2

##### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IH 0852</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>Course</td>
<td>Title</td>
<td>Credit Hours</td>
</tr>
<tr>
<td>--------</td>
<td>-------</td>
<td>--------------</td>
</tr>
<tr>
<td>HIST 1702</td>
<td>World History Modern</td>
<td>3</td>
</tr>
<tr>
<td>GUS 1031</td>
<td>Geography of World Affairs</td>
<td>3</td>
</tr>
<tr>
<td>JPNS 2001</td>
<td>Intermediate Japanese I [LC]</td>
<td>3</td>
</tr>
<tr>
<td>JPNS 2701</td>
<td>TUJ - Japanese Intermediate I</td>
<td>3</td>
</tr>
<tr>
<td>CHI 2001</td>
<td>Chinese Intermediate I [LC]</td>
<td>3</td>
</tr>
<tr>
<td>KRN 2001</td>
<td>Korean Intermediate I [LC]</td>
<td>3</td>
</tr>
<tr>
<td>JPNS 2002</td>
<td>Intermediate Japanese II</td>
<td>3</td>
</tr>
<tr>
<td>JPNS 2702</td>
<td>TUJ - Japanese Intermediate II</td>
<td>3</td>
</tr>
<tr>
<td>CHI 2002</td>
<td>Chinese Intermediate II</td>
<td>3</td>
</tr>
<tr>
<td>KRN 2002</td>
<td>Korean Intermediate II</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1101</td>
<td>Macroeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>JPNS 2001</td>
<td>Intermediate Japanese I [LC]</td>
<td>3</td>
</tr>
<tr>
<td>JPNS 2701</td>
<td>TUJ - Japanese Intermediate I</td>
<td>3</td>
</tr>
<tr>
<td>CHI 2001</td>
<td>Chinese Intermediate I [LC]</td>
<td>3</td>
</tr>
<tr>
<td>KRN 2001</td>
<td>Korean Intermediate I [LC]</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1101</td>
<td>Macroeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>Political Science 2000+ (Political Science Requirement 1)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Political Science 2000+ (Political Science Requirement 2)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>HIST 2804</td>
<td>Peace, Conflict, and Social Change</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3228</td>
<td>America's Rise to Globalism</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3229</td>
<td>Superpower America</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3811</td>
<td>World Economy Since 1945</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1101</td>
<td>Macroeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>Political Science 2000+ (Political Science Requirement 1)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Political Science 2000+ (Political Science Requirement 2)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>HIST 2804</td>
<td>Peace, Conflict, and Social Change</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3228</td>
<td>America's Rise to Globalism</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3229</td>
<td>Superpower America</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3811</td>
<td>World Economy Since 1945</td>
<td>3</td>
</tr>
<tr>
<td>CLA 2000+ (Interdisciplinary Elective 1)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CLA 3000+ (International Affairs Major Internship)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CLA 2000+ (Non-USA / Non-East Asia Requirement 1)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CLA/CST 0800-4999 (2000+ in a related discipline recommended)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CLA 2000+ (East Asia Area Requirement 2)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CLA 2000+ (East Asia Area Requirement 3)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CLA 2000+ Interdisciplinary Elective 2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CLA 2000+ (Non-USA/Non-East Asia Requirement 2)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CLA/CST 0800-4999 (2000+ in a related discipline recommended)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Political Science 4x96, 4x97, or 4x98 (4000+ Writing Intensive) [WI]</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Asian Studies 4x96, 4x97, or 4x98 (4000+ Writing Intensive) [WI]</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CLA/CST 0800-4999</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>
Bachelor of Arts in Japanese

(College of Liberal Arts)

The Japanese major program at Temple University, Japan Campus is a unique undergraduate degree program designed to offer a comprehensive four-year Japanese language curriculum in a JSL (Japanese as a Second Language) setting. It aims to achieve advanced and well-balanced proficiency in Japanese so that students will be well-equipped with linguistic skills and fully prepared to examine socio-cultural aspects of Japan and Japanese literature.

The Bachelor of Arts in Japanese will be conferred upon the student after the completion of 123 credits across the following requirements categories:

1. University requirements
   - All Temple students must take a minimum of two writing-intensive courses as part of the major.
   - Students must complete the General Education (p. 143) curriculum (36 s.h.).

2. General electives vary according to a student's individual program of study. Consult your academic advisor for more information.

3. Major requirements (minimum 43 credits)
   Language Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>JPNS 2702</td>
<td>TUJ - Japanese Intermediate II</td>
<td>4</td>
</tr>
<tr>
<td>JPNS 3001</td>
<td>Advanced Japanese I</td>
<td>3</td>
</tr>
<tr>
<td>JPNS 3002</td>
<td>Advanced Japanese II</td>
<td>3</td>
</tr>
<tr>
<td>JPNS 4001</td>
<td>Japanese Advanced III</td>
<td>3</td>
</tr>
<tr>
<td>JPNS 4002</td>
<td>Japanese Advanced IV</td>
<td>3</td>
</tr>
</tbody>
</table>

Language Skills - Select four of the following: 12

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>JPNS 2003</td>
<td>Oral Intensive Japanese II</td>
</tr>
<tr>
<td>JPNS 2301</td>
<td>Kanji II</td>
</tr>
<tr>
<td>JPNS 2631</td>
<td>Structure of Japanese Language I</td>
</tr>
<tr>
<td>JPNS 3000</td>
<td>Special Topics in Japanese I</td>
</tr>
<tr>
<td>JPNS 3003</td>
<td>Advanced Japanese Writing</td>
</tr>
<tr>
<td>JPNS 3010</td>
<td>Special Topics in Japanese II</td>
</tr>
<tr>
<td>JPNS 3096</td>
<td>Intermediate Writing in Japanese</td>
</tr>
<tr>
<td>JPNS 3631</td>
<td>Structure of Japanese Language II</td>
</tr>
<tr>
<td>JPNS 4003</td>
<td>Advanced Oral Japanese</td>
</tr>
</tbody>
</table>

Area Studies Electives and Writing Intensive 12

In consultation with the Major Coordinator, select 4 content courses in other related disciplines that focus exclusively on Japan, one of them being a writing-intensive (WI) course taught in English.

Capstone - Select one of the following: 3

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>JPNS 4196</td>
<td>Seminar in Japanese and Japan: Japanese Society and Culture through Newspaper</td>
</tr>
<tr>
<td>JPNS 4296</td>
<td>Seminar in Japanese and Japan: Business</td>
</tr>
<tr>
<td>JPNS 4396</td>
<td>Seminar in Japanese and Japan: Literature</td>
</tr>
</tbody>
</table>

Total Credit Hours 43
## Suggested Academic Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

### Year 1

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>JPNS 1001</td>
<td>Japanese Elements I [LC]</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>ENG 0802 or 0812</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Spring</td>
<td>JPNS 1002</td>
<td>Japanese Elements II [LC]</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>JPNS 1301</td>
<td>Kanji I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>IH 0851</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td>16</td>
<td></td>
</tr>
</tbody>
</table>

### Year 2

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>JPNS 2701</td>
<td>TUJ - Japanese Intermediate I</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>JPNS 2301</td>
<td>Kanji II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>IH 0852</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>Spring</td>
<td>JPNS 2702</td>
<td>TUJ - Japanese Intermediate II</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>JPNS 1003</td>
<td>Oral Intensive Japanese I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CLA 2000+ Area Studies Elective 1 (Social Science)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3-4</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td>16</td>
<td></td>
</tr>
</tbody>
</table>

### Year 3

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>JPNS 3001</td>
<td>Advanced Japanese I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>JPNS 2003</td>
<td>Oral Intensive Japanese II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CLA 2000+ Area Studies Elective 2 (Writing Intensive taught in English)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>One CLA 2000+ Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>One CLA 0800-4999 Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Spring</td>
<td>JPNS 3002</td>
<td>Advanced Japanese II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>JPNS 2631</td>
<td>Structure of Japanese Language I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CLA 2000+ Area Studies Elective 3 (Social Science)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>One CLA 0800-4999 Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>One CLA 0800-4999 Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

### Year 4

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>JPNS 4001</td>
<td>Japanese Advanced III</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>JPNS 4003</td>
<td>Advanced Oral Japanese</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CLA 2000+ Area Studies Elective 4 (Social Science)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>
Bachelor of Arts in Psychological Studies

(College of Liberal Arts)

The Bachelor of Arts in Psychological Studies, which is offered only on the Temple University, Japan Campus (TUJ), is awarded by the College of Liberal Arts.

The Psychological Studies major is designed to promote a broad understanding of human behavior and the affective and cognitive processes that underlie it from the perspective of psychology as a science and a profession. In addition to introductory courses, the study of statistics and research methodology will prepare students to deal with the wealth of research-based knowledge they will encounter as they develop a strong foundation in basic and applied areas of psychology. The research or internship option rounds out the Psychological Studies majors’ experiences as they complete advanced electives. Unique to TUJ’s Psychological Studies major is its focus on cross-cultural issues, with special emphasis on Asia and the U.S.

Summary of Requirements for the Degree

1. University and College of Liberal Arts (CLA) Requirements
   - All Temple students must take a minimum of two writing-intensive courses as part of the major. The writing-intensive courses required for this major are PSY 3096 and a Psychology course at the 4000 level.
   - Students must complete the General Education (p. 143) curriculum.
   - Students must follow CLA requirements as specified in the CLA College Requirements (p. 755) section of the Undergraduate Bulletin.

2. Major Requirements

   Introductory Courses
   - PSY 1001 Introduction to Psychology 3
   - PSY 1002 Careers in Psychology 1
   - PSY 1003 Statistics for Psychology 3
   - PSY 1004 Critical Thinking in Psychology 3

   Psychological Studies Science Requirement
   - Select one of the following: 3-4
     - BIOL 1001 Human Biology
     - BIOL 1011 General Biology I
     - CHEM 1031 General Chemistry I
     - PHYS 1021 Introduction to General Physics I

   Developmental/Clinical/Social Foundation Courses (Group 1)
   - Select one of the following: 3
     - PSY 2201 Foundations of Psychopathology
     - PSY 2301 Foundations of Developmental Psychology
     - PSY 2401 Foundations of Social Psychology
     - PSY 2402 Foundations of Industrial and Organizational Psychology

   Brain and Cognitive Sciences Foundation Courses (Group 2)
   - Select one of the following: 3
     - Select one of the following:

   Total Credit Hours: 123
PSY 2101  Foundations of Cognitive Psychology  
PSY 2103  Foundations of Learning and Behavior Analysis  
PSY 2104  Foundations of Sensation and Perception  
PSY 2501  Foundations of Behavioral Neuroscience  
PSY 2502  Foundations of Cognitive Neuroscience  

**Psychology Foundation Elective Course**  
Select an additional course from Group 1 or Group 2  

**Required Methods Course**  
PSY 3096  Conducting Psychological Research  

**Internship / Integrated Research / Clinical Practicum**  
Must complete at least one internship, integrated research or clinical practicum for at least 3 credits, with approval by the Major Coordinator.  

**Advanced Courses**  
In consultation with the Academic Advisor and/or Major Coordinator, select 2 psychology courses at the 3000 level or higher, one of which must focus on gender/culture.  

**Senior Writing Seminar**  
PSY 4000+ Writing Intensive Course  

**Total Credit Hours**  
37-38

---

**Suggested Academic Plan**

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

**Year 1**  
**Fall**  
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 0802 or 0812</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Foreign Language 1001 (first level)</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

| **Term Credit Hours** | 15 |

<table>
<thead>
<tr>
<th>Spring</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>IH 0851</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>Foreign Language 1002 (second level)</td>
<td>4</td>
</tr>
<tr>
<td>PSY 1001</td>
<td>Introduction to Psychology</td>
</tr>
<tr>
<td>BIOL 1001</td>
<td>Human Biology</td>
</tr>
</tbody>
</table>

| **Term Credit Hours** | 17 |

**Year 2**  
**Fall**  
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IH 0852</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PSY 1002</td>
<td>Careers in Psychology</td>
<td>1</td>
</tr>
<tr>
<td>PSY 1003</td>
<td>Statistics for Psychology</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3-4</td>
<td></td>
</tr>
<tr>
<td>Foreign Language (third level)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GenEd Global/World Society Course</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internationally Focused Course from Approved List</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| **Term Credit Hours** | 16-17 |

**Spring**  
| GenEd Breadth Course | 3 |
| GenEd Breadth Course | 3 |
| GenEd Breadth Course | 3 |
| Psychology 2000-level Foundations #1 | 3 |
PSY 1004  Critical Thinking in Psychology 3

Year 3

Fall
One CLA/CST 2000+ Humanities/CST course 3
Psychology 2000-level Foundations #2 3
One CLA/CST 2000+ course 3
Psychology 2000-level Foundation #3 3
One Elective 0800-4999 in any School or College 3

Term Credit Hours 15

Spring
PSY 3096  Conducting Psychological Research [WI] 3
One CLA/CST 2000+ Humanities/CST course 3
One CLA/CST 2000+ course 3
One CLA/CST 2000+ course 3
One CLA/CST 2000+ course 3

Term Credit Hours 15

Year 4

Fall
One 3000-3620 Advanced Psychology #1 course (Gender or Culture) 3
One CLA/CST 2000+ course 3
One CLA/CST 0800-4999 Elective 3
One CLA/CST 0800-4999 Elective 3
Select one of the following:
PSY 3785  Psychology Internship 3
PSY 3791  Collaborative Research I 3

Term Credit Hours 15

Spring
Psychology 4x96, 4x97 or 4x98 (Capstone) [WI] 3
One 3000-3625 Advanced Psychology #2 course 3
One CLA/CST 0800-4999 course 3
One CLA/CST 0800-4999 course 3
One Elective 0800-4999 in any School or College 3

Term Credit Hours 15

Total Credit Hours: 123-124

Bachelor of Science in International Business Studies

(College of Liberal Arts)

Temple University, Japan Campus (TUJ), located in Tokyo, offers a Bachelor of Science in International Business Studies (IBS). TUJ offers a truly international experience - inside and outside the classroom, as well as among students and faculty. This program will prepare students for a challenging career anywhere in the world.

The IBS program challenges students to integrate international business with language studies, an understanding of world affairs and hands-on internship experience. Students develop the global mindset that multinational firms need in the 21st century.

IBS students work on teams with people of similar backgrounds and with those who are often quite different in how they approach life and their studies. TUJ encourages students not only to be multilingual, but also to understand how to navigate across cultures and borders. The IBS program teaches them to think critically, form a well-reasoned opinion, and then capably express that opinion. This is accomplished through class participation, visits to local businesses, and by bringing savvy international business people in the classroom. With those tools, TUJ graduates move confidently into the world of international business and launch productive, fulfilling and viable global careers.

The Bachelor of Science in International Business Studies will be conferred upon a student after the completion of 123 credits. The College of Liberal Arts awards this degree.
Summary of Requirements for the Degree

1. University and College of Liberal Arts (CLA) requirements
   - All Temple students must take a minimum of two writing-intensive courses as part of the major.
   - Students must complete the General Education (p. 143) curriculum.
   - Students must follow CLA requirements as specified in the CLA College Requirements (p. 755) section of the Undergraduate Bulletin.

2. Lower Division Business courses
   - HRM 1101 Leadership and Organizational Management 3
   - ACCT 2101 Financial Accounting 3
   - MKTG 2101 Marketing Management 3
   - ACCT 2102 Managerial Accounting 3
   - **Total Credit Hours**: 12

3. International Business Studies major requirements
   - Select two of the following: 6
     - JIBS 3101 Introduction to Global Finance
     - JIBS 3102 Global Operations and Supply Chain Management
     - JIBS 3501 Marketing in a Global Environment
   - Writing Intensive Requirements: 6
     - JIBS 4197 Global Business Overview
     - JIBS 4596 International Business Capstone
   - **Total Credit Hours**: 12

4. Other required general courses
   - MATH 1021 College Algebra 4
   - MATH 1031 Differential and Integral Calculus 4
   - MATH 2031 Probability and Statistics 3
   - ECON 1101 Macroeconomic Principles 3
   - ECON 1102 Microeconomic Principles 3
   - ECON 3563 International Trade 3
   - or ECON 3564 International Monetary Economics 3
   - ECON 3538 Managerial Economics 3
   - ECON 3581 Co-op Experience in Economics 3
   - ENG 2007 Writing for Business and Industry (former number ENG 2596) 3
   - ORGS 3000 3
   - POLS 2321 Politics of the Global Economy 3
   - Political Science 2000-Level Elective 3
   - ASST 2511 Introduction to Asian Business 3
   - CLA 2020 Special Topics in Liberal Arts II (Corporate Interdisciplinary Seminar) 2
   - **Total Credit Hours**: 43

5. Language Requirements
   - Foreign Language 1001 (first level) 4
   - Foreign Language 1002 (second level) 4
   - Foreign Language 2000+ (third level) 3-4
   - Foreign Language 2000+ (fourth level) 3-4
   - **Total Credit Hours**: 14-16

6. College of Liberal Arts (CLA) or College of Science and Technology (CST)
   - Select three of any CLA/CST courses at 2000+ level or higher 9
   - **Total Credit Hours**: 9
# Suggested Academic Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

## Year 1

<table>
<thead>
<tr>
<th>Term</th>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>ENG 0802 or 0812</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>MATH 1021</td>
<td>College Algebra</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Foreign Language 1001 (first level)</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td>Spring</td>
<td>IH 0851</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Foreign Language 1002 (second level)</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ECON 1101</td>
<td>Macroeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MATH 1031</td>
<td>Differential and Integral Calculus</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

## Year 2

<table>
<thead>
<tr>
<th>Term</th>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>Foreign Language 2000+ (third level)</td>
<td></td>
<td>3-4</td>
</tr>
<tr>
<td></td>
<td>IH 0852</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MATH 2031</td>
<td>Probability and Statistics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td>Spring</td>
<td>GenEd Breadth Course</td>
<td></td>
<td>3-4</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ACCT 2101</td>
<td>Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Foreign Language 2000+ (fourth level)</td>
<td></td>
<td>3-4</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

## Year 3

<table>
<thead>
<tr>
<th>Term</th>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>ENG 2007</td>
<td>Writing for Business and Industry</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>HRM 1101</td>
<td>Leadership and Organizational Management</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MKTG 2101</td>
<td>Marketing Management</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ECON 1102</td>
<td>Microeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ACCT 2102</td>
<td>Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CLA 2020</td>
<td>Special Topics in Liberal Arts II (Corporate Interdisciplinary Seminar)</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>17</strong></td>
</tr>
<tr>
<td>Spring</td>
<td>ECON 3581</td>
<td>Co-op Experience in Economics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ORGS 3000</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>One Political Science course at 2000 level or higher</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Select two of the following:</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>JIBS 3101</td>
<td>Introduction to Global Finance</td>
<td></td>
</tr>
<tr>
<td></td>
<td>JIBS 3102</td>
<td>Global Operations and Supply Chain Management</td>
<td></td>
</tr>
<tr>
<td></td>
<td>JIBS 3501</td>
<td>Marketing in a Global Environment</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

## Year 4

<table>
<thead>
<tr>
<th>Term</th>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
One CLA/CST course at 2000 level or higher 3
JIBS 4596 International Business Capstone [WI] 3
ASST 2511 Introduction to Asian Business 3
POLS 2321 Politics of the Global Economy 3
Select one of the following: 3
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 3563</td>
<td>International Trade</td>
</tr>
<tr>
<td>ECON 3564</td>
<td>International Monetary Economics</td>
</tr>
</tbody>
</table>

| Term Credit Hours | 15 |

**Spring**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>JIBS 4197</td>
<td>Global Business Overview [WI]</td>
</tr>
<tr>
<td>ECON 3538</td>
<td>Managerial Economics</td>
</tr>
</tbody>
</table>
One CLA/CST course at 2000 level or higher 3
One CLA/CST course at 2000 level or higher 3

| Term Credit Hours | 12 |

**Total Credit Hours:** 123

---

1. This course satisfies the GenEd Quantitative Literacy requirement.

2. Through a consultation with an academic advisor or the major coordinator.
Schools, Colleges, and Divisions

Tyler School of Art (p. 180)
Center for the Performing and Cinematic Arts (p. 264)
  Boyer College of Music and Dance (p. 265)
  School of Theater, Film and Media Arts (p. 344)
College of Education (p. 393)
College of Engineering (p. 463)
Fox School of Business and Management (p. 553)
School of Environmental Design (p. 658)
College of Public Health (p. 689)
  School of Social Work (p. 740)
College of Liberal Arts (p. 749)
School of Media and Communication (p. 935)
College of Science and Technology (p. 1007)
School of Tourism and Hospitality Management (p. 1201)

The following are academic units within the university:
Division of University Studies (p. 1225)
University College (p. 1220)

How to find Academic Plans
To find academic plans for a specific program, go to the Academic Programs Chart (p. 2047) and select the hyperlinked degree next to the program name.

An alternate route to academic plans is to select one of the schools, colleges or divisions listed above. Then select the department or program listed under the school, college or division's name in the right navigation panel.
Tyler School of Art

Founded 1935

Hester Stinnett, Interim Dean
2001 North 13th Street
Philadelphia, PA 19122
215-777-9000
tyler.temple.edu

History

Stella Elkins Tyler donated her estate to Temple University in the early 1930s. With an interest in progressive education and a deep appreciation of her mentor, the sculptor Boris Blai, Mrs. Tyler offered her estate with the expressed wish that, through Boris Blai, it would become an environment for the advancement of the fine arts, scholarly study in the arts, and individual creativity.

As founding Dean of Tyler School of Art, Blai instilled within the School a commitment to progressive education, emphasizing the student's mastery of technique within the framework of a liberal arts curriculum. Dean Blai insisted upon individual attention to each student's needs as the basis of successful teaching. During his 25-year tenure Dean Blai shaped the school into one of the finest visual arts centers in the country, and his founding ideals still remain paramount to Tyler's educational philosophy.

In 1960 Dean Charles Le Clair succeeded Boris Blai. During this period the Tyler Campus was improved with construction of a residence hall and two studio/classroom buildings. In 1966 Dean Le Clair founded the Tyler Study Abroad program in Rome, Italy. Tyler's Rome Campus thrives today as one of the most respected fine arts study abroad programs in Europe. The program has expanded to include a full range of liberal arts, architecture, business, and law courses, with an emphasis on topics relating to Rome, Italy, and the European Common Market.

Throughout the 1960s and 1970s, Tyler's curriculum continued to grow in response to new definitions of art-making and the role of art in society. New programs and modern facilities in design, ceramics, glass, metals, and photography were added. During this time, Tyler developed the Art and Art Education department (changed in 2013 to Art Education and Community Arts Practices) and the Art History department on Temple's Main Campus. Today, the curriculum at Tyler continues to address contemporary needs by incorporating digital technology, video, installation, performance, community arts, and the newest degree program, the B.A. in Visual Studies, inaugurated in fall 2011.

Introduction

Goals and Objectives

The Tyler School of Art provides a comprehensive curriculum in fine arts, crafts, design, art education, art history, and architecture. The Bachelor of Fine Arts (B.F.A.) professional programs are offered in:

- Ceramics/Glass
- Fibers and Material Studies
- Graphic and Interactive Design
- Metals/Jewelry/CAD-CAM
- Painting/Drawing
- Photography
- Printmaking
- Sculpture
- B.F.A. Studio with an Art Education Concentration.

The Tyler School of Art also offers:

- B.A. in Art (Japan campus only)
- B.A. in Art History
- B.A. in Visual Studies
- B.S.Ed. in Art Education
- B.S. in Architecture
- B.S. in Facilities Management
- B.S. in Architectural Preservation

Summer classes, pre-college programs and weekend workshops are available. For information on graduate programs, please go to the Tyler web site at tyler.temple.edu or to the Graduate Bulletin (http://bulletin.temple.edu/graduate).
In January 2009, we opened our doors to the new Tyler facility on main campus. Award-winning architect Carlos Jimenez, designer of some of the country's premier art education facilities and exhibition spaces, designed Temple's new Tyler School of Art building. The new Tyler building is located adjacent to the Esther Boyer College of Music and Dance, the new Tyler Architecture Building (opened 2012) and the departments of Film and Media Arts and Theater to form a "mini arts campus" within Temple's main campus. In June 2012, the Temple University Board of Trustees voted to create the Temple University Center for the Arts, uniting the Boyer College of Music and Dance, Tyler School of Art, and the Division of Theater, Film and Media Arts under one administrative umbrella. In October 2015, the Board of Trustees voted to move the Tyler School of Art out of the Center for the Arts, thus allowing the school to become independent. The Board also voted to rename the Center for the Arts to the Center for the Performing and Cinematic Arts. For more information on the Arts at Temple, visit Center for the Performing and Cinematic Arts (http://arts.temple.edu).

Easy access to the wealth of academic courses in Temple's other schools and colleges, athletics, residence halls, student parking, student organizations, and the active campus life of Temple University adds cosmopolitan breadth to Tyler's studio and academic programs.

From its modest enrollment of 12 students in the first freshman class in 1935, Tyler now boasts a student body of over 1,400. Today, Tyler is a dynamic organization, serving students at Temple's Main Campus and the Temple University Rome and Tokyo campuses. For over 80 years, the foundation of Tyler's program has been a faculty of practicing artists and scholars teaching highly-talented and motivated students.

Accreditation
Tyler School of Art, Temple University is an accredited member of the National Association of Schools of Art and Design (NASAD) and the Middle States Association of Colleges and Schools.

The Architecture Program is accredited by the National Architectural Accrediting Board (NAAB), the sole agency authorized to accredit U.S. professional degree programs in architecture. The Facilities Management program is in the process of applying for accreditation by IFMA, the International Facility Management Association.

According to the NAAB, "In the United States, most state registration boards require a degree from an accredited professional degree program as a prerequisite for licensure. The National Architectural Accrediting Board (NAAB), which is the sole agency authorized to accredit U.S. professional degree programs in architecture, recognizes three types of degrees: the Bachelor of Architecture, the Master of Architecture, and the Doctor of Architecture. A program may be granted a 6-year, 3-year, or 2-year term of accreditation, depending on the extent of its conformance with established educational standards. Master's degree programs may consist of a preprofessional undergraduate degree and a professional graduate degree that, when earned sequentially, constitute an accredited professional education. However, the preprofessional degree is not, by itself, recognized as an accredited degree."

Admissions Information
Tyler Admissions Office
Suite 100
2001 N. 13th Street
Philadelphia, PA 19122
215-777-9090
tyler.temple.edu/admission-process
tylerart@temple.edu

Nicole Hall, Director
Lindsey Stevenson, Assistant Director
Grace Ahn, Senior Admissions Counselor
Danny Witkus, Admissions Counselor
Katie Ames, Administrative Assistant

General Information for Freshman and Transfer Applicants to All Programs (BA, BS, BFA, BSED)
Applicants to any Tyler program must meet the deadlines established by the Undergraduate Admissions Office. Please refer to Admission Process (http://tyler.temple.edu/admission-process) for updated undergraduate deadline information as well as information regarding the academic requirements for admission. After the priority deadline dates listed by Temple Undergraduate Admissions, applications are accepted on a rolling admissions basis.

General Information for Intra-University Transfer Students
Temple students who wish to transfer into a Tyler program or Tyler students who wish to transfer into a different Tyler program should contact the Tyler Admissions Office for policies and procedures.

Art, Art Education and Visual Studies
Bachelor of Arts in Visual Studies and Bachelor of Science Programs
Entering undergraduates are admitted to the Tyler programs by the Director of Admissions of Temple University based on a review of the applicant's academic credentials and the results of the portfolio review. This procedure requires the applicant to file all records and test scores in the Office of
Undergraduate Admissions of Temple University and to submit a portfolio. There is a specific format for the portfolio required; please review the information at the Tyler web site: tyler.temple.edu. Appointments for freshman portfolio reviews can be made by calling 215-777-9090.

Transfer Students to the B.A. in Visual Studies and the B.S.E.D. in Art Education Programs

Transfer applicants or freshmen with Advanced Placement or College-Level Studio Courses
All transferred applicants must complete the Temple online application and send their transcripts, etc., to the Temple University Undergraduate Admissions Office. All students are required to submit a portfolio of work for admission and evaluation.

Bachelor of Arts in Art

The B.A. in Art program on the Main campus of Temple University is no longer admitting new students. Those interested in a B.A. in Art may investigate the B.A. in Art offered through the Temple University-Japan campus or consider the B.A. in Visual Studies offered through Tyler on the Main campus of Temple University. Students who were previously enrolled in the B.A. in Art who wish to re-matriculate should review the re-enrollment policy listed on the Policies tab.

Transfer Portfolio Format

The portfolio should be uploaded to temple.slideroom.com (https://temple.slideroom.com). SlideRoom charges a fee for this service. Transfers are reviewed by a committee, so they are not eligible for in-person reviews. You are required to submit images that represent each studio art course completed. Descriptions of each image should be included, indicating size, medium, title, the course in which the work was completed, and date completed. Applicants to the B.A. in Visual Studies and the B.S.E.D. in Art Education are required to submit the writing exercise as outlined in the portfolio requirements for these programs. Most transfer applicants should include the drawing exercise as well unless they have completed a college drawing course. For more information, refer to the Tyler web site: tyler.temple.edu/admission-process.

Please note that the Department of Art Education and Community Arts Practices will only accept up to 24 credits of studio toward either the B.A. in Art or the B.S.E.D. in Art Education degree.

Tyler accepts transfer students from institutions of higher education, depending on accreditation. The transfer student will be required to complete a minimum of 30 studio credits as a student at the Tyler School of Art. In order to be considered for transfer credit to the B.A. or B.S. degree, studio credits must have been completed within the last 10 years, regardless of where those credits were completed.

B.S. in Architecture, B.S. in Architectural Preservation, B.S. in Facilities Management

The three Architecture department programs all begin with the same two-year Architecture Foundations curriculum, also called the Architecture Undeclared curriculum. All freshman applicants to any of the three programs must complete the Temple online application and select "Architecture Undeclared" as their program of study. Admission will be granted to those students with strong academic credentials. Admission to the university does not guarantee admission to the one of the three degrees offered by the Architecture department. Students who clearly meet the academic requirements for admission are not required to submit a portfolio. Students who are accepted into another program at Temple who do not meet the academic requirements for admissions may present a portfolio. For specific portfolio format guidelines, please go to tyler.temple.edu/admission-process.

All students are initially admitted into the Architecture Foundation Program (Architecture Undeclared) and, if desired, apply for admission to the pre-professional Bachelor of Science in Architecture (Pre-Professional Program), or the B.S. in Facilities Management or the B.S. in Architectural Preservation during the fourth studio semester. Requirements for entrance into these programs are outlined on the Architecture web site at tyler.temple.edu/programs/architecture.

The professional degree in architecture offered by Tyler is the Master of Architecture (M.Arch) degree. Students completing the pre-professional B.S. in Architecture may apply to the 4+1 BS in Arch + M.Arch professional track program during their junior year or two-year M.Arch Professional Program in their senior year. Students from other Bachelor’s programs can apply to the three-year Design Intensive Program.

All students admitted to the Architecture Department are guaranteed to graduate from one of the three undergraduate degree programs (the B.S. in Architecture, the B.S. in Facilities Management, or the B.S. in Architectural Preservation) as long as the academic requirements of the University are met, but admission into the B.S. in Architecture is limited and competitive.

Students who are not accepted into the B.S. in Architecture may select either the B.S. in Facilities Management or the B.S. in Architectural Preservation as long as they are in good academic standing and have completed the required coursework.

For additional information, please go to tyler.temple.edu/programs/architecture.

Transfer students seeking advanced placement in architecture design studio will be evaluated by portfolio and the review of the transcripts. Admitted students not presenting a portfolio of work will automatically be placed in first-year design studio, regardless of previous credits. Portfolios must be uploaded to temple.slideroom.com (https://temple.slideroom.com). SlideRoom charges a fee for this service.

Architecture Portfolio Format

Admission to the architecture program is selective, and based on a review of the academic credentials. A portfolio is not required for admission. If the student is not selected for architecture but meets the general requirements for admission to Temple University and wishes to be considered for admission to architecture, he/she must submit a portfolio of artistic or creative work, as per requirements, procedures and assessment criteria specified
by the Architecture Department. Portfolios must be uploaded at temple.slideroom.com (https://temple.slideroom.com). SlideRoom requires an additional fee for this service.

For complete portfolio format information for freshman and transfer applicants please go to tyler.temple.edu/admission-process.

**Intra-University Transfer Admission**

Temple University students who apply as Intra-university transfer students are reviewed for admission to Architecture Foundation Studies based on GPA and availability of space in the program. Admission is selective. Typically, students with a 3.0 or higher GPA are considered. While a portfolio is not required, students may wish to submit a portfolio or work to enhance their application. Transfer students with previous college credits in architecture should submit a portfolio of work that represents studio coursework taken for consideration for advanced standing. Portfolios are to be uploaded at temple.slideroom.com (https://temple.slideroom.com). Follow the instructions on the SlideRoom web site to do this. SlideRoom requires an additional fee for this service. All intra-university transfer students (regardless of the number of credit hours completed) must complete all architecture courses from Architecture Foundation Studies (or submit evidence of having completed equivalent courses elsewhere) before continuing into the 3rd and 4th year of the B.S. in Architecture, the B.S. in Facilities Management or the B.S. in Architectural Preservation.

**Other Transfer Admission**

All transfer students must submit the online Temple University application at admissions.temple.edu. Admission will be based on GPA and prior education. A portfolio is not required for consideration for admission, but may be submitted to enhance the application. Transfer students with previous credits in architecture from other institutions may be considered for admission to Tyler's Architecture program with advanced standing. Students who already hold a Bachelor's degree and certain other upper-level transfer students may be eligible for consideration for participation in various options for acceleration. Placement into the program is based upon prior architectural education and a review of a portfolio representing studio coursework completed, not merely the number of credits earned at another institution. In order to be considered for transfer credit to the B.S. in Architecture degree, studio credits must have been completed within the last 10 years. Students who do not submit a portfolio but are academically admissible will be accepted into first year studio only.

Portfolios are to be uploaded at temple.slideroom.com (https://temple.slideroom.com). SlideRoom requires an additional fee for this service.

**Bachelor of Fine Arts**

Entering undergraduates are admitted to Tyler by the Director of Undergraduate Admissions of Temple University after consultation with Tyler's Director of Admissions following the review of the student's academic record and art portfolio. This procedure requires the applicant to file all records and test scores in the Office of Undergraduate Admissions of Temple University. See Undergraduate Admissions (http://admissions.temple.edu) for more information.

Please refer to the university deadlines on the Undergraduate Application (http://admissions.temple.edu) or go to the Temple web site (http://www.temple.edu) for deadline information. After the priority deadline dates, applications are accepted on a rolling admissions basis.

Undergraduate applicants for the B.F.A. program apply for matriculation for either the Fall or Spring semester.

**Portfolio Review**

**Freshman Applicants**

In addition to satisfying academic requirements, all B.F.A. freshman applicants are required to present a portfolio of fifteen to twenty pieces of original artwork for evaluation. Regularly-scheduled portfolio reviews are held on campus. Applicants living at a considerable distance from Tyler may elect to upload a portfolio at temple.slideroom.com (https://temple.slideroom.com). SlideRoom charges a fee for this service. Those who live in or near the Philadelphia area are expected to present a portfolio of original work during a portfolio review day. This is an occasion when applicants and their families may see the campus and discuss Tyler's educational program with faculty, staff, and students. Tyler also participates in a number of National Portfolio Day (NPDA) events where students can meet with staff or faculty for a portfolio critique. For a complete list of NPDA events in which Tyler will participate, please contact the Tyler Admissions Office. While the application to Tyler is being processed by Temple University, an interview by a member of the Tyler faculty or by the Admissions Staff must be arranged. All work included in the portfolio should have been completed during the previous year and should represent as broad a selection as possible: drawings from life, work in both color and black and white media, design examples, photography, prints, crafts, or sculpture. Portfolios must include five strong examples of drawing from observation regardless of the major the applicant wishes to pursue. We discourage work that is copied directly from photographs or magazines. Original work, CDs, DVDs, binders, etc., must not be sent through the mail. These are unacceptable and will not be reviewed or returned.

The freshman applicant is advised to submit work done independently as well as under instruction.

In order for the application to be completed, an 8 ½” x 11” self-portrait, in pencil from a mirror reflection, must be sent to Tyler. The application is not considered complete without the self-portrait; it becomes a permanent part of the application and is not returned. This self-portrait should not be framed or matted. Please refer to the Tyler admissions web site for more information. Tyler also requires a statement of purpose that is separate from the undergraduate application essay as well as a completed B.F.A. information form. For more information on the statement and the self-portrait, contact the Tyler Admissions Office.

To make a portfolio review appointment, please call the Tyler Admissions Office 215-777-9090.
Transfer Students to the BFA program

To enroll with advanced standing, applicants must fulfill the admission requirements of Temple University as well as the special requirements of the Tyler School of Art. Applicants should demonstrate a level of art performance appropriate to the year for which they are applying. Usually this requires completion of a proportion of studio and academic courses comparable to that taken by Tyler students, as well as a comparable portfolio of at least twenty (20) images of work uploaded to temple.slideroom.com (https://temple.slideroom.com). SlideRoom charges a fee for this service. The images must represent all studio coursework taken, as well as work towards a specific major. The portfolio must also include five (5) strong examples of drawing from observation, regardless of the major the applicant wishes to pursue. Drawings should be complete, sustained works, not sketches. Please note: Students interested in the Graphic and Interactive Design major may be required to submit additional work if requested by the transfer committee.

A transfer committee comprised of Tyler faculty and the Admissions staff will review the portfolios and academic records of each application to determine the best placement level possible. We encourage all transfer applicants to schedule a campus tour.

Tyler accepts transfer students from accredited institutions of higher education. The transfer student will be required to complete a minimum of 30 studio credits as a full-time student at the Tyler School of Art. In order to be considered for transfer credit to the B.F.A. degree, studio credits must have been completed within the last 10 years.

If the transfer student has not completed the equivalent of Tyler’s Foundation Program, he or she must take the deficient courses, beginning with the first semester enrolled at Tyler.

Transfer students are admitted at a specific studio level (second semester sophomore, first semester junior, etc.), which is determined by transferable courses, academic performance, and the portfolio evaluation by Tyler faculty. Students who choose to enroll do so with the understanding that they are accepting the studio placement as determined by the transfer committee.

Readmission Policy (Re-Enrollment)

See Tyler’s Academic Policies and Regulations section.

Financial Aid & Scholarships

Student Financial Services
Conwell Hall, Ground Floor
1801 N. Broad Street
215-204-2244

Financial Aid

Please see the Student Financial Aid (p. 137) section of the Bulletin. Detailed information can also be found on the Student Financial Services (http://sfs.temple.edu) web site. Applications for financial aid (Free Application for Federal Student Aid) are available through the Student Financial Services office, 215-204-2244.

Scholarships

Tyler offers merit-based and merit/financial need-based scholarships dependent upon available funding. Generally, between 16 and 20 portfolio scholarships, ranging from $1000 to full tuition, are awarded to undergraduate students entering in the fall semester. Some of these scholarships may continue dependent upon available funds, cumulative grade point average, and/or demonstrated financial need. All scholarships and guidelines for consideration are posted on the Tyler web site at tyler.temple.edu/scholarships-grants.

Students who wish to compete for portfolio scholarships must follow the deadlines and application procedures indicated on the scholarship list form.

In addition to portfolio-based scholarships, a number of scholarships for entering students based on academic achievement are awarded through Temple University to Tyler School of Art. For more information about these awards, please contact the Temple University Office of Undergraduate Admissions or go to sfs.temple.edu.

Matriculated students also have the opportunity to compete for Tyler-specific scholarships. Information about merit scholarships for continuing students is posted annually on the Tyler Student Life web site: tyler.temple.edu/scholarships-grants.

Study Away Programs

Education Abroad & Overseas Campuses
200 Tuttleman Learning Center
1809 N. 13th Street
215-204-0720
http://studyabroad.temple.edu/
Study Abroad

Many Tyler students take advantage of the opportunity to study abroad. To determine the best time to go and to make sure that studying away from Main campus will not impede time to graduation, students need to meet with an academic advisor, and are strongly advised to do so prior to their sophomore year. B.F.A. students who plan to study abroad or away should ensure that all sophomore pre-requisites for their major are met in the fall semester of their sophomore year.

Rome

Housed in the Villa Caproni, facing the Tiber River just north of the Piazza del Popolo, the school offers courses in painting, drawing, photography, printmaking, sculpture, architecture, and art history. Facilities include a library, an art gallery, private work areas, a computer lab and full equipment in studio disciplines. Art history is taught through direct observation of original works and historic sites. The student also may elect to take courses in the liberal arts including Italian and limited GenEd options. For more information about Study Abroad options, see Education Abroad (p. 49). Depending on their major, students may elect to enroll in a summer program, spend a semester, or full academic year in Rome.

Japan

Students in the Architecture Department programs can apply to study at Temple University Japan for a semester of study abroad. The spring semester offerings include an urbanism elective course for all students and a design studio for B.S. Architecture students. Students in the B.S. Facilities Management program can take business and other course requirements in Japan.

Temple Japan offers a B.A. in Art degree (digital media concentration) exclusively taught in Tokyo. BA in Visual Studies, BSED in Art Education, or BFA students seeking to study in Japan should consult their Tyler academic advisor to select appropriate coursework.

Special Programs in the US

Special summer residency and program opportunities in the US are advertised in the weekly Tyler e-newsletter, the "WHAT", as well as posted in the studio areas in the Tyler building. Some programs are supported with full or partial scholarships from Tyler.

Career Center

Temple University Career Center
220 Mitten Hall, 1913 N. Broad Street
215-204-7981

The Career Center provides students and alumni with up-to-date material on career planning, résumé preparation, interviewing skills, and job search techniques. Students are encouraged to schedule appointments for career conversation and advisement. For more information, see the Career Center (p. 69) section of the Bulletin, or go to their web site at www.temple.edu/provost/careercenter/ or telephone the office at 215-204-7981.

The Tyler Student Life Blog posts networking and career events and advertises career events and employment and internship opportunities through the weekly e-newsletter, the WHAT (Week Here At Tyler). Review the WHAT archives on the Tyler web site: tyler.temple.edu.

Honor Societies/Awards

Annual cash, book, and gift certificate awards are given to graduating students who have excelled in art, demonstrated outstanding scholastic achievement, or distinguished themselves in a particular department. Among these awards are:

- Alec Abels Memorial Award in Painting
- Billikopf Awards
- Rudolf Staffel Award in Ceramics
- Boris Blai Memorial Award in Sculpture
- Jane D. Bonelli Art Education Award
- Kristin Huggins Memorial Award
- Jack Malis Glass Award
- Allen Koss Memorial Awards
- Ann and Jack Moskovitz Art Education Award
- Raphael Sabatini Memorial Award in Printmaking
- Carmela Corso Scholarship Prize
- Edith Weil Hecht Memorial Awards in Painting and Sculpture
- Lester and Violet Hecht Award in Printmaking
- Robert and Richard Hecht Awards
- Bertha Lowenburg Prize
- Nathan Margolis Award in Ceramics
Student Life

Kari Scott, Assistant Director, Tyler Student Life
Tyler Building 110F (in the Temple Contemporary Suite)
miss.kari@temple.edu
215-777-9141

Student Life information can be found at our Tyler Student Life (http://tyler.temple.edu/student-life) web site.

Student Life Office

The Assistant Director for Student Life acts as an ombudsperson for students and facilitates a number of events and activities at Tyler. These include career networking events, graduation and convocation, student organizations and student government, and extracurricular activities. The Assistant Director for Student Life mentors the Tyler Living Learning Community and serves as an advisor to the Dean's Student Advisory Committee. The Assistant Director for Student Life acts also facilitates the annual BFA lottery for exhibition slots in the Stella Elkins Tyler Galleries and lower atrium lounge as well as coordinates exhibitions and installations in the public spaces in and around Tyler. Student Life sends out a weekly e-newsletter, The Week Here At Tyler (The WHAT), to all Tyler students with events, artist talks, exhibitions, and other fun things to do at Tyler, at Temple and in Philadelphia. This includes scholarships, internships, jobs, gigs, and artist calls.

Student Health

Temple University's Student Health Services (http://www.temple.edu/studenthealth/About_SHS.html) provides the eligible student community with affordable, accessible and high quality primary health care. They are located on the fourth floor of the 1800 Liacouras Walk building on Main campus.

Tuttleman Counseling Services (http://www.temple.edu/studentaffairs/counseling) offers students support for emotional, educational or vocational concerns. Assistance is confidential and free of charge.

The Wellness Resource Center (HEART (http://www.temple.edu/studentaffairs/heart)) provides comprehensive wellness education, resources and prevention services that empower and support Temple University Students in making informed, healthier choices in order to achieve emotional and academic success.

Student Resources

Tyler's Student Resources (http://tyler.temple.edu/student-resources) web site hosts a number of resources and information invaluable to students, including the WHAT (Week Here At Tyler) newsletter, on-campus and off-campus lectures, events and activities, and information about Philadelphia. Links to Art Supply sources, Tyler's Digital Services, forms for installations, and even pages for academic advising information are all found on the Tyler Student Resources site.

Student Organizations and Appointed Positions

Student Government - Two elected Tyler representatives participate in the Temple Student Government. This organization provides an integral link between students on all campuses and assures an ongoing dialogue with the administration.

Dean's Student Advisory Committee (DSAC) - Students who seek leadership opportunities may join the Center for the Performing and Cinematic Arts Dean's Student Advisory Committee. Recent DSAC projects include the Philadelphia Art School Mixer reception for the Annual Student Exhibition, an all Philadelphia art school exhibition at the Comcast Center, and "Craft and Create", a community service event. For more information, contact Assistant Dean Carmina Cianciulli at carmina@temple.edu. The DSAC also serves as Tyler's GAF advisory committee to help determine how activity funds Tyler receives form the University are used for arts and cultural enrichment for the University.

Additional information on Student Life organizations and events can be found at our Tyler Student Life (http://tyler.temple.edu/student-life) web site.

Visiting Artists Program

The school and individual departments sponsor an active program of extracurricular events both on and off campus, including public lectures through critical dialogues and arranged introductions, exhibitions, and workshops. These offer students the opportunity to meet with the artists and discuss their
work. Visiting artist lectures are posted on the Tyler web site, on the plasma screens throughout the Tyler building, and in the WHAT (Week Here At Tyler) e-newsletter.

**Temple Contemporary - Exhibitions and Public Programs**

Robert Blackson, Director  
Sarah Biemiller, Assistant Director  
Adam Blumberg, Exhibitions Technician  
Tyler Building, Suite 110  
robert.blackson@temple.edu  
tyler.temple.edu/temple-contemporary  
215-777-9139

Temple Contemporary provides a visual context to inform and inspire public discussion of contemporary social concern. These discussions are collaboratively developed to address issues with local purpose and international significance.

Public programs are the primary initiative of Temple Contemporary, with exhibitions as one component of this greater need. Temple Contemporary provides approximately two live events per week from September to February, which often include screenings, workshops, gallery tours, classes, student presentations, how-to-sessions, rallies, debates, symposiums, concerts, etc. The initiation and consideration of these live events result from the recommendations of members from the Department’s advisory councils, which represent a cross section of Temple University and cultural leaders of Philadelphia.

Through consistent collaborations with faculty members and departmental curricula, the programming of the Exhibitions and Public Programs will also provide a visual and dialogical resource to aid in the teaching of numerous disciplines.

Exhibitions of undergraduate student work are held in the Stella Elkins Tyler galleries and in the Tyler upper and lower atriums and Green hallway as well as in the Architecture building. Installations of student work may also be found throughout the campus. MFA exhibitions are held in the Temple Contemporary gallery space from March through May.


**Student Contact Information**

**Admissions and Continuing Education/Pre-College Programs**

**Admissions**

Tyler Building, Room 100  
215-777-9090  
tylerart@temple.edu

Nicole Hall, Director of Admissions  
Tyler Building, Room 100E  
215-777-9090  
nicoleh@temple.edu

Lindsey Stevenson, Assistant Director  
Tyler Building, Room 100B  
215-777-9096  
lindseystevenson@temple.edu

Grace Ahn, Admissions Counselor  
Tyler Building, Room 100A  
215-777-9097  
graceahn@temple.edu

Danny Witkus, Admissions Counselor  
Tyler Building, Room 100D  
215-777-3250  
danny.witkus@temple.edu

Katie Ames, Administrative Assistant  
Tyler Building, Room 100  
215-777-9090
Continuing Education and Pre College Programs
Terry Putscher, Director, Tyler Continuing Education & Pre-College Programs
Tyler Building, Room 100C
215-777-9010
putsch@temple.edu

Laura Hricko, Program Specialist
Tyler Building, Room 100
215-777-9010
laura.hricko@temple.edu

Advising, Finance & Computer Support Services

Advising
Taheerah Entsuah, Academic Advisor
Tyler Building, Suite 212
215-777-9184
taheerah@temple.edu

Marissa Georgiou, Academic Advisor
Tyler Building, Suite 212
215-777-9150
marissa.georgiou@temple.edu

David Logan, Director of Advising
Tyler Building, 210H
215-777-9122
david.logan@temple.edu

Kathleen Peters, Senior Academic Advisor
Tyler Building, Suite 212
215-777-9185
kpeters@temple.edu

Elizabeth Fever, Administrative Assistant
Tyler Building, Suite 212
215-777-9193
eafever@temple.edu

Computer and Technical Support
David Rhoads, Manager, Technical Support
Tyler Building, Room 202
215-777-9239
tylercs@temple.edu

Craig Fineburg, Senior Technical Support Specialist
Tyler Building, Room 202
215-777-4956
tylercs@temple.edu

L. Steven Campbell, Technical Support Specialist
Tyler Building, Room B20
215-777-9241
tylercs@temple.edu

Paul Muller, Technical Support Specialist
Architecture Building, Room 407
215-777-9241
tylercs@temple.edu

Finance
Marie Birster, Administrative Coordinator for Finance
Tyler Building, Room 210H
215-777-9160
mbirster@temple.edu

Exhibitions & Public Programs and Student Life

Temple Contemporary - Exhibitions and Public Programs
Robert Blackson, Director of Exhibitions & Public Programs
Tyler Building, Room 110H
215-777-9139
robert.blackson@temple.edu

Sarah Biemiller, Assistant Director
Tyler Building, Room 110
215-777-9139
sarah.biemiller@temple.edu

Adam Blumberg, Preparator
Tyler Building, Room 110B
215-777-9146
adam.blumberg@temple.edu

Student Life
Kari Scott, Assistant Director, Tyler Student Life
Tyler Building, Room 110B in the Exhibitions Suite
215-777-9141
miss.kari@temple.edu

Departmental Contacts

Architecture
M. Katherine Wingert-Playdon, Chairperson
Architecture Building, Room 207
215-204-8813
kwingert@temple.edu

Valentina Cleary, Architecture Secretary
Architecture Building, Room 131
215-204-8813
vcleary@temple.edu

Jason Fowler, Technical Assistant
Architecture Building, Room 111 (Woodshop)
215-204-9414
jason.fowler@temple.edu

Emily Furlong, Professional Programs Administrator
Architecture Building, Room 135
215-204-9135
emily.furlong@temple.edu

Art/Art Education/Community Arts/Visual Studies
Pepon Osorio, Department Chairperson
Tyler Building, Room 210K
215-777-9163
pepono@temple.edu

Cynthia Patterson, Secretary
Tyler Building, Room 210K
215-777-9163
cynthia.patterson@temple.edu

Zach Lindenberger, Technician
Tyler Building, Room 210K
215-777-9163
zachary.lindenberger@temple.edu

Art Education
Dr. Lisa Kay, Program Head
Tyler Building, Room B090D
215-777-9259
lisakay@temple.edu

Visual Studies
Dr. Leah Modigliani, Program Head
Tyler Building, Room 230C
215-777-9170
lmodigliani@temple.edu

Art History
Dr. Elizabeth Bolman, Department Chairperson
Tyler Building, Room 210M
215-777-9165
elizabeth.bolman@temple.edu

Michele Gudknecht, Secretary
Tyler Building, Room 210L
215-777-9165
arthisto@temple.edu

Crafts
Nicolas Kripal, Department Chairperson
Tyler Building, Room 210O
215-777-9168
nkripal@temple.edu

Patricia Reavis, Secretary
Tyler Building, Room 210N
215-777-9168
preavis@temple.edu

Ceramics
Chad Curtis, Program Head
Tyler Building, Room 260
215-777-9168
chad.curtis@temple.edu

John Williams, Technician
Tyler Building, Room 160F
215-777-9203
john.williams0005@temple.edu

Fibers & Material Studies
Jesse Harrod, Program Head
Tyler Building, Room 250
215-777-9136
jesse.harrod@temple.edu

Loo Bain, Fibers Technician
Tyler Building, Room 250M
215-777-9023
loobain@temple.edu

Glass
Sharyn O’Mara, Program Head
Tyler Building, Room 120C
215-777-9212
somara@temple.edu

Kristin Lee Deady, Glass Technician
Tyler Building, Room 120B
215-777-9128
kristin.lee.deady@temple.edu

**Metals/Jewelry/CAD-CAM**
Stanley Lechtzin, Program Head
Tyler Building, Room 220
215-777-9128
stanlech@temple.edu

**Foundations**
Gerard Brown, Department Chairperson
Tyler Building, Room 210R
215-777-9181
gbrown@temple.edu

Edda Alicea, Secretary
Tyler Building, Room 210P
215-777-9170
edda@temple.edu

Zach Lindenberger, Technician
Tyler Building, Room 210K
215-777-9163
zachary.lindenberger@temple.edu

**Graphic Arts and Design**
Stephanie Knopp, Department Chairperson (fall 2015)
Tyler Building, Room 210T
215-777-9145
stephart@temple.edu

Dermot MacCormack, Department Chairperson (spring 2016)
Tyler Building, Room 210T
215-777-9145
dermot@temple.edu

Nora Leva, Secretary
Tyler Building, Room 210V
215-777-9145
nleva@temple.edu

**Graphic & Interactive Design**
Alice Drueding, Program Head
Tyler Building, Room 240
215-777-9145
drueding@temple.edu

**Photography**
Byron Wolfe, Program Head
Tyler Building, Room B30X
215-777-9145
byron.wolfe@temple.edu

Jille Mandel, Technician
Tyler Building, Room B30W
215-777-9226
jmandel@temple.edu
Printmaking
Richard Hricko, Program Head
Tyler Building, Room 260B
215-777-9126
hricko@temple.edu

Dawn Simmons
Tyler Building, Room 260S
215-777-9127
dsimmons@temple.edu

Painting, Drawing & Sculpture
Susan Moore, Interim Department Chairperson (Fall 2015)
Tyler Building, Room 210S
215-777-9180
msusan@temple.edu

Mark Shetabi, Department Chairperson (Spring 2016)
Tyler Building, Room 210S
215-777-9180
mark.shetabi@temple.edu

Matthew Sepielli, Secretary
Tyler Building, Room 210U
215-777-9176
matthew.sepielli@temple.edu

Painting
Marilyn Holsing, Program Head
Tyler Building, Room 300D
215-777-9106
marilyn.holsing@temple.edu

Sculpture
Jude Tallichet, Program Head
Tyler Building, Room 130
215-777-9176
jude@temple.edu

Tim Rusterholz, Technician
Tyler Building, Room 140J
215-777-9158
sculpture.shop@temple.edu

For other contact information, go to the Tyler School of Art Administration (http://tyler.temple.edu/administration) web site.

Academic Policies & Regulations
The university policies and regulations generally apply to all undergraduate students and provide a framework within which schools and colleges may specify further conditions or variations appropriate to students in their courses or programs. Policies specific to Tyler School of Art are as follows:

Academic Credit
A credit hour is a measure of the amount of work represented in intended learning outcomes and verified by evidence of student achievement. A credit hour is an institutionally established equivalency that reasonably approximates:

1. not less than one hour of classroom instruction or direct faculty instruction and a minimum of two hours of out-of-class student work each week for approximately fifteen weeks for one semester of credit or the equivalent amount of work over a different amount of time; or
2. at least an equivalent amount of work for other academic activities such as studio work. For example, a three-credit studio course allows for not less than nine hours of work which can include five hours of in-class studio and at least four hours of out-of-class student work.

Additional academic credit policies may be found in the Academic Policies (p. 90) section of this Bulletin.
Courses Inapplicable to Graduation

Credits earned in Mathematics 0015 and lower-level courses in Military Science are not included in the minimum number of credits required for graduation. A maximum of 4 courses or up to 12 semester hours for upper-level Military Science (Army ROTC), Naval Science (Navy ROTC), or Aerospace Studies (Air Force ROTC) courses will be applicable toward graduation credits. Courses transferred from other institutions or taken at Temple University that do not satisfy studio, art history, College or General Education requirements are elective. Tyler programs vary in the number of elective credits applicable toward the degree. When selecting courses it is recommended students check with their advisor.

Dean's List

Each fall and spring semester, those undergraduates who have met the credit hour and academic criteria for their school or college are placed on the Dean's List. See the Dean's List (p. 92) policy for specific GPA and credit-hour requirements.

Double Major within Tyler

Some undergraduate students may be interested in pursuing a double major within Tyler. Students within Tyler need to fulfill all the major requirements for each major, and must complete two writing intensive courses for each major - students may not complete three WI courses for two majors even if the majors require the same WI course. There may be some overlap with elective courses. Please check with an academic advisor to discuss the course requirements for each major.

Grievances

Please refer to the University grievance policy (p. 41), located in the Responsibilities & Rights section of this Bulletin.

Student Academic Grievance Policy and Procedure

Title IX of the Education Amendments Act of 1972 requires that each college or university establish due process for the resolution of academic grievances. Students enrolled at Temple University have the right to appeal academic decisions that they dispute. Each school and college at Temple University has established and adheres to its own grievance procedure. The following procedures are specifically applicable to all degree programs of Tyler School of Art.

Students should be advised that filing a formal grievance beyond the level of the instructor is serious and should be avoided until all informal methods of adjudication have been employed.

Step 1 – Faculty Member: A student with an academic grievance must first attempt to discuss the problem with the faculty member. In most cases, the grievance can be settled in this manner.

Step 2 – Chairperson: If the grievance cannot be resolved in Step 1, the student may submit a letter of grievance to the chairperson of the faculty member’s department stating the following: course reference number, course number and section, faculty member teaching the course, and specific reason(s) for the grievance. The chairperson shall review with the student his/her reasons for the grievance. The chairperson, with letter of grievance, shall meet with the faculty member to discuss the problem. The chairperson shall transmit, in writing, the outcome of this meeting and his/her decision to the student and faculty member. Note: If the faculty member in the grievance is the department chairperson, the letter of grievance should be submitted directly to the Assistant Dean’s Office.

Step 3 - Assistant Dean: If the student remains dissatisfied, he/she may appeal to the Assistant Dean’s Office. The Assistant Dean shall schedule a meeting first with the faculty member and the chairperson to discuss the grievance. Following this discussion, the student is invited to join the meeting to discuss the matter further and hear the decision. A report regarding the outcome of the meeting is written by the Assistant Dean and forwarded to the Dean’s Office.

Step 4 - Student Appeal and Grievance Committee: If the student decides to pursue the matter further, he/she may appeal the case to the Student Appeal and Grievance Committee which consists of the four at-large members of the Tyler Executive Council. The Dean shall appoint one of these members as Chair without vote. The committee shall also consist of two undergraduate students and one graduate student provided by the Tyler Student Alliance (see Tyler School of Art By-Laws, Article III, Section B., No. 1). The Student Appeal and Grievance Committee shall make recommendations to the Dean on each appeal or grievance. All recommendations to the Dean shall reasonably summarize the student’s claim, provide the basis for the committee’s recommendation, and state clearly the committee’s recommended disposition of the student’s claim.

Step 5 - Dean of Tyler: The Dean of Tyler shall investigate the matter thoroughly and, if necessary, discuss the case with all those involved. The Dean's decision shall be forwarded, in writing, to the student and committee.

Step 6 - University Administration: Should the student decide to appeal further, he/ she will be directed to the appropriate University administrator: the Vice Provost for Undergraduate Students or the University Dean of the Graduate School. All materials will be forwarded to the appropriate office for further consideration.

Step 7 - Provost: Appeals for contesting a grade or any academic matter are directed from the Vice Provost for Undergraduate Students or the University Dean of the Graduate School to the Provost’s Office. This is the final step and highest level for student academic appeals.
Fall and Spring Semester Time Limit For Academic Appeals
The time limit within which a grade grievance can be entered is one (1) semester after the grade has been made a part of the student’s transcript.

Summer Session Time Limit For Academic Appeals
Due to the condensed schedule of the summer sessions, the limit within which summer grade grievances can be entered is two (2) weeks after the grade has been made a part of the student’s transcript.

For further information on academic grievance procedures, please inquire in the Assistant Dean’s Office.

Grievances Other Than Academic Appeals
• Students who believe they have been discriminated against because of gender, race, national origin, age or disability, should consult the Office of Equal Opportunity Compliance (http://www.temple.edu/eoc), Sandra A. Foehl, Director, Equal Opportunity Compliance 215-204-8890 or sandra.foehl@temple.edu. You may also contact one of the University Ombudspersons (http://www.temple.edu/eoc/AppDev/ombuds.asp); Tyler's designated Ombudsperson is Kari Scott (215.777.9141 or miss.kari@temple.edu). You may contact any Temple Ombudsperson regardless of department.

Students are welcome to contact Assistant Dean Carmina Cianciulli, at carmina@temple.edu or 215-777-9199 to discuss grievance policies and procedures.

Incomplete Coursework Policy
An instructor will file an "I" (Incomplete) only if the student has completed the majority (51% or more) of the work of the course at a passing level, and only for reasons beyond the student’s control. This may include severe illness, broken limbs, family situation, etc. An incomplete may not be used to give students extra time to improve their grades. There must be a compelling reason behind each incomplete grade assigned. An instructor may file an "I" when a student has not completed the work of a course by the time grades must be submitted but has completed the majority of the work at a passing level and has a written agreement with the instructor and the department regarding completion of the work, including the nature of the work to be completed. The completion date may be no later than one year from the end of the semester in which the student took the course. The agreement shall also specify a default grade to be received if the work is not completed by the date indicated. Four copies of the agreement must be made: One copy shall be retained by the instructor, one shall be given to the student, one shall be filed with the department office and one shall be filed in the Tyler Academic Advising office in the student's record file (note that the University form states that one copy goes to the Dean's office - Tyler holds those copies in the student's file in Advising).

When reporting the grade of "I" for a student, the instructor shall also file a report of the default grade. If the instructor does not change the grade of "I", pursuant to the agreement with the student, by the end of one year from the time the grade of "I" was awarded, the appropriate University official shall automatically change the grade of "I" to the reported default grade and the default grade shall appear on the transcript and be used for all other grading purposes as the actual grade received in the course. Faculty advisors and staff advisors have the option of not permitting a student to register for an "overload" if the student is carrying one or more active incomplete courses, or for a "full load" if the student is carrying two or more active incompletes.

Independent Study Policy
The following are the guidelines and standards for “Independent Study” Undergraduate credit in Studio, Art History and Art Education for students and faculty at Tyler School of Art:

• There will be a maximum of 1 student in Independent Study per full-time faculty per fall and spring semester.
• The intended area of study must supplement, not supplant, existing studio, art history and art education courses, and curriculum.
• An Independent Study course shall count for 1-3 credits, with a maximum of 6 credits applicable toward the degree. You may not take more than two Independent Study courses in your career.
• Independent Study courses shall carry upper level numbers. Students must be classified as Juniors or Seniors. Students should have prior experience with the faculty member teaching the Independent Study course.
• A written proposal must be developed and agreed upon in advance of the beginning of the semester, describing the intended area of the investigation. At the end of the Independent Study, a paper must be submitted describing the outcome of the learning experience.
• Only after the student receives written permission from the faculty member and the department chair may they register for the class.

Installation Policy
Students or faculty who wish to have art work or performances installed outside the studio must complete an Installation form, and have it approved by the appropriate University personnel. Students or faculty must also have an approved installation form to place work outside the building, anywhere on campus. The Student Life office requires 7 business days to ensure enough time to get the appropriate approvals. In many cases extra time is needed to revise a proposal due to safety issues or otherwise unavailable space. Forms filed less than seven (7) days will risk being denied. The Assistant
Director for Student Life will work with the student and faculty and University personnel to locate appropriate space for student installations. Please note that approvals are not automatic, and can be denied on the basis of non-compliance with University policies.

Students who place projects without approval, or who abandon or incompletely de-install projects, or who do not properly restore sites, buildings, or other university property will be subject to fine and, potentially, disciplinary action. Installation forms are available online at tyler.temple.edu/displaying-artwork. Please refer any questions or concerns to Kari Scott via e-mail (miss.kari@temple.edu).

Loss or Damage
Temple University is not responsible for loss of property of any student or other individual due to fire, theft, or other cause. The university may require residence hall students to present proof of insurance against loss by fire, theft, or other cause before assignment to any university housing.

Program Performance
Matriculated BA in Art History, BA in Art, BA in Visual Studies, BFA students (with the exception of those seeking the Art Education concentration), BS in Architectural Preservation, and BS in Facilities Management in the Tyler School of Art must maintain a minimum grade point average (GPA) of 2.0 or may be subject to academic action including academic warning, probation, and dismissal from the university. Higher minimum GPAs are required by the BS in Architecture and Bachelor of Architecture Program (2.5)\(^1\), the BFA with Art Education Concentration (3.0), and the BSED in Art Education program (3.0).

\(^{1}\) Please contact the Architecture program office for updates to this policy.

Re-Enrollment Policy
All students who have attended Tyler School of Art of Temple University and wish to be considered for readmission (re-enrollment) to Tyler must fill out the request to re-enroll form (http://www.temple.edu/vpus/documents/request_to_reenroll.pdf) available at Temple University's Office of the Senior Vice Provost for Undergraduate Studies. Students should contact the Tyler Admissions Office for more information at 215-777-9090.

For those students who have left Tyler in academic good standing and apply for re-enrollment into a semester within three years of the last completed semester, no portfolio review or interview is required. A portfolio uploaded to temple.slideroom.com (https://temple.slideroom.com) is required for those BFA (see additional information for BFA in Graphic & Interactive Design majors below), BA in Art, BA in Visual Studies, or BSED in Art Education students who have not attended Tyler for more than three years from the semester in which they intend to apply for re-enrollment. SlideRoom charges a fee for this service. Please note: We are no longer accepting students for re-enrollment into the BA in Art on the Main campus; the BA in Art will only be available at the Japan campus. Students previously enrolled in that program may seek admission into the BA in Visual Studies. Students who seek re-enrollment will be considered for matriculation into the current catalog year.

Students who are dismissed from Tyler or who left on academic probation must review the academic standing policy (p. 83) located in the Academic Policies section of this Bulletin.

A portfolio uploaded to temple.slideroom.com (https://temple.slideroom.com) is also required of all BFA, BA in Art, BA in Visual Studies, or BSED in Art Education students who were dismissed or who left Tyler on academic probation. It must include twenty (20) images of your studio work, ten (10) completed at Tyler, and ten (10) after leaving Tyler that demonstrate studio progress.

Any student who attends another college or university and has taken studio art credits must submit a portfolio uploaded to temple.slideroom.com (https://temple.slideroom.com) to represent completed studio coursework in order to have those credits considered for transfer credit into the Tyler BFA, BA in Visual Studies, or BSED in Art Education programs or one of the Architecture programs. Academic credits will be accepted into the Tyler degree programs as determined by Temple University policy for the semester in which the student is applying for readmission.

The final decision regarding readmission will depend both on the recommendation of the transfer committee as well as the review of academic credentials by the Tyler Admissions Office. Please note well: Any student applying for readmission must be aware that Tyler may not accept studio credits that are more than 10 years old into any Tyler curriculum from transfer or readmission applicants regardless of where those credits were completed.

Graphic & Interactive Design (GAID) Re-Enrollment Policy

Leave of Absence Policy: Graphic & Interactive Design (GAID) students can apply to take a Leave of Absence (LOA) from Temple University/Tyler School of Art for up to 2 consecutive semesters. At the end of the LOA, a GAID major can return to school and resume their progress through the design program.

- Although every effort will be made to get GAID majors into courses they need when they return to Temple/Tyler, seats in required Graphic and Interactive Design courses cannot be guaranteed to students who return after a LOA or an extended period when they are not enrolled at Temple/Tyler. Returning students will not be added to sections that have filled which may mean additional time at Tyler will be required in order to complete the BFA in Graphic & Interactive Design.
• GAID majors who remain out of school longer than 2 consecutive semesters are required to re-enroll in the school and the program. The re-enrollment process includes a portfolio requirement to determine if the student will be readmitted to the GAID major. **Re-enrollment into the GAID major is not guaranteed.**

**Portfolio Review:**

• Students re-applying to the GAID program must show a portfolio consisting of the work they originally submitted to get into the major through the Sophomore Portfolio Review as well as work from any additional GAID classes they took. Students who were admitted into the major prior to the implementation of the GAID portfolio review in fall 2014 will need to submit a portfolio of work representing work completed in GAD 2001 and GAD 2021. Students who are out of school for more than 3 years also need to include 10 design pieces that they produced during the time they were not enrolled at Temple/Tyler.

• Students who are not re-enrolled on the basis of the portfolio have the option to re-take the prerequisites for the major (GAD 2001 and GAD 2021) to develop a new portfolio for submission to the Sophomore Portfolio Review. These students will be reviewed as second-time applicants to the GAID program. Students who have completed sophomore prerequisites for other majors may also consider re-enrollment into those majors (after discussion with an academic advisor) or seek re-enrollment into the University into a different Tyler or Temple program.

**Student Art Work**

The school reserves the right to keep art work submitted for course credit. In practice, this privilege is exercised sparingly but, in certain studio areas, the selection of one piece by each graduating student contributes to an important instructional collection.

Tyler School of Art records images of student work for use in Tyler publications and web sites. Tyler reserves the right to reproduce without notification such images of any artwork produced by students while attending Tyler for promotional or other purposes, including in print publications, institutional web sites, e-communications, multimedia presentations, and documents about Tyler or Temple University for admission recruitment, fundraising, or institutional informational purposes.

When the student art work is reproduced in Tyler publications, either in print form or electronic form, every effort will be made to give credit to the student artist. No compensation is provided to students for such uses of images of student work.

Please see the **Installation Policy** above regarding placing student art work in the public spaces at Tyler and in any Temple building or on Temple grounds.

**General College Graduation Requirements**

Students in the Tyler School of Art must meet all degree requirements mandated by Temple University, as well as requirements from individual departments and programs.

**New students** will follow the General Education (GenEd (p. 143)) program requirements.

Students are responsible for following the course requirements and department policies as listed in the Undergraduate Bulletin and in departmental handbooks, curriculum and advising publications. Please note that Tyler has minimum grade requirements for required courses for the majors. Please refer to the DARS and academic advising sheets available from your advising staff.

**Academic Advising Information**

Please note: Non-Tyler students who are interested in learning more about the majors and/or admissions requirements should contact the Tyler Admissions staff at tyleral@temple.edu or by calling 215-777-9090.

**Academic Advising**

Academic Advising Office
Tyler Building, 212
215-777-9229

Online Appointment System (https://apps.cst.temple.edu/advising)

Taheerah Entsuah, Advisor
215-777-9229
taheerah@temple.edu

Marissa Georgiou, Advisor
215-777-9229
marissa.georgiou@temple.edu

Kathleen Peters, Advisor
215-777-9229
kpeters@temple.edu
David Logan, Advising Director  
215-777-9122  
david.logan@temple.edu  

**Major Advising**  

Architecture (first and second year)  
Professor Kate Wingert-Playdon  
Architecture Building, 137  
215-204-8813  

Architecture (third and fourth year)  
Professor Vojislav Ristic  
Architecture Building, 139  
215-204-8813  
vristic@temple.edu  

Art (Temple University Japan campus only)  
Professor Kaoru Sakurai, Major Coordinator (ksakurai@tuj.temple.edu)  
Shinya Watanabe, Major Coordinator (shinyaw@tuj.temple.edu)  

Arts in Community Certificate Program  
Dr. William Yalowitz  
Tyler Building, 210J  
215-777-9163  
artedart@temple.edu  

Art Education  
Dr. Lisa Kay  
Professor Wendy Osterweil  
Tyler Building, B090D  
215-777-9163  
artedart@temple.edu  

Art History  
Dr. Jonathan Kline  
Tyler Building, 211E  
215-777-9165  
jdkline@temple.edu  

Ceramics  
Professor Chad Curtis  
Tyler Building, 150M  
215-777-9201  
chad.curtis@temple.edu  

Fibers and Material Studies  
Professor Jessica Harrod  
Tyler Building, 250N  
215-777-9136  
jessica.harrod@temple.edu  

Glass  
Professor Sharyn O'Mara  
Tyler Building, 120D  
215-777-9128  
somara@temple.edu  

Foundation Program  
Professor Gerard Brown, Program Head  
Tyler Building, 210R  
215-777-9181  
gerard.brown@temple.edu  

Graphic & Interactive Design
Professor Alice Drueding
Tyler Building, 240O
215-777-9185
drueding@temple.edu

Metals/Jewelry/CAD-CAM
Professor Stanley Lechtzin
Tyler Building, 220F
215-777-9129
stanlech@temple.edu

Photography
Professor Byron Wolfe
Tyler Building, B030Y
215-777-9245
byron.wolfe@temple.edu

Printmaking
Professor Richard Hricko
Tyler Building, 260B
215-777-9125
hricko@temple.edu

Painting
Professor Marilyn Holsing
Tyler Building, 300D
215-777-9106
marilyn.holsing@temple.edu

Sculpture
Professor Jude Tallichet
Tyler Building, 140A
215-777-9155
jude@temple.edu

Visual Studies
Dr. Leah Modigliani
215-777-9170
lmodigliani@temple.edu

**Minor Advising**

Art Minor (Main Campus)
Professor Kim Strommen
215-777-9179
kim.strommen@temple.edu

Art Minor (Japan Campus)
Professor Kaoru Sakurai
ksakurai@tuji.temple.edu or

Professor Shinya Watanabe
shinya@tuji.temple.edu

Art History Minor
Dr. Jonathan Kline
Tyler Building, 211E
215-777-9165
jdkline@temple.edu

**For BFA Students**

Advising is provided individually and in groups to degree-seeking students enrolled in Tyler School of Art.
Foundation courses are rostered by the advising staff but students will select their own academic classes. Midway through their second semester, freshmen are advised both individually and in groups by the advising staff on policies, methods, and procedures to assist them in self-registration for their first sophomore semester.

It is critical to note that all majors have either one or two sophomore prerequisites. Students who are thinking about overseas study should consult an advisor before the beginning of the sophomore year.

Sophomores should arrange to meet with the academic advisors who will help them register for their second sophomore semester. Faculty advisors are also available for sophomore students who have questions about the majors. When sophomores register for their junior year they are assigned to a major advisor, a faculty member from the major they enter, who will continue to advise the student during his/her junior and senior years on studio matters.

Juniors, seniors, and all transfer students should continue to consult with their academic advisor regarding General Education requirements and progression towards degree completion.

The Art Education staff provides additional advising for B.F.A. students seeking the Art Education concentration as there are a number of clearances and special requirements for that program, as required by the PA Department of Education.

**For Architecture, Art, Art Education, Art History and Visual Studies Students**

Advising is provided to degree-seeking students enrolled in the Architecture, Visual Studies, Art, Art Education, Arts in Community and Art History programs by the academic advising staff and the faculty advisors in the majors.

Faculty advisors in the student’s area provide advising to most juniors and seniors for their major and academic advising is provided by the academic advisors.

The Art Education staff provides additional advising for students in the B.S.ED. in Art Education and B.F.A. with Art Education Concentration, as there are a number of clearances and special requirements for that program, as required by the PA Department of Education.

**Additional Advising Services**

The academic advising office should be contacted if there are questions concerning courses that require placement testing. An academic advisor should be contacted if there are questions concerning ENG 0802, IH 0851 & IH 0852, and other General Education (GenEd (p. 143)) requirements, or developmental courses in English and Mathematics.

Professional academic advisors meet with all students on academic warning, academic probation or designated “at-risk” by virtue of multiple mid-term deficiency notices and work with students with disabilities to ensure appropriate accommodations are made. Students should use the online appointment system (https://apps.cst.temple.edu/advising) to schedule an advising appointment or call 215-777-9229.

**Faculty**

For additional faculty information, go to the Tyler School of Art web site: http://tyler.temple.edu/faculty-directory.

Stephen M. Anderson, Assistant Professor (Teaching/Instructional), Department of Architecture, Tyler School of Art; M.Arch., University of Pennsylvania.

Steven Berkowitz, Associate Professor, Department of Graphic Arts and Design, Tyler School of Art; M.F.A., Temple University.

Philip P. Betancourt, Professor, Department of Art History, Tyler School of Art; Ph.D., University of Pennsylvania.

Elizabeth S. Bolman, Professor, Department of Art History, Tyler School of Art; Ph.D., Bryn Mawr College.

Gerard F. Brown, Assistant Professor, Department of Foundations, Tyler School of Art; M.A., School of the Art Institute of Chicago.

Tracy E. Cooper, Professor, Department of Art History, Tyler School of Art; Ph.D., Princeton University.

Chad D. Curtis, Associate Professor, Department of Crafts, Tyler School of Art; M.F.A., Alfred University, New York State College of Ceramics.

Daniel V. Cutrone, Assistant Professor (Teaching/Instructional), Department of Crafts, Tyler School of Art; M.F.A., Temple University.

Therese A. Dolan, Professor, Department of Art History, Tyler School of Art; Ph.D., Bryn Mawr College.

Alice E. Drueing, Professor, Department of Graphic Arts and Design, Tyler School of Art; B.F.A., Temple University.

Amze J. Emmons, Associate Professor, Department of Graphic Arts and Design, Tyler School of Art; M.F.A., University of Washington.

Seher Erdogan Ford, Assistant Professor, Department of Architecture, Tyler School of Art; M.Arch., Yale University.

Jane DeRose Evans, Professor, Department of Art History, Tyler School of Art; Ph.D., University of Pennsylvania.
Clifton R. Fordham, Assistant Professor, Department of Architecture, Tyler School of Art; M.Arch., Yale University.

Samuel C. Fritch, Assistant Professor (Teaching/Instructional), Department of Foundations, Tyler School of Art; M.F.A., Temple University.

Philip Glahn, Associate Professor, Department of Painting, Drawing and Sculpture, Tyler School of Art; Ph.D., City University of New York.

Abby Ryan Guido, Assistant Professor (Teaching/Instructional), Department of Graphic Arts and Design, Tyler School of Art; B.F.A., Temple University.

Marcia B. Hall, Professor, Department of Art History, Tyler School of Art; Ph.D., Harvard University.

Sally W. Harrison, Associate Professor, Department of Architecture, Tyler School of Art; M.Arch., Massachusetts Institute of Technology.

Jesse Harrod, Assistant Professor, Department of Crafts, Tyler School of Art; M.F.A., School of the Art Institute of Chicago.

Kelly A. Holohan, Associate Professor, Department of Graphic Arts and Design, Tyler School of Art; M.F.A., Temple University.

Marilyn M. Holsing, Professor, Department of Painting, Drawing and Sculpture, Tyler School of Art; M.A., University of New Mexico.

Richard D. Hricko, Professor, Department of Graphic Arts and Design, Tyler School of Art; M.F.A., University of Iowa.

Alicia Imperiale, Assistant Professor, Department of Architecture, Tyler School of Art; M.A., Princeton University.

Simona M. Josan-Barkley, Assistant Professor (Teaching/Instructional), Department of Foundations, Tyler School of Art; M.F.A., Pennsylvania Academy of the Fine Arts.

Lisa Kay, Assistant Professor, Department of Art Education and Community Arts, Tyler School of Art; Ed.D., Northern Illinois University.

Nichola Kinch, Assistant Professor, Department of Foundations, Tyler School of Art; M.F.A., Temple University.

Jonathan Dunlap Kline, Assistant Professor (Teaching/Instructional), Department of Art History, Tyler School of Art; Ph.D., Temple University.

Stephanie A. Knopp, Professor, Department of Graphic Arts and Design, Tyler School of Art; M.F.A., Pennsylvania State University.

Nicholas W. Kripal, Professor, Department of Crafts, Tyler School of Art; M.F.A., Southern Illinois University.

Scott R. Laserow, Professor, Department of Graphic Arts and Design, Tyler School of Art; B.F.A., Temple University.

Stanley Lechtzin, Professor, Department of Crafts, Tyler School of Art; M.F.A., Cranbook Academy of Art.

Dermot MacCormack, Associate Professor, Department of Graphic Arts and Design, Tyler School of Art; B.F.A., National College of Art and Design, Dublin.

Martha Madigan, Professor, Department of Graphic Arts and Design, Tyler School of Art; M.F.A., School of the Art Institute of Chicago.

Margo S. Margolis, Professor, Department of Painting, Drawing and Sculpture, Tyler School of Art; M.F.A., Indiana University.

Timothy E. McDonald, Associate Professor (Teaching/Instructional), Department of Architecture, Tyler School of Art; M.Arch., McGill University.

Rebecca Michaels, Associate Professor (Teaching/Instructional), Department of Graphic Arts and Design, Tyler School of Art; M.F.A., Temple University.

Leah Modigliani, Assistant Professor, Department of Foundations, Tyler School of Art; Ph.D., Stony Brook University.

Jo-Anna J. Moore, Associate Professor Emeritus, Department of Art Education and Community Arts, Tyler School of Art; Ed. D., Harvard University.

Susan M. Moore, Professor, Department of Painting, Drawing and Sculpture, Tyler School of Art; M.F.A., University of California Davis.

Keith Morrison, Professor, Department of Painting, Drawing and Sculpture, Tyler School of Art; M.F.A., School of the Art Institute of Chicago.

Adele Nelson, Assistant Professor, Department of Art History, Tyler School of Art; Ph.D., New York University.

Dona R. Nelson, Professor, Department of Painting, Drawing and Sculpture, Tyler School of Art; B.F.A., Ohio State University.

Rashida Ng, Associate Professor, Department of Architecture, Tyler School of Art; M.Arch., University of Pennsylvania.

Sharyn A. O’Mara, Associate Professor, Department of Crafts, Tyler School of Art; M.F.A., Rhode Island School of Design.

Odilli Donald Odita, Associate Professor, Department of Painting, Drawing and Sculpture, Tyler School of Art; M.F.A., Bennington College.

Karyn Olivier, Associate Professor, Department of Painting, Drawing and Sculpture, Tyler School of Art; M.F.A., Cranbook Academy of Art.
Schools, Colleges, and Divisions

Eric Oskey, Assistant Professor (Teaching/Instructional), Department of Architecture, Tyler School of Art; M.Arch., Cornell University.

Pepón Osorio, Professor, Department of Art Education and Community Arts, Tyler School of Art; M.A., Columbia University.

Wendy B. Osterweil, Associate Professor (Teaching/Instructional), Department of Art Education and Community Arts, Tyler School of Art; M.F.A., University of Wisconsin.

Lisi Raskin, Associate Professor, Department of Painting, Drawing and Sculpture, Tyler School of Art; M.F.A., Columbia University.

Vojislav Ristic, Assistant Professor (Teaching/Instructional), Department of Architecture, Tyler School of Art; Dipl.lng.Arch., Belgrade University.

Bryan Martin Satalino, Assistant Professor (Teaching/Instructional), Department of Graphic Arts and Design, Tyler School of Art; M.F.A., Temple University.

Joseph S. Scorsone, Professor Emeritus, Department of Graphic Arts and Design, Tyler School of Art.

Vickie L. Sedman, Professor, Department of Crafts, Tyler School of Art; M.F.A., University of Wisconsin-Madison.

Mark Shaver, Assistant Professor (Teaching/Instructional), Department of Foundations, Tyler School of Art; M.F.A., University of Georgia.

Paul E. Sheriff, Professor, Department of Graphic Arts and Design, Tyler School of Art; B.F.A., Temple University.

Mark Shetabi, Associate Professor, Department of Painting, Drawing and Sculpture, Tyler School of Art; M.F.A., Pennsylvania Academy of the Fine Arts.

Robert Z. Shuman Jr., Associate Professor, Department of Architecture, Tyler School of Art; B.Arch., Temple University.

Gerald D. Silk, Professor, Department of Art History, Tyler School of Art; Ph.D., University of Virginia.

Samantha Simpson, Associate Professor, Department of Foundations, Tyler School of Art; M.F.A., San Francisco Art Institute.

Hester Stinnett, Professor, Department of Graphic Arts and Design, Tyler School of Art; M.F.A., Temple University.

Kim D. Strommen, Professor, Department of Graphic Arts and Design, Tyler School of Art; M.F.A., Washington University.

Jude E. Tallichet, Professor, Department of Painting, Drawing and Sculpture, Tyler School of Art; M.F.A., University of Montana.

Christian Tomaszewski, Assistant Professor (Teaching/Instructional), Department of Painting, Drawing and Sculpture, Tyler School of Art; M.F.A., Academy of Fine Arts in Poznan, Poland.

Ashley West, Assistant Professor, Department of Art History, Tyler School of Art; Ph.D., University of Pennsylvania.

M. Katherine Wingert-Playdon, Professor, Department of Architecture, Tyler School of Art; M.S., Pennsylvania State University.

Andrew Wit, Assistant Professor, Department of Architecture, Tyler School of Art; M.Arch., Massachusetts Institute of Technology.

Byron Wolfe, Associate Professor, Department of Graphic Arts and Design, Tyler School of Art; M.F.A., Arizona State University.

William Yalowitz, Associate Professor, Department of Art Education and Community Arts, Tyler School of Art; Ed.D., Temple University.

Architecture

Kate Wingert-Playdon, Chair
Tyler School of Art, Architecture Building, Room 207
2001 North 13th Street
Philadelphia, PA 19122
215-204-7903
tyler.temple.edu/programs/architecture

About the Architecture Department

Tyler Architecture focuses on design in the contexts of culture, technology, and stewardship of the built and natural environment. Its programs stress critical inquiry and innovation as part of the creative process, teaching students how to intervene in the physical world through carefully considered acts of making. The Department engages the city, exploring and addressing the ethical and social dimensions of architecture and the urban environment. Through this engagement, it seeks to develop an ethos of responsibility in the students, preparing them to become effective leaders in practices and discourses surrounding the complex global and local issues of our time.

The Department offers the following degrees:
• Bachelor of Science in Architecture pre-professional degree
• Bachelor of Science in Facilities Management
• Bachelor of Science in Architectural Preservation
• Bachelor of Architecture, National Architectural Accrediting Board (NAAB) accredited degree, five-year, for students who entered through the fall of 2009
• Bachelor of Science in Architecture and Master of Architecture, Professional Track 4+1 accelerated program
• Master of Architecture, National Architectural Accrediting Board (NAAB) accredited degree, two-year Professional track, for students who receive a 4-year pre-professional bachelor’s degree program in architecture, three year Design Intensive track for students who receive a bachelor’s program in other disciplines or in a non-pre-professional architecture program

The undergraduate architecture curricula share a common two-year Foundation Program. Upon successful completion of this preparatory program, students may continue in the Bachelor of Science in Architectural Preservation or the Bachelor of Science in Facilities Management, or can apply for acceptance into the Bachelor of Science in Architecture degree program. Since the four-year Bachelor of Science in Architecture degree program leads directly to the Master of Architecture degree program, admission is competitive. This is so that students are well prepared for graduate level professional program studies after obtaining the Bachelor of Science in Architecture degree. Typically, students accepted to the Bachelor of Science in Architecture program have a cumulative GPA of 3.0 or higher and an excellent portfolio. Completion of minimum entrance requirements does not guarantee admission.

The four-year Bachelor of Science in Architectural Preservation degree prepares students for a career in cultural and historic preservation focused on the built environment. Careers in the field of Architectural Preservation are those where leadership includes advocacy for places important to the underlying cultural and historical infrastructure of communities and environments.

The four-year Bachelor of Science in Facilities Management degree prepares students for a career in the profession of Facility Management. It is a profession that encompasses multiple disciplines to ensure functionality of the built environment by integrating people, place, process and technology. Students who choose this degree program can pursue facility management certification after entering into the profession.

The four-year Bachelor of Science in Architecture degree is a pre-professional program. Graduates are qualified for a variety of positions in architecture and related fields for which a professional degree and registration are not requirements for advancement. Additionally, students may utilize this degree toward the goal of architectural education at the graduate level.

In fall 2014, the Architecture department launched the new 4+1 BS in Arch + M.Arch. professional track program. The accelerated degree program will consist of a minimum of 111 semester hours of undergraduate coursework, a maximum of 12 (twelve) semester hours of graduate coursework to count towards both the undergraduate and the graduate degrees. Upon successful completion of the fourth year, students will receive a Bachelor of Science in Architecture. At the end of the contiguous fifth year (including two summers), students will receive a Master of Architecture, Professional Track. Students will complete the requirements for both degrees in five years including two summer semesters of graduate coursework. To be eligible for the program, students must be declared Architecture majors; have a minimum of 3.5 cumulative GPA in at least 45 credits of coursework taken at Temple; be able to complete their undergraduate degree in four full-time semesters (beginning with their first semester taking a graduate course as an undergraduate); and be able to complete the graduate degree in one additional year including two summer semesters of graduate coursework.

The NAAB accredited Master of Architecture (M.Arch.) professional degree program prepares students for the practice of architecture in entry-level positions. All undergraduate and graduate students in the department are eligible to register for and begin the NCARB Intern Development Program (IDP). Tyler Architecture Department offers two tracks in the M.Arch. degree program: a 2-year Professional Program track for students who have earned a pre-professional Bachelor’s degree in architecture and a 3-year Design Intensive track for students who have a non-pre-professional Bachelor’s degree in architecture or another discipline. This curriculum is designed to enable students to learn theories and methodologies of architectural design as well as to understand the social, economic, political, and technological forces that shape the built environment. The principal educational component of the program is a coordinated series of studio courses in which creative design talents and management skills are developed. Holders of this degree may, upon completion of postgraduate work experience, be admitted to the architectural licensing examinations offered in each state, through which they may become registered architects.

According to the NAAB, “In the United States, most state registration boards require a degree from an accredited professional degree program as a prerequisite for licensure. The National Architectural Accrediting Board (NAAB), which is the sole agency authorized to accredit U.S. professional degree programs in architecture, recognizes three types of degrees: the Bachelor of Architecture, the Master of Architecture, and the Doctor of Architecture. A program may be granted a 6-year, 3-year, or 2-year term of accreditation, depending on the extent of its conformance with established educational standards. Master's degree programs may consist of a pre-professional undergraduate degree and a professional graduate degree that, when earned sequentially, constitute an accredited professional education. However, the pre-professional degree is not, by itself, recognized as an accredited degree.”

(Note: The Bachelor of Architecture degree program is not available for students entering in Fall 2010 or after. Students who entered in 2009 and who have completed a substantial amount of the requirements of the Bachelor of Architecture degree program by Spring 2014 will have until Spring 2016 to finish all requirements for the Bachelor of Science in Architecture or the Bachelor of Architecture degrees offered on entry in 2009. For further information, consult the department’s web site at tyler.temple.edu/programs/architecture)
Study Abroad

All Architecture Department students have the opportunity to study abroad for a semester at Temple Rome or Temple Japan. Admission to these programs is competitive. Applications are made through the Temple Education Abroad Office.

Students who plan to study abroad should arrange to meet with an academic advisor as early as possible, preferably during the freshman year, in order to plan the sequence of courses that would be most appropriate. While students majoring in Architecture may study in Rome in the fall or spring semester, Japan is only an option for the spring. Because of program requirements in the fall semesters of junior and senior years, Architectural Preservation and Facilities Management majors should consider attending the Rome or Japan program only during the spring semester of the junior year.

Programs

- Bachelor of Science in Architectural Preservation (p. 203)
- Bachelor of Science in Architecture (p. 206)
- Bachelor of Science in Facilities Management (p. 209)

Bachelor of Science in Architectural Preservation

The four-year Bachelor of Science in Architectural Preservation degree prepares students for a career in cultural and historic preservation focused on the built environment. Careers in the field of Architectural Preservation are those where leadership includes advocacy for places important to the underlying cultural and historical infrastructure of communities and environments.

Summary of Degree Requirements

University Requirements

All students are required to complete the General Education requirements. Go to the General Education (p. 143) section for more information.

Summer or semester study abroad will satisfy the GenEd Global/World Society requirement.

All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific writing-intensive courses required for this major are ARCH 3296 and ARCH 4596.

Program Requirements

A total of 122 s.h. is required for completion of the Bachelor of Science in Architectural Preservation.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1031</td>
<td>Differential and Integral Calculus</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1021</td>
<td>Introduction to General Physics I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1011</td>
<td>Chemistry: The Study of Matter I</td>
<td>4</td>
</tr>
<tr>
<td>ARCH 1011</td>
<td>Visual Literacy for Architects 1</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 1001</td>
<td>Introduction to Design and the Environment</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 1012</td>
<td>Visual Literacy for Architects 2</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 2121</td>
<td>Foundation Architectural Design 1</td>
<td>4</td>
</tr>
<tr>
<td>ARCH 2141</td>
<td>Architectural History: Ancient through Renaissance</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 2151</td>
<td>Architecture, Technology, and the Environment</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 2122</td>
<td>Foundation Architectural Design 2</td>
<td>4</td>
</tr>
<tr>
<td>ARCH 2142</td>
<td>Architectural History: Renaissance through 20th Century</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 3111</td>
<td>Introduction to Architectural Preservation</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 3152</td>
<td>Materials and Methods</td>
<td>4</td>
</tr>
<tr>
<td>ARCH 3296</td>
<td>Movements in Modern Architecture</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 3251</td>
<td>Structural Analysis for Architects</td>
<td>3</td>
</tr>
<tr>
<td>ARCH Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ARCH 4141</td>
<td>Global Preservation Practice</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 4145</td>
<td>Research Methods for Architectural Preservation</td>
<td>3</td>
</tr>
</tbody>
</table>
ARCH 3354 Sustainability and Architecture 3
ARCH 4199 Capstone Research Seminar for Architectural Preservation 4
ARCH 4596 Seminar in Architectural Theory 3
ARCH Elective 3

Suggested Academic Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Science in Architectural Preservation

Requirements for New Students starting in the 2015-2016 Academic Year

Architecture Foundation Studies Courses (Year 1 & 2)

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 1011</td>
<td>Visual Literacy for Architects 1</td>
<td>3</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1031</td>
<td>Differential and Integral Calculus</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>14</strong></td>
</tr>
<tr>
<td>Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ARCH 1001</td>
<td>Introduction to Design and the Environment</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 1012</td>
<td>Visual Literacy for Architects 2 (spring only)</td>
<td>3</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 1021</td>
<td>Introduction to General Physics I</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 2121</td>
<td>Foundation Architectural Design 1 (fall only)</td>
<td>4</td>
</tr>
<tr>
<td>ARCH 2141</td>
<td>Architectural History: Ancient through Renaissance (fall only)</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 2151</td>
<td>Architecture, Technology, and the Environment</td>
<td>3</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td>Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ARCH 2122</td>
<td>Foundation Architectural Design 2 (spring only)</td>
<td>4</td>
</tr>
<tr>
<td>ARCH 2142</td>
<td>Architectural History: Renaissance through 20th Century</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

**Total Credit Hours:** 62

---

1. Although not required, freshman students registered for ARCH 1011 should also take FDPR 1501 and FDPR 1502.
2. Option to take ARCH 2123 / ARCH 2153 instead of ARCH 2121 for B.S. in Facilities Management.
3. Option to take ARCH 2124 / ARCH 2154 instead of ARCH 2122 for B.S. in Facilities Management.
4. Students planning to study abroad should substitute the Free Elective for a required course available only on main campus. For more information, please see your advisor.

Note: The Architecture Foundation is common to all three undergraduate degrees. In the spring of the sophomore year, students declare a major in one of the degrees offered. A place in the B.S. in Facilities Management or the B.S. in Architectural Preservation is guaranteed for all students in good standing with the University. Admission to the Bachelor of Science in Architecture is competitive. Typically, students have a cumulative GPA of 3.0 or higher and an excellent portfolio. Completion of minimum entrance requirements does not guarantee admission.
# Bachelor of Science in Architectural Preservation (Year 3 & 4)

### Year 3

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 3111</td>
<td>Introduction to Architectural Preservation</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 3152</td>
<td>Materials and Methods</td>
<td>4</td>
</tr>
<tr>
<td>ARCH 3296</td>
<td>Movements in Modern Architecture [WI]</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1011</td>
<td>Chemistry: The Study of Matter I</td>
<td>4</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 17

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 3251</td>
<td>Structural Analysis for Architects</td>
<td>3</td>
</tr>
<tr>
<td>Architecture Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 15

### Year 4

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 4141</td>
<td>Global Preservation Practice (fall only)</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 4145</td>
<td>Research Methods for Architectural Preservation (fall only)</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 3354</td>
<td>Sustainability and Architecture</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 15

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 4199</td>
<td>Capstone Research Seminar for Architectural Preservation</td>
<td>4</td>
</tr>
<tr>
<td>ARCH 4596</td>
<td>Seminar in Architectural Theory [WI]</td>
<td>3</td>
</tr>
<tr>
<td>Architecture Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 13

### Total Credit Hours:

**60**

### Total Credits for the B.S. in Architectural Preservation:

**122**

#### Rome Option

Students who plan to study abroad are encouraged to meet with an advisor as early as the freshman year. While the grid below suggests appropriate coursework, a semester abroad would require using free electives that ordinarily would be taken in other semesters. It will take careful planning with an advisor to ensure that the degree is completed as efficiently as possible, and that courses normally taken in the spring of junior year on Main campus are completed before the semester abroad. ARCH 3241 counts as an Architecture elective.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 3241</td>
<td>Seminar Analysis of Urban Structure in Rome</td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credit Hours:** 15

#### Japan Option

Students who plan to study abroad are encouraged to meet with an advisor as early as the freshman year. While the grid below suggests appropriate coursework, a semester abroad would require using free electives that ordinarily would be taken in other semesters. It will take careful planning with an advisor to ensure that the degree is completed as efficiently as possible, and that courses normally taken in the spring of junior year on Main campus are completed before the semester abroad.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credit Hours:** 15
GenEd courses are offered at the Japan campus and can be substituted where appropriate for Free electives. ARCH 3242 counts as an Architecture elective.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 3242</td>
<td>Urban Seminar in Tokyo (Undergraduate) (spring only)</td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Total Credit Hours</td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

**Bachelor of Science in Architecture**

The four-year Bachelor of Science in Architecture degree is a pre-professional program. Graduates are qualified for a variety of positions in architecture and related fields for which a professional degree and registration are not requirements for advancement. Additionally, students may utilize this degree toward the goal of architectural education at the graduate level.

**Summary of Degree Requirements**

The Bachelor of Science degree in Architecture may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 123 semester hours of credit with a minimum cumulative 2.00 GPA.

**University Requirements**

All students are required to complete the General Education requirements. Go to the General Education (p. 143) section for more information.

Summer or semester study abroad will satisfy the GenEd Global/World Society (GG) requirement.

All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific writing-intensive courses required for this major are ARCH 3296 and ARCH 4596.

**Program Requirements**

All required Architecture courses, MATH 1031 and PHYS 1021 must be completed with a C- or better to fulfill major requirements.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1031</td>
<td>Differential and Integral Calculus</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1021</td>
<td>Introduction to General Physics I</td>
<td>4</td>
</tr>
<tr>
<td>Freshman Requirements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ARCH 1011</td>
<td>Visual Literacy for Architects 1</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 1001</td>
<td>Introduction to Design and the Environment</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 1012</td>
<td>Visual Literacy for Architects 2</td>
<td>3</td>
</tr>
<tr>
<td>Sophomore Requirements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ARCH 2121</td>
<td>Foundation Architectural Design 1</td>
<td>4</td>
</tr>
<tr>
<td>ARCH 2141</td>
<td>Architectural History: Ancient through Renaissance</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 2151</td>
<td>Architecture, Technology, and the Environment</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 2122</td>
<td>Foundation Architectural Design 2</td>
<td>4</td>
</tr>
<tr>
<td>ARCH 2142</td>
<td>Architectural History: Renaissance through 20th Century</td>
<td>3</td>
</tr>
<tr>
<td>Junior Requirements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ARCH 3231</td>
<td>Architectural Design III</td>
<td>6</td>
</tr>
<tr>
<td>ARCH 3152</td>
<td>Materials and Methods</td>
<td>4</td>
</tr>
<tr>
<td>ARCH 3296</td>
<td>Movements in Modern Architecture</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 3232</td>
<td>Architectural Design IV</td>
<td>6</td>
</tr>
<tr>
<td>ARCH 3354</td>
<td>Sustainability and Architecture</td>
<td>3</td>
</tr>
<tr>
<td>Senior Requirements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ARCH 4331</td>
<td>Architectural Design V</td>
<td>6</td>
</tr>
<tr>
<td>ARCH 3251</td>
<td>Structural Analysis for Architects</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 4332</td>
<td>Architectural Design VI</td>
<td>6</td>
</tr>
<tr>
<td>ARCH 4596</td>
<td>Seminar in Architectural Theory</td>
<td>3</td>
</tr>
<tr>
<td>ARCH Electives</td>
<td></td>
<td>9</td>
</tr>
</tbody>
</table>
# Suggested Academic Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

## Bachelor of Science in Architecture

### Requirements for New Students starting in the 2015-2016 Academic Year

#### Architecture Foundation Studies Courses (Year 1 & 2)

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>ARCH 1011</td>
<td>Visual Literacy for Architects 1¹</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
</tr>
<tr>
<td>MATH 1031</td>
<td>Differential and Integral Calculus</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>14</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>ARCH 1001</td>
<td>Introduction to Design and the Environment</td>
</tr>
<tr>
<td>ARCH 1012</td>
<td>Visual Literacy for Architects 2 (spring only)</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
</tr>
<tr>
<td>PHYS 1021</td>
<td>Introduction to General Physics I</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>16</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>ARCH 2121</td>
<td>Foundation Architectural Design 1 (fall only)²</td>
</tr>
<tr>
<td>ARCH 2141</td>
<td>Architectural History: Ancient through Renaissance (fall only)</td>
</tr>
<tr>
<td>ARCH 2151</td>
<td>Architecture, Technology, and the Environment</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>16</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>ARCH 2122</td>
<td>Foundation Architectural Design 2 (spring only)³</td>
</tr>
<tr>
<td>ARCH 2142</td>
<td>Architectural History: Renaissance through 20th Century</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
</tr>
<tr>
<td>Free Elective⁴</td>
<td></td>
</tr>
<tr>
<td>Free Elective⁴</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>16</td>
</tr>
<tr>
<td><strong>Total Credit Hours:</strong></td>
<td><strong>62</strong></td>
</tr>
</tbody>
</table>

¹ Although not required, freshman students registered for ARCH 1011 should also take FDPR 1501 and FDPR 1502.

² Option to take ARCH 2123 / ARCH 2153 instead of ARCH 2121 for B.S. in Facilities Management.

³ Option to take ARCH 2124 / ARCH 2154 instead of ARCH 2122 for B.S. in Facilities Management.

⁴ Students planning to study abroad should substitute the Free Elective for a required course available only on main campus. For more information, please see your advisor.

Note: The Architecture Foundation is common to all three undergraduate degrees. In the spring of the sophomore year, students declare a major in one of the degrees offered. A place in the B.S. in Facilities Management or the B.S. in Architectural Preservation is guaranteed for all students in good standing with the University. Admission to the Bachelor of Science in Architecture is competitive. Typically, students have a cumulative GPA of 3.0 or higher and an excellent portfolio. Completion of minimum entrance requirements does not guarantee admission.

## Bachelor of Science in Architecture (Year 3 & 4)

<table>
<thead>
<tr>
<th>Year 3</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>ARCH 3231</td>
<td>Architectural Design III</td>
</tr>
</tbody>
</table>
ARCH 3152  Materials and Methods  4
ARCH 3296  Movements in Modern Architecture [WI]  3
GenEd Breadth Course  3

Term Credit Hours  16

Spring
ARCH 3232  Architectural Design IV  6
ARCH 3354  Sustainability and Architecture  3
GenEd Breadth Course  3
Free Elective  3

Year 4
Fall
ARCH 4331  Architectural Design V  6
ARCH 3251  Structural Analysis for Architects  3
Architecture Elective  3
Free Elective  3

Term Credit Hours  15

Spring
ARCH 4332  Architectural Design VI  6
ARCH 4596  Seminar in Architectural Theory [WI]  3
Architecture Elective  3
Architecture Elective  3

Term Credit Hours  15

Total Credit Hours:  61

Total Credits for the B.S. in Architecture:  123

**Rome Option**

Bachelor of Science in Architecture students who plan to study abroad are encouraged to meet with an advisor as early as the freshman year. While the grid below suggests appropriate coursework, a semester abroad would require using free electives that ordinarily would be taken in other semesters. It will take careful planning with an advisor to ensure that the degree is completed as efficiently as possible, and that courses normally taken in the spring of junior year or the fall of senior year on Main campus are completed before the semester abroad. ARCH 3234 can substitute for ARCH 4331; ARCH 3241 counts as an Architecture elective.

ARCH 3234  Architectural Design Studio in Rome  6
ARCH 3241  Seminar Analysis of Urban Structure in Rome  3
Free Elective  3
Free Elective  3

Total Credit Hours  15

**Japan Option**

Bachelor of Science in Architecture students who plan to study abroad are encouraged to meet with an advisor as early as the freshman year. While the grid below suggests appropriate coursework, a semester abroad would require using free electives that ordinarily would be taken in other semesters. It will take careful planning with an advisor to ensure that the degree is completed as efficiently as possible, and that courses normally taken in the spring of junior year or fall of senior year on Main campus are completed before the semester abroad.

GenEd courses are offered at the Japan campus and can be substituted where appropriate for Free electives. ARCH 3233 can substitute for ARCH 4331; ARCH 3242 counts as an Architecture elective.

ARCH 3233  Architecture Design Studio in Tokyo (Undergraduate)  6
ARCH 3242  Urban Seminar in Tokyo (Undergraduate)  3
Free Elective  3
Free Elective  3

Total Credit Hours  15
# Bachelor of Science in Facilities Management

The four-year Bachelor of Science in Facilities Management degree prepares students for a career in the profession of Facility Management. It is a profession that encompasses multiple disciplines to ensure functionality of the built environment by integrating people, place, process and technology. Students who choose this degree program can pursue facility management certification after entering into the profession.

## Summary of Requirements

### University Requirements

All students are required to complete the General Education requirements. Go to the General Education (p. 143) section for more information.

Summer or semester study abroad will satisfy the GenEd Global/World Society requirement.

All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific writing-intensive courses required for this major are ARCH 3097 and ARCH 4296.

### Program Requirements

A total of 122 s.h. is required for completion of the Bachelor of Science in Facilities Management.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1031</td>
<td>Differential and Integral Calculus</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1021</td>
<td>Introduction to General Physics I</td>
<td>4</td>
</tr>
<tr>
<td><strong>Freshman Requirements</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ARCH 1011</td>
<td>Visual Literacy for Architects 1</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 1001</td>
<td>Introduction to Design and the Environment</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 1012</td>
<td>Visual Literacy for Architects 2</td>
<td>3</td>
</tr>
<tr>
<td><strong>Sophomore Requirements</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>ARCH 2121</td>
<td>Foundation Architectural Design 1</td>
<td></td>
</tr>
<tr>
<td>ARCH 2123</td>
<td>Facility Management Foundation I</td>
<td></td>
</tr>
<tr>
<td>&amp; ARCH 2153</td>
<td>and Facility Management Case Study Research I</td>
<td></td>
</tr>
<tr>
<td>ARCH 2141</td>
<td>Architectural History: Ancient through Renaissance</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 2151</td>
<td>Architecture, Technology, and the Environment</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>ARCH 2122</td>
<td>Foundation Architectural Design 2</td>
<td></td>
</tr>
<tr>
<td>ARCH 2124</td>
<td>Facility Management Foundation II</td>
<td></td>
</tr>
<tr>
<td>&amp; ARCH 2154</td>
<td>and Facility Management Case Study Research II</td>
<td></td>
</tr>
<tr>
<td>ARCH 2142</td>
<td>Architectural History: Renaissance through 20th Century</td>
<td>3</td>
</tr>
<tr>
<td><strong>Junior Requirements</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ARCH 3097</td>
<td>Introduction to Facility Management</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 3152</td>
<td>Materials and Methods</td>
<td>4</td>
</tr>
<tr>
<td>ARCH 3013</td>
<td>Project Planning &amp; Programming</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 3354</td>
<td>Sustainability and Architecture</td>
<td>3</td>
</tr>
<tr>
<td><strong>Senior Requirements</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ARCH 3012</td>
<td>Computer Aided Facility Management</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 4011</td>
<td>Research Methods for Facility Management</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 4296</td>
<td>Design, Behavior and Culture</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 4099</td>
<td>Capstone Research Seminar for Facility Management</td>
<td>4</td>
</tr>
<tr>
<td>ARCH Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Additional Requirements</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACCT 2101</td>
<td>Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1102</td>
<td>Microeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>HRM 1101</td>
<td>Leadership and Organizational Management</td>
<td>3</td>
</tr>
<tr>
<td>LGLS 1102</td>
<td>Law of Contracts</td>
<td>3</td>
</tr>
<tr>
<td>RE 3501</td>
<td>Real Estate Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>RE 3502</td>
<td>Real Estate Practice</td>
<td>3</td>
</tr>
<tr>
<td>STAT 2103</td>
<td>Statistical Business Analytics</td>
<td>4</td>
</tr>
<tr>
<td>MSOM 3101</td>
<td>Operations Management</td>
<td>3</td>
</tr>
</tbody>
</table>

**Suggested Academic Plan**

Please note that this is a *suggested* academic plan. Depending on your situation, your academic plan may look different.

**Bachelor of Science in Facilities Management**

**Requirements for New Students starting in the 2015-2016 Academic Year**

**Architecture Foundation Studies Courses (Year 1 & 2)**

### Year 1

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 1011</td>
<td>Visual Literacy for Architects 1&lt;sup&gt;1&lt;/sup&gt;</td>
<td>3</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1031</td>
<td>Differential and Integral Calculus</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 14

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 1001</td>
<td>Introduction to Design and the Environment</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 1012</td>
<td>Visual Literacy for Architects 2 (spring only)</td>
<td>3</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 1021</td>
<td>Introduction to General Physics I</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 16

### Year 2

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 2121</td>
<td>Foundation Architectural Design 1 (fall only)&lt;sup&gt;2&lt;/sup&gt;</td>
<td>4</td>
</tr>
<tr>
<td>ARCH 2141</td>
<td>Architectural History: Ancient through Renaissance (fall only)</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 2151</td>
<td>Architecture, Technology, and the Environment</td>
<td>3</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 16

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 2122</td>
<td>Foundation Architectural Design 2 (spring only)&lt;sup&gt;3&lt;/sup&gt;</td>
<td>4</td>
</tr>
<tr>
<td>ARCH 2142</td>
<td>Architectural History: Renaissance through 20th Century</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Free Elective&lt;sup&gt;4&lt;/sup&gt;</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Free Elective&lt;sup&gt;4&lt;/sup&gt;</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 16

**Total Credit Hours**: 62

---

1. Although not required, freshman students registered for ARCH 1011 should also take FDPR 1501 and FDPR 1502.
2. Option to take ARCH 2123 / ARCH 2153 instead of ARCH 2121 for B.S. in Facilities Management.
3. Option to take ARCH 2124 / ARCH 2154 instead of ARCH 2122 for B.S. in Facilities Management.
4. Students planning to study abroad should substitute the Free Elective for a required course available only on main campus. For more information, please see your advisor.

Note: The Architecture Foundation is common to all three undergraduate degrees. In the spring of the sophomore year, students declare a major in one of the degrees offered. A place in the B.S. in Facilities Management or the B.S. in Architectural Preservation is guaranteed for all students in good standing with the University. Admission to the Bachelor of Science in Architecture is competitive. Typically, students have a cumulative GPA of 3.0 or higher and an excellent portfolio. Completion of minimum entrance requirements does not guarantee admission.
# Bachelor of Science in Facilities Management (Year 3 & 4)

<table>
<thead>
<tr>
<th>Year 3</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 3097</td>
<td>Introduction to Facility Management [WI] (fall only)</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 3152</td>
<td>Materials and Methods</td>
<td>4</td>
</tr>
<tr>
<td>ACCT 2101</td>
<td>Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>RE 3501</td>
<td>Real Estate Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>HRM 1101</td>
<td>Leadership and Organizational Management</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td>Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ARCH 3013</td>
<td>Project Planning Programming</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 3354</td>
<td>Sustainability and Architecture</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1102</td>
<td>Microeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>RE 3502</td>
<td>Real Estate Practice</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 4</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 3012</td>
<td>Computer Aided Facility Management (fall only)</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 4011</td>
<td>Research Methods for Facility Management (fall only)</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 4296</td>
<td>Design, Behavior and Culture [WI]</td>
<td>3</td>
</tr>
<tr>
<td>LGLS 1102</td>
<td>Law of Contracts</td>
<td>3</td>
</tr>
<tr>
<td>STAT 2103</td>
<td>Statistical Business Analytics</td>
<td>4</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td>Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ARCH 4099</td>
<td>Capstone Research Seminar for Facility Management (spring only)</td>
<td>4</td>
</tr>
<tr>
<td>MSOM 3101</td>
<td>Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Architecture Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>13</strong></td>
</tr>
<tr>
<td><strong>Total Credit Hours:</strong></td>
<td></td>
<td><strong>60</strong></td>
</tr>
</tbody>
</table>

**Total Credits for the B.S. in Facilities Management:**

122

## Rome Option

Students who plan to study abroad are encouraged to meet with an advisor as early as the freshman year. While the grid below suggests appropriate coursework, a semester abroad would require using free electives that ordinarily would be taken in other semesters. It will take careful planning with an advisor to ensure that the degree is completed as efficiently as possible, and that courses normally taken in the spring of junior year on Main campus are completed before the semester abroad. ARCH 3241 counts as an Architecture elective.

<table>
<thead>
<tr>
<th>Rome Option</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 3241</td>
<td>Seminar Analysis of Urban Structure in Rome</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credit Hours</strong></td>
<td></td>
</tr>
</tbody>
</table>

## Japan Option

Students who plan to study abroad are encouraged to meet with an advisor as early as the freshman year. While the grid below suggests appropriate coursework, a semester abroad would require using free electives that ordinarily would be taken in other semesters. It will take careful planning with an advisor to ensure that the degree is completed as efficiently as possible, and that courses normally taken in the spring of junior year on Main campus are completed before the semester abroad.
GenEd courses are offered at the Japan campus and can be substituted where appropriate for Free electives. ARCH 3242 counts as an Architecture elective.

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 3242</td>
<td>Urban Seminar in Tokyo (Undergraduate) (spring only)</td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

**Art**

Kaoru Sakurai, Major Coordinator  
Art Program, Temple University Japan Campus  
k@tuj.temple.edu (shinyaw@tuj.temple.edu)  
tujinfo@tuj.temple.edu  
Tel: =81-3-5441-9800  

Shinya Watanabe, Major Coordinator  
Art Program, Temple University Japan Campus  
shinyaw@tuj.temple.edu  
tujinfo@tuj.temple.edu  
Tel: =81-3-5441-9800  

Temple University Japan’s Art Major is a NASAD-accredited program offered under the auspices of the Tyler School of Art, Temple University. The Bachelor of Arts in Art with a Digital Media concentration is a fine-art oriented course of study focusing on the use of the computer as a creative tool. The major helps to cultivate the artistic sense and skills that will help students develop as artists and to work in art-related careers.

A minor in Art is available on both the TUJ campus and the Main campus of Temple University. For more information regarding the Art Minor, please review the Art Minor page in this bulletin.

**Programs**

- Art Minor (p. 212)
- Bachelor of Arts in Art, Digital Media Concentration (p. 213)

**Art Minor**

Temple University students have the option of exploring the visual arts by choosing to take a minor in Art. The Art Minor is available on both the Main Campus of Temple University and at the Temple University Japan Campus.

While the studio courses within the minor are generally found listed under the ART department, Main Campus students may also take courses open to all Temple students from the Graphic Arts and Design, Crafts, and Painting/Drawing/Sculpture departments to help fulfill elective credits.

The Main Campus Faculty Advisor for the Art Minor is Professor Kim Strommen - kim.strommen@temple.edu

The Temple University Japan Faculty Advisor for the Art Minor is Professor Shinya Watanabe - shinyaw@tuj.temple.edu.

**Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTU 1501</td>
<td>Introduction to Visual Language, Design</td>
<td>3</td>
</tr>
<tr>
<td>ARTU 1401</td>
<td>Introduction to Visual Language, Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ARTU 1101</td>
<td>Introduction to Visual Language, Painting</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ARTH 1155</td>
<td>Art Heritage of the Western World I</td>
<td></td>
</tr>
<tr>
<td>or ARTH 1955</td>
<td>Honors Art Heritage of the Western World I</td>
<td></td>
</tr>
<tr>
<td>ARTH 1156</td>
<td>Art Heritage of the Western World II</td>
<td></td>
</tr>
<tr>
<td>or ARTH 1956</td>
<td>Honors Art Heritage of the Western World II</td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ARTU 2301</td>
<td>Relief Printmaking</td>
<td></td>
</tr>
<tr>
<td>ARTU 2311</td>
<td>Lithography</td>
<td></td>
</tr>
</tbody>
</table>
**Bachelor of Arts in Art, Digital Media Concentration**

**Exclusively offered at Temple's Japan campus**

The Bachelor of Arts in Art with a Digital Media concentration is a fine-art oriented course of study focusing on the use of the computer as a creative tool. This concentration helps students develop their artistic vision using new technology to focus on personal expression; it is not graphic design. Students in this concentration pursue a variety of projects designed to help them explore the boundaries between technology and studio art processes. Students interested in graphic design should investigate the B.F.A. in Graphic and Interactive Design on the Main Campus of Temple University.

All Temple students are required to complete the General Education (GenEd (p. 143)) curriculum.

- Study abroad for a summer or semester will satisfy the Global/World Society requirement.
- The GenEd Arts requirement is waived if all of the following courses are completed with a C- or better: ARTU 1101, ARTU 1201, ARTU 1401 and ARTU 1501. If the student changes majors before completing all four courses, s/he must complete a GenEd Arts course to satisfy the requirement for General Education.

Students must complete successfully the second semester of a foreign language.

Students must complete at least 15 semester hours in upper-level Liberal Arts courses.

There may be minimum grade requirements of C- or better in required courses - students should refer to the DARS and their advisor.

The Bachelor of Arts degree may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 123 semester hours of credit with a minimum cumulative GPA of 2.00.

Students who are seeking admission into the B.A. in Art degree program must review the requirements and procedures outlined on the TUJ web site: www.tuj.ac.jp/admissions/index.html (http://www.tuj.ac.jp/admissions).

**Bachelor of Arts in Art Major Requirements**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTU 1501</td>
<td>Introduction to Visual Language, Design</td>
<td>3</td>
</tr>
<tr>
<td>ARTU 1401</td>
<td>Introduction to Visual Language, Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ARTU 1101</td>
<td>Introduction to Visual Language, Painting</td>
<td>3</td>
</tr>
<tr>
<td>ARTU 1201</td>
<td>Introduction to Visual Language, 3-D Design</td>
<td>3</td>
</tr>
<tr>
<td>ARTU 4796</td>
<td>Art Seminar</td>
<td>3</td>
</tr>
</tbody>
</table>

**Art History Requirements**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTH 1155</td>
<td>Art Heritage of the Western World I</td>
<td>3</td>
</tr>
<tr>
<td>or ARTH 1955</td>
<td>Honors Art Heritage of the Western World I</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 1156</td>
<td>Art Heritage of the Western World II</td>
<td>3</td>
</tr>
<tr>
<td>or ARTH 1956</td>
<td>Honors Art Heritage of the Western World II</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one from the following:

- Art History 2000-4999 Elective
- ARTE 3011 Introductory Seminar in Community Arts
- PHIL 1061 Art and Society

One writing intensive Art History course ¹

Total Credit Hours 27-28

¹ A course selected here cannot be used as part of the upper-level CLA requirements.

**Digital Media Concentration Requirements**

**Digital Studio Courses**

Select five from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTU 2601</td>
<td>Computer Imaging</td>
<td></td>
</tr>
<tr>
<td>ARTU 2801</td>
<td>Art Photography: Darkroom</td>
<td></td>
</tr>
<tr>
<td>ARTU 2811</td>
<td>Art Photography: Digital</td>
<td></td>
</tr>
</tbody>
</table>

Two additional Studio Electives 6

Note: The department will accept a maximum of 9 s.h. of transfer studio credits towards the minor. A portfolio of work must be submitted for review by department faculty. Contact the Tyler Admissions staff for more information.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTU 2601</td>
<td>Computer Imaging</td>
</tr>
<tr>
<td>ARTU 2602</td>
<td>Intermediate Computer Imaging</td>
</tr>
<tr>
<td>ARTU 2605</td>
<td>Internet Imaging</td>
</tr>
<tr>
<td>ARTU 2811</td>
<td>Art Photography: Digital</td>
</tr>
<tr>
<td>ARTU 2812</td>
<td>Intermediate Art Photography: Digital</td>
</tr>
<tr>
<td>ARTU 3321</td>
<td>Intermediate Printmaking: Digital</td>
</tr>
<tr>
<td>ARTU 3603</td>
<td>Advanced Computer Imaging</td>
</tr>
<tr>
<td>ARTU 3813</td>
<td>Advanced Art Photography: Digital</td>
</tr>
<tr>
<td>ARTU 4682</td>
<td>Independent Study: Computer Imaging</td>
</tr>
</tbody>
</table>

### Printmaking or Photography Course

Select one from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTU 2301</td>
<td>Relief Printmaking</td>
</tr>
<tr>
<td>ARTU 2302</td>
<td>Intermediate Printmaking: Relief</td>
</tr>
<tr>
<td>ARTU 2311</td>
<td>Lithography</td>
</tr>
<tr>
<td>ARTU 2312</td>
<td>Intermediate Printmaking: Lithography</td>
</tr>
<tr>
<td>ARTU 2801</td>
<td>Art Photography: Darkroom</td>
</tr>
<tr>
<td>ARTU 2802</td>
<td>Intermediate Art Photography: Darkroom</td>
</tr>
</tbody>
</table>

Two ARTU Studio Electives, digital or non-digital (2000-4000 level) 6
Two Non-Digital ARTU Studio Electives (2000-4000 level) 6
Five upper-level CLA courses 15

**Total Hours** 45

---

1.“One must be in Social Science. Upper-level Art History courses can be counted here except as noted above.

2.Total hours for the degree is 123 and includes the GenEd requirements and elective coursework. See your advisor for more information.

### Suggested Academic Plan

Please note that this is a *suggested* academic plan. Depending on your situation, your academic plan may look different.

**Bachelor of Art in Art, Digital Media Concentration**

**Requirements for New Students starting in the 2015-2016 Academic Year**

#### Year 1

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ARTU 1401</td>
<td>Introduction to Visual Language, Drawing 1</td>
<td>3</td>
</tr>
<tr>
<td>ARTU 1501</td>
<td>Introduction to Visual Language, Design 1</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 1155 or 1955</td>
<td>Art Heritage of the Western World I</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours** 16

**Spring**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>ARTU 1101</td>
<td>Introduction to Visual Language, Painting 1</td>
<td>3</td>
</tr>
<tr>
<td>ARTU 1201</td>
<td>Introduction to Visual Language, 3-D Design 1</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 1156 or 1956</td>
<td>Art Heritage of the Western World II</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours** 16

#### Year 2

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Foreign Language 1001 - first level</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Non-Digital Studio Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>
ARTU 2301  Relief Printmaking
ARTU 2302  Intermediate Printmaking: Relief
ARTU 2311  Lithography
ARTU 2312  Intermediate Printmaking: Lithography
ARTU 2801  Art Photography: Darkroom
ARTU 2802  Intermediate Art Photography: Darkroom

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>16</th>
</tr>
</thead>
</table>

### Spring
- GenEd Breadth Course
- Digital Studio Elective
- Studio Elective
- Upper-Level Art History course
- Upper-Level CLA course - Social Science

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>16</th>
</tr>
</thead>
</table>

### Year 3

#### Fall
- GenEd Breadth Course
- Digital Studio Elective
- Studio Elective
- Upper-Level Art History course

#### Spring
- GenEd Breadth Course
- Studio Elective
- Digital Studio Elective
- Upper-Level CLA course

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
</table>

### Year 4

#### Fall
- Digital Studio Elective
- Digital Studio Elective
- Upper-Level Art History course [WI]
- Upper-Level CLA course
- Free Elective

#### Spring
- ARTU 4796  Art Seminar [WI]
- Upper-Level CLA course
- Free Elective

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>12</th>
</tr>
</thead>
</table>

### Total Credit Hours: 123

---

2. Can substitute PHIL 1061 or ARTE 3011.
3. Social Science not required if pursuing a minor in Art History.
4. Choose between ARTH 2096, ARTH 2097 (3 s.h.), ARTH 2098, ARTH 2196, ARTH 2496, ARTH 2497, ARTH 3097.

### Art Education & Community Arts Practices

Pepon Osorio, Chair
The mission of the Department of Art Education and Community Arts Practices is to prepare students for the multiple roles where art, education and community intersect in the 21st century. We develop artists, educators, arts-based community leaders and teaching artists through thoughtful engagement with art making, contextual art study and partnerships, with emphasis on diverse populations in urban schools and neighborhoods. The departmental faculty promote creative research, leadership and responsive pedagogy. The faculty view art and artists as part of a network of social practices that foster self-reflective growth and group understanding.

Programs

- Bachelor of Science in Education in Art Education (p. 216)
- Certificate in Arts in Community (p. 219)

Bachelor of Science in Education in Art Education

Dr. Lisa Kay, Art Education Program Head
Tyler Building, Room B090D
215-777-9259
lisakay@temple.edu

Tyler School of Art offers the Bachelor of Science in Education in Art Education, an accredited program leading to Pennsylvania Certification in Art, K-12. Newly-expanded offerings in the Community Arts have developed courses with outreach to the Philadelphia community. Graduates from our Art programs have gone on to graduate study, field work in art galleries, studios, and a wide variety of art-related occupations. We have a 92% placement rate for Art Education in K-12 schools and also in community sites.

The Art Education program ensures a fully-rounded preparation for the elementary and secondary school teacher. This program provides content study for art teacher preparation and teacher certification to teach art in kindergarten through twelfth grade. The requirements for the degree are 122 total credits:

<table>
<thead>
<tr>
<th>Category</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Studio Art</td>
<td>42</td>
</tr>
<tr>
<td>Art History</td>
<td>10</td>
</tr>
<tr>
<td>Art Education</td>
<td>20</td>
</tr>
<tr>
<td>Education and Special Education</td>
<td>15</td>
</tr>
<tr>
<td>General Education</td>
<td>29</td>
</tr>
<tr>
<td>Required or elective liberal arts</td>
<td>6</td>
</tr>
<tr>
<td>courses</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credit Hours</strong></td>
<td><strong>122</strong></td>
</tr>
</tbody>
</table>

The Art Education program requires students maintain a minimum cumulative GPA of 3.0 to enroll in Art Education courses and to graduate with the Bachelor of Science degree in Art Education.

A portfolio is required for admission into the B.S.ED. in Art Education degree program. If you have completed college-level studio courses and are seeking studio equivalency credit, you must complete a transfer portfolio review. The department will only accept up to 24 transfer credits of studio work toward the major. Students who are seeking admission into the B.S.ED. in Art Education degree program must contact the Tyler Admissions Office (215-777-9090) for portfolio requirements.

BS in Art Education students should routinely meet with an Art Education faculty advisor to discuss field placement, clearances, and requirements, as the state of Pennsylvania may change requirements after the Bulletin information has been posted. Application for ARTE 3096 and ARTE 4003/ARTE 4088 must be submitted by the deadline communicated to students by the Art Education department.

Degree Requirements for the B.S.ED. in Art Education

The Bachelor of Science in Education degree in Art Education may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 122 semester hours of credit with a minimum cumulative GPA of 3.0.

University Requirements

Completion of the university’s General Education (p. 143) curriculum.

- Successful completion (minimum grade of C-) in both VS 1151 and ARTH 1156 will waive the GenEd Arts (GA) requirement.
• Successful completion (minimum grade of C-) in EDUC 2109, SPED 2231, and ENES 3338 will waive the GenEd Human Behavior (GB) requirement.
• Summer or semester study abroad will satisfy the GenEd Global/World Society requirement.

**Major Requirements**

- A minimum 3.0 cumulative GPA is required for registration in all Art Education courses.
- ARTE 2001, ARTE 3096, ARTE 4003 and ARTE 4088 must be completed with a C or better to fulfill major requirements.
- Students must earn minimum grade of C- in required Studio courses, College of Education coursework and additional mathematics requirement.

**Studio Requirements in Visual Studies, Foundation and Ceramics**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDPR 1501</td>
<td>Introduction to Art and Design</td>
<td>1</td>
</tr>
<tr>
<td>VS 1058</td>
<td>Visual Studies 1: Interdisciplinary Studio Seminar 1</td>
<td>3</td>
</tr>
<tr>
<td>VS 1151</td>
<td>Visual Studies 1 Foundation: Drawing</td>
<td>3</td>
</tr>
<tr>
<td>VS 1351</td>
<td>Visual Studies 1 Foundation: 3D</td>
<td>3</td>
</tr>
<tr>
<td>VS 1451</td>
<td>Visual Studies 1 Foundation: Composition and Color</td>
<td>2</td>
</tr>
<tr>
<td>VS 1651</td>
<td>Visual Studies 1 Foundation: Digital Imaging</td>
<td>3</td>
</tr>
<tr>
<td>VS 2058</td>
<td>Visual Studies 2: Interdisciplinary Studio Seminar 2</td>
<td>3</td>
</tr>
<tr>
<td>VS 2152</td>
<td>Visual Studies 2 Concept Studio: Drawing</td>
<td>3</td>
</tr>
<tr>
<td>VS 2252</td>
<td>Visual Studies 2 Concept Studio: Painting</td>
<td>3</td>
</tr>
<tr>
<td>VS 2552</td>
<td>Visual Studies 2 Concept Studio: Print Imaging</td>
<td>3</td>
</tr>
<tr>
<td>VS 3253</td>
<td>Visual Studies 3 Concept Studio: Hybrid Painting</td>
<td>3</td>
</tr>
</tbody>
</table>

Ceramics course - select one from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRFT 2151</td>
<td>Beginning Ceramics</td>
</tr>
<tr>
<td>CRFT 2152</td>
<td>Introduction to Beginning Ceramics for Non-Tyler BFA Majors</td>
</tr>
</tbody>
</table>

**Art History**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTH 1155</td>
<td>Art Heritage of the Western World I</td>
<td>3</td>
</tr>
<tr>
<td>or ARTH 1955</td>
<td>Honors Art Heritage of the Western World I</td>
<td></td>
</tr>
<tr>
<td>ARTH 1156</td>
<td>Art Heritage of the Western World II</td>
<td>3</td>
</tr>
<tr>
<td>or ARTH 1956</td>
<td>Honors Art Heritage of the Western World II</td>
<td></td>
</tr>
</tbody>
</table>

Additional Art History writing intensive elective course (2000+ level) [WI]

- 4

**Art Education**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTE 2001</td>
<td>Science and Art of Teaching</td>
<td>4</td>
</tr>
<tr>
<td>ARTE 3096</td>
<td>Art in Elementary and Secondary School</td>
<td>4</td>
</tr>
<tr>
<td>ARTE 4003</td>
<td>Special Needs K-12 Students in the Art Room</td>
<td>3</td>
</tr>
<tr>
<td>ARTE 4088</td>
<td>Student Teaching</td>
<td>9</td>
</tr>
</tbody>
</table>

**Education**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 2103</td>
<td>Socio-cultural Foundations of Education in the United States</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 2109</td>
<td>Adolescent Development for Educators</td>
<td>3</td>
</tr>
</tbody>
</table>

**Special Education**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPED 2231</td>
<td>Introduction to Inclusive Education</td>
<td>3</td>
</tr>
<tr>
<td>SPED 3211</td>
<td>Effective Instructional Strategies for Young Children with Disabilities</td>
<td>3</td>
</tr>
</tbody>
</table>

**English Education (Secondary)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENES 3338</td>
<td>Foundations of Language Teaching: Teaching English Language Learners in Grades 4 to 12</td>
<td>3</td>
</tr>
</tbody>
</table>

**Studio Art Electives**

- 9

**Academic Elective**

- 3

**Mathematics Requirement- one Mathematics course (in addition to GenEd Math)**

- 3

**Total Credit Hours**

- 93

---

1 May be taken from Visual Studies, Community Arts or from 2000 level Crafts, PDS or GAD.

**Suggested Academic Plan**

Please note that this is a *suggested* academic plan. Depending on your situation, your academic plan may look different.
# Bachelor of Science in Education in Art Education

## Requirements for New Students starting in the 2015-2016 Academic Year

### Year 1

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VS 1151</td>
<td>Visual Studies 1 Foundation: Drawing¹</td>
<td>3</td>
</tr>
<tr>
<td>VS 1451</td>
<td>Visual Studies 1 Foundation: Composition and Color</td>
<td>2</td>
</tr>
<tr>
<td>FDPR 1501</td>
<td>Introduction to Art and Design</td>
<td>1</td>
</tr>
<tr>
<td>ARTH 1155 or 1955</td>
<td>Art Heritage of the Western World I</td>
<td>3</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 16

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VS 1058</td>
<td>Visual Studies 1: Interdisciplinary Studio Seminar 1</td>
<td>3</td>
</tr>
<tr>
<td>VS 1351</td>
<td>Visual Studies 1 Foundation: 3D</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 1156 or 1956</td>
<td>Art Heritage of the Western World II¹</td>
<td>3</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 16

### Year 2

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VS 1651</td>
<td>Visual Studies 1 Foundation: Digital Imaging</td>
<td>3</td>
</tr>
<tr>
<td>VS 2252</td>
<td>Visual Studies 2 Concept Studio: Painting</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 2103</td>
<td>Socio-cultural Foundations of Education in the United States</td>
<td>3</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics elective (1000+ or higher)</td>
<td></td>
<td>3-4</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 15

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VS 2552</td>
<td>Visual Studies 2 Concept Studio: Print Imaging</td>
<td>3</td>
</tr>
<tr>
<td>VS 2058</td>
<td>Visual Studies 2: Interdisciplinary Studio Seminar 2</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 2109</td>
<td>Adolescent Development for Educators²</td>
<td>3</td>
</tr>
<tr>
<td>SPED 2231</td>
<td>Introduction to Inclusive Education (field experience)²</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 15

### Year 3

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VS 2152</td>
<td>Visual Studies 2 Concept Studio: Drawing</td>
<td>3</td>
</tr>
<tr>
<td>Studio Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ARTE 2001</td>
<td>Science and Art of Teaching (field experience)</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 16

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VS 3253</td>
<td>Visual Studies 3 Concept Studio: Hybrid Painting</td>
<td>3</td>
</tr>
<tr>
<td>Ceramics course - select one from the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRFT 2151</td>
<td>Beginning Ceramics</td>
<td>3</td>
</tr>
<tr>
<td>CRFT 2152</td>
<td>Introduction to Beginning Ceramics for Non-Tyler BFA Majors</td>
<td>3</td>
</tr>
<tr>
<td>SPED 3211</td>
<td>Effective Instructional Strategies for Young Children with Disabilities</td>
<td>3</td>
</tr>
<tr>
<td>ENES 3338</td>
<td>Foundations of Language Teaching: Teaching English Language Learners in Grades 4 to 12²</td>
<td>3</td>
</tr>
<tr>
<td>Art History Writing Intensive Elective [WI]</td>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 16
Certificate in Arts in Community

Dr. Billy Yalowitz, Faculty Advisor
yalowitz@temple.edu
artedart@temple.edu

The Arts in Community Program (ACP) was started as a commitment to the many and varied communities in Philadelphia and to Tyler students' education as artists to combine artistic disciplines with skills and knowledge in community organizing, positioning them for an expanded civic role in the 21st century. ACP develops and delivers university courses, after-school workshops, intergenerational forums, inter-disciplinary performances and site-specific installations. At the heart of the program are community partnerships and internships that enable Tyler/Temple students to expand their art disciplines as community collaborators. During the last several years ACP has created a body of community-based arts works, establishing a network of relationships and ongoing presence in neighborhoods that translates into continued projects. During this time, we have worked with youth and adults, organizations and families, in North Philadelphia neighborhoods and beyond, building a broad range of community arts partnerships that stimulate dialogue and share history to create exhibitions and interdisciplinary performances based on community lives and stories and shared student experiences.

As part of this program, Tyler offers an undergraduate Certificate in Arts in Community on the Main Campus only. The undergraduate certificate consists of a four-course, 12-credit sequence. Both matriculated and non-matriculated students may register for these courses. The required courses for the undergraduate certificate are:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTE 3011</td>
<td>Introductory Seminar in Community Arts</td>
<td>3</td>
</tr>
<tr>
<td>or ARTE 3911</td>
<td>Honors Introductory Seminar in Community Arts</td>
<td>3</td>
</tr>
<tr>
<td>ARTE 3089</td>
<td>Research and Project Planning Seminar in Community Arts</td>
<td>3</td>
</tr>
<tr>
<td>or ARTE 3989</td>
<td>Honors Research and Project Planning in Community Arts</td>
<td>3</td>
</tr>
<tr>
<td>ARTE 4012</td>
<td>Community Arts</td>
<td>3</td>
</tr>
<tr>
<td>ARTE 4089</td>
<td>Evaluation and Documentation in Community Arts</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credit Hours: **12**

Art History

Dr. Elizabeth Bolman, Chairperson of Art History
Tyler School of Art Building
Administrative Suite Room 210M
215-777-9165
elizabeth.bolman@temple.edu
arthisto@temple.edu

Dr. Jonathan Kline, Undergraduate Advisor
Tyler School of Art Building
Art History Suite Room 211
The Department of Art History offers broad-ranging introductory surveys of art, from prehistoric times to the present, and more closely focused courses, treating limited segments of the vast historic panorama in both western and non-western art. Approximately sixty courses are offered over the span of a four-year period.

The Department of Art History is strongest in the Western tradition, with relatively equal distribution of focus on Ancient/Medieval, Renaissance/Baroque, and Modern/Contemporary. There are particular strengths in the study of art from the Mediterranean region, with specialists in Bronze Age Aegean, Ancient Roman, Medieval Byzantine and Coptic, Italian and Spanish Renaissance and Baroque, and Modern Italy and France, and in the study of modern and contemporary American art.

The Graduate Student Art History Association sponsors lectures and exhibition visits open to all students throughout the year.

Programs

- Art History Minor (p. 220)
- Bachelor of Arts in Art History (p. 220)

Art History Minor

Requirements for non-B.F.A. Students

Select one of the following:  

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTH 1801</td>
<td>Arts of Asia</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 1155</td>
<td>Art Heritage of the Western World I</td>
<td></td>
</tr>
<tr>
<td>ARTH 1156</td>
<td>Art Heritage of the Western World II</td>
<td></td>
</tr>
<tr>
<td>ARTH 1955</td>
<td>Honors Art Heritage of the Western World I</td>
<td></td>
</tr>
<tr>
<td>ARTH 1956</td>
<td>Honors Art Heritage of the Western World II</td>
<td></td>
</tr>
<tr>
<td>ARTH 0808</td>
<td>Arts of the Western World: The Visual Experience</td>
<td></td>
</tr>
</tbody>
</table>

Select four Upper-Level 2000+ Art History Electives  

Total Credit Hours  

19

Requirements for Tyler School of Art B.F.A. Students

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTH 1155</td>
<td>Art Heritage of the Western World I</td>
<td>3</td>
</tr>
<tr>
<td>or ARTH 1955</td>
<td>Honors Art Heritage of the Western World I</td>
<td></td>
</tr>
<tr>
<td>ARTH 1156</td>
<td>Art Heritage of the Western World II</td>
<td>3</td>
</tr>
<tr>
<td>or ARTH 1956</td>
<td>Honors Art Heritage of the Western World II</td>
<td></td>
</tr>
</tbody>
</table>

Select four Upper-Level 2000+ Art History Electives  

Total Credit Hours  

22

Bachelor of Arts in Art History

Students majoring in art history graduate with a thorough knowledge of the art historical traditions of each major period from ancient through postmodern art and with an understanding of the methods practiced in the discipline of art history. Tyler’s Art History program has a unique point of view. From its position in a University setting and in one of the country’s top art schools, its students have access to outstanding research resources, studio work, and travel opportunities that create a multidimensional undergraduate experience.

In addition to taking courses at Temple’s Main Campus in Philadelphia, students are encouraged to study abroad, spending a semester or year at Temple’s campuses in either Tokyo or Rome. Several undergraduates are also often accepted into a summer excavation project in Italy. In addition to these opportunities, internships at the Philadelphia Museum of Art, the Fabric Workshop and Museum, the Print Center, and other local and regional cultural institutions provide hands-on learning experiences.

Our graduates are well prepared, whether they wish to pursue graduate work in the field, write professionally, launch careers in museums or auction houses, or embark on any other path that requires broad liberal arts experience and a strong background interpreting the visual world. They hold jobs as museum curators, gallery directors, corporate art employees, researchers, and work in a variety of capacities for cultural associations.
Degree Requirements

The degree of Bachelor of Arts in Art History may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 123 semester hours of credit with a minimum cumulative GPA of 2.0 overall and in the major.

Grades below a C- in Art History and General Education courses do not fulfill requirements for the degree.

University Requirements

Students must complete the requirements of the General Education (GenEd (p. 143)) program.

- Summer or semester study abroad will satisfy the GenEd Global/World Society (GG) requirement.

Program Requirements

- A minimum of 66 credits must be taken outside of Tyler departments to earn the degree
- A minimum of 45 semester hours in upper level courses must be completed with a passing grade: CLA 2000 to 4999; CST 2000 to 4999.
  a. Two 2000+ courses (minimum 6 credits) must be taken from Social or Natural Sciences.
  b. Upper-level Art History courses are categorized as upper-level Liberal Arts courses.
- Students must complete the second level of a foreign language:

Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARBC 1002</td>
<td>Arabic Elements II</td>
</tr>
<tr>
<td>CHI 1002</td>
<td>Chinese Elements II</td>
</tr>
<tr>
<td>FREN 1002</td>
<td>Introduction to French II</td>
</tr>
<tr>
<td>GER 1002</td>
<td>Introduction to German II</td>
</tr>
<tr>
<td>GRKA 1002</td>
<td>Ancient Greek 2</td>
</tr>
<tr>
<td>GRKM 1002</td>
<td>Modern Greek Elements II</td>
</tr>
<tr>
<td>HEBR 1002</td>
<td>Elements II</td>
</tr>
<tr>
<td>HIN 1002</td>
<td>Hindi Elements II</td>
</tr>
<tr>
<td>ITAL 1002</td>
<td>Italian Language II</td>
</tr>
<tr>
<td>ITAL 1902</td>
<td>Honors Italian Language II</td>
</tr>
<tr>
<td>JPNS 1002</td>
<td>Japanese Elements II</td>
</tr>
<tr>
<td>KRN 1002</td>
<td>Korean Elements II</td>
</tr>
<tr>
<td>LAT 1002</td>
<td>Latin 2</td>
</tr>
<tr>
<td>PORT 1002</td>
<td>Basic II</td>
</tr>
<tr>
<td>RUS 1002</td>
<td>First-Year Russian II</td>
</tr>
<tr>
<td>SPAN 1002</td>
<td>Basic II</td>
</tr>
<tr>
<td>SPAN 1902</td>
<td>Honors Basic II</td>
</tr>
<tr>
<td>VTNM 1002</td>
<td>Vietnamese Elements II</td>
</tr>
</tbody>
</table>

Art History Major Requirements (minimum of 41 s.h.)

Introductory Level Courses

Select a minimum of two of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTH 1155</td>
<td>Art Heritage of the Western World I</td>
</tr>
<tr>
<td>or ARTH 1955</td>
<td>Honors Art Heritage of the Western World I</td>
</tr>
<tr>
<td>ARTH 1156</td>
<td>Art Heritage of the Western World II</td>
</tr>
<tr>
<td>or ARTH 1956</td>
<td>Honors Art Heritage of the Western World II</td>
</tr>
<tr>
<td>ARTH 1801</td>
<td>Arts of Asia 1</td>
</tr>
</tbody>
</table>

Upper Level Lecture Course

Select one course from 5 of the 7 groups below:

Ancient

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTH 2110</td>
<td>Topics in Ancient Art</td>
</tr>
<tr>
<td>ARTH 2111</td>
<td>Minoan Art</td>
</tr>
<tr>
<td>ARTH 2117</td>
<td>Archaeological Excavitation</td>
</tr>
<tr>
<td>ARTH 2129</td>
<td>Greek and Roman Sculpture</td>
</tr>
<tr>
<td>ARTH 2135</td>
<td>Art and Archeology of Ancient Rome and the Mediterranean</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>ARTH 2196</td>
<td>Greek and Roman Sculpture</td>
</tr>
<tr>
<td>Medieval</td>
<td></td>
</tr>
<tr>
<td>ARTH 2200</td>
<td>Topics in Medieval Art</td>
</tr>
<tr>
<td>ARTH 2215</td>
<td>Late Antique/Byzantine Art</td>
</tr>
<tr>
<td>ARTH 2216</td>
<td>Early Medieval Visual Culture</td>
</tr>
<tr>
<td>ARTH 2217</td>
<td>Gothic Art</td>
</tr>
<tr>
<td>ARTH 2325</td>
<td>Northern Renaissance Art 1350-1550</td>
</tr>
<tr>
<td>Renaissance</td>
<td></td>
</tr>
<tr>
<td>ARTH 2300</td>
<td>Special Topics</td>
</tr>
<tr>
<td>ARTH 2321</td>
<td>Masters of Renaissance Art</td>
</tr>
<tr>
<td>ARTH 2323</td>
<td>Early Renaissance: Italy</td>
</tr>
<tr>
<td>ARTH 2325</td>
<td>Northern Renaissance Art 1350-1550</td>
</tr>
<tr>
<td>ARTH 2329</td>
<td>Renaissance and Baroque Architecture in Italy</td>
</tr>
<tr>
<td>ARTH 2350</td>
<td>Topics in Early Modern Art, 1400-1750</td>
</tr>
<tr>
<td>ARTH 3301</td>
<td>Michelangelo</td>
</tr>
<tr>
<td>ARTH 3324</td>
<td>High Renaissance Art in Italy</td>
</tr>
<tr>
<td>Baroque</td>
<td></td>
</tr>
<tr>
<td>ARTH 2329</td>
<td>Renaissance and Baroque Architecture in Italy</td>
</tr>
<tr>
<td>ARTH 2350</td>
<td>Topics in Early Modern Art, 1400-1750</td>
</tr>
<tr>
<td>ARTH 2400</td>
<td>Topics in Baroque Art</td>
</tr>
<tr>
<td>ARTH 2428</td>
<td>High and Late Baroque Art in Rome</td>
</tr>
<tr>
<td>ARTH 2431</td>
<td>Southern Baroque Art: Italy and Spain</td>
</tr>
<tr>
<td>ARTH 2432</td>
<td>Northern Baroque Art</td>
</tr>
<tr>
<td>ARTH 2450</td>
<td>Topics in Eighteenth Century Art</td>
</tr>
<tr>
<td>ARTH 2496</td>
<td>Southern Baroque Art: Italy and Spain</td>
</tr>
<tr>
<td>ARTH 2497</td>
<td>Northern Baroque Art</td>
</tr>
<tr>
<td>19th Century</td>
<td></td>
</tr>
<tr>
<td>ARTH 2500</td>
<td>Topics in 19th Century Art</td>
</tr>
<tr>
<td>ARTH 2535</td>
<td>Romanticism</td>
</tr>
<tr>
<td>ARTH 2543</td>
<td>Impressionism and Post-Impressionism</td>
</tr>
<tr>
<td>ARTH 2563</td>
<td>Painting: Late 19th Century</td>
</tr>
<tr>
<td>ARTH 2704</td>
<td>19th Century American Art</td>
</tr>
<tr>
<td>20th Century</td>
<td></td>
</tr>
<tr>
<td>ARTH 2008</td>
<td>History of Photography</td>
</tr>
<tr>
<td>ARTH 2013</td>
<td>Art of the Film</td>
</tr>
<tr>
<td>ARTH 2600</td>
<td>Topics in 20th Century Art</td>
</tr>
<tr>
<td>ARTH 2601</td>
<td>History of Modern Graphic Design</td>
</tr>
<tr>
<td>ARTH 2610</td>
<td>Topics in Modern and Contemporary Art</td>
</tr>
<tr>
<td>ARTH 2622</td>
<td>Galleries and Studios of Rome</td>
</tr>
<tr>
<td>ARTH 2642</td>
<td>Modern Painting and Sculpture 1900-45</td>
</tr>
<tr>
<td>ARTH 2644</td>
<td>Modern Art: 1945 to the Present</td>
</tr>
<tr>
<td>ARTH 2651</td>
<td>Symbolism, Dada, and Surrealism</td>
</tr>
<tr>
<td>ARTH 2658</td>
<td>Picasso and Modern Masters</td>
</tr>
<tr>
<td>ARTH 2701</td>
<td>Main Trends in American 20th Century Painting</td>
</tr>
<tr>
<td>Non Western</td>
<td></td>
</tr>
<tr>
<td>ARTH 2800</td>
<td>Topics in Non-Western Art</td>
</tr>
<tr>
<td>ARTH 2807</td>
<td>East Meets West</td>
</tr>
<tr>
<td>ARTH 2815</td>
<td>Japanese Art</td>
</tr>
<tr>
<td>ARTH 2818</td>
<td>Art of India</td>
</tr>
<tr>
<td>ARTH 2819</td>
<td>Southeast Asian Art</td>
</tr>
<tr>
<td>ARTH 2868</td>
<td>Arts of Asia</td>
</tr>
<tr>
<td>ARTH 2871</td>
<td>Chinese Art</td>
</tr>
</tbody>
</table>
Schools, Colleges, and Divisions

Capstone

| ARTH 3097 | Art History Capstone | 4 |

Electives

Two additional upper-level Art History electives numbered 2000-4999 | 8 |

Writing Intensive Course

Note: In addition to the Capstone requirement, one other Upper-Level Art History course (either as part of the 5 "categories" or electives) must be Writing Intensive (WI).

Select one of the following:

| ARTH 2096 | Art History Writing Intensive |
| ARTH 2097 | Art History Writing Intensive |
| ARTH 2098 | Art History Writing Intensive |
| ARTH 2196 | Greek and Roman Sculpture |
| ARTH 2496 | Southern Baroque Art: Italy and Spain |
| ARTH 2497 | Northern Baroque Art |
| ARTH 2897 | Writing for Art History: Art History Writing Intensive Seminar |

Studio Art

One Studio Art Course | 3

1 Only offered at the Japan campus.

Suggested Academic Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Arts in Art History

Requirements for New Students starting in the 2015-2016 Academic Year

Year 1

Fall

| ARTH 1155 or 1955 | Art Heritage of the Western World I | 3 |
| ENG 0802, 0812, or 0902 | Analytical Reading and Writing [GW] | 4 |
| GenEd Breadth Course | 3 |
| GenEd Breadth Course | 3 |
| Free Elective | 3 |

Term Credit Hours | 16 |

Spring

| ARTH 1156 or 1956 | Art Heritage of the Western World II | 3 |
| IH 0851 or 0951 | Mosaic: Humanities Seminar I [GY] | 3 |
| GenEd Breadth Course | 3 |
| GenEd Quantitative Literacy Course [GQ] | 4 |
| Free Elective | 3 |

Term Credit Hours | 16 |

Year 2

Fall

| Upper-Level 2000+ WI Art History Course¹ | 4 |
| Foreign Language 1001 - first level | 4 |
| IH 0852 or 0952 | Mosaic: Humanities Seminar II [GZ] | 3 |
| GenEd Breadth Course | 3 |
| GenEd Breadth Course | 3 |

Term Credit Hours | 17 |

Spring

| Upper-Level 2000+ Art History Course | 4 |
| Foreign Language 1002 - second level | 4 |
| GenEd Breadth Course | 3 |
GenEd Breadth Course  3
Free Elective  3

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>17</th>
</tr>
</thead>
</table>

### Year 3

#### Fall

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper-Level 2000+ Art History Course</td>
<td>4</td>
</tr>
<tr>
<td>Upper-Level 2000+ Art History Course</td>
<td>4</td>
</tr>
<tr>
<td>Upper-Level 2000+ Liberal Arts Elective</td>
<td>3</td>
</tr>
<tr>
<td>Studio Art</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>14</th>
</tr>
</thead>
</table>

#### Spring

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTH 3097 Art History Capstone [WI]</td>
<td>4</td>
</tr>
<tr>
<td>Upper-Level 2000+ Art History Course</td>
<td>4</td>
</tr>
<tr>
<td>Upper-Level 2000+ CLA Social Science Elective</td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>14</th>
</tr>
</thead>
</table>

### Year 4

#### Fall

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper-Level 2000+ Art History Course</td>
<td>4</td>
</tr>
<tr>
<td>Upper-Level 2000+ CLA Social Science Elective</td>
<td>3</td>
</tr>
<tr>
<td>Upper-Level 2000+ Liberal Arts Elective</td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>16</th>
</tr>
</thead>
</table>

#### Spring

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper-Level 2000+ Art History Course</td>
<td>4</td>
</tr>
<tr>
<td>Upper-Level 2000+ Liberal Arts Elective</td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>13</th>
</tr>
</thead>
</table>

### Total Credit Hours: 123

All upper-level Art History courses are categorized as upper-level Liberal Arts courses.

1. ARTH 2897 is strongly recommended.
2. ARTH 3097 Art History Capstone is a senior-level course in historiography and research methods, typically offered every semester. Students may take Capstone in either the third or fourth year, but should not enroll until after they have completed at least four upper-level art history courses.

### Bachelor of Fine Arts

Tyler School of Art  
2001 N. 13th Street  
Philadelphia, PA 19122  
215-777-9000  
tyler@temple.edu

Tyler's curriculum is designed to give sound preparation to the future artist while at the same time avoiding narrow vocational goals. The freshman foundation program and introductory courses in each studio area develop a thorough understanding of fundamental processes and information. Advanced courses in the majors stress the development of an individual idiom and preparation for the professional world. At Tyler, art students find an atmosphere of aesthetic freedom that encourages personal experimentation and the exploration of visual concepts.

Tyler’s BFA curriculum is designed to give sound preparation to the future artist through coursework that provides a variety of approaches, practices, skills and goals. The BFA foundation program and introductory courses in each studio area develop a thorough understanding of fundamental processes and information. Advanced courses in the major stress the development of an individual idiom and preparation for the professional world. At Tyler, art students find an atmosphere of aesthetic freedom that encourages personal experimentation and the exploration of visual concepts.
Freshman Year

The Foundation Program is highly structured and intensive; it forms the base that establishes the fundamental studio practice and principles for all visual art expression. In addition to presenting traditional vocabulary, theory, media, and technique, the Foundation Program develops creative thinking and problem solving, visual thinking, and perceptual and imaginative abilities. Faculty members from all areas of the school teach the Foundation courses, assuring a broad range of experience and diverse viewpoints.

Sophomore Year

Sophomore studio electives serve as prerequisites to enter the major, of which one or two specific courses are required in each major. During the sophomore year, students are offered the opportunity to explore a wide range of studio areas. This experience gives the necessary background with which to make an informed selection of a major and adds to the overall breadth of the educational experience. Requirements are six 2000-level studio courses (18 s.h.), not to exceed three courses from any one major area and to include at least one course from three different major areas; and additional credits in Art History electives and/or General Education.

Junior and Senior Years

The Bachelor of Fine Arts degree is completed after a final two-year concentration in a major studio area. Because expressive work is often achieved by synthesis of disparate media, studio work outside the major is allowed. Requirements are the specified major courses (21-24 s.h. depending on the major) and one major capstone course (3 s.h.), with a minimum grade of C- required in each course; a minimum of three studio electives which may be taken outside the major (9-12 s.h. depending on the major); and additional credits in Art History, General Education, and elective courses.

The B.F.A. with Art Education Concentration

The B.F.A. with the Art Education Concentration prepares students for the PA certification in teaching art, kindergarten through twelfth grade. Students must complete B.F.A. requirements along with a three-year sequence in Education and Art Education that begins in the sophomore year. Five years are necessary to fulfill all requirements. Students who take summer session courses may complete the degree in 4.5 years.

Programs

- B.F.A. Foundation Program (p. 225)
- Bachelor of Fine Arts (p. 226)
- Bachelor of Fine Arts with Art Education Concentration (p. 228)

B.F.A. Foundation Program

Gerard Brown, Chair
Tyler School of Art Building
Administrative Suite Room 210P
215-777-9170
gbrown@temple.edu

Studies for the B.F.A. degree at Tyler (including those who seek the Art Education Concentration) begin with a common freshman experience, the Foundation Year. During this year, students are enrolled in studio courses in Drawing, 2-D and 3-D Principles as well as two Foundation seminar courses. The Foundation Program Department is highly structured and intensive. It forms the fundamental basis for studio practice, critical thinking, and understanding and implementation of principles of visual expression. The program emphasizes creative and critical thinking, problem solving, visual thinking, perception and observation through the use of visual vocabulary, theory, media, and techniques of artistic practice. The Foundation faculty is comprised of artists from all the fields represented in the school’s majors, providing freshmen with a broad perspective and diverse points of view from which to build their experience as artists.

B.F.A. Foundation Year Requirements

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td></td>
</tr>
<tr>
<td>FDPR 1501</td>
<td>Introduction to Art and Design</td>
</tr>
<tr>
<td>FDPR 1511</td>
<td>Foundation Drawing</td>
</tr>
<tr>
<td>FDPR 1521</td>
<td>2D Foundation Principles</td>
</tr>
<tr>
<td>FDPR 1531</td>
<td>3D Foundation Principles/W</td>
</tr>
<tr>
<td>ARTH 1155 or 1955</td>
<td>Art Heritage of the Western World I</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
</tr>
<tr>
<td>Term Credit Hours</td>
<td>17</td>
</tr>
<tr>
<td>Spring</td>
<td></td>
</tr>
</tbody>
</table>

1. GW denotes General Writing course.
Temple University Undergraduate Bulletin 2015-2016

FDPR 1502  Investigations of Art and Design  1
FDPR 1512  Foundation Drawing  3
FDPR 1522  2D Foundation Principles  3
FDPR 1532  3D Foundation Principles/C  3
ARTH 1156 or 1956  Art Heritage of the Western World II  3
IH 0851 or 0951  Mosaic: Humanities Seminar I [GY]  3

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art Heritage of the Western World II</td>
<td>3</td>
</tr>
<tr>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
</tbody>
</table>

Term Credit Hours: 16
Total Credit Hours: 33

1 These are suggested GenEds to take during the first year; other GenEd courses may be substituted. Please consult your advisor.

Bachelor of Fine Arts

Tyler's BFA curriculum is designed to give sound preparation to the future artist through coursework that provides a variety of approaches, practices, skills and goals. The BFA foundation program and introductory courses in each studio area develop a thorough understanding of fundamental processes and information. Advanced courses in the major stress the development of an individual idiom and preparation for the professional world. At Tyler, art students find an atmosphere of aesthetic freedom that encourages personal experimentation and the exploration of visual concepts.

Freshman Year

The Foundation Program is highly structured and intensive; it forms the base that establishes the fundamental studio practice and principles for all visual art expression. In addition to presenting traditional vocabulary, theory, media, and technique, the Foundation Program develops creative thinking and problem solving, visual thinking, and perceptual and imaginative abilities. Faculty members from all areas of the school teach the Foundation courses, assuring a broad range of experience and diverse viewpoints.

Sophomore Year

Sophomore studio electives serve as prerequisites to enter the major, of which one or two specific courses are required in each major. During the sophomore year, students are offered the opportunity to explore a wide range of studio areas. This experience gives the necessary background with which to make an informed selection of a major and adds to the overall breadth of the educational experience. Requirements are six 2000-level studio courses (18 s.h.), not to exceed three courses from any one major area and to include at least one course from three different major areas; and additional credits in Art History electives and/or General Education.

Junior and Senior Years

The Bachelor of Fine Arts degree is completed after a final two-year concentration in a major studio area. Because expressive work is often achieved by synthesis of disparate media, studio work outside the major is allowed. Requirements are the specified major courses (21-24 s.h. depending on the major) and one major capstone course (3 s.h.), with a minimum grade of C- required in each course; a minimum of three studio electives which may be taken outside the major (9-12 s.h. depending on the major); and additional credits in Art History, General Education and elective courses.

The Bachelor of Fine Arts degree in Studio Art may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 126 semester hours of credit with a minimum cumulative GPA of 2.00.

Please note that there may be minimum grade requirements in the courses required for the degree and as prerequisites for other courses. Please confer with the advising staff and review the DARS for information.

B.F.A. Curriculum

<table>
<thead>
<tr>
<th>Studio courses</th>
<th>74</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foundation Program (20 credits)</td>
<td></td>
</tr>
<tr>
<td>2000 level Sophomore studios including major pre-reqs (18 credits)</td>
<td></td>
</tr>
<tr>
<td>Major studio requirements (21-24 credits, varies depending on major)</td>
<td></td>
</tr>
<tr>
<td>Capstone [WI] course in Major (3 credits)</td>
<td></td>
</tr>
<tr>
<td>Studio electives (9-12 credits, varies depending on major)</td>
<td></td>
</tr>
<tr>
<td>Art History</td>
<td>14</td>
</tr>
<tr>
<td>ARTH 1155  Art Heritage of the Western World I</td>
<td></td>
</tr>
<tr>
<td>ARTH 1156  Art Heritage of the Western World II</td>
<td></td>
</tr>
<tr>
<td>2000+ ARTH elective</td>
<td></td>
</tr>
<tr>
<td>2000+ ARTH writing intensive</td>
<td></td>
</tr>
<tr>
<td>General Education</td>
<td>32</td>
</tr>
</tbody>
</table>
Successful completion (minimum C-) of FDPR 1511 and ARTH 1156 satisfies the GenEd Arts (GA) requirement.

Summer or semester study abroad program will satisfy the GenEd Global/World Society (GG) requirement.

<table>
<thead>
<tr>
<th>Non-studio elective</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open elective</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credit Hours</strong></td>
<td><strong>126</strong></td>
</tr>
</tbody>
</table>

1 Students waived from General Education (p. 143) requirements must make up the credits with academic coursework taken outside of Tyler departments to be in compliance with BFA accreditation.

Suggested Academic Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Fine Arts

Requirements for New Students starting in the 2015-2016 Academic Year

**Year 1**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
</tr>
<tr>
<td>FDPR 1511</td>
<td>Foundation Drawing</td>
</tr>
<tr>
<td>FDPR 1521</td>
<td>2D Foundation Principles</td>
</tr>
<tr>
<td>FDPR 1531</td>
<td>3D Foundation Principles/W</td>
</tr>
<tr>
<td>FDPR 1501</td>
<td>Introduction to Art and Design</td>
</tr>
<tr>
<td>ARTH 1155 or 1955</td>
<td>Art Heritage of the Western World I</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
</tr>
<tr>
<td>FDPR 1512</td>
<td>Foundation Drawing</td>
</tr>
<tr>
<td>FDPR 1522</td>
<td>2D Foundation Principles</td>
</tr>
<tr>
<td>FDPR 1532</td>
<td>3D Foundation Principles/C</td>
</tr>
<tr>
<td>FDPR 1502</td>
<td>Investigations of Art and Design</td>
</tr>
<tr>
<td>ARTH 1156 or 1956</td>
<td>Art Heritage of the Western World II</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

**Year 2**

<table>
<thead>
<tr>
<th>Fall</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Select three of the following:</td>
<td>9</td>
</tr>
<tr>
<td>CRFT 2xxx (Studio Electives/Prerequisites)</td>
<td></td>
</tr>
<tr>
<td>GAD 2xxx (Studio Electives/Prerequisites)</td>
<td></td>
</tr>
<tr>
<td>PDS 2xxx (Studio Electives/Prerequisites)</td>
<td></td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Select three of the following:</td>
<td>9</td>
</tr>
<tr>
<td>CRFT 2xxx (Studio Electives/Prerequisites)</td>
<td></td>
</tr>
<tr>
<td>GAD 2xxx (Studio Electives/Prerequisites)</td>
<td></td>
</tr>
<tr>
<td>PDS 2xxx (Studio Electives/Prerequisites)</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

**Year 3**

<table>
<thead>
<tr>
<th>Fall</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Studio Major Courses</td>
<td>6</td>
</tr>
<tr>
<td>Studio Elective</td>
<td>3</td>
</tr>
</tbody>
</table>
Art History Elective  
GenEd Breadth Course  

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>16</th>
</tr>
</thead>
</table>

**Spring**

Studio Major Courses  
Studio Elective  
Art History Writing-Intensive Elective [WI]  
GenEd Breadth Course

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>16</th>
</tr>
</thead>
</table>

**Year 4**

**Fall**

Studio Major Courses  
Studio Elective  
GenEd Breadth Course  
Non-Studio Elective

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
</table>

**Spring**

Studio Major Courses  
Writing Intensive course in major (Capstone) [WI]  
GenEd Breadth Course  
Open Elective

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
</table>

Total Credit Hours:  
126

1. These 2 courses constitute the waiver for the GenEd Arts category if the courses are completed with a grade of C- or better.
2. See academic advisor for details.
3. Students may elect to take a second writing intensive course within their majors (if available), but must still fulfill a total of 14 credits in Art History - see academic advisor for details.
4. In some majors, the Capstone is taken in the junior year.

### Bachelor of Fine Arts with Art Education Concentration

The B.F.A. with the Art Education Concentration prepares students for the PA certification in teaching art, kindergarten through twelfth grade. Students must complete B.F.A. requirements along with a three-year sequence in Education and Art Education that begins in the sophomore year. Five years are necessary to fulfill all requirements. Students who take summer session courses may complete the degree in 4.5 years.

The Bachelor of Fine Arts degree with the Art Education Concentration may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 155 semester hours of credit with a minimum cumulative GPA of 3.0.

### University Requirements

All Temple students are required to complete the General Education (GenEd p. 143)) curriculum.

- Successful completion (minimum C-) of FDPR 1511 and ARTH 1156 satisfies the GenEd Arts (GA) requirement.
- Successful completion (minimum C-) of EDUC 2109, SPED 2231, and ENES 3338 satisfies the GenEd Human Behavior (GB) requirement.
- Summer or semester study abroad will satisfy the GenEd Global/World Society (GG) requirement.

### Concentration Requirements

ARTE 2001, ARTE 3096, ARTE 4003 and ARTE 4088 must be completed with a C or better to fulfill concentration requirements.

Students must earn a minimum grade of C- in required College of Education coursework and additional mathematics requirement to fulfill concentration requirements.

Students in the B.F.A. degree with the Art Education Concentration are required to take a Ceramics studio course and an additional studio course in Crafts; a Painting studio course and an additional studio course from PDS; a Printmaking studio course and an additional studio course from the GAD department. These courses may include prerequisite, sophomore, and/or studio courses within the student's chosen B.F.A. major.
Any B.F.A. student who wishes to pursue the Art Education Concentration must arrange to meet with the Art Education faculty advisor to discuss field placement, clearances, and requirements, as the state of Pennsylvania may change requirements after the Bulletin information has been posted. It is strongly suggested that students do so during their freshman year.

**B.F.A. with Art Education Concentration**

<table>
<thead>
<tr>
<th>Studio Courses</th>
<th>74</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foundation Program (20 credits)</td>
<td></td>
</tr>
<tr>
<td>2000 level Sophomore studios including major pre-reqs (18 credits)</td>
<td></td>
</tr>
<tr>
<td>Major studio requirements (24-27 credits, varies depending on major)</td>
<td></td>
</tr>
<tr>
<td>Studio electives (9-12 credits, varies depending on major)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Art History Courses</th>
<th>14</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTH 1155 Art Heritage of the Western World I</td>
<td></td>
</tr>
<tr>
<td>ARTH 1156 Art Heritage of the Western World II</td>
<td></td>
</tr>
<tr>
<td>2000+ ARTH elective</td>
<td></td>
</tr>
<tr>
<td>2000+ ARTH elective</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>General Education Courses</th>
<th>29</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Education Requirements</th>
<th>18</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 2103 Socio-cultural Foundations of Education in the United States</td>
<td></td>
</tr>
<tr>
<td>EDUC 2109 Adolescent Development for Educators</td>
<td></td>
</tr>
<tr>
<td>SPED 2231 Introduction to Inclusive Education</td>
<td></td>
</tr>
<tr>
<td>SPED 3211 Effective Instructional Strategies for Young Children with Disabilities</td>
<td></td>
</tr>
<tr>
<td>ENES 3338 Foundations of Language Teaching: Teaching English Language Learners in Grades 4 to 12</td>
<td></td>
</tr>
<tr>
<td>Mathematics course (1000 level) for PA Certification</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Art Education Courses</th>
<th>20</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTE 2001 Science and Art of Teaching</td>
<td></td>
</tr>
<tr>
<td>ARTE 3096 Art in Elementary and Secondary School</td>
<td></td>
</tr>
<tr>
<td>ARTE 4003 Special Needs K-12 Students in the Art Room</td>
<td></td>
</tr>
<tr>
<td>ARTE 4088 Student Teaching</td>
<td></td>
</tr>
</tbody>
</table>

**Total Credit Hours**

155

**Suggested Academic Plan**

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

**B.F.A. with Art Education Concentration (Five-Year)**

**Requirements for New Students starting in the 2015-2016 Academic Year**

**Year 1**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 0802, 0812, or 0902 Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>FDPR 1511 Foundation Drawing ¹</td>
<td>3</td>
</tr>
<tr>
<td>FDPR 1521 2D Foundation Principles</td>
<td>3</td>
</tr>
<tr>
<td>FDPR 1531 3D Foundation Principles/W</td>
<td>3</td>
</tr>
<tr>
<td>FDPR 1501 Introduction to Art and Design</td>
<td>1</td>
</tr>
<tr>
<td>ARTH 1155 Art Heritage of the Western World I</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

17

<table>
<thead>
<tr>
<th>Spring</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>IH 0851 or 0951 Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>FDPR 1512 Foundation Drawing</td>
<td>3</td>
</tr>
<tr>
<td>FDPR 1522 2D Foundation Principles</td>
<td>3</td>
</tr>
<tr>
<td>FDPR 1532 3D Foundation Principles/C</td>
<td>3</td>
</tr>
<tr>
<td>FDPR 1502 Investigations of Art and Design</td>
<td>1</td>
</tr>
<tr>
<td>ARTH 1156 Art Heritage of the Western World II ¹</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

16
### Year 2

#### Fall
- Studio 3
- Studio 3
- Studio 3
- EDUC 2103 Socio-cultural Foundations of Education in the United States 3
- IH 0852 or 0952 Mosaic: Humanities Seminar II [GZ] 3

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
</table>

#### Spring
- Studio 3
- Studio 3
- Studio 3
- EDUC 2109 Adolescent Development for Educators\(^2\) 3
- GenEd Quantitative Literacy Course [GQ] 4

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>16</th>
</tr>
</thead>
</table>

### Year 3

#### Fall
- Studio Major Course 3
- Studio Major Course 3
- Studio Elective 3
- Second Mathematics course for certification 3-4
- GenEd Breadth Course 3

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15-16</th>
</tr>
</thead>
</table>

#### Spring
- Studio Major Course 3
- Studio Major Course 3
- ARTE 2001 Science and Art of Teaching 4
- SPED 2231 Introduction to Inclusive Education\(^2\) 3
- GenEd Breadth Course 3

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>16</th>
</tr>
</thead>
</table>

### Year 4

#### Fall
- Studio Major Course 3
- Studio Major Course 3
- Art History Elective 3
- ENES 3338 Foundations of Language Teaching: Teaching English Language Learners in Grades 4 to 12\(^2\) 3
- GenEd Breadth Course 3

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>16</th>
</tr>
</thead>
</table>

#### Spring
- Studio Major Course 3
- Studio Major Course 3
- Select one of the following:
  - CRFT (Major Capstone) [WI] 3
  - GAD (Major Capstone) [WI] 3
  - PDS (Major Capstone) [WI] 3
- Art History Elective 4
- SPED 3211 Effective Instructional Strategies for Young Children with Disabilities 3

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>16</th>
</tr>
</thead>
</table>

### Year 5

#### Fall
- Studio elective 3
- Studio elective 3
Schools, Colleges, and Divisions

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTE 3096</td>
<td>Art in Elementary and Secondary School [WI]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

**Spring**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTE 4003</td>
<td>Special Needs K-12 Students in the Art Room</td>
<td>3</td>
</tr>
<tr>
<td>ARTE 4088</td>
<td>Student Teaching</td>
<td>9</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

**Total Credit Hours:** 155-156

1. These 2 courses constitute the waiver for the GenEd Arts category if the courses are completed with a C- or better.
2. These 3 courses constitute the waiver for the GenEd Human Behavior category if the courses are completed with a C- or better.

**Crafts**

Nicholas Kripal, Chairperson
Tyler School of Art Building
Administrative Suite Room 210N
215-777-9168
nkripal@temple.edu

The Crafts Department encompasses the media disciplines of Ceramics/Glass, Fibers and Material Studies, and Metals/Jewelry/CAD-CAM. These disciplines are rooted in a rich history, developed and refined within a contemporary context, and practiced and experienced through a series of formal presentations and evaluations. The Crafts Department faculty endeavor to refine and interpret Crafts traditions, techniques, and concepts while also pursuing the frontiers of their disciplines through their studio practice.

Students are challenged to explore the broad cultural and historical contexts in which their disciplines are made, exhibited, and experienced. They are encouraged to pursue their individual visions with an attitude of curiosity and imagination. The end goal of the curriculum is the education of a Crafts artist who will be creatively active throughout their lives, contributing to the enrichment of not only the communities in which they live and work, but the world community as well.

Upon graduation, students go on to careers in art education, design, the arena of not-for-profit and commercial galleries, and the professional practice of a studio artist. Many students go on to graduate school in order to receive further training and research for their eventual professional careers.

**Programs**

- Bachelor of Fine Arts in Ceramics (p. 231)
- Bachelor of Fine Arts in Fibers & Material Studies (p. 234)
- Bachelor of Fine Arts in Glass (p. 237)
- Bachelor of Fine of Arts in Metals/Jewelry/CAD-CAM (p. 240)

**Bachelor of Fine Arts in Ceramics**

**Ceramics/Glass**

Chad Curtis, Program Head, Ceramics
Tyler School of Art Building
Rooms 150/160
215-777-9201
chad.curtis@temple.edu

Sharyn O'Mara, Program Head, Glass
Tyler School of Art Building
Room 120
215-777-9211
somara@temple.edu

Since its earliest days, craft traditions and media have been an intrinsic part of the Tyler curriculum, aesthetic, and vibe. The intertwined areas of ceramics and glass reflect this history, and continue to build on it by attracting students who are interested in challenging the definitions of these art forms.
Undergraduate students’ exploration of ceramics can take many forms. There is state of the art equipment available for wheelwork, mold making and slip casting, as well as large kilns for hand building and sculpture. Students are encouraged to investigate a wide range of processes, including the recent addition of 3-D modeling and printing, as they develop their own personal visions. Separate studio space is available for junior and senior majors, and students are encouraged to reach outside their own spheres for inspiration and ideas. Many of our students are interested in interdisciplinary work, such as integrating industrial design and pushing it into the fine arts perspective, resulting in new hybrids. A recent special project with an art conservation firm had students researching and recreating historical Rookwood tiles for a restoration project at a nearby architectural landmark. This provided firsthand experience collaborating with conservators and architects and ceramic technicians. The Ceramics program makes a point of drawing on the energy and resources of the city. Students attend lectures and exhibitions at museums, galleries and other cultural institutions all over town, and participate in community arts projects in the ongoing collaboration with Philadelphia’s Mural Arts Project.

Degree Requirements

The Bachelor of Fine Arts degree in Ceramics may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 126 semester hours of credit with a minimum cumulative GPA of 2.00. All Ceramics majors must complete the BFA curriculum (p. 226) and General Education (p. 143) requirements.

- Students must earn a C- or better in CRFT 2151 and CRFT 2161 to enter the Ceramics major.
- The eight required Junior/Senior studio courses and CRFT 4496 (capstone) must be completed with a C- or better to fulfill major requirements.

Major Requirements for B.F.A. in Ceramics

Sophomore Prerequisites

| CRFT 2151 | Beginning Ceramics | 3 |
| CRFT 2161 | Intermediate Ceramics | 3 |

Junior Requirements

| CRFT 3162 | Advanced Ceramics (This course is repeatable and should be taken once in the fall and once in the spring) | 6 |

Two additional specialized Ceramics courses | 6 |

Senior Requirements

| CRFT 4162 | Advanced Ceramics (This course is repeatable and should be taken once in the fall and once in the spring) | 6 |

Two additional specialized Ceramics courses | 6 |

| CRFT 4496 | Business Practices in Crafts (Capstone) | 3 |

Suggested Academic Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Fine Arts in Ceramics

Requirements for New Students starting in the 2015-2016 Academic Year

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td></td>
</tr>
<tr>
<td>FDPR 1511</td>
<td>Foundation Drawing</td>
</tr>
<tr>
<td>FDPR 1521</td>
<td>2D Foundation Principles</td>
</tr>
<tr>
<td>FDPR 1531</td>
<td>3D Foundation Principles/W</td>
</tr>
<tr>
<td>FDPR 1501</td>
<td>Introduction to Art and Design</td>
</tr>
<tr>
<td>ARTH 1155</td>
<td>Art Heritage of the Western World I</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>FDPR 1512</td>
<td>Foundation Drawing</td>
</tr>
<tr>
<td>FDPR 1522</td>
<td>2D Foundation Principles</td>
</tr>
<tr>
<td>FDPR 1532</td>
<td>3D Foundation Principles/C</td>
</tr>
<tr>
<td>FDPR 1502</td>
<td>Investigations of Art and Design</td>
</tr>
<tr>
<td>ARTH 1156</td>
<td>Art Heritage of the Western World II</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>
### Year 2
#### Fall
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRFT 2151</td>
<td>Beginning Ceramics</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>CRFT 2000-2999 Studio Elective</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GAD 2000-2999 Studio Elective</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PDS 2000-2999 Studio Elective</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>CRFT 2000-2999 Studio Elective</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GAD 2000-2999 Studio Elective</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PDS 2000-2999 Studio Elective</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 16

#### Spring
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRFT 2161</td>
<td>Intermediate Ceramics</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>CRFT 2000-2999 Studio Elective</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GAD 2000-2999 Studio Elective</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PDS 2000-2999 Studio Elective</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>CRFT 2000-2999 Studio Elective</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GAD 2000-2999 Studio Elective</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PDS 2000-2999 Studio Elective</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 15

### Year 3
#### Fall
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRFT 3162</td>
<td>Advanced Ceramics</td>
<td>3</td>
</tr>
<tr>
<td>CRFT 3000+</td>
<td>(Specialized Ceramics Course)</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>CRFT Studio Elective</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GAD Studio Elective</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PDS Studio Elective</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Art History Elective</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 16

#### Spring
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRFT 3162</td>
<td>Advanced Ceramics</td>
<td>3</td>
</tr>
<tr>
<td>CRFT 3000+</td>
<td>(Specialized Ceramics Course)</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>CRFT Studio Elective</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GAD Studio Elective</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PDS Studio Elective</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Art History Elective [WI]</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 16

### Year 4
#### Fall
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRFT 4162</td>
<td>Advanced Ceramics</td>
<td>3</td>
</tr>
<tr>
<td>CRFT 3000+</td>
<td>(Specialized Ceramics Course)</td>
<td>3</td>
</tr>
</tbody>
</table>
Select one of the following:
- CRFT Studio Elective
- GAD Studio Elective
- PDS Studio Elective
- GenEd Breadth Course
- Non-Studio Elective

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
</tr>
</tbody>
</table>

### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRFT 4162</td>
<td>Advanced Ceramics</td>
<td>3</td>
</tr>
<tr>
<td>CRFT 3000+</td>
<td>(Specialized Ceramics Course)</td>
<td>3</td>
</tr>
<tr>
<td>CRFT 4496</td>
<td>Business Practices in Crafts [WI] (Capstone)</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Open Elective</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
</tr>
</tbody>
</table>

Total Credit Hours: 126

1 These 2 courses constitute the waiver for the GenEd Arts category if the courses are completed with a C- or better.

Please Note: An approved study abroad program will waive the GenEd Global/World Society (GG) requirement. Ceramics majors interested in studying abroad should consult with an academic advisor to determine if a semester (generally spring semester of second year) or a summer program would be the best option to remain on track for graduation.

## Bachelor of Fine Arts in Fibers & Material Studies

**Fibers & Material Studies**

Jesse Harrod, Program Head  
Tyler School of Art Building  
Suite 250N  
215-777-9136  
jessica.harrod@temple.edu

The Fibers and Material Studies major includes equipment and classes in weaving, off-loom structures, fabric dyeing and surface processes, screen printing on fabric, digital printing, and the use of alternative materials. Once students acquire an understanding and proficiency of techniques and media, the program promotes experimentation and development of a personal direction.

## Degree Requirements

The Bachelor of Fine Arts degree in Fibers & Material Studies may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 126 semester hours of credit with a minimum cumulative GPA of 2.00. All Fibers & Material Studies majors must complete the BFA curriculum (p. 226) and General Education (p. 143) requirements.

- Students must earn a C- or better in CRFT 2305 and CRFT 2317 to enter the Fibers & Material Studies major.
- The eight required Junior/Senior studio courses and CRFT 4496 (capstone) must be completed with a C- or better to fulfill major requirements.

### Major Requirements for B.F.A. in Fibers & Material Studies

#### Sophomore Prerequisites

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRFT 2305</td>
<td>Fabric Pattern and Image I</td>
<td>3</td>
</tr>
<tr>
<td>CRFT 2317</td>
<td>Off Loom Structure I</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Junior and Senior Requirements

Select 8 of the following Specialized Fibers Courses - 4 courses at 2000/3000 level and 4 courses at 3000/4000 level:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRFT 2312</td>
<td>Alternative Materials</td>
</tr>
<tr>
<td>CRFT 2318</td>
<td>Woven Structure I</td>
</tr>
<tr>
<td>CRFT 3306</td>
<td>Mixed Media Construction: Structural Embellishment I</td>
</tr>
<tr>
<td>CRFT 3307</td>
<td>Soft Sculpture</td>
</tr>
<tr>
<td>CRFT 3308</td>
<td>Shibori Cloth Techniques</td>
</tr>
<tr>
<td>CRFT 3309</td>
<td>Body Wear Construction</td>
</tr>
</tbody>
</table>
CRFT 3311       Body Art & Adornment
CRFT 3314       Mixed Media Printing
CRFT 3315       Textile Design for Print Production
CRFT 3317       Off Loom Structure II
CRFT 3318       Woven Structure II
CRFT 3371       Silkscreen on Fabric I
CRFT 3385       Field Internship in Fibers
CRFT 4305       Fabric Pattern and Image II
CRFT 4306       Structural Embellishment II
CRFT 4317       Off Loom Structure III
CRFT 4318       Woven Structure III
CRFT 4371       Silkscreen on Fabric II

Capstone
CRFT 4496       Business Practices in Crafts (Capstone) 3

Suggested Academic Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Fine Arts in Fibers & Material Studies

Requirements for New Students starting in the 2015-2016 Academic Year

Year 1

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDPR 1511</td>
<td>Foundation Drawing 1</td>
</tr>
<tr>
<td>FDPR 1521</td>
<td>2D Foundation Principles</td>
</tr>
<tr>
<td>FDPR 1531</td>
<td>3D Foundation Principles/W</td>
</tr>
<tr>
<td>FDPR 1501</td>
<td>Introduction to Art and Design</td>
</tr>
<tr>
<td>ARTH 1155 or 1955</td>
<td>Art Heritage of the Western World I</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

Spring

| FDPR 1512             | Foundation Drawing | 3 |
| FDPR 1522             | 2D Foundation Principles | 3 |
| FDPR 1532             | 3D Foundation Principles/C | 3 |
| FDPR 1502             | Investigations of Art and Design | 1 |
| ARTH 1156 or 1956     | Art Heritage of the Western World II 1 | 3 |
| IH 0851 or 0951       | Mosaic: Humanities Seminar I [GY] | 3 |
| **Term Credit Hours** | **16** |

Year 2

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRFT 2305</td>
<td>Fabric Pattern and Image I</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3</td>
</tr>
<tr>
<td>CRFT 2000-2999 Studio Elective</td>
<td></td>
</tr>
<tr>
<td>GAD 2000-2999 Studio Elective</td>
<td></td>
</tr>
<tr>
<td>PDS 2000-2999 Studio Elective</td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3</td>
</tr>
<tr>
<td>CRFT 2000-2999 Studio Elective</td>
<td></td>
</tr>
<tr>
<td>GAD 2000-2999 Studio Elective</td>
<td></td>
</tr>
<tr>
<td>PDS 2000-2999 Studio Elective</td>
<td></td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

Spring
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRFT 2317</td>
<td>Off Loom Structure I</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following:

- CRFT 2000-2999 Studio Elective
- GAD 2000-2999 Studio Elective
- PDS 2000-2999 Studio Elective

Select one of the following:

- CRFT 2000-2999 Studio Elective
- GAD 2000-2999 Studio Elective
- PDS 2000-2999 Studio Elective

GenEd Breadth Course 3
GenEd Breadth Course 3

<table>
<thead>
<tr>
<th>Term</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

### Year 3

#### Fall

- CRFT 2xxx/3xxx (Specialized Fibers Course) 3
- CRFT 2xxx/3xxx (Specialized Fibers Course) 3

Select one of the following:

- CRFT Studio Elective
- GAD Studio Elective
- PDS Studio Elective

Art History Elective 4
GenEd Breadth Course 3

<table>
<thead>
<tr>
<th>Term</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>16</td>
</tr>
</tbody>
</table>

#### Spring

- CRFT 2xxx/3xxx (Specialized Fibers Course) 3
- CRFT 2xxx/3xxx (Specialized Fibers Course) 3

Select one of the following:

- CRFT Studio Elective
- GAD Studio Elective
- PDS Studio Elective

Art History Elective [WI] 4
GenEd Breadth Course 3

<table>
<thead>
<tr>
<th>Term</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>16</td>
</tr>
</tbody>
</table>

### Year 4

#### Fall

- CRFT 3xxx/4xxx (Specialized Fibers Course) 3
- CRFT 3xxx/4xxx (Specialized Fibers Course) 3

Select one of the following:

- CRFT Studio Elective
- GAD Studio Elective
- PDS Studio Elective

GenEd Breadth Course 3
Non-Studio Elective 3

<table>
<thead>
<tr>
<th>Term</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

#### Spring

- CRFT 3xxx/4xxx (Specialized Fibers Course) 3
- CRFT 3xxx/4xxx (Specialized Fibers Course) 3
- CRFT 4496 Business Practices in Crafts [WI] (Capstone- Spring only) 3
GenEd Breadth Course 3
These 2 courses constitute the waiver for the GenEd Arts category if the courses are completed with a C- or better.

1. Capstone may be taken in spring of third or fourth year.

Please Note: An approved study abroad program will waive the GenEd Global/World Society (GG) requirement. Fibers and Material Studies majors interested in studying abroad should plan to spend either spring semester of their second year, after completing the sophomore prerequisites for the major in the fall, or consider a summer semester to remain on track with required courses. Please see an academic advisor for more details.

**Bachelor of Fine Arts in Glass**

**Ceramics/Glass**

Chad Curtis, Program Head, Ceramics
Tyler School of Art Building
Rooms 150/160
215-777-9201
chad.curtis@temple.edu

Sharyn O'Mara, Program Head, Glass
Tyler School of Art Building
Room 120
215-777-9211
somara@temple.edu

Since its earliest days, craft traditions and media have been an intrinsic part of the Tyler curriculum, aesthetic, and vibe. The intertwined areas of ceramics and glass reflect this history, and continue to build on it by attracting students who are interested in challenging the definitions of these art forms.

The glass program combines a contemporary art context with coursework that emphasizes the history, chemistry, and technical aspects of glass production. In addition to learning glass blowing, glass fabrication, glass fusing, glass casting, and kiln work, students are responsible for running the hot and cold studios, and for learning to build the tools they need to articulate their concepts in glass and other media.

The program also emphasizes the development of a closely-knit artistic community. Having a cohesive group of students is a valued goal, and genuine teamwork is required to make work and run the studios. Tyler also prepares students by making sure they are part of the greater glass community. Through membership in a variety of professional associations, faculty members bring visiting artists, workshops, and guest lecturers to campus. Students tour Philadelphia studios and explore the city’s wealth of cultural institutions.

**Degree Requirements**

The Bachelor of Fine Arts degree in Glass may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 126 semester hours of credit with a minimum cumulative GPA of 2.00. All Glass majors must complete the BFA curriculum (p. 226) and General Education (p. 143) requirements.

- Students must earn a C- or better in CRFT 2258 and CRFT 2261 to enter the Glass major.
- The eight required Junior/Senior studio courses and CRFT 4496 (capstone) must be completed with a C- or better to fulfill major requirements.

The faculty encourages taking Glass courses in excess of the minimum required. These additional courses count towards required studio electives.

**Major Requirements for B.F.A. in Glass**

<table>
<thead>
<tr>
<th>Sophomore Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRFT 2258 Introduction to Glass 3</td>
</tr>
<tr>
<td>CRFT 2261 Intermediate Glass 3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Junior Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRFT 3243 Advanced Glass Seminar 3</td>
</tr>
<tr>
<td>CRFT 3244 Advanced Glass, Topic: Visiting Artist Series 3</td>
</tr>
</tbody>
</table>

Select one of the following Cold Glass courses: 3

|CRFT 3237 Glass Construction, Topic: Kiln Working|
CRFT 3238  Glass Construction, Topic: Cold Glass

Select one of the following Hot Glass courses:
- CRFT 3231  Hot Glass, Topic: Blowing
- CRFT 3242  Hot Glass Casting

Senior Requirements
CRFT 4252  Advanced Glass Seminar 3
CRFT 4244  Advanced Glass Seminar: Visiting Artist Series 3

Select one of the following Cold Glass courses:
- CRFT 4237  Glass Construction, Topic: Kiln Working 3
- CRFT 4238  Glass Construction, Topic: Cold Glass 3

Select one of the following Hot Glass courses:
- CRFT 4241  Hot Glass Blowing 3
- CRFT 4242  Hot Glass Casting 3
- CRFT 4496  Business Practices in Crafts (Capstone) 3

Suggested Academic Plan
Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Fine Arts in Glass
Requirements for New Students starting in the 2015-2016 Academic Year

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>CRFT 2258</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Introduction to Glass</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRFT 2000-2999 Studio Elective</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GAD 2000-2999 Studio Elective</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PDS 2000-2999 Studio Elective</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring</td>
<td>16</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Fall</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRFT 2258</td>
<td></td>
</tr>
</tbody>
</table>

| Select one of the following: | |
| CRFT 2000-2999 Studio Elective |
| GAD 2000-2999 Studio Elective |
| PDS 2000-2999 Studio Elective |

Term Credit Hours

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Spring</th>
</tr>
</thead>
</table>

| IH 0852 or 0951 |

| Mosaic: Humanities Seminar II [GZ] |

GenEd Quantitative Literacy Course [GQ] 3

Term Credit Hours

| 16 | 17 |
| CRFT 2261 | Intermediate Glass | 3 |
| Select one of the following: | 3 |
| CRFT 2000-2999 Studio Elective | |
| GAD 2000-2999 Studio Elective | |
| PDS 2000-2999 Studio Elective | |
| Select one of the following: | 3 |
| CRFT 2000-2999 Studio Elective | |
| GAD 2000-2999 Studio Elective | |
| PDS 2000-2999 Studio Elective | |
| GenEd Breadth Course | 3 |
| GenEd Breadth Course | 3 |

**Term Credit Hours**

<table>
<thead>
<tr>
<th>Year 3</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>CRFT 3243</td>
<td>Advanced Glass Seminar</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3</td>
</tr>
<tr>
<td>CRFT 3231</td>
<td>Hot Glass, Topic: Blowing</td>
</tr>
<tr>
<td>CRFT 3242</td>
<td>Hot Glass Casting</td>
</tr>
<tr>
<td>CRFT 3237</td>
<td>Glass Construction, Topic: Kiln Working</td>
</tr>
<tr>
<td>CRFT 3238</td>
<td>Glass Construction, Topic: Cold Glass</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3</td>
</tr>
<tr>
<td>CRFT Studio Elective</td>
<td></td>
</tr>
<tr>
<td>GAD Studio Elective</td>
<td></td>
</tr>
<tr>
<td>PDS Studio Elective</td>
<td></td>
</tr>
<tr>
<td>Art History Elective</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

<table>
<thead>
<tr>
<th>Year 4</th>
<th>16</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>CRFT 4252</td>
<td>Advanced Glass Seminar</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3</td>
</tr>
<tr>
<td>CRFT 4237</td>
<td>Glass Construction, Topic: Kiln Working</td>
</tr>
<tr>
<td>CRFT 4238</td>
<td>Glass Construction, Topic: Cold Glass</td>
</tr>
<tr>
<td>CRFT 4241</td>
<td>Hot Glass Blowing</td>
</tr>
<tr>
<td>CRFT 4242</td>
<td>Hot Glass Casting</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3</td>
</tr>
<tr>
<td>CRFT Studio Elective</td>
<td></td>
</tr>
<tr>
<td>GAD Studio Elective</td>
<td></td>
</tr>
</tbody>
</table>
Temple University Undergraduate Bulletin 2015-2016

PDS Studio Elective
GenEd Breadth Course 3
Non-Studio Elective 3

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
</table>

**Spring**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRFT 4244</td>
<td>Advanced Glass Seminar: Visiting Artist Series</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following not previously taken:³</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>CRFT 4237</td>
<td>Glass Construction, Topic: Kiln Working</td>
<td></td>
</tr>
<tr>
<td>CRFT 4238</td>
<td>Glass Construction, Topic: Cold Glass</td>
<td></td>
</tr>
<tr>
<td>CRFT 4241</td>
<td>Hot Glass Blowing</td>
<td></td>
</tr>
<tr>
<td>CRFT 4242</td>
<td>Hot Glass Casting</td>
<td></td>
</tr>
<tr>
<td>CRFT 4496</td>
<td>Business Practices in Crafts [WI] (Capstone)</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Open Elective</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
</table>

**Total Credit Hours:** 126

¹ These 2 courses constitute the waiver for the GenEd Arts category if the courses are completed with a C- or better.
² Students need one Hot Glass course (CRFT 3231 or CRFT 3242) and one Cold Construction course (CRFT 3237 or CRFT 3238) at the Junior level.
³ Students need one Hot Glass course (CRFT 4241 or CRFT 4242) and one Cold Construction course (CRFT 4237 or CRFT 4238) at the Senior level.

Please Note: An approved study abroad program will waive the GenEd Global/World Society (GG) requirement. Glass majors interested in studying abroad should consult with an academic advisor to determine if a semester (generally spring semester of second year) or a summer program would be the best option to remain on track for graduation.

**Bachelor of Fine of Arts in Metals/Jewelry/CAD-CAM**

**Metals/Jewelry/CAD-CAM**

Stanley Lechtzin, Program Head
Tyler School of Art Building
Room 220
215-777-9129
stanlech@temple.edu

This program stresses the use of traditional techniques and materials in relation to their historical significance while encouraging the use of new technologies in the advanced courses. The assignments are focused on the design and creation of jewelry, functional forms, tableware, furniture, lighting, toys, and product design, to name a few. Along with teaching studio practices centered around the utilization of metal, plastics, and composite materials, the curriculum integrates the technologies of digital practices as they relate to three-dimensional form realization, and includes computer-aided-design, computer-aided manufacture and 3D printing technologies.

**Degree Requirements**

The Bachelor of Fine Arts degree in Metals/Jewelry/CAD-CAM may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 126 semester hours of credit with a minimum cumulative GPA of 2.00. All Metals/Jewelry/CAD-CAM majors must complete the BFA curriculum (p. 226) and General Education (p. 143) requirements.

- Students must earn a C- or better in CRFT 2453, and CRFT 2433 or CRFT 3433 to enter the Metals/Jewelry/CAD-CAM major.
- The seven required Junior/Senior studio courses and CRFT 4496 (capstone) must be completed with a C- or better to fulfill major requirements.

**Major Requirements for B.F.A. in Metals/Jewelry/CAD-CAM**

**Sophomore Prerequisite**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRFT 2453</td>
<td>Jewelry</td>
</tr>
<tr>
<td>CRFT 2433</td>
<td>CAD/CAM I Computer-Aided-Design/Computer-Aided-Manufacture ¹</td>
</tr>
<tr>
<td>or CRFT 3433</td>
<td>CAD/CAM I Computer-Aided-Design/Computer-Aided-Manufacture ²</td>
</tr>
</tbody>
</table>

**Junior Requirements**
CRFT 3465  Junior Metalsmithing (fall only)  3
CRFT 3466  Junior Metalsmithing (spring only)  3
One specialized Metals course  3

**Senior Requirements**

CRFT 2434  CAD/CAM II Computer-Aided-Design/Computer-Aided-Manufacture  3
or CRFT 3434  CAD/CAM II Computer-Aided-Design/Computer-Aided-Manufacture  3
CRFT 4463  Senior Metals and Plastics (fall only)  3
CRFT 4464  Senior Metals and Plastics (spring only)  3
One specialized Metals course  3
CRFT 4496  Business Practices in Crafts (Capstone, spring only)  3

1 CRFT 2453 Jewelry is a prerequisite for CRFT 2433 CAD/CAM I Computer-Aided-Design/Computer-Aided-Manufacture, but both can be taken concurrently.

**Specialized Metals/Jewelry/CAD-CAM (MJC-C) or Elective Courses**

CRFT 2408  Electroforming Workshop  3
CRFT 3408  Electroforming Workshop  3
CRFT 2409  Color in Metals  3
CRFT 3409  Color in Metals  3
CRFT 2413  Machine Tool Processes  3
CRFT 2415  Production Processes  3
CRFT 3415  Production Processes  3
CRFT 2475  Casting  3
CRFT 2476  Casting  3
CRFT 3407  Plastics for Jewelry  3
CRFT 3435  Advanced CAD/CAM  3
CRFT 3457  Plastics for Jewelry and Objects  3
CRFT 3459  Metalsmithing  3
CRFT 3463  Enameling  3
CRFT 3467  Tyler Metals Workshop, England/Scotland  6
CRFT 3471  Lapidary and Stone Setting  3
CRFT 3479  Photo Processes and Etching Jewelry  3
CRFT 4435  Rapid ProtoTyping  3
CRFT 4436  Rapid ProtoTyping  3
CRFT 4471  Senior Seminar in Metals  3
CRFT 4485  Field Internship Metals/Jewelry/CAD-CAM  3

**Suggested Academic Plan**

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

**Bachelor of Fine Arts in Metals/Jewelry/CAD-CAM**

**Requirements for New Students starting in the 2015-2016 Academic Year**

<table>
<thead>
<tr>
<th>Year 1</th>
<th></th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FDPR 1511  Foundation Drawing 1</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>FDPR 1521  2D Foundation Principles</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>FDPR 1531  3D Foundation Principles/W</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>FDPR 1501  Introduction to Art and Design</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>ARTH 1155  Art Heritage of the Western World I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902  Analytical Reading and Writing [GW]</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
</tr>
<tr>
<td>------------</td>
<td>--------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>FDPR 1512</td>
<td>Foundation Drawing</td>
<td>3</td>
</tr>
<tr>
<td>FDPR 1522</td>
<td>2D Foundation Principles</td>
<td>3</td>
</tr>
<tr>
<td>FDPR 1532</td>
<td>3D Foundation Principles/C</td>
<td>3</td>
</tr>
<tr>
<td>FDPR 1502</td>
<td>Investigations of Art and Design</td>
<td>1</td>
</tr>
<tr>
<td>ARTH 1156</td>
<td>Art Heritage of the Western World II</td>
<td>3</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td><strong>Year 2</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRFT 2453</td>
<td>Jewelry</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>CRFT 2000-2999 Studio Electives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GAD 2000-2999 Studio Electives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PDS 2000-2999 Studio Electives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>CRFT 2000-2999 Studio Electives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GAD 2000-2999 Studio Electives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PDS 2000-2999 Studio Electives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRFT 2433</td>
<td>CAD/CAM I Computer-Aided-Design/Computer-Aided-Manufacture</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>CRFT 2000-2999 Studio Electives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GAD 2000-2999 Studio Electives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PDS 2000-2999 Studio Electives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>CRFT 2000-2999 Studio Electives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GAD 2000-2999 Studio Electives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PDS 2000-2999 Studio Electives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td><strong>Year 3</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRFT 3465</td>
<td>Junior Metalsmithing</td>
<td>3</td>
</tr>
<tr>
<td>CRFT, GAD, or PDS Studio Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>CRFT, GAD, or PDS Studio Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Art History Elective</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRFT 3466</td>
<td>Junior Metalsmithing</td>
<td>3</td>
</tr>
<tr>
<td>CRFT 2434 or 3434</td>
<td>CAD/CAM II Computer-Aided-Design/Computer-Aided-Manufacture</td>
<td>3</td>
</tr>
<tr>
<td>CRFT, GAD, or PDS Studio Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Art History Elective [WI]</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td><strong>Year 4</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRFT 4463</td>
<td>Senior Metals and Plastics</td>
<td>3</td>
</tr>
<tr>
<td>Course Type</td>
<td>Course</td>
<td>Credits</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>----------------</td>
<td>---------</td>
</tr>
<tr>
<td>Specialized MJC-C Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CRFT, GAD, or PDS Studio Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Non-Studio Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Spring**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRFT 4464</td>
<td>3</td>
</tr>
<tr>
<td>Senior Metals and Plastics</td>
<td></td>
</tr>
<tr>
<td>Specialized MJC-C Course</td>
<td>3</td>
</tr>
<tr>
<td>CRFT 4496</td>
<td>3</td>
</tr>
<tr>
<td>Business Practices in Crafts [WI]</td>
<td></td>
</tr>
<tr>
<td>Open Elective</td>
<td>3</td>
</tr>
<tr>
<td>Gened Breadth Course</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

**Total Credit Hours:**

126

1 These 2 courses constitute the waiver for the GenEd Arts category if the courses are completed with a C- or better.

Please Note: An approved study abroad program will waive the GenEd Global/World Society (GG) requirement. MJC-C majors interested in studying abroad should consult with an academic advisor to determine if a semester (generally spring semester of second year) or a summer program would be the best option to remain on track for graduation.

**Graphic Arts & Design**

Stephanie Knopp, Department Chairperson  
Tyler School of Art Building  
Administrative Suite Room 210V  
215-777-9145  
stephanie.knopp@temple.edu

The Graphic Arts and Design Department encompasses three distinct areas of study -- Graphic and Interactive Design, Photography, and Printmaking. Our mission is to prepare students for the challenges of each discipline and to help them maximize their potential as artists.

The Graphic Arts and Design faculty is made up of practicing artists and designers who are professionally active and able to teach the fundamental principles of their disciplines while keeping abreast of innovations in their fields. During the student’s two-year program of coursework in the major, conceptual thinking aimed at the development of the student’s personal artistic vision is stressed; at the same time, technical skills using appropriate tools and techniques to solve creative problems are developed. Our majors are encouraged to integrate each discipline’s traditional image-making techniques with rapidly-evolving 21st-century digital technologies. Upon graduation, our students are prepared to enter their respective fields as professionals and to continue their growth as artists.

**Programs**

- Bachelor of Fine Arts in Graphic & Interactive Design (p. 243)
- Bachelor of Fine Arts in Photography (p. 248)
- Bachelor of Fine Arts in Printmaking (p. 250)

**Bachelor of Fine Arts in Graphic & Interactive Design**

Alice Drueding, Program Head  
Tyler School of Art Building  
Room 240  
215-777-9890  
drueding@temple.edu

Graphic Designers use creative combinations of ideas, art, and technology to inform and influence specific audiences. Graphic and Interactive Design (http://tyler.temple.edu/programs/graphic-interactive-design) at Tyler is a practice-based program that prepares students to work in both print and interactive media. From sophomore through senior year, students explore image making, typography, material, craft and technology--essential components of visual communication. Courses include assignments that represent different aspects of design practice such as identity and branding,
packaging, publishing, poster design, advertising, signage, environmental design, illustration, and design for the web, mobile media and motion graphics. The program trains students to work on client-driven projects and in design authorship.

Portfolio Review for Admission into the GAID Major

Because of the demand for a limited number of spaces in the Graphic and Interactive Design Major, all BFA students who are not yet declared majors in the Graphic & Interactive Design major will have to apply for the Sophomore Portfolio Review in GAID in order to get into the major, regardless of when that student started at Tyler or when they took Graphic Design (GAD 2001) and Computers for Design (GAD 2121).

The review process will be required for any Tyler student seeking to enter the major for fall 2015. Because the GAID program follows a strict fall/spring sequence, students may only begin as GAID majors in the fall semester. Students must complete the program in sequence as the capstone courses are offered only in the spring. Admitted students must begin taking required courses in the major at the junior (3xxx) level in the academic year immediately following official admission to the major or their admission to the major will be forfeited.

It is strongly recommended that potential applicants for admission to the GAID major attend one of the official sophomore advising meetings with the GAID Program Head where the application process will be explained. The process will also be explained by the instructors in each section of GAD 2001.

Degree Requirements

The Bachelor of Fine Arts degree in Graphic and Interactive Design may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 126 semester hours of credit with a minimum cumulative GPA of 2.00. All Graphic and Interactive Design majors must complete the BFA curriculum (p. 226) and General Education (p. 143) requirements.

- The eight required Junior/Senior required courses must be completed with a C- or better to fulfill major requirements.

Requirements for B.F.A. in Graphic & Interactive Design

Sophomore Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAD 2001</td>
<td>Graphic Design</td>
<td>3</td>
</tr>
<tr>
<td>GAD 2021</td>
<td>Computers for Design</td>
<td>3</td>
</tr>
</tbody>
</table>

Note 1: A final grade of C- minus or better is required in GAD 2001 and in GAD 2021 and approved portfolio review is required to enter the major.

Note 2: Graphic and Interactive Design majors who plan to study abroad should do so in the second semester of their sophomore year if they plan to graduate in four years. These students should see the Area Head for advising prior to leaving.

GAID Protocol for Portfolio Reviews

There will be two portfolio review cycles in Graphic & Interactive Design (GAID) each academic year: the end of the Fall semester (December) and the end of the Spring semester (May). The portfolio reviews will take place in the week after final studio course reviews. Specific dates for the reviews will be announced at the beginning of each semester in the GAD 2001 classes. They will also be posted on Blackboard and in the GAID suite. All full-time GAID faculty will serve on the GAID Portfolio Review Admissions Committee.

Applicants must have completed all Tyler Foundations courses (or had approved transfer courses as noted by the Tyler Admissions Office) and the 2 prerequisites for the major: GAD 2001 and GAD 2021 with a C-minus or better.

Application and Notification

The complete policy and application process is detailed on the Graphic and Interactive Design website: http://tyler.temple.edu/programs/graphic-interactive-design.

Application forms will be available for eligible students on Blackboard.

Students who have completed or who are currently enrolled in the two prerequisites for the GAID major (GAD 2001 and GAD 2021) and intend to submit an application for the Portfolio Review will be able to obtain an application form, portfolio template and detailed application instructions on Blackboard by mid-semester.

Students who fail to submit all of the required materials for the Portfolio Review will be disqualified, but may re-apply at the next review cycle as a first-time submitter. Late submissions will not be reviewed.

Applicants to the GAID major will receive one of the following decisions from the committee after the review is completed: (i) accepted (ii) not accepted (iii) revise and submit. Students who receive a (iii) revise and submit evaluation should re-apply in the next portfolio review cycle.

Students who pass the portfolio review for admission to the GAID major will be informed via TUMail. Within 2 weeks of receiving this email, admitted students must reply to the acceptance email to confirm that they definitively want to major in GAID. Students who do not confirm by that deadline will
forfeit their admission to the major and will need to re-apply in the next GAID portfolio review cycle as a second-time submitter. Students are limited to no more than two applications to the major.

**Junior Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAD 3001</td>
<td>Advanced Graphic Design</td>
<td>3</td>
</tr>
<tr>
<td>GAD 3002</td>
<td>Advanced Graphic Design</td>
<td>3</td>
</tr>
<tr>
<td>GAD 3011</td>
<td>Typography</td>
<td>3</td>
</tr>
<tr>
<td>GAD 3021</td>
<td>Intermediate Computer Graphics</td>
<td>3</td>
</tr>
</tbody>
</table>

**Electives strongly recommended**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAD 3013</td>
<td>Advanced Typography</td>
<td>3</td>
</tr>
<tr>
<td>or GAD 3015</td>
<td>Advanced Typography</td>
<td>3</td>
</tr>
<tr>
<td>GAD 3023</td>
<td>Interactive Design</td>
<td>3</td>
</tr>
<tr>
<td>or GAD 3025</td>
<td>Interactive Design</td>
<td>3</td>
</tr>
<tr>
<td>GAD 3027</td>
<td>Digital Narratives</td>
<td>3</td>
</tr>
<tr>
<td>GAD 3031</td>
<td>Illustration</td>
<td>3</td>
</tr>
<tr>
<td>or GAD 3033</td>
<td>Illustration</td>
<td>3</td>
</tr>
<tr>
<td>GAD 3041</td>
<td>Advertising Design</td>
<td>3</td>
</tr>
<tr>
<td>GAD 3096</td>
<td>The Business of Design</td>
<td>3</td>
</tr>
<tr>
<td>GAD 3101</td>
<td>Collaborative Design Workshop in Rome</td>
<td>3</td>
</tr>
</tbody>
</table>

**Note 1:** In the junior year, *Advanced Graphic Design* must be taken in sequence (GAD 3001 in Fall / GAD 3002 in Spring).

**Note 2:** The prerequisites for Senior level design courses are the four required courses at the junior level: GAD 3001 (Fall), GAD 3002 (Spring), GAD 3011 (Fall or Spring), and GAD 3021 (Fall or Spring). GAD 3023 or GAD 3025 is strongly recommended for students taking GAD 3027. GAD 3023 or GAD 3025 is required for GAD 4002 or GAD 4007.

**Note 3:** Students who plan to have an interactive portfolio only should take GAD 3023 or GAD 3025. GAD 3021 is the prerequisite for this course.

**Note 4:** GAD 3096 (Fall or Spring) is Writing Intensive and must be passed with a C- or better to be recognized as Writing Intensive credit. It can replace a Writing Intensive requirement in Art History. In that case the Art History requirement can be fulfilled with an Art History course that is not Writing Intensive.

**Senior Requirements**

**Senior Graphic Design Courses**

Select two specialized courses in Senior Graphic Design from the following: 6

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAD 3013</td>
<td>Advanced Typography</td>
<td></td>
</tr>
<tr>
<td>or GAD 3015</td>
<td>Advanced Typography</td>
<td></td>
</tr>
<tr>
<td>GAD 3027</td>
<td>Digital Narratives</td>
<td></td>
</tr>
<tr>
<td>GAD 3041</td>
<td>Advertising Design</td>
<td></td>
</tr>
<tr>
<td>GAD 4000</td>
<td>Senior Design: Special Topics</td>
<td></td>
</tr>
<tr>
<td>or GAD 4010</td>
<td>Senior Design: Special Topics</td>
<td></td>
</tr>
<tr>
<td>GAD 4001</td>
<td>Senior Graphic Design: Senior Design Workshop</td>
<td></td>
</tr>
<tr>
<td>GAD 4002</td>
<td>Senior Graphic Design: Hybrid Design</td>
<td></td>
</tr>
<tr>
<td>GAD 4003</td>
<td>Senior Graphic Design: Art Direction</td>
<td></td>
</tr>
<tr>
<td>GAD 4004</td>
<td>Senior Graphic Design: Packaging</td>
<td></td>
</tr>
<tr>
<td>GAD 4005</td>
<td>Senior Graphic Design: Publishing</td>
<td></td>
</tr>
<tr>
<td>GAD 4006</td>
<td>Senior Graphic Design: Corporate</td>
<td></td>
</tr>
<tr>
<td>GAD 4007</td>
<td>Senior Interactive Design</td>
<td></td>
</tr>
<tr>
<td>GAD 4008</td>
<td>Senior Graphic Design: Projects in Authorship</td>
<td></td>
</tr>
<tr>
<td>GAD 4011</td>
<td>Senior Graphic Design: Design for the Public Good</td>
<td></td>
</tr>
<tr>
<td>GAD 4111</td>
<td>Senior Illustration</td>
<td></td>
</tr>
<tr>
<td>or GAD 4112</td>
<td>Senior Illustration</td>
<td></td>
</tr>
</tbody>
</table>

Select one specialized course from the Senior Graphic Design list or one of the following: 3

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAD 3031</td>
<td>Illustration</td>
<td></td>
</tr>
<tr>
<td>or GAD 3033</td>
<td>Illustration</td>
<td></td>
</tr>
</tbody>
</table>
GAD 3023  Interactive Design
or GAD 3025  Interactive Design
GAD 3096  The Business of Design
GAD 3101  Collaborative Design Workshop in Rome

**Specialized Course Requirement**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAD 4009</td>
<td>Senior Graphic Design: Projects in Authorship (spring only)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Capstone Requirement**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAD 4196</td>
<td>Senior Portfolio (Capstone, spring only)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Note 1**: Additional 3xxx and 4xxx level GAD courses may be taken as studio electives.

**Note 2**: The capstone GAD 4196 Senior Portfolio and GAD 4009 Senior Graphic Design: Projects in Authorship are offered in spring semesters only. These two courses must be taken in addition to the three required senior (or equivalent) GAD courses listed above.

**Suggested Academic Plan**

Please note that this is a *suggested* academic plan. Depending on your situation, your academic plan may look different.

**Bachelor of Fine Arts in Graphic and Interactive Design**

**Requirements for New Students starting in the 2015-2016 Academic Year**

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDPR 1511</td>
<td>Foundation Drawing(^1)</td>
<td>3</td>
</tr>
<tr>
<td>FDPR 1521</td>
<td>2D Foundation Principles</td>
<td>3</td>
</tr>
<tr>
<td>FDPR 1531</td>
<td>3D Foundation Principles/W</td>
<td>3</td>
</tr>
<tr>
<td>FDPR 1501</td>
<td>Introduction to Art and Design</td>
<td>1</td>
</tr>
<tr>
<td>ARTH 1155</td>
<td>Art Heritage of the Western World I</td>
<td>3</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>17</td>
</tr>
<tr>
<td>Spring</td>
<td>Select one of the following:</td>
<td>3</td>
</tr>
<tr>
<td>FDPR 1512</td>
<td>Foundation Drawing</td>
<td>3</td>
</tr>
<tr>
<td>FDPR 1522</td>
<td>2D Foundation Principles</td>
<td>3</td>
</tr>
<tr>
<td>FDPR 1532</td>
<td>3D Foundation Principles/C</td>
<td>3</td>
</tr>
<tr>
<td>FDPR 1502</td>
<td>Investigations of Art and Design</td>
<td>1</td>
</tr>
<tr>
<td>ARTH 1156</td>
<td>Art Heritage of the Western World II(^1)</td>
<td>3</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>16</td>
</tr>
<tr>
<td>Year 2</td>
<td>Fall</td>
<td>Credit Hours</td>
</tr>
<tr>
<td>GAD 2001</td>
<td>Graphic Design</td>
<td>3</td>
</tr>
<tr>
<td>GAD 2021</td>
<td>Computers for Design</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>CRFT 2000-2999 Studio Electives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GAD 2000-2999 Studio Electives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PDS 2000-2999 Studio Electives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>16</td>
</tr>
<tr>
<td>Spring</td>
<td>Select one of the following:</td>
<td>3</td>
</tr>
<tr>
<td>CRFT 2000-2999 Studio Electives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GAD 2000-2999 Studio Electives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PDS 2000-2999 Studio Electives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>
Schools, Colleges, and Divisions

CRFT 2000-2999 Studio Electives
GAD 2000-2999 Studio Electives
PDS 2000-2999 Studio Electives

Select one of the following:

<table>
<thead>
<tr>
<th>CRFT 2000-2999 Studio Electives</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAD 2000-2999 Studio Electives</td>
</tr>
<tr>
<td>PDS 2000-2999 Studio Electives</td>
</tr>
</tbody>
</table>

GenEd Breadth Course 3
GenEd Breadth Course 3

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
</table>

**Year 3**

**Fall**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAD 3001</td>
<td>Advanced Graphic Design</td>
<td>3</td>
</tr>
<tr>
<td>GAD 3011</td>
<td>Typography</td>
<td>3</td>
</tr>
<tr>
<td>GAD 3021</td>
<td>Intermediate Computer Graphics</td>
<td>3</td>
</tr>
<tr>
<td>Art History Elective</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>16</th>
</tr>
</thead>
</table>

**Spring**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAD 3002</td>
<td>Advanced Graphic Design</td>
<td>3</td>
</tr>
<tr>
<td>Studio Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Studio Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Art History Elective [WI]</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>16</th>
</tr>
</thead>
</table>

**Year 4**

**Fall**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior Graphic Design Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Senior Graphic Design course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GAD 3xxx/4xxx (Specialized or Advanced GAD course, as per senior requirements)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Non-Studio Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
</table>

**Spring**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAD 4009</td>
<td>Senior Graphic Design: Projects in Authorship</td>
<td>3</td>
</tr>
<tr>
<td>GAD 4196</td>
<td>Senior Portfolio [WI]</td>
<td>3</td>
</tr>
<tr>
<td>Studio Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Open Elective</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
</table>

**Total Credit Hours:** 126

---

1. These 2 courses constitute the waiver for the GenEd Arts category if the courses are completed with a C- or better.

2. Courses offered in Fall only

3. Courses offered in Spring only

4. OR GAD 3096 to fulfill the Writing Intensive requirement. If taken, a non-Writing Intensive Art History course will fulfill the Art History requirement.

5. A minimum of 2 senior studios must be successfully completed before taking GAD 4196. Senior studios are GAD 3013 (if taken in the senior year), GAD 3015 (if taken in the senior year), GAD 3027 (if taken in the senior year), GAD 3041 (if taken in the senior year), GAD 4000, GAD 4001, GAD 4002, GAD 4003, GAD 4004, GAD 4005, GAD 4006, GAD 4007, GAD 4008, GAD 4009, GAD 4010, GAD 4011, GAD 4111 and GAD 4112.
Please Note: An approved study abroad program will waive the GenEd Global/World Society (GG) requirement. Graphic and Interactive Design majors interested in studying abroad should plan to spend either spring semester of their second year, after completing the sophomore prerequisites for the major in the fall, or consider a summer semester to remain on track with required courses. Please see an academic advisor for more details.

## Bachelor of Fine Arts in Photography

**Photography**

Byron Wolfe, Program Head  
Tyler School of Art Building Room 030Z  
215-777-9244  
byron.wolfe@temple.edu

In addition to traditional black and white and color photography, Tyler’s Photography Area ([http://tyler.temple.edu/programs/photography](http://tyler.temple.edu/programs/photography)) will introduce you to various other creative approaches to the medium. Some of these include digital imaging techniques, large-format professional digital printing in black and white and color, handmade cameras, large format photography, historical alternative processes, critical theory, and career options for artists who wish to enter the field of photography. The emphasis in the Photography Major is on the development of personal vision for the artist.

### Degree Requirements

The Bachelor of Fine Arts degree in Photography may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 126 semester hours of credit with a minimum cumulative GPA of 2.00. All Photography majors must complete the BFA curriculum (p. 226) and General Education (p. 143) requirements.

- Students must earn a C- or better in GAD 2441 or GAD 2451, and GAD 2461 to enter the Photography major.
- The nine required Junior/Senior courses must be completed with a C- or better to fulfill major requirements.

### Major Requirements for B.F.A. in Photography

#### Sophomore Prerequisite  

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAD 2441</td>
<td>Photography I</td>
<td>3</td>
</tr>
<tr>
<td>or GAD 2451</td>
<td>Photography I</td>
<td>3</td>
</tr>
<tr>
<td>GAD 2461</td>
<td>Digital Imaging (Prerequisite for Digital Photography)</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Junior and Senior Requirements  

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAD 3402</td>
<td>View Camera</td>
<td>3</td>
</tr>
<tr>
<td>GAD 3411</td>
<td>Digital Photography (Prerequisite: Digital Imaging)</td>
<td>3</td>
</tr>
<tr>
<td>GAD 3412</td>
<td>Photography II</td>
<td>3</td>
</tr>
<tr>
<td>GAD 3401</td>
<td>Color Photography I</td>
<td>3</td>
</tr>
<tr>
<td>or GAD 3431</td>
<td>Color Photography I</td>
<td>3</td>
</tr>
<tr>
<td>GAD 3441</td>
<td>Advanced Photo Workshop</td>
<td>3</td>
</tr>
<tr>
<td>or GAD 3451</td>
<td>Advanced Photography Workshop</td>
<td>3</td>
</tr>
<tr>
<td>GAD 3461</td>
<td>Photo Process Workshop</td>
<td>3</td>
</tr>
<tr>
<td>or GAD 3471</td>
<td>Photo Process Workshop</td>
<td>3</td>
</tr>
<tr>
<td>GAD 4441</td>
<td>Senior Photography</td>
<td>3</td>
</tr>
<tr>
<td>GAD 4496</td>
<td>Senior Seminar in Photography (Capstone)</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Specialized Photo Course

Select one of the following:  

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAD 3185</td>
<td>Field Internship</td>
<td>3</td>
</tr>
<tr>
<td>GAD 3413</td>
<td>Photographic Lighting (strongly recommended)</td>
<td>3</td>
</tr>
<tr>
<td>GAD 3421</td>
<td>Digital Projects</td>
<td>3</td>
</tr>
<tr>
<td>GAD 3422</td>
<td>Contemporary Photography</td>
<td>3</td>
</tr>
<tr>
<td>GAD 3432</td>
<td>Color Photography II</td>
<td>3</td>
</tr>
</tbody>
</table>

1. The schedule of courses that are required for the Photography major is posted each semester on the Tyler Photography website: [http://tyler.temple.edu/programs/photography](http://tyler.temple.edu/programs/photography).

### Suggested Academic Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.
# Bachelor of Fine Arts in Photography

**Requirements for New Students starting in the 2015-2016 Academic Year**

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FDPR 1511</td>
<td>Foundation Drawing¹</td>
</tr>
<tr>
<td></td>
<td>FDPR 1521</td>
<td>2D Foundation Principles</td>
</tr>
<tr>
<td></td>
<td>FDPR 1531</td>
<td>3D Foundation Principles/W</td>
</tr>
<tr>
<td></td>
<td>FDPR 1501</td>
<td>Introduction to Art and Design</td>
</tr>
<tr>
<td></td>
<td>ARTH 1155</td>
<td>Art Heritage of the Western World I</td>
</tr>
<tr>
<td></td>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td></td>
<td>FDPR 1512</td>
<td>Foundation Drawing</td>
</tr>
<tr>
<td></td>
<td>FDPR 1522</td>
<td>2D Foundation Principles</td>
</tr>
<tr>
<td></td>
<td>FDPR 1532</td>
<td>3D Foundation Principles/C</td>
</tr>
<tr>
<td></td>
<td>FDPR 1502</td>
<td>Investigations of Art and Design</td>
</tr>
<tr>
<td></td>
<td>ARTH 1156</td>
<td>Art Heritage of the Western World II¹</td>
</tr>
<tr>
<td></td>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GAD 2441 or 2451</td>
<td>Photography I</td>
</tr>
<tr>
<td></td>
<td>Select one of the following:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CRFT 2000-2999 Studio Electives</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GAD 2000-2999 Studio Electives</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PDS 2000-2999 Studio Electives</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Select one of the following:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CRFT 2000-2999 Studio Electives</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GAD 2000-2999 Studio Electives</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PDS 2000-2999 Studio Electives</td>
<td></td>
</tr>
<tr>
<td></td>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
</tr>
<tr>
<td></td>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td></td>
</tr>
</tbody>
</table>

| Spring | | | |
|--------| | | |
| GAD 2461 | Digital Imaging | | 3 |
| Select one of the following: | | | 3 |
| CRFT 2000-2999 Studio Electives | | |
| GAD 2000-2999 Studio Electives | | |
| PDS 2000-2999 Studio Electives | | |
| Select one of the following: | | | 3 |
| CRFT 2000-2999 Studio Electives | | |
| GAD 2000-2999 Studio Electives | | |
| PDS 2000-2999 Studio Electives | | |
| GenEd Breadth Course | | | 3 |
| GenEd Breadth Course | | | 3 |
| **Term Credit Hours** | | | 15 |

<table>
<thead>
<tr>
<th>Year 3</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GAD 3441 or 3451</td>
<td>Advanced Photo Workshop</td>
</tr>
<tr>
<td></td>
<td>GAD 3461 or 3471</td>
<td>Photo Process Workshop</td>
</tr>
<tr>
<td></td>
<td>GAD 3412</td>
<td>Photography II</td>
</tr>
</tbody>
</table>
Art History Elective [WI] 
GenEd Breadth Course 

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>16</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>GAD 3401 or 3431</td>
<td>Color Photography I</td>
</tr>
<tr>
<td>GAD 3402</td>
<td>View Camera</td>
</tr>
<tr>
<td>Studio Elective</td>
<td>3</td>
</tr>
<tr>
<td>Art History Elective</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>16</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Year 4</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>GAD 4496</td>
<td>Senior Seminar in Photography [WI]</td>
</tr>
<tr>
<td>GAD 3411</td>
<td>Digital Photography</td>
</tr>
<tr>
<td>Studio Elective</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>Non-Studio Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>GAD 4441</td>
<td>Senior Photography</td>
</tr>
<tr>
<td>Specialized Photography Course²</td>
<td>3</td>
</tr>
<tr>
<td>Studio Elective</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>Open Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credit Hours:** 126

1. These 2 courses constitute the waiver for the GenEd Arts category if the courses are completed with a C- or better.
2. Choose from GAD 3185, GAD 3186, GAD 3413, GAD 3421, GAD 3422, GAD 3432.

Please Note: An approved study abroad program will waive the GenEd Global/World Society (GG) requirement. Photography majors interested in studying abroad should consult with an academic advisor to determine if a semester (generally spring semester of second year) or a summer program would be the best option to remain on track for graduation.

**Bachelor of Fine Arts in Printmaking**

**Printmaking**

Richard Hricko, Program Head
Tyler School of Art Building
Room 260
215-777-9125
hricko@temple.edu

The Printmaking Area (http://tyler.temple.edu/programs/printmaking) is housed in large, fully-equipped modern studios where you first learn the fundamentals of the three printmaking disciplines (silkscreen, lithography, and etching) before exploring at least two of these disciplines in depth. After students master the basic technical aspects of printmaking, the faculty encourages the exploration of advanced subjects that include color and photo-etching, photo-lithography, metal engraving, mezzotint, woodcut, digital printmaking, large-scale printing, installation, and the full utilization of the computer as an image-creating tool.

**Degree Requirements**

The Bachelor of Fine Arts degree in Printmaking may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 126 semester hours of credit with a minimum cumulative GPA of 2.00. All Printmaking majors must complete the BFA curriculum (p. 226) and General Education (p. 143) requirements.

- Students must earn a C- or better in either GAD 2701 or GAD 2702 and one of the introductory printmaking courses (GAD 2711, GAD 2731/GAD 2741, GAD 2751/GAD 2761) to enter the Printmaking major.
Major Requirements for B.F.A. in Printmaking

Sophomore Prerequisites

Select one Survey of Printmaking course from the following:
- GAD 2701  Survey of Printmaking Techniques (Lithography and Serigraphy)
- GAD 2702  Survey of Printmaking Techniques (Relief Printing and Etching)

Select one introductory Printmaking course from the following:
- GAD 2711  Serigraphy
- GAD 2731  Etching
  or GAD 2741  Etching
- GAD 2751  Lithography
  or GAD 2761  Lithography

Junior and Senior Requirements

Select two of the following (not taken as sophomore prerequisite):
- GAD 2711  Serigraphy
- GAD 2731  Etching
  or GAD 2741  Etching
- GAD 2751  Lithography
  or GAD 2761  Lithography

Select two Advanced courses from the following:
- GAD 3711  Advanced Serigraphy (fall only)
- GAD 3731  Advanced Etching (fall only)
- GAD 3751  Advanced Lithography (spring only)

Select three Specialized Printmaking courses from the following:
- GAD 3811  Printmaking Workshop (Intermedia, fall only)
  or GAD 3821  Printmaking Workshop
- GAD 3831  Relief and Monoprint Workshop (spring only)
- GAD 3841  Color Print Workshop (Intermedia, spring only)
- GAD 4511  Senior Projects Workshop/Seminar (spring only)
- GAD 3896  Art Career Workshop (Capstone)

Prerequisite for GAD 3711.
Prerequisite for GAD 3731.
Prerequisite for GAD 3751.
Indicates Writing Capstone.

Suggested Academic Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Fine Arts in Printmaking

Requirements for New Students starting in the 2015-2016 Academic Year

Year 1

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDPR 1511</td>
<td>3</td>
</tr>
<tr>
<td>FDPR 1521</td>
<td>3</td>
</tr>
<tr>
<td>FDPR 1531</td>
<td>3</td>
</tr>
<tr>
<td>FDPR 1501</td>
<td>1</td>
</tr>
<tr>
<td>ARTH 1155</td>
<td>3</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>4</td>
</tr>
</tbody>
</table>

Term Credit Hours 17
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDPR 1512</td>
<td>Foundation Drawing</td>
<td>3</td>
</tr>
<tr>
<td>FDPR 1522</td>
<td>2D Foundation Principles</td>
<td>3</td>
</tr>
<tr>
<td>FDPR 1532</td>
<td>3D Foundation Principles/C</td>
<td>3</td>
</tr>
<tr>
<td>FDPR 1502</td>
<td>Investigations of Art and Design</td>
<td>1</td>
</tr>
<tr>
<td>ARTH 1156</td>
<td>Art Heritage of the Western World II</td>
<td>3</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours** 16

### Year 2

#### Fall

Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAD 2701</td>
<td>Survey of Printmaking Techniques (Lithography/Serigraphy)</td>
<td>3</td>
</tr>
<tr>
<td>GAD 2702</td>
<td>Survey of Printmaking Techniques (Relief Printing/Etching)</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following:

| CRFT 2000-2999 Studio Electives | 3 |
| GAD 2000-2999 Studio Electives  | 3 |
| PDS 2000-2999 Studio Electives  | 3 |

Select one of the following:

| CRFT 2000-2999 Studio Electives | 3 |
| GAD 2000-2999 Studio Electives  | 3 |
| PDS 2000-2999 Studio Electives  | 3 |

| IH 0852 or 0952 | Mosaic: Humanities Seminar II [GZ] | 3 |

GenEd Quantitative Literacy Course [GQ] 4

**Term Credit Hours** 16

#### Spring

Select one introductory Printmaking course from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAD 2711</td>
<td>Serigraphy(^2)</td>
<td>3</td>
</tr>
<tr>
<td>GAD 2731 or 2741</td>
<td>Etching(^3)</td>
<td>3</td>
</tr>
<tr>
<td>GAD 2751 or 2761</td>
<td>Lithography(^4)</td>
<td>4</td>
</tr>
</tbody>
</table>

Select one of the following:

| CRFT 2000-2999 Studio Electives | 3 |
| GAD 2000-2999 Studio Electives  | 3 |
| PDS 2000-2999 Studio Electives  | 3 |

Select one of the following:

| CRFT 2000-2999 Studio Electives | 3 |
| GAD 2000-2999 Studio Electives  | 3 |
| PDS 2000-2999 Studio Electives  | 3 |

GenEd Breadth Course 3

**Term Credit Hours** 15

### Year 3

#### Fall

Select two of the following Printmaking courses (not previously taken):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAD 2711</td>
<td>Serigraphy(^2)</td>
<td>3</td>
</tr>
<tr>
<td>GAD 2731 or 2741</td>
<td>Etching(^3)</td>
<td>3</td>
</tr>
<tr>
<td>GAD 2751 or 2761</td>
<td>Lithography(^4)</td>
<td>4</td>
</tr>
</tbody>
</table>

Studio Elective 3

Art History Elective [WI]\(^5\) 4

GenEd Breadth Course 3

**Term Credit Hours** 16

#### Spring

Advanced Printmaking course\(^6\) 3

GAD 3896 Art Career Workshop [WI] (Capstone)\(^5\) 3
Studio Elective 3
Art History Elective 4
GenEd Breadth Course 3

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>16</th>
</tr>
</thead>
</table>

Year 4
Fall
Advanced Printmaking course ³ 6
Specialized Printmaking course ⁷ 3
Studio Elective 3
GenEd Breadth Course 3
GenEd Breadth Course 3

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
</table>

Spring
Specialized Printmaking course ⁷ 3
Specialized Printmaking course ³ 3
Studio Elective 3
Open Elective 3
Non-Studio Elective 3

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
</table>

Total Credit Hours: 126

These 2 courses constitute the waiver for the GenEd Arts category if the courses are completed with a C- or better.

Prerequisite for GAD 3711.
Prerequisite for GAD 3731.
Prerequisite for GAD 3751.
Writing Intensive course.
Choose from GAD 3711 (fall only), GAD 3731 (fall only), and GAD 3751 (spring only). Two different advanced courses are required.
Choose from GAD 3811 or GAD 3821 (fall only), GAD 3831 (spring only), GAD 3841 (spring only) and GAD 4511 (spring only). Three distinct specialized courses are required.

Please Note: An approved study abroad program will waive the GenEd Global/World Society (GG) requirement. Printmaking majors interested in studying abroad should consult with an academic advisor to determine if a semester (generally spring semester of second year) or a summer program would be the best option to remain on track for graduation.

Painting/Drawing/Sculpture

Susan Moore, Interim Department Chair (Fall)
Tyler School of Art Building
Administrative Suite Room 210S
215-777-9176
msusan@temple.edu

Mark Shetabi, Department Chair (Spring)
Tyler School of Art Building
Administrative Suite Room 210S
215-777-9176
mark.shetabi@temple.edu

The Painting, Drawing, and Sculpture Department emphasizes art making as an ongoing discipline rooted in rich history. We provide our students with a rigorous experience of the disciplines of drawing, painting, and sculpture. This experience ranges through the aesthetic, the technical, and the well-formed idea. We are committed to providing our students with the understanding of the broad cultural and historical context in which art is made and experienced.

The Painting, Drawing, and Sculpture Department has a weekly schedule of visiting lectures. Our lectures include practicing studio artists, museum curators, and critics, all of national standing.
Programs

- Bachelor of Fine Arts in Painting (p. 254)
- Bachelor of Fine Arts in Sculpture (p. 257)

Bachelor of Fine Arts in Painting

Painting/Drawing

Professor Marilyn Holsing, Painting Program Head
Tyler School of Art Building
Room 300D
215-777-9106
marilyn.holsing@temple.edu

Tyler’s Painting and Drawing program provides the skills and concepts essential to artistic growth. The faculty has designed studio and seminar courses that foster the development of pictorial concepts realized in the tangible form of painting and drawing.

The courses offer a range of both genre-based courses and advanced level courses. Upper level courses cover technical, formal, topical, and theory based issues. An extensive range of approaches will be presented in the context of both historical precedent and contemporary practice. The faculty advises each student to participate in a variety of studio experiences to facilitate the integration of technique with personal vision.

Degree Requirements

The Bachelor of Fine Arts degree in Painting may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 126 semester hours of credit with a minimum cumulative GPA of 2.00. All Painting majors must complete the BFA curriculum (p. 226) and General Education (p. 143) requirements.

- Students must earn a C- or better in Painting (PDS 2011 or PDS 2111) and Intermediate or Digital Drawing (PDS 2311, PDS 2321, PDS 2331, PDS 2341 or PDS 3341) to enter the Painting major.
- The eight required Junior/Senior courses and PDS 3596 must be completed with a C- or better to fulfill major requirements.

Major Requirements for B.F.A. in Painting

Sophomore Requirements

<table>
<thead>
<tr>
<th>Painting</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PDS 2011</td>
<td>Painting</td>
</tr>
<tr>
<td>or PDS 2111</td>
<td>Painting</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Drawing</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Select one of the following:</td>
<td></td>
</tr>
<tr>
<td>PDS 2311</td>
<td>Intermediate Drawing</td>
</tr>
<tr>
<td>PDS 2321</td>
<td>Intermediate Drawing</td>
</tr>
<tr>
<td>PDS 2331</td>
<td>Intermediate Figure Drawing (spring only)</td>
</tr>
<tr>
<td>PDS 2341</td>
<td>Digital Drawing</td>
</tr>
<tr>
<td>PDS 3341</td>
<td>Digital Drawing</td>
</tr>
</tbody>
</table>

Note: PDS 2051 is suggested, but not required, for those interested in becoming a Painting major.

Note: PDS 2511 is strongly recommended for students interested in Painting or Sculpture as a major.

Note: Students may only take 3 Painting/Drawing courses in the sophomore year; other 2000-level PDS courses may be used as electives for the junior/senior year.

Junior and Senior Requirements

Eight courses totaling 24 credit hours. These courses must satisfy the following grade level requirements:

- Four (4) courses in Painting numbered 3000, and above (can include PDS 2051);
- Two (2) courses in Drawing numbered 3000 and above; and
- Two (2) courses in either Painting or Drawing numbered 3000 and above (can include PDS 2051).
Any Painting or Drawing courses taken in excess of the required eight courses will count as studio electives. This is a common practice encouraged by the Painting Faculty.

Students must also take the Capstone course: PDS 3596 PDS Seminar.

### Painting

Select four of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PDS 2051</td>
<td>Painting Materials &amp; Techniques</td>
</tr>
<tr>
<td>PDS 3021</td>
<td>Landscape (fall only)</td>
</tr>
<tr>
<td>or PDS 4021</td>
<td>Landscape</td>
</tr>
<tr>
<td>PDS 3041</td>
<td>Color</td>
</tr>
<tr>
<td>or PDS 3141</td>
<td>Color</td>
</tr>
<tr>
<td>or PDS 4041</td>
<td>Color</td>
</tr>
<tr>
<td>PDS 3031</td>
<td>Figure Painting</td>
</tr>
<tr>
<td>or PDS 4031</td>
<td>Figure Painting</td>
</tr>
<tr>
<td>PDS 3211</td>
<td>Painting on Paper</td>
</tr>
<tr>
<td>or PDS 3221</td>
<td>Painting on Paper</td>
</tr>
<tr>
<td>PDS 3011</td>
<td>Advanced Painting</td>
</tr>
<tr>
<td>or PDS 3111</td>
<td>Advanced Painting</td>
</tr>
<tr>
<td>or PDS 4011</td>
<td>Advanced Painting</td>
</tr>
<tr>
<td>or PDS 4111</td>
<td>Advanced Painting</td>
</tr>
<tr>
<td>PDS 4072</td>
<td>Senior Painting Studio</td>
</tr>
<tr>
<td>&amp; PDS 4172</td>
<td>Senior Painting Studio</td>
</tr>
</tbody>
</table>

### Capstone Course

PDS 3596 PDS Seminar

3 units

### Drawing

Select two of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PDS 3021</td>
<td>Landscape (fall only)</td>
</tr>
<tr>
<td>or PDS 4021</td>
<td>Landscape</td>
</tr>
<tr>
<td>PDS 3341</td>
<td>Digital Drawing</td>
</tr>
<tr>
<td>PDS 3351</td>
<td>Rome Sketchbook</td>
</tr>
<tr>
<td>PDS 3411</td>
<td>Advanced Drawing</td>
</tr>
<tr>
<td>or PDS 3421</td>
<td>Advanced Drawing</td>
</tr>
<tr>
<td>or PDS 4411</td>
<td>Advanced Drawing</td>
</tr>
<tr>
<td>PDS 3431</td>
<td>Figure Drawing</td>
</tr>
<tr>
<td>or PDS 3441</td>
<td>Figure Drawing</td>
</tr>
<tr>
<td>or PDS 4431</td>
<td>Figure Drawing</td>
</tr>
<tr>
<td>or PDS 4441</td>
<td>Figure Drawing</td>
</tr>
<tr>
<td>PDS 3451</td>
<td>Interactive Projects</td>
</tr>
</tbody>
</table>

### Drawing or Painting

Select two of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PDS 2051</td>
<td>Painting Materials &amp; Techniques</td>
</tr>
<tr>
<td>PDS 3011</td>
<td>Advanced Painting</td>
</tr>
<tr>
<td>or PDS 3111</td>
<td>Advanced Painting</td>
</tr>
<tr>
<td>PDS 3031</td>
<td>Figure Painting</td>
</tr>
<tr>
<td>or PDS 3431</td>
<td>Figure Drawing</td>
</tr>
<tr>
<td>or PDS 3441</td>
<td>Figure Drawing</td>
</tr>
<tr>
<td>PDS 3351</td>
<td>Rome Sketchbook</td>
</tr>
<tr>
<td>PDS 3411</td>
<td>Advanced Drawing</td>
</tr>
<tr>
<td>PDS 4072</td>
<td>Senior Painting Studio</td>
</tr>
<tr>
<td>&amp; PDS 4172</td>
<td>Senior Painting Studio</td>
</tr>
</tbody>
</table>

---

1 PDS 3021 and PDS 4021 may be taken for Painting and/or Drawing Credit.
Students wishing to enroll in PDS 4072 or PDS 4172 must be jury-selected by the faculty and special approval is needed to register for these courses. Both courses are team-taught by two faculty members and must be taken in the same semester.

PDS 3596 counts as one of the two required writing intensive courses. The other writing intensive course must be an Art History course.

Note: Do not duplicate any courses previously taken for Drawing or Painting credit.

**Suggested Academic Plan**

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

**Bachelor of Fine Arts in Painting**

**Requirements for New Students starting in the 2015-2016 Academic Year**

### Year 1

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDPR 1511</td>
<td>Foundation Drawing</td>
<td>3</td>
</tr>
<tr>
<td>FDPR 1521</td>
<td>2D Foundation Principles</td>
<td>3</td>
</tr>
<tr>
<td>FDPR 1531</td>
<td>3D Foundation Principles/W</td>
<td>3</td>
</tr>
<tr>
<td>FDPR 1501</td>
<td>Introduction to Art and Design</td>
<td>1</td>
</tr>
<tr>
<td>ARTH 1155</td>
<td>Art Heritage of the Western World I</td>
<td>3</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
</tbody>
</table>

**Term Credit Hours: 17**

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDPR 1512</td>
<td>Foundation Drawing</td>
<td>3</td>
</tr>
<tr>
<td>FDPR 1522</td>
<td>2D Foundation Principles</td>
<td>3</td>
</tr>
<tr>
<td>FDPR 1532</td>
<td>3D Foundation Principles/C</td>
<td>3</td>
</tr>
<tr>
<td>FDPR 1502</td>
<td>Investigations of Art and Design</td>
<td>1</td>
</tr>
<tr>
<td>ARTH 1156</td>
<td>Art Heritage of the Western World II</td>
<td>3</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours: 16**

### Year 2

#### Fall

Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PDS 2311</td>
<td>Intermediate Drawing</td>
<td>3</td>
</tr>
<tr>
<td>PDS 2321</td>
<td>Intermediate Drawing</td>
<td>3</td>
</tr>
<tr>
<td>PDS 2331</td>
<td>Intermediate Figure Drawing</td>
<td>3</td>
</tr>
<tr>
<td>PDS 2341</td>
<td>Digital Drawing (fall only)</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following:

- CRFT Sophomore Studio Elective
- GAD Sophomore Studio Elective
- PDS Sophomore Studio Elective

IH 0852 or 0952 | Mosaic: Humanities Seminar II [GZ]  | 3            |

**GenEd Quantitative Literacy Course [GQ]**

**Term Credit Hours: 16**

#### Spring

Select one of the following:

- CRFT Sophomore Studio Elective
- GAD Sophomore Studio Elective
- PDS Sophomore Studio Elective

Select one of the following:

- CRFT Sophomore Studio Elective
- GAD Sophomore Studio Elective
- PDS Sophomore Studio Elective

**Term Credit Hours: 16**
Select one of the following:
- CRFT Sophomore Studio Elective
- GAD Sophomore Studio Elective
- PDS Sophomore Studio Elective

GenEd Breadth Course
GenEd Breadth Course

**Year 3**

**Fall**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PDS Painting Course</td>
<td>3</td>
</tr>
<tr>
<td>PDS Painting Course</td>
<td>3</td>
</tr>
<tr>
<td>Studio Elective</td>
<td>3</td>
</tr>
<tr>
<td>Art History Elective(^2)</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

15

**Spring**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PDS Painting Course</td>
<td>3</td>
</tr>
<tr>
<td>PDS Drawing Course</td>
<td>3</td>
</tr>
<tr>
<td>Studio Elective</td>
<td>3</td>
</tr>
<tr>
<td>Art History Elective (^2)</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

16

**Year 4**

**Fall**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PDS Painting Course</td>
<td>3</td>
</tr>
<tr>
<td>PDS Drawing Course</td>
<td>3</td>
</tr>
<tr>
<td>PDS 3596 PDS Seminar (^3)</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>Non-Studio Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

15

**Spring**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PDS Painting or Drawing Course</td>
<td>3</td>
</tr>
<tr>
<td>PDS Painting or Drawing Course</td>
<td>3</td>
</tr>
<tr>
<td>Studio Elective</td>
<td>3</td>
</tr>
<tr>
<td>Open Elective</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

15

**Total Credit Hours:** 126

---

1. These 2 courses constitute the waiver for the GenEd Arts category if the courses are completed with a C- or better.
2. Art History WI Elective may be taken either fall or spring.
3. PDS 3596 PDS Seminar can be taken either fall or spring semester.

Please Note: An approved study abroad program will waive the GenEd Global/World Society (GG) requirement. Painting majors interested in studying abroad may elect to study abroad in a summer program, for a semester or an entire academic year. Please see an academic advisor for more details.

**Bachelor of Fine Arts in Sculpture**

**Sculpture**

Jude Tallichet, Program Head
Tyler School of Art Building
Room 130
215-777-9155
The Sculpture Program provides the skills and concepts essential to creative growth. Courses are designed to integrate the development of technical skills with critical discourse and theory, and knowledge of contemporary sculpture. Students are encouraged to explore a broad range of sculptural strategies through studio courses including installation, sound, video, robotics, public art, and wood and metal fabrication. All courses provide intensive studio experience and intense critical dialogue combined with exhibition opportunities and field trips. The sculpture area includes a metal shop, wood shop, plaster and mold making facilities, a small sound studio and individual studios for undergraduate majors and for graduate sculpture students.

**Degree Requirements**

The Bachelor of Fine Arts degree in Sculpture may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 126 semester hours of credit with a minimum cumulative GPA of 2.00. All Sculpture majors must complete the BFA curriculum (p. 226) and General Education (p. 143) requirements.

- Students must earn a C- or better in Sculpture (PDS 2611 or PDS 2621) to enter the major.
- The eight required Junior/Senior courses and PDS 3596 must be completed with a C- or better to fulfill major requirements.

The faculty encourages taking sculpture courses in excess of the minimum required. These additional courses count towards required studio electives.

**Major Requirements for B.F.A. in Sculpture**

**Sophomore Prerequisite**

PDS 2611 Sculpture 3
or PDS 2621 Sculpture

Students are encouraged to take Installation or Mold Making in the second semester of the sophomore year after Sophomore Sculpture.

**Junior and Senior Requirements**

Select two of the following: 6

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PDS 3611</td>
<td>Advanced Sculpture</td>
</tr>
<tr>
<td>PDS 3612</td>
<td>Advanced Sculpture</td>
</tr>
<tr>
<td>PDS 3621</td>
<td>Advanced Sculpture</td>
</tr>
<tr>
<td>PDS 3622</td>
<td>Advanced Sculpture</td>
</tr>
</tbody>
</table>

PDS Specialized Sculpture course (see list below) 3
PDS Specialized (see list below) or Advanced Sculpture course 1 6
PDS 4611 Senior Sculpture 3

Select two Drawing courses from the following: 6

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PDS 2311</td>
<td>Intermediate Drawing</td>
</tr>
<tr>
<td>or PDS 2321</td>
<td>Intermediate Drawing</td>
</tr>
<tr>
<td>PDS 2341</td>
<td>Digital Drawing</td>
</tr>
<tr>
<td>PDS 2521</td>
<td>Video Workshop</td>
</tr>
<tr>
<td>PDS 3351</td>
<td>Rome Sketchbook</td>
</tr>
<tr>
<td>PDS 3411</td>
<td>Advanced Drawing 2</td>
</tr>
<tr>
<td>or PDS 3421</td>
<td>Advanced Drawing</td>
</tr>
<tr>
<td>or PDS 4411</td>
<td>Advanced Drawing</td>
</tr>
<tr>
<td>PDS 3431</td>
<td>Figure Drawing 2</td>
</tr>
<tr>
<td>or PDS 3441</td>
<td>Figure Drawing</td>
</tr>
<tr>
<td>or PDS 4431</td>
<td>Figure Drawing</td>
</tr>
<tr>
<td>or PDS 4441</td>
<td>Figure Drawing</td>
</tr>
<tr>
<td>PDS 3451</td>
<td>Interactive Projects</td>
</tr>
</tbody>
</table>

**Capstone**

PDS 3596 PDS Seminar 3

1 Advanced Sculpture courses include specials topics in: Sound, Performance, Metal Fabrication and Robotics. These vary from semester to semester. More than the two required Advanced Sculpture courses are recommended in order to intensify creative development of sculptural practice.

2 These courses have a sophomore level prerequisite. Check the course descriptions for more details.
Students are advised to take the capstone in their Junior Year.

**Specialized Sculpture Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PDS 2632</td>
<td>Installation</td>
<td>3</td>
</tr>
<tr>
<td>PDS 3631</td>
<td>Installation</td>
<td>3</td>
</tr>
<tr>
<td>PDS 3521</td>
<td>Advanced Video</td>
<td>3</td>
</tr>
<tr>
<td>PDS 2521</td>
<td>Video Workshop</td>
<td>3</td>
</tr>
<tr>
<td>PDS 3731</td>
<td>Sculpture Techniques &amp; Materials</td>
<td>3</td>
</tr>
<tr>
<td>PDS 2641</td>
<td>Mold-Making Technology</td>
<td>3</td>
</tr>
<tr>
<td>PDS 3641</td>
<td>Mold-Making Technology</td>
<td>3</td>
</tr>
<tr>
<td>PDS 2631</td>
<td>Figure Modeling</td>
<td>3</td>
</tr>
<tr>
<td>PDS 3721</td>
<td>Public Art Projects</td>
<td>3</td>
</tr>
<tr>
<td>PDS 4582</td>
<td>Independent Study</td>
<td>3</td>
</tr>
<tr>
<td>PDS 4585</td>
<td>Field Internship</td>
<td>1 to 3</td>
</tr>
</tbody>
</table>

1 It is possible to do Field Internships with alternative arts organizations and art fabrication companies in the Philadelphia area.

**Suggested Academic Plan**

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

**Bachelor of Fine Arts in Sculpture**

**Requirements for New Students starting in the 2015-2016 Academic Year**

**Year 1**

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDPR 1511</td>
<td>Foundation Drawing¹</td>
<td>3</td>
</tr>
<tr>
<td>FDPR 1521</td>
<td>2D Foundation Principles</td>
<td>3</td>
</tr>
<tr>
<td>FDPR 1531</td>
<td>3D Foundation Principles/W</td>
<td>3</td>
</tr>
<tr>
<td>FDPR 1501</td>
<td>Introduction to Art and Design</td>
<td>1</td>
</tr>
<tr>
<td>ARTH 1155</td>
<td>Art Heritage of the Western World I</td>
<td>3</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

**17**

**Spring**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDPR 1512</td>
<td>Foundation Drawing</td>
<td>3</td>
</tr>
<tr>
<td>FDPR 1522</td>
<td>2D Foundation Principles</td>
<td>3</td>
</tr>
<tr>
<td>FDPR 1532</td>
<td>3D Foundation Principles/C</td>
<td>3</td>
</tr>
<tr>
<td>FDPR 1502</td>
<td>Investigations of Art and Design</td>
<td>1</td>
</tr>
<tr>
<td>ARTH 1156</td>
<td>Art Heritage of the Western World II¹</td>
<td>3</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

**16**

**Year 2**

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PDS 2611 or 2621</td>
<td>Sculpture</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following:

- CRFT Sophomore Studio Elective
- GAD Sophomore Studio Elective
- PDS Sophomore Studio Elective

Select one of the following:

- CRFT Sophomore Studio Elective
- GAD Sophomore Studio Elective
- PDS Sophomore Studio Elective

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

**16**
### Spring
Select one of the following:  
- CRFT Sophomore Studio Elective  
- GAD Sophomore Studio Elective  
- PDS Sophomore Studio Elective  
Select one of the following:  
- CRFT Sophomore Studio Elective  
- GAD Sophomore Studio Elective  
- PDS Sophomore Studio Elective  
Select one of the following:  
- CRFT Sophomore Studio Elective  
- GAD Sophomore Studio Elective  
- PDS Sophomore Studio Elective  
GenEd Breadth Course  
GenEd Breadth Course  

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
</table>

### Year 3

#### Fall
PDS 3611 or 3621  
Advanced Sculpture  
PDS Specialized Sculpture  
PDS 3596  
PDS Seminar [WI] (Capstone)  
Art History Elective  
GenEd Breadth Course  

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>16</th>
</tr>
</thead>
</table>

#### Spring
PDS 3612 or 3622  
Advanced Sculpture  
PDS Drawing  
CRFT, GAD, or PDS Studio Elective  
Art History Elective (WI)  
GenEd Breadth Course  

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>16</th>
</tr>
</thead>
</table>

### Year 4

#### Fall
PDS 4611  
Senior Sculpture  
PDS Drawing  
CRFT, GAD, or PDS Studio Elective  
GenEd Breadth Course  
Non-Studio Elective  

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
</table>

#### Spring
PDS Specialized or Advanced Sculpture  
PDS Specialized Sculpture  
CRFT, GAD, or PDS Studio Elective  
GenEd Breadth Course  
Open Elective  

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
</table>

### Total Credit Hours: 126

---

1. These 2 courses constitute the waiver for the GenEd Arts category if the courses are completed with a C- or better.
2. Select two Drawing courses from the following: PDS 2311/PDS 2321, PDS 2341, PDS 2521, PDS 3351, PDS 3411/PDS 3421/PDS 4411, PDS 3431/PDS 3441/PDS 4431/PDS 4441, AND PDS 3451. Some courses have a sophomore level prerequisite. Check the course descriptions for more details.
Please Note: An approved study abroad program will waive the GenEd Global/World Society (GG) requirement. Sculpture majors interested in studying abroad may elect to study abroad for a semester or attend a summer program. Please see an academic advisor for more details.

Visual Studies

Dr. Leah Modigliani, Program Head
Tyler School of Art Building
lmodigliani@temple.edu
215-777-9170

The Bachelor of Arts in Visual Studies enables students to develop an interdisciplinary studio practice. The curriculum organizes multiple approaches to visual thinking that cut across various disciplines into a logical whole. Students in this major develop studio practices from a variety of aesthetic, theoretical, scientific, sociological, and historical viewpoints. Students learn to consider medium, its impact on the image and message of a piece, and the work’s social and cultural context. The major is comprised of a stimulating blend of studio and academic courses that provide students with a sound basis for pursuing graduate study in studio art, art history, art theory and criticism, or visual anthropology.

Degree Requirements for the B.A. in Visual Studies

The Bachelor of Arts degree may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 122 semester hours of credit with a minimum cumulative 2.00 GPA.

University Requirements

- Students must complete the university’s General Education (p. 143) curriculum.
  - Successful completion (minimum grade of C-) in both VS 1151 and ARTH 1156 will waive the GenEd Arts (GA) requirement.
  - Summer or semester study abroad will satisfy the Gen Ed Global/World Society requirement.

Major Requirements

- Required Visual Studies courses must be completed with a minimum grade of C- to apply towards degree requirements.
- All Temple students must take a minimum of two writing-intensive courses at Temple University as part of the major. The writing-intensive courses are identified with (WI) after the titles.

<table>
<thead>
<tr>
<th>Foundation Requirements</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>VS 1151</td>
<td>Visual Studies 1 Foundation: Drawing</td>
<td>3</td>
</tr>
<tr>
<td>VS 1351</td>
<td>Visual Studies 1 Foundation: 3D</td>
<td>3</td>
</tr>
<tr>
<td>VS 1651</td>
<td>Visual Studies 1 Foundation: Digital Imaging</td>
<td>3</td>
</tr>
<tr>
<td>TYLE 1071</td>
<td>Visual Studies 1 Introduction to Visual Studies: History, Theory, Practice</td>
<td>3</td>
</tr>
<tr>
<td>FDPR 1501</td>
<td>Introduction to Art and Design (freshman seminar)</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Studio Requirements</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>VS 1058</td>
<td>Visual Studies 1: Interdisciplinary Studio Seminar 1</td>
<td>3</td>
</tr>
<tr>
<td>VS 2058</td>
<td>Visual Studies 2: Interdisciplinary Studio Seminar 2</td>
<td>3</td>
</tr>
<tr>
<td>One Concept studio from Visual Studies at the 2xxx level</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>VS 3058</td>
<td>Visual Studies 3 Interdisciplinary Studio Seminar 3</td>
<td>3</td>
</tr>
<tr>
<td>Two Hybrid studios from Visual Studies at the 3xxx level</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>VS 4098</td>
<td>Visual Studies 4 Interdisciplinary Studio Seminar 4 (WI)</td>
<td>3</td>
</tr>
<tr>
<td>One Interdisciplinary studio from Visual Studies at the 4xxx level</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GAD 3896</td>
<td>Art Career Workshop (WI)</td>
<td>3</td>
</tr>
<tr>
<td>Select 5 studio electives from Visual Studies, Community Arts or 2000 level Crafts, PDS or GAD</td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Art History Requirement</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTH 1155</td>
<td>Art Heritage of the Western World I</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 1156</td>
<td>Art Heritage of the Western World II</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Academic Requirements</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Select 4 Academic Elective courses at any level</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>Select 4 Upper Level Academic electives (2000-level or above)</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Language Requirement (select one from the following)</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>ARBC 1002</td>
<td>Arabic Elements II</td>
<td></td>
</tr>
<tr>
<td>CHI 1002</td>
<td>Chinese Elements II</td>
<td></td>
</tr>
<tr>
<td>FREN 1002</td>
<td>Introduction to French II</td>
<td></td>
</tr>
</tbody>
</table>
GER 1002  Introduction to German II
GRKA 1002  Ancient Greek 2
GRKM 1002  Modern Greek Elements II
HEBR 1002  Elements II
HIN 1002  Hindi Elements II
ITAL 1002  Italian Language II
or ITAL 1902  Honors Italian Language II
JPNS 1002  Japanese Elements II
KRN 1002  Korean Elements II
LAT 1002  Latin 2
PORT 1002  Basic II
RUS 1002  First-Year Russian II
SPAN 1002  Basic II
or SPAN 1902  Honors Basic II
VTNM 1002  Vietnamese Elements II

Total Credit Hours  90

1  Not ARTE 3011
2  From within the University, but outside of Tyler departments.
3  If Language 1001 level is required per placement test results, this will apply towards one of the required academic elective courses.
4  If Language 1002 is not required as determined by placement testing, these credits must be taken as academic elective.

Suggested Academic Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Arts in Visual Studies

Requirements for New Students starting in the 2015-2016 Academic Year

Year 1

Fall  Credit Hours
ENG 0802, 0812, or 0902  Analytical Reading and Writing [GW]  4
ARTH 1155 or 1955  Art Heritage of the Western World I  3
FDPR 1501  Introduction to Art and Design  1
TYLE 1071  Visual Studies 1 Introduction to Visual Studies: History, Theory, Practice  3
Select two of the following:  6
VS 1151  Visual Studies 1 Foundation: Drawing ¹
VS 1351  Visual Studies 1 Foundation: 3D
VS 1651  Visual Studies 1 Foundation: Digital Imaging

Term Credit Hours  17

Spring
IH 0851 or 0951  Mosaic: Humanities Seminar I [GY]  3
GenEd Quantitative Literacy Course [GQ]  4
ARTH 1156 or 1956  Art Heritage of the Western World II ¹  3
VS 1058  Visual Studies 1: Interdisciplinary Studio Seminar 1  3
Select one of the following (not taken in the previous semester):  3
VS 1151  Visual Studies 1 Foundation: Drawing ¹
VS 1351  Visual Studies 1 Foundation: 3D
VS 1651  Visual Studies 1 Foundation: Digital Imaging

Term Credit Hours  16

Year 2

Fall
VS 2xxx (VS2 Concept Studio)  3
VS, CRFT, GAD, PDS or ARTE (Studio elective) ²  3
<table>
<thead>
<tr>
<th>Term</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring</td>
<td>VS 2058</td>
<td>Visual Studies 2: Interdisciplinary Studio Seminar 2</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>VS, CRFT, GAD, PDS or ARTE (Studio elective)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Academic Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Credit Hours</td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

**Year 3**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>VS 3xxx (VS3 Hybrid Studio)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VS, CRFT, GAD, PDS or ARTE (Studio elective)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic Elective</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic Elective (first level language)</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Credit Hours</td>
<td>16</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>VS 3058</td>
<td>Visual Studies 3 Interdisciplinary Studio Seminar 3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>VS 3xxx (VS3 Hybrid Studio)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Language Requirement (second level language)</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic Elective</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Credit Hours</td>
<td>16</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Year 4**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>VS 4xxx (VS4 Interdisciplinary studio)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GAD 3896</td>
<td>Art Career Workshop [WI]</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Upper Level Academic Elective (2000+)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper Level Academic Elective (2000+)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper Level Academic Elective (2000+)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Credit Hours</td>
<td>15</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>VS 4098</td>
<td>Visual Studies 4 Interdisciplinary Studio Seminar 4 [WI]</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>VS, CRFT, GAD, PDS or ARTE (Studio elective)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VS, CRFT, GAD, PDS or ARTE (Studio elective)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper Level Academic Elective (2000+)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Credit Hours</td>
<td>15</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Total Credit Hours | 122 |

---

1. These 2 courses constitute the waiver for the GenEd Arts category if the courses are completed with a C- or better.
2. Select studio electives from Visual Studies, ARTE (Community Arts courses, but not ARTE 3011) or 2000 level CRFT, PDS or GAD
3. If language 1001 is not required as determined by placement test, these credits must be taken as academic elective.
4. If Language 1002 is not required as determined by placement testing, these credits must be taken as academic elective.

Please Note: An approved study abroad program will waive the GenEd Global/World Society (GG) requirement. Visual Studies majors interested in studying abroad should consult with an academic advisor to discuss how a semester or a summer program fits in the program to remain on track for graduation.
Center for the Performing and Cinematic Arts

The Center for the Performing and Cinematic Arts at Temple University is a comprehensive and unified academic unit consisting of the Boyer College of Music and Dance and the School of Theater, Film and Media Arts.

The Center for the Performing and Cinematic Arts offers the BA, BS, BM, BFA, MA, MM, MS, MFA, MMT, DMA and PhD degrees and a collaboratively oriented community of award-winning faculty and professionals within the context of an urban major research university located in one of the most culturally vital cities in the United States.

Sharing the Center's vision of growth and sustainability as a cultural leader in the 21st century, its donors and alumni serve as ambassadors to the mission and represent some of the most prolific and noted individuals in national and international cultural arenas.

The Center for the Performing and Cinematic Arts at Temple University serves its neighboring communities in addition to national and international audiences through more than 500 events, performances, lectures and exhibits annually.

The Center for the Performing and Cinematic Arts is overseen by its Dean and the Vice Provost for the Arts at Temple University, Dr. Robert T. Stroker.

arts.temple.edu
Boyer College of Music & Dance

Founded 1962

Dr. Robert T. Stroker, Dean
2001 N. 13th Street
Philadelphia, PA 19122
215-204-8301
b (music@temple.edu)boyer@temple.edu (boyer@temple.edu)
www.temple.edu/boyer

Mission

The Boyer College of Music and Dance is committed to nurturing and advancing music as a form of human expression, as an art, and as a subject for intellectual inquiry. Recognizing that music possesses unique powers -- to move the spirit, to excite the mind, to reveal the past, to chart the future, to instruct, to heal, and to foster communication -- the college seeks to perpetuate music in its myriad forms through creative and scholarly work, teaching, and service, according to the highest artistic and academic standards.

As an integral part of Temple University, the Boyer College shares the ideals of Russell Conwell upon which Temple was founded: to recognize talent and personal potential wherever they may be found; to provide educational opportunities for meritorious students of limited financial means; and to serve as a constructive presence in the wider Philadelphia community.

In carrying out its mission, the Boyer College seeks both to continue the long tradition of artistry and scholarship that we have inherited and to develop new insights, perspectives, and practices. This dual objective -- to explore both past and future, old and new -- should be broadly reflected in the life of the college: in curricula and instruction; institutional policy; professional activities of faculty; advisement of students; and musical performances.

For the art of music to remain vital, our culture must develop both highly-trained, professional musicians and informed, perceptive listeners. Accordingly, the college recognizes its responsibility to administer professional education to the student seeking a career in music, provide opportunities for the general university student to study and experience music, and share its musical life with the public.

The Boyer College provides a distinctive union of the best conservatory-type training with intense academically-oriented classroom teaching. Coupled with the performance opportunities of the university and the culturally-rich Philadelphia area, the Boyer College offers students the competitive edge in complete, comprehensive musical preparation. Many programs throughout the university offer minors. Students who wish to pursue a minor outside of music should contact the appropriate department.

Accreditation


Music Admissions

The following requirements for admission to the college are to be considered minimal. Applicants who pass the following examinations may be recommended to the Director of Admissions as eligible for admission to the college. In addition, candidates must meet general requirements set by the Office of Undergraduate Admissions.

• An audition in the major performing medium must be completed before an applicant can be accepted into the Boyer College of Music and Dance.
• After submitting the completed application, the applicant is responsible for scheduling his/her audition. E-mail music@temple.edu to schedule your audition. Refer to Boyer College for audition dates (http://www.temple.edu/boyer/admissions/undergrad-admissions/auditions.asp), pre-screening requirements, and audition requirements.
• The freshman application deadline is March 1. Applications for admission to the spring semester must be received no later than November 1.
• If the applicant is unable to be present because of distance, applicants should upload a video audition to Decision Desk. Refer to Boyer College for specific video audition details (http://www.temple.edu/boyer/admissions/undergrad-admissions/auditions.asp#Recorded).
• Prescreening audition recordings are required for jazz guitar; prescreening portfolio submissions are required for the B.M. Composition program.
• B.S. Music applicants must submit a statement of goals to music@temple.edu, and take a theory test.

Dance Admissions

Admission into the dance program requires the submission of four items:

• A general university application submitted to the Office of Undergraduate Admissions.
• Official transcripts / standardized test scores submitted to the Office of Undergraduate Admissions.
• A dance application submitted to the Department of Dance.
• Attendance at an audition located on Temple University Main Campus in Philadelphia, or other arrangements to complete the audition requirements.

A dance audition cannot be scheduled until all other required application materials have been submitted. Please note that Temple University will not make an admission decision until applicants attend a dance audition.

The dance audition consists of technique classes divided into sections of ballet, modern, and African dance; a one minute solo of an applicant's own choreography; and an interview. The faculty attempts to choose students with physical, artistic, and intellectual potential to enter and complete the dance program and the university curriculum. The faculty is concerned that potential students' goals and aspirations are supported by the department philosophy, maximizing success in the program.

For additional information regarding dance admissions and for an application, please visit Boyer Admissions (http://www.temple.edu/boyer/admissions).

Transfer Credits

In addition to the university's statement regarding transfer credit (see Transfer Students (p. 23)), the Boyer College of Music and Dance will, during New Student Orientation, determine all transferred music credits through placement exams. Where deemed necessary, students may be tested in music theory, music history, and secondary piano. Tests in other music areas may be arranged through individual departments.

Financial Aid

See Financial Aid (p. 137) in the Bulletin.

Financial aid is available to full-time undergraduates in the form of music grants, academic scholarships, loans, grants, music grants-in-aid, and work-study programs. No separate application is necessary.

Music Grants are awarded based on merit. The Boyer College has application and audition deadlines for priority music scholarship consideration. No separate application is required.

Entering Student Scholarships are offered by the Dance Department following successful entrance auditions and are based on artistic talent and potential for success in the dance curriculum. No separate application is necessary.

Financial aid awards are made after the student has been admitted as a fully-matriculated student. Students are to be enrolled full-time, unless prior permission is granted to do otherwise by the Associate Dean.

Music and Dance scholarships and awards for currently enrolled and graduating undergraduate and graduate students include, but are not limited, to the following:

Voice/Opera
Florence Berggren Voice Scholarship
Philip Y. Cho Voice Scholarship Fund
John T. Douglas Award for Young Artists
Else Fink Memorial Scholarship
Professor Robert Grooters Memorial Scholarship
Klara Meyers Scholarship
Morton C. Meyers Memorial Scholarship
Sidney and Mindelle Weinberg Voice Scholarship

Choral Conducting
Robert Page Graduate Choral Conducting Scholarship

Music Therapy
Anni Baker Scholarship in Music Therapy

Instrumental
Max Aronoff Prize
Stuart J. Best Memorial Scholarship
Fred Schrader Memorial Scholarship Fund
Elizabeth Smith String Scholarship
Glenn Steele Percussion Scholarship

Keyboard
Olga Gagliardi Getto Award
Jacobs Music Company Steinway Award
Louis and Peter Vennett Scholarship

Jazz
Paul Beller Memorial Scholarship
David M. Katz Scholarship
Julian F. King Jazz Studies Award
Billy Strayhorn Jazz Education Scholarship Award

Diamond Band
H. E. Pike Memorial Award

Music Studies
Bruce Archibald Memorial Fund
Dr. B. Stimson Carrow Award
Dr. Milton J. Sutter, Jr. Memorial Award

Music Education
Dorothy Albert Bogusz Scholarship
Ruth M. Lafferty Memorial Award
Frances G. Lumsden Memorial Scholarship
William T. and Carmen T. Middleberg Scholarship

General
Irving Berlin Scholarship
Esther Boyer Scholarship Fund
Elaine Brown Tribute Fund
Dr. Jeffrey M. Cornelius Tribute Fund Award
Rida C. Davis Memorial Scholarship
Douty Foundation Scholarship
Richard M. Duris Scholarship for Excellence in Classical Music
Elizabeth K. Frescoln Award
Frances Hutton Memorial Award
Helen Laird Tribute Award
Dr. Arthur Bennett Lipkin Memorial Fund
Esther M. Schultz Award
William M. Singer Memorial
Alice Tully Scholarship
David L. Stone Tribute Scholarship
E. M. Yarnell Scholarship
Boyer College Alumni Association Award
Dr. Jeffrey M. Cornelius Tribute Fund Award
Edwin B. Garrigues Scholarships
Jil D. Hamm Memorial Scholarship
Michael S. Kavalhuna Scholarship
New School Scholarship
Presser Foundation Scholarships
Janet M. Yamron Scholarship

Dance
Terese Benzwie Dance in Education Award
Frances Bowden Scholarship
The Katherine Dunham Award for Creative Dance Research
Edrie Ferdun Award
Sarah Hilsendager Award
Rose Vernick Award

Special Programs

Music Technology Component
In addition to coursework leading to Bachelor's degrees in Music, the Boyer College of Music and Dance offers a 36-credit component in Music Technology to qualified music majors. This component, which is distributed over a student's freshman through senior years, normally results in a five-year program.

The music technology component provides a structured sequence of courses for those students who desire to use new technologies to enhance their skills as performers, composers, teachers, and scholars. Courses focus on the creative, performance, and pedagogical aspects of music technology.
Temple Music Prep provides lifelong, non-credit learning opportunities in music and dance to the Greater Philadelphia community and surrounding areas. As a division of Temple University’s Boyer College of Music and Dance, Music Prep is uniquely able to combine university expertise with Philadelphia’s outstanding cultural assets, assuring excellence in experience and results.

Programming includes Early Childhood Music Foundations beginning with newborns through 4 years of age, Movement and Dance Classes for children 3 years old through teens, individual instruction in all instruments and voice for children and adults, and classes specially designed for adults. Music Prep is also an authorized provider of Act 48 credits for Pennsylvania educators.

A major component is the Center for Gifted Young Musicians, which serves those students with exceptional ability and motivation. The Community Music Scholars Program serves students with need from over fifty public schools, allowing access to affordable quality instruction.

Temple Music Prep is a member of the National Guild for Community Arts Education and the Greater Philadelphia Cultural Alliance.

Key Program Components

- **Individual lessons** from an outstanding faculty in orchestral instruments, piano, guitar, voice, composition and jazz techniques are offered for children and adults.

- **Suzuki instruction** in violin, cello, guitar, and piano is also offered for young children. In the "talent education method" of Dr. Shinichi Suzuki, children learn to play music with the same enjoyment and fluency with which they learn language.

- **Early Childhood Music Foundations** is an innovative program in early childhood music education education (newborns through children 4 years of age) that has a national reputation for excellence. In a carefully planned sequence of music learning, the program uses the natural human inclination for chanting, singing and movement as the first steps in the musical understanding of melody and rhythm.

- **Movement and Dance** classes take children through a sequential, age-specific dance program. Offerings include: Creative Movement (3 & 4 yrs.), Music and Movement (5 yrs. in kindergarten through 7 yrs.), Modern Dance (8 yrs. through teens in three levels) and Ballet Technique (pre-teens & teens).

- **Basic Musicianship** classes are offered in three progressive levels. The goal of these classes is to develop musicianship by integrating aural, written, vocal, and tactile skills. By using movable "Do" solfege, students learn to make the connection between musical notation and sound. A one-week summer music theory intensive course is offered for those students preparing to enter a college music degree program.

- **Adult classes** are designed to provide opportunities for personal growth and professional development. Offerings include: classes in learning to play piano, learning to play guitar, learning to sing, jazz improvisation, or in Suzuki piano teacher training; participation in a community band or a community choir during the academic year or week-long music workshops offered at the Boyer College; as well as individual study in instruments and voice. Pennsylvania educators are eligible to receive Act 48 credit for most of these offerings.

- **The Center for Gifted Young Musicians** is the component of Music Prep that focuses on the training of exceptionally-gifted students who have the ability and willingness to make a serious commitment to music. By audition only.

### Instrumental Division (for strings)

The Center’s instrumental program provides a comprehensive package of music instruction and performance for young musicians who have demonstrated the greatest potential for musical achievement. Emphasis in this program is placed on the development of superior musical skills through large and small ensemble performance. The faculty is made up of the finest artist/teachers in the region, including members of The Philadelphia Orchestra and professors from Temple’s own Boyer College of Music and Dance.

#### Young Artists Harp Ensemble

The Young Artists Harp Ensemble offers pedal and lever harp students ages 10 through high school the opportunity to participate in a group ensemble experience with a conductor as well as in student-led chamber music settings. Participants are also eligible to attend monthly studio master classes by Philadelphia Orchestra principal harpist, Elizabeth Hainen at the Boyer College of Music and Dance. Students may also have the opportunity to collaborate with other Temple Music Prep ensemble groups.

#### The Festival of Young Musicians

The Festival of Young Musicians has long been the centerpiece of the Center for Gifted Young Musicians. Held annually in late April/early May, it consists of a series of concerts throughout the region that feature all the performers in the Center.

- **The Community Music Scholars Program: Upper Division** provides weekly individual instruction, music theory and ensemble experience at a nominal fee for young instrumentalists. These Philadelphia school students with need are nominated by their school music teachers and accepted by audition.
• The Philadelphia String Project at Temple University is aligned with the National String Project Consortium (NSPC) a coalition of String Project sites at universities across the United States that exchange ideas and learn from each other but operate completely independently. The NSPC is dedicated to increasing the number of children playing stringed instruments, addressing the critical shortage of string teachers in the US and supporting public school string programs. Participating students receive twice weekly instruction taught by a Master Teacher and supported by Temple University undergraduate music education and performance string interns.

The Boyer College of Music Preparatory and Extension Division is located at Temple University's Center City Campus, 1515 Market Street, in the heart of metropolitan Philadelphia at the hub of the Regional Transit System.

For further information concerning curricula and fees, write to:

Temple Music Preparatory Division
1515 Market Street, Suite 501
Philadelphia, PA 19102
e-mail: musicprep@temple.edu
phone: 215-204-1512
web site: www.temple.edu/boyer/community/music-prep/index.asp

Facilities

Presser Hall, opened in 1967, is the center of musical activity at Temple University. This building houses practice rooms, classrooms, ensemble rehearsal rooms, teaching studios, faculty offices, a 16-station computer classroom, student and faculty lounges, a large listening and viewing library, and the Presser Learning Center. Presser Hall's performance facilities include Klein Recital Hall and Arronson Rehearsal Hall. Presser Hall houses the Music Studies Department, the Music Education Department, the wind, brass, and Percussion programs of the Instrumental Department, the Choral Activities Department, the Department of Voice and Opera, and the programs in Music Therapy and Jazz Studies. Presser Hall is fully Wi-Fi enabled.

The Presser Hall Listening Library houses a collection of more than 20,000 recordings and tapes, 10,000 compact discs, hundreds of video tapes and DVDs, reference books, and scores. Music listening and viewing assignments for courses in music history, theory, composition, jazz, education, and literature can be completed with this collection, which spans music history and performance from the earliest times to the present. This facility also contains general use computer stations, cell-phone and laptop charging stations, searchable databases of digital audio tracks, iPad stations, and multiple LP/CD/DVD media stations. A larger collection of music books and scores is found in Paley Library.

The Boyer College's Rock Hall was extensively renovated for music and dedicated in 1994 in recognition of the generous support of Dr. Milton Rock and the late Mrs. Shirley Rock. Located at Broad Street and Cecil B. Moore Avenue on Temple University's Main Campus, Rock Hall houses the Office of the Dean, the string and chamber music programs of the New School Institute, the programs in Music Composition, the Keyboard Department, the Early Music Program, the Alice Tully Library, three state-of-the-art computer/electronic laboratories for music and dance, practice rooms, classrooms, and a 325-seat chamber music recital hall. Rock Hall is fully wi-fi enabled.

The visual video/film scoring studio in Rock Hall features a variety of voice modules controlled by a computer workstation, a multi-channel mixer, 5:1 surround sound, and digital and analog recording facilities. Students are encouraged to design their own libraries of timbres for use in composition. The computer synthesis studio uses several computer workstations with expanded disk memory, digital and analog recording equipment, and a broad range of software for music synthesis. Most hardware and software titles in the Boyer College Computer Labs are identical to those in the new TECH Center's dedicated Music Lab, enabling students to work on projects in multiple venues.

The Boyer College added a 3-story addition to Presser Hall in 2009 which contains 21 additional practice rooms, three large classrooms, teaching studios, administrative offices, the Center for Arts and Quality of Life, and a 24-track ProTools recording studio.

The Boyer College's Department of Dance has its administrative, faculty, institute, and student offices housed in 1700 North Broad Street. Dance classes are held in three large dance studios in Pearson Hall where there are additional support spaces as well as two small teaching studios for smaller groups. Dance classes and performances are held in Conwell Dance Theater in Conwell Hall, a 125-seat black box theater. All Dance Department spaces are wi-fi enabled.

As of the 2011-2012 academic year, the College presents its largest ensembles in performance in the Temple Performing Arts Center. This iconic building — formerly the Baptist Temple of Philadelphia — was specifically converted into a performing arts complex capable of housing a full symphony orchestra and choir. Boyer's symphony orchestra, choirs, wind symphony, percussion ensemble and other large ensembles all perform in this venue. In addition, the Temple Performing Arts Center is also available to the College for recording sessions, rehearsals, faculty concerts and other significant events.

Also utilized by the Boyer College is the third floor of Mitten Hall where the Temple Opera Theater's rehearsal, administrative and faculty offices are housed along with the Opera Listening and Study Library, and the scene, costume, and prop shops. Tomlinson Theater, located across the street from
Presser Hall, is used for on-campus large ensemble performances and for the twice yearly staged opera productions. A 55-seat smart classroom for music and dance instruction is housed in the Tuttleman Learning Center.

The Boyer College is able to loan professional equipment to students in the form of instruments (violins, violas, celli, basses, all woodwinds, all brasses, all percussion), audio gear (JBL, Yamaha and Peavey), portable digital recording units, iPads, and video gear. Also available for use are unique vintage instruments: Hammond B3 Organ with Leslie Speaker, Fender Rhodes 73 synthesizer, Yamaha and Kurzweil synthesizers.

In July of 2012, the Boyer College of Music and Dance became part of Temple University’s Center for the Arts, a comprehensive administrative restructuring of all of the Arts programs on Temple’s campus. The combined programs included the Boyer College of Music and Dance, Tyler School of Art, and the Division of Theater, Film and Media Arts. With the oversight of all these areas by the Vice Provost for the Arts and Dean of the Center, Dr. Robert Stroker, the possibilities for collaborations among all of the arts programs on Temple’s campus have significantly increased.

In October 2015, the Center for the Arts was renamed the Center for the Performing and Cinematic Arts; the Division of Theater, Film and Media Arts was renamed the School of Theater, Film and Media Arts; and the Tyler School of Art became an independent school.

Student Contact Information

Boyer College of Music and Dance

Robert T. Stroker, Vice Provost for the Center of the Performing and Cinematic Arts

Dean, Boyer College of Music and Dance

Rock Hall

215-204-5004

robert.stroker@temple.edu

Beth Bolton, Associate Dean for Faculty and Academic Affairs

Presser Hall

215-204-8097

bbolton@temple.edu

Edward Flanagan, Associate Dean for Student Affairs

Presser Hall

215-204-8301

edward.flanagan@temple.edu

Steven Kreinberg, Associate Dean of Instructional Technology & Assessment

Rock Hall

215-204-8098

kreinberg@temple.edu

David Brown, Assistant Dean for Administrative Affairs, Center for the Performing and Cinematic Arts

Presser Hall

215-204-8392

dpbrown@temple.edu

Sue Alcedo, Director of Finance and Administration, Center for the Performing and Cinematic Arts

Rock Hall

215-204-5191

alcedo@temple.edu

Millie Bai

Rock Hall, Alice Tully Library

215-204-5531

millie@temple.edu

Jennifer Bolcar, Administrative Assistant

Presser Hall Office

215-204-5527

jbolcar@temple.edu

Florence Brown-Palmore, Executive Assistant to the Dean

Rock Hall Office

215-204-5527

palmore@temple.edu

Taish Bruton, Administrative Assistant, Department of Music Education and Music Therapy
Presser Hall, Presser Learning Center
215-204-8310
tbruton@temple.edu

Anne Canan, Administrative Specialist
Presser Hall, Main Office
215-204-8301
anne.canan@temple.edu

Molly Clark Davis, Alumni Relations Officer for the Arts and SMC
Temple Administrative Services Building (TASB)
215-926-2226
molly.clarkdavis@temple.edu

Leslie Cochran, Department Coordinator for Choral Activities and Jazz Activities
Presser Hall, Rm. 201
215-204-8304
cochranel@temple.edu

Lesley Copans, Academic Advisor
Presser Hall
215-204-8372
lcopans@temple.edu

Barbara DiToro, Associate Director, Temple Music Prep
Temple University Center City
1515 Market Street, 5th Floor
215-204-1512
musicprep@temple.edu

Bart Dunn, Instrumental Coordinator
Presser Hall
215-204-8306
bart.dunn@temple.edu

Linda Fiore, Director of College Relations and External Affairs
Rock Hall
215-204-8307
linda.fiore@temple.edu

Norma Anthony, Dance Admissions Representative
1700 N. Broad Street, Suite 309C
215-204-0533
norma.anthony@temple.edu

Anne Harlow, College Subject Specialist
Paley Library
215-204-1399
aharlow@temple.edu

Dara Boyd, Assistant Director of Marketing and Communications
Rock Hall
215-204-8117
dboyd@temple.edu

Jason Horst, Director of Operations, Center for the Performing and Cinematic Arts
Tyler Dean’s Suite
215-204-8391
jhorst@temple.edu

Nanette Hudson Joyce, Associate Director, Conwell Dance Theater
1700 N. Broad Street, Suite 309
215-204-6177
njoyce@temple.edu
For university-wide academic policies, refer to Undergraduate Academic Policies (p. 81).

Note that the policies for music students and dance students are listed in separate sections below.
• Music policies (p. 273)
• Dance policies (p. 275)

Boyer College Policies for Music Students

Students are responsible for complying with all university-wide academic policies as well as those of the Boyer College of Music and Dance that appear below.

Dean's List

Each fall and spring semester, those undergraduates who have met the credit hour and academic criteria for their school or college are placed on the Dean's List. See the Dean's List (p. 92) policy for specific GPA and credit-hour requirements.

Band Camp and Choir Retreat Policy

Each fall, prior to the opening of school, the Temple University Marching Band holds its annual band camp. In addition to having a concentrated four-day work period to prepare for the coming season, students get to know each other in both a working and social relationship. They also become acquainted with the group directors at both the personal and professional levels. Attendance at band camp is mandatory for group participation.

The Temple University Concert Choir often meets a few days prior to fall classes or during the first weekend of fall classes for extensive rehearsals.

Ensemble Requirements

• Undergraduate students with a major or concentration in voice or keyboard are required to participate in a choral ensemble, as determined by the Director of Choral Activities, throughout the undergraduate degree program where indicated by the curriculum. Participation begins in the first semester and continues until a baccalaureate degree is obtained. The requirement is waived during the semester of senior recital, internship, or student teaching.
• Music Education/Jazz majors whose concentration is voice are required to participate in both classical and jazz vocal ensembles. After advisement to determine which kind of ensemble is appropriate, these students should go to the Director of Choral Activities to be placed in a classical ensemble and to the Director of Jazz Studies to be placed in a jazz ensemble.
• Undergraduate students with a major or concentration in strings are required to play in the Temple University Symphony Orchestra. Participation begins in the first semester and continues until a baccalaureate degree is obtained. Qualified jazz strings and upright bass students are required to audition. This requirement is waived during the semester of student teaching or internship.
• All woodwind, brass, and percussion performance majors and/or concentrations must audition for instrumental ensembles, large and small, at the beginning of the fall semester for placement during the academic year. Continuing students will audition for ensemble placement through juries at the end of each semester. New students will audition for ensemble placement at the beginning of the first semester of study.
• Music education majors whose principal instrument is woodwind, brass, or percussion are required to play in the marching band for one semester, normally during the fall semester of the freshman and sophomore years. Transfer students in this category must also register for Marching Band for one semester unless they can show evidence of equivalent undergraduate experience at another college or university as determined by the Director of Bands.
• All students taking private lessons (major or concentration) or Recital Extensions are required to participate in an ensemble each semester in attendance.
• Percussion majors are required to participate in Percussion Ensemble.
• Any instrumental student who does not play for a private lesson jury at the end of each semester must arrange for an audition for ensemble placement for the succeeding semester with the Department of Instrumental Studies.
• Students may perform in more than two ensembles only with permission of their advisor.
• All students must show evidence of ensemble experience in their performance medium.
• All students who are registered for applied and concentration lessons must arrange their schedules in order to attend regularly-scheduled master/studio classes. Failure to do so may result in the lowering of the applied lesson grade.

Independent Study Policy

Independent Study provides a special opportunity for juniors and seniors to work in a highly-individualized setting with one or more faculty members.

Those who wish to design an Independent Study project must prepare a written proposal six months in advance of the semester in which the study is to be accomplished. This proposal is then submitted for the approval of a special Honors subcommittee of the Academic Planning and Review Committee, which includes the dean and associate dean. Private lessons beyond those required in the curriculum are not an appropriate form of Independent Study.

Professional Development Policy

All students in the college, in addition to passing the required subjects toward their degrees, are obligated to serve in a number of capacities in order to enrich their academic and musical expertise. The Boyer College believes that such experiences give impetus to successful professional careers.

Among the duties that may be required are conducting laboratory classes, tutoring, teaching private lessons, coaching, participating in the distribution and inventory control of university-owned musical instruments and instructional materials, participating in ensembles, accompanying, supervising
performance classes, performing at admission and open house events, and other academically-related activities. The Boyer College performances must be given priority over non-college commitments.

Instrumental Jury Policy

All instrumental students, both performance majors and instrumental concentration students, must play a jury at the conclusion of each semester to show evidence of progress on their instrument. For string performance majors, the jury at the end of the sophomore year is the ‘Junior Standing Jury,’ which must be successfully passed in order for the student to continue in the performance program.

Recital and Concert Attendance Policy

The dean and faculty of the Boyer College of Music and Dance consider recital and concert attendance to be a significant educational activity in the training of a musician. It is largely through the process of active listening that the young musician develops powers of discrimination and critical judgment with relation to musical performance. Therefore, attendance at a minimum of sixteen college recitals or concerts throughout the course of an academic year is mandatory for full-time undergraduate students. A maximum of 56 recitals is needed to complete the requirement. Of the eight required recitals attended in each semester by full-time students, one must be an official Boyer College World Music Recital or Multicultural Music Lecture-Performance. Part-time, matriculated undergraduate students are also responsible for attending a specific number of concerts with the same World Music Recital or Multicultural Music Lecture-Performance requirement. For part-time students the number of required recitals in a semester will be in a direct ratio to the number of credits for which they are registered. During student teaching, therapy internship, or senior recital, this requirement is waived. The requirement for full-time transfer students will be based on the number of semesters they attended the Boyer College. Failure to comply with this ruling may result in delay of graduation from the college.

Senior Recital Policy

Students in the following curriculums are required to perform a senior recital:

- Piano Performance
- Piano Pedagogy
- Instrumental Performance
- Voice Performance
- Jazz Instrumental Performance
- Jazz Voice Performance
- Jazz Arranging/Composition

The senior recital provides the opportunity for the performance major to display his or her development and potential as a professional musician and should be considered the focal point for the semesters of private lessons which precede it. Before the senior recital is scheduled, the student must have successfully completed private lessons during each semester prior to the recital and must have achieved senior status academically. All grades of "incomplete" in private lessons must be cleared before the student may apply for the senior recital. Students should refer to the Boyer College of Music and Dance Undergraduate Handbook for further details and policies governing recitals.

After receiving approval from the jury and the major teacher in the applied area, a student should apply for the Senior Recital date and complete the necessary recital arrangements through the recital coordinator.

For students enrolled in the Instrumental Studies Department, the recital approval jury serves to demonstrate the student’s ability to perform the degree recital successfully. Normally, this occurs at the preceding semester’s jury. If by departmental approval this jury does not occur, then a jury must be scheduled at least four weeks prior to the recital. If the jury is not successfully completed by that time, the Instrumental Studies Department reserves the right to cancel the recital date. Most of the recital repertoire, with the exception of chamber ensemble works, should be available for performance at the jury and accompanied by the recital accompanist. Recital approval is dependent upon the time remaining between the approval jury and the actual recital date, as well as the degree of preparedness of the repertoire.

Except for non-sonata and complicated contemporary repertoire, string performance majors should perform from memory (and the recital program should include some portion that will be performed from memory). Students who wish an exception to this memorization policy must obtain prior approval from the department by indicating the request on the recital repertoire form when it is submitted to the department for approval of the program.

Senior Recitals are usually presented Monday through Friday at 5:15 PM or 7:30 PM. Performance time should be 45 to 50 minutes, exclusive of an optional intermission of no more than 10 minutes.

Recital Extension Policy

Some students may need to extend their applied study beyond the required number of semesters in order to complete the preparation for the Senior Recital. Students who do not present a recital during the recital semester will receive the grade of "Incomplete" and must register for MUSC 5000 for 2
semester hours of non-degree credit. Recital Extension must be taken each semester until the recital has been presented. The sole exceptions to this rule are as follows:

- Students who give their recitals during the first three weeks of the spring semester are not required to register for Recital Extension that semester.
- Students who register for Recital Extension or for private lessons during the summer may give their recitals during the first three weeks of the fall semester. However, if a student does not register for either Recital Extension or lessons during the summer, he or she may not present the recital in the fall semester -- regardless of the date -- without also registering for that semester of lessons or Recital Extension.
- Private applied lessons beyond the eight-semester requirement currently in effect for undergraduate performance majors may be taken by permission of the jury and/or the appropriate performance department chairman. MUSC 5000 carries a $500 fee (subject to change without notice). Tuition scholarships do not cover this private lesson fee.

Program Performance Policy

All music departments reserve the right to dismiss an undergraduate student at any time from a given undergraduate degree program, regardless of grade point average, if in the opinion of the major department, he or she is unable to meet departmental standards. The decision will receive automatic review by the Academic Review and Planning Committee. The student has the right to appeal the dismissal to the Academic Review and Planning Committee of the Boyer College of Music and Dance.

Undergraduate Private Lesson Policy

Weekly one-hour private lessons are arranged for full-time matriculated undergraduates in the Boyer College for as many semesters as required by the particular curriculum. (A full-time student must be registered for at least 12 credits each semester.) A per semester lesson fee of $250 (subject to change without notice) -- above and beyond the regular tuition -- will be automatically added to the tuition charge of each student for this study. Students who do not complete a minimum of 12 semester hours must pay a private lesson fee of $500 for the succeeding semester of private lessons. Students who are accepted for a double concentration or a double major in performance must be fully accepted by both departments by audition. A private lesson fee of $500 is assessed for the second instrument. Approval of the associate dean is required for all students desiring a double major or double concentration. Tuition scholarships granted by the Boyer College do not cover the private lesson fees.

Boyer College Policies for Dance Students

Students are responsible for complying with all university-wide academic policies that apply to their individual academic status. Additional and unique policies, or exceptions for the Boyer College of Music, Department of Dance, appear below.

Dean's List

Each fall and spring semester, those undergraduates who have met the credit hour and academic criteria for their school or college are placed on the Dean's List. See the Dean's List (p. 92) policy for specific GPA and credit-hour requirements.

Leave of Absence

Students must submit the Leave of Absence form to the Undergraduate Program Coordinator in advance of the semester in which the leave is to take place, stating the reason(s) why the leave is necessary. A Leave of Absence must be authorized by the Undergraduate Program Coordinator and Department Chairperson, who will process the leave in accordance with the university's leave of absence policy. (Policy # 02.10.16 (http://policies.temple.edu/getdoc.asp?policy_no=02.10.16))

Injury Policy

An injury may affect a student’s ability to successfully continue in a course. A student who is injured is expected to immediately contact their instructor and the Undergraduate Program Coordinator to discuss the possibility of continuance in the course. Injured students are responsible for seeking appropriate medical attention for their injuries. Students must provide an official doctor’s note recommending non-participation in class to their instructors. Failure to provide a doctor’s note verifying an injury may result in the student’s violation of applicable absence policies or may otherwise impact the student’s grade.

Any student who is advised by a doctor to refrain from dancing for three weeks or more may be required to withdraw from studio courses that focus on dance technique, composition, repertory and improvisation. For students who will miss fewer than three weeks of classes due to their injury, and who are physically able to do so, must attend all classes to observe and take notes. Instructors may assign additional written work if appropriate. If a student is unable to participate in midterm or final examinations due to an injury, the student is responsible for working with their instructor to develop alternate assignments at the discretion of the faculty member.

Persons subject to this policy may have the option for a medical withdrawal or an incomplete in their courses. Students should review Temple University's Withdrawal from Classes Policy (02.10.14 (http://policies.temple.edu/getdoc.asp?policy_no=02.10.14)) and Incomplete Coursework Policy (02.10.13 (http://policies.temple.edu/getdoc.asp?policy_no=02.10.13)).

Independent Study and Field Experience

Students who wish to register for Independent Study or Field Experience must submit a written proposal to the Undergraduate Program Coordinator no later than two months in advance of the semester in which the study is to be accomplished. A student who is on academic probation may not register
for Independent Study or Field Experience. Credits will not be granted retroactively, and no more than 4 credits will be awarded over the course of a student's undergraduate study.

Full-Time/Part-Time Status
The semester load for full-time undergraduate students is 17 credits. Undergraduate students must carry at least 12 credit hours to be classified as full-time. The Bachelor of Fine Arts (BFA) in Dance requires matriculated students to attend on a full-time basis each semester. Students who have been full-time for at least four semesters may petition the Undergraduate Program Coordinator no later than two months in advance for approval to enroll in the subsequent semester on a part-time basis. All requests for part-time status must be approved by the dance faculty. Part-time status is granted for one semester only. Students who are on academic probation are not eligible for part-time status. If a student is granted part-time status and is then placed on academic probation, part-time status will be revoked.

Academic Overloads (18 or more semester hours)
Academic overloads need special approval from the Associate Dean for Student Affairs. Students interested in pursuing an academic overload should contact their Faculty Advisor no later than 2 months prior to the start of the semester in which they desire to overload. Students who are on academic probation are not eligible for academic overloads.

Technique Standards
Temple University's Department of Dance recognizes the necessity of technical training in building professional quality performers, choreographers, and teachers. Our technique classes include a diverse range of dance forms, including ballet, modern, jazz, and African. Each of our technique teachers draws from an array of influences and styles, preparing students for the eclecticism found within the contemporary dance world today. Through four years of technical training, our students gain an understanding of and apply the following principles in reaching their expressive potential and minimizing injury:

- Alignment and Core Connection
- Physical Strength and Flexibility
- Upper and Lower Body Integration
- Clarity in Articulating Various Body Parts
- Sensitivity to Qualitative Range and Expressivity Inside Movement
- Rhythmic Awareness and Musicality
- Incorporation of Weight and Breath
- Spatial Awareness
- Critical Thinking
- Self Motivation and Discipline

Modern Technique represents the core of our students' technical training. Students in the Performance & Choreography Focus are required to advance to Modern Technique IV, while students in the Dance Education Focus are required to advance to at least Modern Technique III. In all technique classes, video evaluations occur at the mid-term and final periods of each semester. Following these evaluations, students receive verbal and written feedback from their instructors. This process provides a method of looking at a student's progress in developing the target competencies for each level of technique.

Technique Placement Class
All entering undergraduates are placed into modern and ballet technique levels based on their audition and supplemental dance application. Adjustments to level placement may be made during the first week of classes. Returning undergraduates should consult with their faculty advisor about level placement prior to registering for classes. Students may repeat a level up to two times, and are not allowed to regress in level.

First Semester Program Review
At the end of the first semester, each student's progress will be formally evaluated in the following categories to determine suitability for continued study within the dance program.

Academic Progress
Students must meet and maintain the minimum academic standards listed below:

- 2.50 grade point average (GPA) in dance courses each semester.
- 2.25 grade point average (GPA) overall each semester.
- No more than one grade below B- in a dance course is permitted.
- No withdrawals or incompletes are permitted in dance courses.
- Successful completion of the following dance courses:
DANC 1801 First Year Seminar in Dance 1
DANC 1811 Movement Improvisation I 2
DANC 1813 Dance Repertory I 2
or DANC 1819 Dance Production
DANC 1841 Music for Dancers 2
or DANC 1851 Global Dance Traditions
At least two modern technique classes
At least one ballet technique class

Technical Growth
Students must be able to demonstrate and articulate verbally a conceptual understanding of alignment, strength, and mobility. They must be able to assimilate sequential movement materials, and successfully perform basic movement phrases.

Improvisation
Students must demonstrate their ability to spontaneously create solo movement, and demonstrate their understanding of basic partnering techniques and improvising in groups. Students will be able to generate movement material that both explores and expands their expressive range as dancers.

Creative Engagement
Over the course of the first semester, students must:

- Participate in one performance or audition one finished work for the student concert.
- Demonstrate consistent attendance, focus, intellectual curiosity, and openness to new approaches, as reflected in faculty evaluations of student coursework.
- Demonstrate receptivity to feedback and in-class evaluation from instructors, and apply this information in subsequent work.
- Demonstrate healthy life practices as part of a disciplined approach towards one's work as a dancer.
- Maintain positive professional interactions with peers and faculty.

Second Semester Program Review
At the end of the second semester, each student's progress will be formally evaluated in the following categories to determine suitability for continued study within the dance program.

Academic Progress
Students must meet and maintain the minimum academic standards listed below:

- 2.50 grade point average (GPA) in dance courses each semester.
- 2.25 grade point average (GPA) overall each semester.
- No more than one grade below B- in a dance course is permitted.
- No withdrawals or incompletes are permitted in dance courses.
- Successful completion of the following dance courses:

DANC 1801 First Year Seminar in Dance 1
DANC 1811 Movement Improvisation I 2
DANC 1813 Dance Repertory I 2
DANC 1819 Dance Production 1
DANC 1841 Music for Dancers 2
DANC 1851 Global Dance Traditions 2
At least four modern technique classes
At least two ballet technique classes

Technical Growth
Students must be able to apply, demonstrate, and articulate verbally a conceptual understanding of alignment, strength, and mobility. They must be able to assimilate sequential movement materials, and successfully perform movement phrases that deal with the following elements:

- Movement efficiency and proper alignment
- Shifting off the vertical line of balance and returning to center
- Basic rhythmic structures and patterns
• Basic locomotor movement and some inverted movement
• Variable spatial planes, directions, and levels
• Assimilation of sequential movement material
• Concepts of body organization: such as breath support, core to distal/head to tail patterning, upper-lower/body half integration, and cross-lateral patterning
• Differing energy qualities: how energy is directed within the body and projected out into space

Creative Engagement
Over the course of the second semester, students must:
• Participate in one performance or audition one finished work for the student concert.
• Demonstrate consistent attendance, focus, intellectual curiosity, and openness to new approaches, as reflected in faculty evaluations of student coursework.
• Demonstrate receptivity to feedback and in-class evaluation from instructors, and apply this information in subsequent work.
• Demonstrate healthy life practices as part of a disciplined approach towards one's work as a dancer.
• Maintain positive professional interactions with peers and faculty.

Third Semester Program Review
At the end of the third semester, each student's progress will be formally evaluated in the following categories to determine suitability for continued study within the dance program. As part of this process, students apply for entrance into either the Dance Education Focus or the Performance & Choreography Focus.

Artistic Portfolio
By December 1st, students will submit to the Undergraduate Program Coordinator a portfolio containing the following:
• Concert Programs: copies for each production in which the student has participated as a performer or stage crew.
• DVD: videos of all choreography and performances in previous three semesters.
• Essay: a personal statement of 1-2 pages that identifies the track the student wishes to pursue, how that track will impact their professional goals and development, and assesses their artistic and professional development within the curriculum to date.

Academic Progress
Students must meet and maintain the minimum academic standards listed below:
• 2.50 grade point average (GPA) in dance courses each semester.
• 2.25 grade point average (GPA) overall each semester.
• No more than one grade below B- in a dance course is permitted.
• No withdrawals or incompletes are permitted in dance courses.
• Successful completion of the following dance courses, in addition to those listed for the first and second semester reviews:
  
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DANC 2813</td>
<td>Dance Composition I</td>
<td>2</td>
</tr>
<tr>
<td>DANC 2814</td>
<td>Dance Composition II</td>
<td>2</td>
</tr>
<tr>
<td>DANC 2872</td>
<td>Foundations of Dance Education</td>
<td>3</td>
</tr>
</tbody>
</table>
  or DANC 3851 | Lighting Design for Dance            |         |
  | DANC 4874   | Dance Repertory III                  | 3       |
  or DANC 4811 | African Dance Repertory              |         |

At least six modern technique classes
At least three ballet technique classes

Technical Growth
Students must demonstrate awareness of alignment issues and articulate personal strategies for addressing them. They must be able to assimilate and retain movement material sequentially and qualitatively, and successfully perform movement phrases that deal with the following elements:
• Increased movement efficiency and proper alignment
• Basic kinesiological principles in technique and conditioning contexts
• Increased facility in shifting off the vertical line of balance and returning to center
• Incorporation of weight into on-balance and off-balance movement involving momentum and weight release
• Increased rhythmic acuity: ability to work with shifting accents, structures & patterns
• Embodiment of musicality and more complex phrasing
• Movement initiation and follow-through
• Ability to risk and expand one's spatial parameters: demonstration of an increased drive through space
• Modulation between different energy states with breath support inside metric and non-metric phrasing
• Developing confidence in one's creative engagement with movement material
• Ability to adapt when experiencing new teaching methods and styles

Choreography
Students must also be able to discuss their work and the process by which they created it. Students must be able to create and perform a dance that:

• Successfully communicates an idea of personal significance;
• Demonstrates the ability to develop thematic movement material;
• Investigates movement imaginatively;
• Explores a range of dynamic qualities; and,
• Reflects a basic understanding of choreographic structure.

Creative Engagement
By the end of the third semester, students must:

• Audition one piece of their choreography for a student concert and participate in three performances.
• Demonstrate consistent attendance, focus, intellectual curiosity, and openness to new approaches as reflected in faculty evaluations of student coursework.
• Demonstrate receptivity to feedback and in-class evaluations from instructors, and apply this information in subsequent work.
• Maintain positive, professional interactions with peers and faculty.
• Demonstrate healthy life practices as part of a disciplined approach towards one's work as a dancer.
• Participate in one audition or recruitment event.

Special Course Sequences
The courses listed below must be taken in the specified sequence, and cannot be taken out of order or during the same semester. All courses must be completed before students register for Senior Choreographic Project or Dance Education Project.

• Composition: Movement Improvisation I, Composition I, Composition II, Creative Process
• History: Dance Modernism, Dance Post-Modernism
• Repertory: Dance Repertory I, Dance Repertory II, Dance Repertory III
• Technical Theater: Dance Production, Lighting Design for Dance

Enrollment in Dance Repertory III is by audition, and only required in the Performance & Choreography Focus.

Note that the general college graduation requirements for music students and dance students are listed in separate sections below.

• Music graduation requirements (p. 279)
• Dance graduation requirements (p. 280)

University Requirements
• All new students are required to complete the university's General Education (GenEd (p. 143)) curriculum.
• All Temple students must take a minimum of two writing-intensive courses as part of the major.

General College Graduation Requirements - Music
• All music education students must maintain a 3.0 GPA to obtain permission to student teach and qualify for state teacher certification.
• All music therapy students must receive a grade of B- or better in all music therapy classes. Grades below B- in any music therapy course may not be applied toward degree requirements in music therapy. Students may retake such courses only once, only with faculty approval. If a grade below B- is earned upon retaking the course, the students will not be permitted to continue as a music therapy major, but may be eligible to change to a different curriculum.
• All Boyer College music students must attend a minimum number of College recitals each semester to qualify for graduation. Refer to the Recital and Concert Attendance Policy for more detailed information.
• All Boyer College music students are required to participate in specific ensembles as determined by their department and program. Refer to the Ensemble Requirement Policy for more detailed information.
• Students in the following curriculums are required to perform a senior recital prior to graduation: Piano Performance, Piano Pedagogy, Instrumental Performance, Voice Performance, Jazz Instrumental Performance, Jazz Voice Performance, and Jazz Arranging/Composition. Refer to the Senior Recital Policy for more detailed information.

• All undergraduate music students must be cleared by the Assistant Director of Advising for graduation by the end of their junior year. Please refer to the Boyer College Policy Section (p. 272) for a complete list of policies. Detailed requirements for each degree program are listed within the curriculum section of the Bulletin.

Descriptions

1. Certain courses fulfill multiple requirements. In consultation with an advisor, students will be able to plan their curriculum more effectively.
2. The total number of credit hours required for graduation may be greater for some students based on placement exams, transfer evaluations, individual curricular choices, and academic progress.
3. Students must fulfill the necessary prerequisites for any given course or course sequence. See the Prerequisite and Co-requisite Policy (p. 99) in the University-wide Academic Policies section of this Bulletin.

General College Graduation Requirements - Dance

See the Dance Major (p. 292) page for the specific courses that are required for dance majors.

1. Dance required GPA for graduation: 2.25 cumulative, 2.5 in dance major
2. Dance Contact Information:
   1700 N. Broad Street, Suite 309
   Main Office Phone: 215-204-8710
3. Dance Requirements & Special Course Sequences (see dance major page for details):
   a. Must be taken in the required sequence
   b. Cannot be taken out of order or during the same semester
   c. All must be completed before students register for Senior Choreographic Projects.

Academic Advising Center

All Bachelor of Music, Bachelor of Science in Music, Bachelor of Fine Arts in Dance students will be assigned a faculty advisor. Students are required to meet with their advisor prior to registering for classes for the following semester.

Academic advisors attempt to avoid errors when advising students about their program requirements. Temple University's Schools and Colleges cannot assume liability for errors in advising; therefore, students must assume primary responsibility for understanding the requirements for their degree, and acquiring current information about their academic status.

Boyer College of Music and Dance - ADVISING CONTACTS

Marguerite Jackson, Assistant Director of Advising
Presser Hall
215-204-2229
margo@temple.edu

Lesley Copans, Academic Advisor
Presser Hall
215-204-8372
lcopans@temple.edu

Dr. Edward Flanagan, Associate Dean for Student Affairs
Presser Hall
215-204-8301
edward.flanagan@temple.edu

Dr. Beth Bolton, Associate Dean for Faculty and Academic Affairs
Rock Hall
215-204-5527
bbolton@temple.edu

Departmental Faculty Advisors

DANCE

Dr. Karen Bond
Associate Professor of Dance
215-204-6280
kbond003@temple.edu

Dr. Sherril Dodds
Professor of Dance
Chair, Dance Department
215-204-4959
sherril.dodds@temple.edu

Jillian Harris
Assistant Professor of Dance
215-204-5114
jhdan2@temple.edu

Laura Katz Rizzo
Assistant Professor of Dance
215-204-2328
laura.katz@temple.edu

Kun-Yang Lin
Associate Professor of Dance
215-204-5168
kun-yang.lin@temple.edu

Merian Soto
Associate Professor of Dance
215-204-6281
msoto@temple.edu

Dr. Kariamu Welsh
Professor of Dance
215-204-6286
kariamu@temple.edu

Dr. Laura Katz Rizzo
Dance Undergraduate Program Coordinator
laura.katz@temple.edu

**Instrumental**

Dr. Matthew Brunner
Director of Athletic Bands
215-204-2162
brunnerm@temple.edu

Vladimir Dyo
Instrumental Music
215-204-8334
vladimirdyo@temple.edu

Phillip O'Banion
Assistant Professor, Artist Director for Percussion
215-204-8329
obanion@temple.edu

Emily Threinen
Associate Professor, Artistic Director for Winds and Brass
Director of Bands
215-204-8335
emily.threinen@temple.edu

**Jazz Studies**

Terell Stafford
Professor, Director of Jazz Studies
215-204-8036
Music Education and Music Therapy
Dr. Rollo Dilworth, Chair
Associate Professor of Music Education
215-204-8310
rollo.dilworth@temple.edu

Dr. Deborah Sheldon
Professor of Music Education
215-204-8649
dsheldon@temple.edu

Dr. Beth Bolton
Associate Dean
215-204-8474
bbolton@temple.edu

Dr. Alison Reynolds
Associate Professor of Music Education
alison.reynolds@temple.edu

Dr. Nathan Buonviri
Assistant Professor of Music Education
buonviri@temple.edu

Dr. Darlene Brooks
Associate Professor of Music Therapy
darlene.brooks@temple.edu

Music Studies
Bachelor of Science in Music
Marguerite Jackson
Assistant Director of Advising
215-204-2229
margo@temple.edu

Music Studies
Dr. Michael Klein
Music Studies Department Chair
215-204-8322
mklein01@temple.edu

Composition
Dr. Maurice Wright
Composition Coordinator
215-204-8016
wright@temple.edu

Music History
Dr. Steven Zohn
Music History Coordinator
215-204-5096
szohn@temple.edu

Music Theory
Dr. Edward Latham
Music Theory Coordinator
215-204-8498
elatham@temple.edu

Keyboard
Charles Abramovic, Chair
Change of Concentration within Music

Students wishing to change their concentration or major may need to contact Margo Jackson (margo@temple.edu), Assistant Director of Advising, Presser Hall, 215-204-2229. An interview with the Department Chairperson, along with written authorization from your Department and Faculty advisor, is required.

Change of Program Request form:

www.temple.edu/vpus/forms/index.htm#advising

If you are considering changing your major from music to another major within Temple University, please see Margo Jackson in Presser Hall. Many colleges require students to schedule Intra-University Transfer workshops.

Permission to Take a Course Outside of Temple University: See Academic Policies (p. 98)

University Academic Resources: www.temple.edu/vpus/resources/index.htm

New Student Orientation Information: www.temple.edu/studentaffairs/orientation/

Registration and Schedule Revision — Add/Drop: See Registration (p. 33).

Faculty

Charles Abramovic, Professor, Department of Keyboard Studies, Boyer College of Music and Dance; D.M.A., Temple University.

Mitos Andaya, Associate Professor, Department of Choral Activities, Boyer College of Music and Dance; D.M.A., University of Kansas.

Christine L. Anderson, Associate Professor, Department of Voice and Opera, Boyer College of Music and Dance; D.M.A., University of Cincinnati College-Conservatory of Music.

Luis O. Biava, Professor Emeritus, Department of Instrumental Studies, Boyer College of Music and Dance; M.M., Manhattan School of Music.

Beth Bolton, Associate Professor, Department of Music Education and Music Therapy, Boyer College of Music and Dance; Ph.D., Temple University.

Karen E. Bond, Associate Professor, Department of Dance, Boyer College of Music and Dance; Ph.D., La Trobe University.

Darlene M. Brooks, Associate Professor, Department of Music Education and Music Therapy, Boyer College of Music and Dance; Ph.D., Temple University.

Matthew Brunner, Assistant Professor (Teaching/Instructional), Department of Instrumental Studies, Boyer College of Music and Dance; D.M.A., Indiana University.

Nathan Buonviri, Assistant Professor, Department of Music Education and Music Therapy, Boyer College of Music and Dance; Ph.D., Temple University.

David B. Cannata, Associate Professor, Department of Music Studies, Boyer College of Music and Dance; Ph.D., New York University.

Deborah A. Confredo, Professor, Department of Music Education and Music Therapy, Boyer College of Music and Dance; Ph.D., Florida State University.

Andreas Delfs, Professor, Department of Instrumental Studies, Boyer College of Music and Dance; M.M., The Juilliard School.

Marcus DeLoach, Assistant Professor, Department of Voice and Opera, Boyer College of Music and Dance; D.M.A., Rice University.

Alexander deVaron, Assistant Professor (Teaching/Instructional), Department of Music Studies, Boyer College of Music and Dance; D.M.A., Temple University.

Cheryl L. Dileo, Professor, Department of Music Education and Music Therapy, Boyer College of Music and Dance; Ph.D., Louisiana State University.
Rollo A. Dilworth, Associate Professor, Department of Music Education and Music Therapy, Boyer College of Music and Dance; D.M.A., Northwestern University.

Sheril Dodds, Professor, Department of Dance, Boyer College of Music and Dance; Ph.D., University of Surrey.

Vladimir Dyo, Instructor (Teaching/Instructional), Department of Instrumental Studies, Boyer College of Music and Dance; D.M.A., Temple University.

Alexander E. Fiorillo, Professor, Department of Keyboard Studies, Boyer College of Music and Dance; M.M., Catholic University of America.

Edward Flanagan, Associate Professor, Department of Music Studies, Boyer College of Music and Dance; Ph.D., Temple University.

Cynthia J. Folio, Professor, Department of Music Studies, Boyer College of Music and Dance; Ph.D., Eastman School of Music.

Mark Franko, Professor, Department of Dance, Boyer College of Music and Dance; Ph.D., Columbia University.

Shana Goldin-Perschbacher, Assistant Professor, Department of Music Studies, Boyer College of Music and Dance; Ph.D., University of Virginia.

Lorie A. Gratis, Assistant Professor (Teaching/Instructional), Department of Voice and Opera, Boyer College of Music and Dance; D.M.A., Temple University.

Matthew J. Greenbaum, Professor, Department of Music Studies, Boyer College of Music and Dance; Ph.D., City University of New York.

Jillian Harris, Assistant Professor, Department of Dance, Boyer College of Music and Dance; M.F.A., New York University Tisch School of the Arts.

Andrea McGraw Hunt, Assistant Professor (Teaching/Instructional), Department of Music Education and Music Therapy, Boyer College of Music and Dance; Ph.D., Temple University.

Lawrence R. Indik, Associate Professor (Practice), Department of Voice and Opera, Boyer College of Music and Dance; D.M.A., Manhattan School of Music.

John F. Johnson, Professor, Department of Music Studies, Boyer College of Music and Dance; M.M., University of Texas.

Laura E. Katz Rizzo, Assistant Professor (Teaching/Instructional), Department of Dance, Boyer College of Music and Dance; Ph.D., Temple University.

Gregory S. Kettinger, Instructor (Teaching/Instructional), Department of Music Studies, Boyer College of Music and Dance; B.M., Temple University.

Joann M. Kirchner, Assistant Professor (Teaching/Instructional), Department of Keyboard Studies, Boyer College of Music and Dance; Ph.D., University of Oklahoma.

Michael Klein, Professor, Department of Music Studies, Boyer College of Music and Dance; Ph.D., State University of New York at Buffalo.

Allen M. Krantz, Instructor (Teaching/Instructional), Department of Instrumental Studies, Boyer College of Music and Dance; M.A., Stanford University.

Steven Kreinberg, Associate Professor, Department of Music Studies, Boyer College of Music and Dance; Ed.D., Temple University.

Jan L. Krzywicki, Professor, Department of Music Studies, Boyer College of Music and Dance; M.M., Philadelphia Musical Academy.

Edward D. Latham, Associate Professor, Department of Music Studies, Boyer College of Music and Dance; Ph.D., Yale University.

Kun-Yang Lin, Associate Professor, Department of Dance, Boyer College of Music and Dance; M.F.A., New York University Tisch School of the Arts.

Joyce Z. Lindorf, Professor, Department of Keyboard Studies, Boyer College of Music and Dance; D.M.A., The Juilliard School.

Wendy Magee, Associate Professor, Department of Music Education and Music Therapy, Boyer College of Music and Dance; Ph.D., University of Sheffield.

Yukiko Mitsudome, Assistant Professor (Research), Department of Music Education and Music Therapy, Boyer College of Music and Dance; Ph.D., Temple University.

Phillip R. O'Banion, Assistant Professor, Department of Instrumental Studies, Boyer College of Music and Dance; M.M., University of Colorado.

Richard D. Oatts, Professor, Department of Music Studies, Boyer College of Music and Dance.

Lambert T. Orkis, Professor, Department of Keyboard Studies, Boyer College of Music and Dance; M.M., Temple University.

Elizabeth C. Parker, Assistant Professor, Department of Music Education and Music Therapy, Boyer College of Music and Dance; Ph.D., University of Nebraska-Lincoln.
David Pasbrig, Assistant Professor (Teaching/Instructional), Department of Music Studies, Boyer College of Music and Dance; D.M.A., Temple University.

Paul Rardin, Associate Professor, Department of Choral Activities, Boyer College of Music and Dance; D.M.A., University of Michigan.

Alison M. Reynolds, Associate Professor, Department of Music Education and Music Therapy, Boyer College of Music and Dance; Ph.D., Temple University.

Valery Ryvkin, Associate Professor, Department of Voice and Opera, Boyer College of Music and Dance; M.M., The Juilliard School.

Benjamin A. Schachter, Assistant Professor (Teaching/Instructional), Department of Music Studies, Boyer College of Music and Dance; M.M., New England Conservatory.

Eduard Schmieder, Professor, Department of Instrumental Studies, Boyer College of Music and Dance.

Helen Shoemark, Associate Professor, Department of Music Education and Music Therapy, Boyer College of Music and Dance; Ph.D., University of Melbourne.

Jeffrey C. Solow, Professor, Department of Instrumental Studies, Boyer College of Music and Dance; B.A., University of California Los Angeles.

Merián Soto, Professor, Department of Dance, Boyer College of Music and Dance; M.A.

Terell L. Stafford, Professor, Department of Music Studies, Boyer College of Music and Dance; M.M., Rutgers University.

Robert T. Stroker, Professor, Department of Music Education and Music Therapy, Boyer College of Music and Dance; Ph.D., Michigan State University.

Maria del Pico Taylor, Professor, Department of Keyboard Studies, Boyer College of Music and Dance; M.M., Northwestern University.

Emily C. Threinen, Associate Professor, Department of Instrumental Studies, Boyer College of Music and Dance; D.M.A., University of Michigan.

Adam Vidiksis, Instructor (Teaching/Instructional), Department of Music Studies, Boyer College of Music and Dance; Ph.D., Temple University.

Lindsay Weightman, Associate Professor (Teaching/Instructional), Department of Music Studies, Boyer College of Music and Dance; D.M.A., Manhattan School of Music.

Kariamu Welsh, Professor, Department of Dance, Boyer College of Music and Dance; D.A., New York University.

Stephen A. Willier, Associate Professor, Department of Music Studies, Boyer College of Music and Dance; Ph.D., University of Illinois.

Maurice W. Wright, Professor, Department of Music Studies, Boyer College of Music and Dance; D.M.A., Columbia University.

Steven D. Zohn, Professor, Department of Music Studies, Boyer College of Music and Dance; Ph.D., Cornell University.

Certificates

Undergraduate Certificate Programs in Performance (Performing Arts, Classical and Jazz, and Dance), Music Studies (Theory, History, Composition, and Jazz Studies), and Technology provide opportunities to experience the excitement of Center for the Performing and Cinematic Arts courses. Completing these certificate programs will culminate in significant music and dance knowledge and performance experience. Each of the proposed certificate programs offers a coherent disciplinary context beyond that which is possible in random course election. Graded experiences will be recognized on the final transcript.

Coursework may be completed in four semesters if the program permits. Most students should complete all requirements within six semesters. Accepted students may delay certain required coursework by one semester or take courses out of sequence only with Boyer College advisor approval.

There are no exit requirements, comprehensive exams, theses, or practica required. Grading will consist of standard letter grades awarded according to Boyer College and university policy for all coursework. The minimum grade for all coursework is C-. There will be no course auditing, pass/fail grades, or CR options. Evidence of student success will be indicated by courses completed and grades earned.

Admission

Applicants must complete an online application (http://www.temple.edu/boyer/academicprograms/certificates-application.asp). Admission requires students to be in good standing, and have completed at least 15 credits at Temple University by the initial requested semester of certificate coursework.

All application materials must be submitted by November 30 for Spring semester matriculation and May 15 for Fall semester matriculation.

Only one program may be selected. There will be no concurrent multiple program admission.

Advising and course selection will occur after admission. A grade of C- or higher must be earned in all required courses to receive the certificate.
No certificate program will be recognized as stand-alone.

No certificate program will be available to any applicant after completion of the bachelor's degree.

Certificate completion will be acknowledged on the official transcript only at the time of the awarding of the bachelor's degree.

Certificates

- Certificate in Chamber Music (p. 286)
- Certificate in Classical Piano (p. 286)
- Certificate in Classical Voice (p. 287)
- Certificate in Dance (p. 287)
- Certificate in Jazz Arranging (p. 287)
- Certificate in Jazz Improvisation (p. 288)
- Certificate in Jazz Piano (p. 288)
- Certificate in Jazz Studies Composition (p. 288)
- Certificate in Jazz Voice (p. 289)
- Certificate in Jazz Voice (p. 289)
- Certificate in Music (p. 289)
- Certificate in Music Composition (p. 290)
- Certificate in Music History (p. 290)
- Certificate in Music Technology (p. 290)
- Certificate in Music Theory (Jazz) (p. 290)
- Certificate in Music Theory (Traditional) (p. 291)
- Certificate in Orchestral Music (p. 291)
- Certificate in Performing Arts (p. 291)

Certificate in Chamber Music

Undergraduate students interested in the Certificate in Chamber Music must be in good standing and have completed at least 15 credits at Temple University by the initial requested semester of certificate coursework.

In addition to the online application (http://www.temple.edu/boyer/academicprograms/certificates-application.asp) and other requirements listed on the Certificates (p. 285) page, students must also submit a video recording (DVD) of one movement of a solo work from standard classical repertoire.

The Certificate in Chamber Music will be acknowledged on the official transcript at the time of the awarding of the bachelor's degree provided that the student successfully completes the following courses with a grade of C- or better in each course:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUST 3770</td>
<td>Topics in Music Theory (take 2 times for 2 credits each)</td>
<td>4</td>
</tr>
<tr>
<td>MUSC 3551</td>
<td>Applied Lesson - Instrumental (take 2 times for 3 credits each)</td>
<td>6</td>
</tr>
<tr>
<td>MUSC 4510</td>
<td>Instrumental Ensemble (take 2 times for 1 credit each)</td>
<td>2</td>
</tr>
<tr>
<td>MUSC 4520</td>
<td>Ensemble (take 2 times for 1 credit each)</td>
<td>2</td>
</tr>
</tbody>
</table>

Total Credit Hours: 14

Certificate in Classical Piano

Undergraduate students interested in the Certificate in Classical Piano must be in good standing and have completed at least 15 credits at Temple University by the initial requested semester of certificate coursework.

In addition to the online application (http://www.temple.edu/boyer/academicprograms/certificates-application.asp) and other requirements listed on the Certificates (p. 285) page, students must also successfully complete MUSC 1411 (classical section) or submit a video recording (DVD) of a short selection from the standard classical repertoire.

The Certificate in Classical Piano will be acknowledged on the official transcript at the time of the awarding of the bachelor's degree provided that the student successfully completes the following courses with a grade of C- or better in each course:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 1411</td>
<td>Private Piano for Non-Music Majors</td>
<td>1</td>
</tr>
<tr>
<td>MUSC 1412</td>
<td>Private Piano for Non-Music Majors</td>
<td>1</td>
</tr>
<tr>
<td>MUSC 2411</td>
<td>Private Piano for Non-Music Majors</td>
<td>1</td>
</tr>
<tr>
<td>MUST 3770</td>
<td>Topics in Music Theory (take 2 times for 3 credits each)</td>
<td>6</td>
</tr>
</tbody>
</table>
Certificate in Classical Voice

Undergraduate students interested in the Certificate in Classical Voice must be in good standing and have completed at least 15 credits at Temple University by the initial requested semester of certificate coursework.

In addition to the online application (http://www.temple.edu/boyer/academicprograms/certificates-application.asp) and other requirements listed on the Certificates (p. 285) page, students must also successfully complete MUSC 1256 (classical section) or submit a video recording (DVD) of one song or aria from the standard classical repertoire.

The Certificate in Classical Voice will be acknowledged on the official transcript at the time of the awarding of the bachelor's degree provided that the student successfully completes the following courses with a grade of C- or better in each course:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 1256</td>
<td>Private Voice for Non-Music Majors</td>
<td>1</td>
</tr>
<tr>
<td>MUSC 1257</td>
<td>Private Voice for Non-Music Majors</td>
<td>1</td>
</tr>
<tr>
<td>MUSC 1258</td>
<td>Private Voice for Non-Music Majors</td>
<td>1</td>
</tr>
<tr>
<td>MUST 1741</td>
<td>Aural Theory I</td>
<td>2</td>
</tr>
<tr>
<td>MUSC 1407</td>
<td>Piano for Non-Music Majors I</td>
<td>1</td>
</tr>
<tr>
<td>MUSC 1408</td>
<td>Piano for Non-Music Majors II</td>
<td>1</td>
</tr>
<tr>
<td>MUSC 3300</td>
<td>Choral Ensemble (take 3 times for 1 credit each)</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUST 1701</td>
<td>Music Theory for Non-Music Majors</td>
<td>2</td>
</tr>
<tr>
<td>MUST 3770</td>
<td>Topics in Music Theory</td>
<td></td>
</tr>
</tbody>
</table>

Total Credit Hours 12

Certificate in Dance

Undergraduate students interested in the Certificate in Dance must be in good standing and have completed at least 15 credits at Temple University by the initial requested semester of certificate coursework.

In addition to the online application (http://www.temple.edu/boyer/academicprograms/certificates-application.asp) and other requirements listed on the Certificates (p. 285) page, students must also submit a video recording (DVD) of a self-choreographed solo (two minutes maximum) which demonstrates the applicant's ability to develop movement ideas using some basic elements of composition.

The Certificate in Dance will be acknowledged on the official transcript at the time of the awarding of the bachelor's degree provided that the student successfully completes the following courses with a grade of C- or better in each course:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DANC 1804</td>
<td>Jazz Dance I</td>
<td>2</td>
</tr>
<tr>
<td>DANC 1811</td>
<td>Movement Improvisation I</td>
<td>2</td>
</tr>
<tr>
<td>DANC 1852</td>
<td>Ways of Knowing Dance</td>
<td>2</td>
</tr>
<tr>
<td>DANC 2853</td>
<td>African Dance I</td>
<td>2</td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DANC 1807</td>
<td>Hatha Yoga I</td>
<td>2</td>
</tr>
<tr>
<td>DANC 2822</td>
<td>Pilates: Body Conditioning</td>
<td></td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DANC 1815</td>
<td>Modern Dance Technique I A</td>
<td></td>
</tr>
<tr>
<td>DANC 1831</td>
<td>Ballet I A</td>
<td></td>
</tr>
<tr>
<td>DANC 2844</td>
<td>Hip Hop</td>
<td></td>
</tr>
</tbody>
</table>

Total Credit Hours 12

Certificate in Jazz Arranging

Undergraduate students interested in the Certificate in Jazz Arranging must be in good standing and have completed at least 15 credits at Temple University by the initial requested semester of certificate coursework.
In addition to the online application (http://www.temple.edu/boyer/academicprograms/certificates-application.asp) and other requirements listed on the Certificates (p. 285) page, students must also submit one original jazz arrangement (minimum 12 measures, PDF format) to boyer@temple.edu.

The Certificate in Jazz Arranging will be acknowledged on the official transcript at the time of the awarding of the bachelor’s degree provided that the student successfully completes the following courses with a grade of C- or better in each course:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUST 3770</td>
<td>Topics in Music Theory (take 2 times for 2 credits each)</td>
<td>4</td>
</tr>
<tr>
<td>MUST 4112</td>
<td>Jazz Arranging I</td>
<td>3</td>
</tr>
<tr>
<td>MUST 4115</td>
<td>Jazz Arranging II</td>
<td>3</td>
</tr>
<tr>
<td>MUST 4110</td>
<td>Seminar in Jazz Composition and Arranging</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total Credit Hours</strong></td>
<td></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

**Certificate in Jazz Improvisation**

Undergraduate students interested in the Certificate in Jazz Improvisation must be in good standing and have completed at least 15 credits at Temple University by the initial requested semester of certificate coursework.

In addition to the online application (http://www.temple.edu/boyer/academicprograms/certificates-application.asp) and other requirements listed on the Certificates (p. 285) page, students must also submit a video recording (DVD) of one jazz standard (with improvisation) from *The New Real Book*.

The Certificate in Jazz Improvisation will be acknowledged on the official transcript at the time of the awarding of the bachelor’s degree provided that the student successfully completes the following courses with a grade of C- or better in each course:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUST 3770</td>
<td>Topics in Music Theory (take 2 times for 2 credits each)</td>
<td>4</td>
</tr>
<tr>
<td>MUST 4113</td>
<td>Jazz Improvisation: Theory and Practice I</td>
<td>2</td>
</tr>
<tr>
<td>MUSC 3100</td>
<td>Small Jazz Ensemble (take 4 times for 1 credit each)</td>
<td>4</td>
</tr>
<tr>
<td>MUST 4114</td>
<td>Jazz Improvisation: Theory and Practice II</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total Credit Hours</strong></td>
<td></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

**Certificate in Jazz Piano**

Undergraduate students interested in the Certificate in Jazz Piano must be in good standing and have completed at least 15 credits at Temple University by the initial requested semester of certificate coursework.

In addition to the online application (http://www.temple.edu/boyer/academicprograms/certificates-application.asp) and other requirements listed on the Certificates (p. 285) page, students must also successfully complete MUSC 1411 (Jazz section) or submit a video recording (DVD) of one jazz standard (with improvisation) from *The New Real Book*.

The Certificate in Jazz Piano will be acknowledged on the official transcript at the time of the awarding of the bachelor’s degree provided that the student successfully completes the following courses with a grade of C- or better in each course:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 1411</td>
<td>Private Piano for Non-Music Majors</td>
<td>1</td>
</tr>
<tr>
<td>MUSC 1412</td>
<td>Private Piano for Non-Music Majors</td>
<td>1</td>
</tr>
<tr>
<td>MUST 3770</td>
<td>Topics in Music Theory (take 2 times for 2 credits each)</td>
<td>4</td>
</tr>
<tr>
<td>MUSC 3100</td>
<td>Small Jazz Ensemble (take 4 times for 1 credit each)</td>
<td>4</td>
</tr>
<tr>
<td>MUST 4113</td>
<td>Jazz Improvisation: Theory and Practice I</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total Credit Hours</strong></td>
<td></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

**Certificate in Jazz Studies Composition**

Undergraduate students interested in the Certificate in Jazz Studies Composition must be in good standing and have completed at least 15 credits at Temple University by the initial requested semester of certificate coursework.

In addition to the online application (http://www.temple.edu/boyer/academicprograms/certificates-application.asp) and other requirements listed on the Certificates (p. 285) page, students must also submit one original jazz composition (minimum 16 measures, PDF format) to boyer@temple.edu.

The Certificate in Jazz Studies Composition will be acknowledged on the official transcript at the time of the awarding of the bachelor’s degree provided that the student successfully completes the following courses with a grade of C- or better in each course:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUST 3770</td>
<td>Topics in Music Theory (take 2 times for 3 credits each)</td>
<td>6</td>
</tr>
<tr>
<td>MUST 4110</td>
<td>Seminar in Jazz Composition and Arranging</td>
<td>2</td>
</tr>
</tbody>
</table>
MUST 4112          Jazz Arranging I            3
MUST 4120          Seminar in Advanced Jazz Composition and Arranging 2

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUST 4112</td>
<td>Jazz Arranging I</td>
<td>3</td>
</tr>
<tr>
<td>MUST 4120</td>
<td>Seminar in Advanced Jazz Composition and Arranging</td>
<td>2</td>
</tr>
</tbody>
</table>

**Total Credit Hours: 13**

---

**Certificate in Jazz Voice**

Undergraduate students interested in the Certificate in Jazz Voice must be in good standing and have completed at least 15 credits at Temple University by the initial requested semester of certificate coursework.

In addition to the online application (http://www.temple.edu/boyer/academicprograms/certificates-application.asp) and other requirements listed on the Certificates (p. 285) page, students must also successfully complete MUSC 1256 (Jazz section) or submit a video recording (DVD) of one jazz standard (with improvisation) from *The New Real Book*.

The Certificate in Jazz Voice will be acknowledged on the official transcript at the time of the awarding of the bachelor's degree provided that the student successfully completes the following courses with a grade of C- or better in each course:

- MUSC 1256  Private Voice for Non-Music Majors 1
- MUSC 1257  Private Voice for Non-Music Majors 1
- MUST 3770  Topics in Music Theory (take 2 times for 2 credits each) 4
- MUSC 3100  Small Jazz Ensemble (take 4 times for 1 credit each) 4
- MUSC 3300  Choral Ensemble (take 2 times for 1 credit each) 2

**Total Credit Hours: 12**

---

**Certificate in Music**

Undergraduate students interested in the Certificate in Music must be in good standing and have completed at least 15 credits at Temple University by the initial requested semester of certificate coursework.

Students must complete the online (http://www.temple.edu/boyer/academicprograms/certificates-application.asp) application and other requirements that may be listed on the Certificates (p. 285) page. No audition or portfolio is required.

The Certificate in Music will be acknowledged on the official transcript at the time of the awarding of the bachelor's degree provided that the student successfully completes the following courses with a grade of C- or better in each course.

There are two course completion options for the Certificate in Music: Music A and Music B.

**Music A Course Requirements**

- MUST 3770  Topics in Music Theory 2
- MUST 2703  Music in History 3

Choose one of the following: 3

- MUSC 3300  Choral Ensemble (take 3 times for 1 credit each)
- MUSC 1411  Private Piano for Non-Music Majors (take 3 times for 1 credit each)
- MUSC 4520  Ensemble (take 3 times for 1 credit each)
- MUST 2704  Music in History 3
- MUST 2733  American Musical Theater 3

**Total Credit Hours: 14**

**Music B Course Requirements**

- MUST 1701  Music Theory for Non-Music Majors 2
- MUST 1763  American Popular Music 2

Select one of the following: 3

- MUSC 3300  Choral Ensemble (take 3 times for 1 credit each)
- MUSC 1411  Private Piano for Non-Music Majors (take 3 times for 1 credit each)
- MUSC 4520  Ensemble (take 3 times for 1 credit each)
- MUST 2112  Pop Song Writing 2
- MUST 2114  History of Jazz 3

**Total Credit Hours: 12**
Certificate in Music Composition

Undergraduate students interested in the Certificate in Music Composition must be in good standing and have completed at least 15 credits at Temple University by the initial requested semester of certificate coursework.

In addition to the online application (http://www.temple.edu/boyer/academicprograms/certificates-application.asp) and other requirements listed on the Certificates (p. 285) page, students must also submit one original composition (minimum 16 measures, PDF format) to boyer@temple.edu.

The Certificate in Music Composition will be acknowledged on the official transcript at the time of the awarding of the bachelor's degree provided that the student successfully completes the following courses with a grade of C- or better in each course:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUST 3770</td>
<td>Topics in Music Theory (take 2 times for 3 credits each)</td>
<td>6</td>
</tr>
<tr>
<td>MUST 2748</td>
<td>Composition I</td>
<td>2</td>
</tr>
<tr>
<td>MUST 2749</td>
<td>Composition II</td>
<td>2</td>
</tr>
<tr>
<td>MUST 4717</td>
<td>Counterpoint</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credit Hours</strong></td>
<td></td>
<td><strong>13</strong></td>
</tr>
</tbody>
</table>

Certificate in Music History

Undergraduate students interested in the Certificate in Music History must be in good standing and have completed at least 15 credits at Temple University by the initial requested semester of certificate coursework.

Students must complete the online (http://www.temple.edu/boyer/academicprograms/certificates-application.asp) application and other requirements that may be listed on the Certificates (p. 285) page. No audition or portfolio is required.

The Certificate in Music History will be acknowledged on the official transcript at the time of the awarding of the bachelor's degree provided that the student successfully completes the following courses with a grade of C- or better in each course:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUST 3770</td>
<td>Topics in Music Theory (take 2 times for 2 credits each)</td>
<td>4</td>
</tr>
<tr>
<td>MUST 2703</td>
<td>Music in History</td>
<td>3</td>
</tr>
<tr>
<td>MUST 2704</td>
<td>Music in History</td>
<td>3</td>
</tr>
<tr>
<td>MUST 3696</td>
<td>Music in History</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credit Hours</strong></td>
<td></td>
<td><strong>13</strong></td>
</tr>
</tbody>
</table>

Certificate in Music Technology

Undergraduate students interested in the Certificate in Music Technology must be in good standing and have completed at least 15 credits at Temple University by the initial requested semester of certificate coursework.

Students must complete the online (http://www.temple.edu/boyer/academicprograms/certificates-application.asp) application and other requirements that may be listed on the Certificates (p. 285) page. No audition or portfolio is required.

The Certificate in Music Technology will be acknowledged on the official transcript at the time of the awarding of the bachelor's degree provided that the student successfully completes the following courses with a grade of C- or better in each course:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUST 4713</td>
<td>Sound Recording</td>
<td>3</td>
</tr>
<tr>
<td>MUST 4714</td>
<td>Sound Editing</td>
<td>3</td>
</tr>
<tr>
<td>FMA 1172</td>
<td>Introduction to Film and Video Analysis</td>
<td>3</td>
</tr>
<tr>
<td>MUST 4725</td>
<td>Advanced Audio Production</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credit Hours</strong></td>
<td></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

Certificate in Music Theory (Jazz)

Undergraduate students interested in the Certificate in Music Theory (Jazz) must be in good standing and have completed at least 15 credits at Temple University by the initial requested semester of certificate coursework.

Students must complete the online (http://www.temple.edu/boyer/academicprograms/certificates-application.asp) application and other requirements that may be listed on the Certificates (p. 285) page. No audition or portfolio is required.
The Certificate in Music Theory (Jazz) will be acknowledged on the official transcript at the time of the awarding of the bachelor's degree provided that the student successfully completes the following courses with a grade of C- or better in each course:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUST 1711</td>
<td>Theory I (Jazz)</td>
<td>4</td>
</tr>
<tr>
<td>MUST 1712</td>
<td>Theory II (Jazz)</td>
<td>4</td>
</tr>
<tr>
<td>MUST 2712</td>
<td>Theory IV</td>
<td>4</td>
</tr>
<tr>
<td>MUST 3770</td>
<td>Topics in Music Theory</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credit Hours</strong></td>
<td><strong>14</strong></td>
</tr>
</tbody>
</table>

**Certificate in Music Theory (Traditional)**

Undergraduate students interested in the Certificate in Music Theory (Traditional) must be in good standing and have completed at least 15 credits at Temple University by the initial requested semester of certificate coursework.

Students must complete the online (http://www.temple.edu/boyer/academicprograms/certificates-application.asp) application and other requirements that may be listed on the Certificates (p. 285) page. No audition or portfolio is required.

The Certificate in Music Theory (Traditional) will be acknowledged on the official transcript at the time of the awarding of the bachelor's degree provided that the student successfully completes the following courses with a grade of C- or better in each course:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUST 1711</td>
<td>Theory I (Traditional)</td>
<td>4</td>
</tr>
<tr>
<td>MUST 1712</td>
<td>Theory II (Traditional)</td>
<td>4</td>
</tr>
<tr>
<td>MUST 2711</td>
<td>Theory III</td>
<td>4</td>
</tr>
<tr>
<td>MUST 4717</td>
<td>Counterpoint</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credit Hours</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

**Certificate in Orchestral Music**

Undergraduate students interested in the Certificate in Orchestral Music must be in good standing and have completed at least 15 credits at Temple University by the initial requested semester of certificate coursework.

In addition to the online application (http://www.temple.edu/boyer/academicprograms/certificates-application.asp) and other requirements listed on the Certificates (p. 285) page, students must also submit a video recording (DVD) of one movement of a solo work from standard classical repertoire.

The Certificate in Orchestral Music will be acknowledged on the official transcript at the time of the awarding of the bachelor's degree provided that the student successfully completes the following courses with a grade of C- or better in each course:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUST 3770</td>
<td>Topics in Music Theory (take 2 times for 2 credits each)</td>
<td>4</td>
</tr>
<tr>
<td>MUSC 3551</td>
<td>Applied Lesson - Instrumental (take 2 times for 3 credits each)</td>
<td>6</td>
</tr>
<tr>
<td>MUSC 4500</td>
<td>Instrumental Ensemble (take 2 times for 1 credit each)</td>
<td>2</td>
</tr>
<tr>
<td>MUSC 4520</td>
<td>Ensemble (take 2 times for 1 credit each)</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credit Hours</strong></td>
<td><strong>14</strong></td>
</tr>
</tbody>
</table>

**Certificate in Performing Arts**

Undergraduate students interested in the Certificate in Performing Arts must be in good standing and have completed at least 15 credits at Temple University by the initial requested semester of certificate coursework.

Students must complete the online (http://www.temple.edu/boyer/academicprograms/certificates-application.asp) application and other requirements that may be listed on the Certificates (p. 285) page. No audition or portfolio is required.

The Certificate in Performing Arts will be acknowledged on the official transcript at the time of the awarding of the bachelor's degree provided that the student successfully completes the following courses with a grade of C- or better in each course:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>THTR 1008</td>
<td>Poetry as Performance</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>FMA 1171</td>
<td>Media &amp; Culture</td>
<td></td>
</tr>
<tr>
<td>FMA 1172</td>
<td>Introduction to Film and Video Analysis</td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>MUSC 3100</td>
<td>Small Jazz Ensemble (take 4 times for 1 credit each)</td>
<td>4</td>
</tr>
</tbody>
</table>
MUSC 3300  Choral Ensemble (take 4 times for 1 credit each)
MUSC 4500  Instrumental Ensemble (take 4 times for 1 credit each)
DANC 1811  Movement Improvisation I

Total Credit Hours 12

Dance

Dr. Sherril Dodds
Department Chairperson
215-204-5169
sherril.dodds@temple.edu

Laura Katz Rizzo
Undergraduate Program Coordinator
laura.katz@temple.edu

www.temple.edu/boyer/dance

Mission

The Dance Department is committed to artistic and scholarly excellence through fostering a creative, reflective and inclusive learning environment. Through embodied practice, the Dance Faculty and students seek to honor traditions while exploring new ways of knowing dance. In recognition that we experience through the body, the programs encourage students to consider how bodies in motion contribute to knowledge, transform our social world and facilitate community engagement.

The Bachelor of Fine Arts in Dance emphasizes modern dance technique, performance, choreography, and dance theory. The Bachelor of Fine Arts in Dance at Temple is focused on building well-rounded, versatile artists who are not only technically proficient, but have a broad range and a deep understanding of their work. The B.F.A. program focuses on modern dance technique and choreography, but with a broad curriculum that includes requirements in ballet, which follows the AMERICAN BALLET THEATRE® National Training Curriculum, African dance and other technique electives. Other course requirements include composition, repertory, creative process, improvisation, and dance science, in addition to courses that explore cultural, historical and analytical approaches to the study of dance.

Full accredited Member of the National Association of Schools of Dance (NASD).

The degree program in dance aims to:

- Guide students toward a balance of cognitive, analytic, intuitive, and creative skills.
- Aid students in development of their creative potential through technique, choreography, performance, research, and other creative media.
- Educate students about the various forms and purposes of dance within their historical, social, and cultural contexts.
- Provide intensive training in a range of dance techniques and styles as represented by the faculty and selected guest artists.
- Prepare students for professional careers as performing artists, choreographers, teachers, scholars, and informed and responsible leaders in academic and other professional settings.

The Bachelor of Fine Arts degree in Dance is conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 123 semester hours of credit and completion of the required Dance and university requirements.

Dance Resources: The Dance Department, with its three studios, rehearsal room, Pilates room, black-box theater, video library, and assorted classrooms, embraces a broad array of activities. The Philadelphia Dance Collection at Temple University (PDCAT) provides access to the dance legacy of the region through a permanent collection of multi-format archival resources related to the history of Philadelphia dance.

Special Opportunities: The Conwell Dance Theater season provides many opportunities for students to perform and choreograph. A typical season features two student concerts, two Master of Fine Arts thesis concerts, two Bachelor of Fine Arts senior concerts, a faculty dance concert, and an alumni concert. Added to this are performances by guest artists, repertory showings, and informal student choreography performances. Recent guest artists have included Kyle Abraham; Rennie Harris Puremovement; Cornelius Carter; Ruth Andrien, former soloist with the Paul Taylor Dance Company; and Nina Watt, member of the José Limón Dance Company.

Programs

- Bachelor of Fine Arts in Dance (p. 293)
- Minor in Dance (p. 296)
Bachelor of Fine Arts in Dance

The Bachelor of Fine Arts in Dance emphasizes modern dance technique, performance, choreography, and dance theory. The Bachelor of Fine Arts in Dance at Temple is focused on building well-rounded, versatile artists who are not only technically proficient, but have a broad range and a deep understanding of their work. The B.F.A. program focuses on modern dance technique and choreography, but with a broad curriculum that includes requirements in ballet, which follows the AMERICAN BALLET THEATRE® National Training Curriculum. African dance and other technique electives. Other course requirements include composition, repertory, creative process, improvisation, and dance science, in addition to courses that explore cultural, historical and analytical approaches to the study of dance.

Full accredited Member of the National Association of Schools of Dance (NASD).

The degree program in dance aims to:

• Guide students toward a balance of cognitive, analytic, intuitive, and creative skills.
• Aid students in development of their creative potential through technique, choreography, performance, research, and other creative media.
• Educate students about the various forms and purposes of dance within their historical, social, and cultural contexts.
• Provide intensive training in a range of dance techniques and styles as represented by the faculty and selected guest artists.
• Prepare students for professional careers as performing artists, choreographers, teachers, scholars, and informed and responsible leaders in academic and other professional settings.

Summary of Requirements

The Bachelor of Fine Arts degree in Dance is conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 123 semester hours of credit and completion of the required Dance and university requirements.

University Requirements

• All students are required to complete the university's General Education (GenEd (p. 143)) curriculum.
• All students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for the major are identified with the code "WI".

Program Requirements

Foundation

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DANC 1801</td>
<td>First Year Seminar in Dance</td>
<td>1</td>
</tr>
<tr>
<td>DANC 1811</td>
<td>Movement Improvisation I</td>
<td>2</td>
</tr>
<tr>
<td>DANC 1813</td>
<td>Dance Repertory I</td>
<td>2</td>
</tr>
<tr>
<td>DANC 1815</td>
<td>Modern Dance Technique I A (two semesters)</td>
<td>2/2</td>
</tr>
<tr>
<td>DANC 1817</td>
<td>Modern Dance Technique I B (two semesters)</td>
<td>2/2</td>
</tr>
<tr>
<td>DANC 1819</td>
<td>Dance Production</td>
<td>1</td>
</tr>
<tr>
<td>DANC 1831</td>
<td>Ballet I A</td>
<td>2</td>
</tr>
<tr>
<td>DANC 1832</td>
<td>Ballet I B</td>
<td>2</td>
</tr>
<tr>
<td>DANC 1841</td>
<td>Music for Dancers</td>
<td>2</td>
</tr>
<tr>
<td>DANC 1852</td>
<td>Ways of Knowing Dance</td>
<td>2</td>
</tr>
</tbody>
</table>

Advanced Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DANC 2813</td>
<td>Dance Composition I</td>
<td>2</td>
</tr>
<tr>
<td>DANC 2814</td>
<td>Dance Composition II</td>
<td>2</td>
</tr>
<tr>
<td>DANC 2815</td>
<td>Modern Dance Technique II A (two semesters)</td>
<td>2/2</td>
</tr>
<tr>
<td>DANC 2817</td>
<td>Modern Dance Technique II B (two semesters)</td>
<td>2/2</td>
</tr>
<tr>
<td>DANC 2831</td>
<td>Ballet II A</td>
<td>2</td>
</tr>
<tr>
<td>DANC 2832</td>
<td>Ballet II B</td>
<td>2</td>
</tr>
<tr>
<td>DANC 2853</td>
<td>African Dance I</td>
<td>2</td>
</tr>
<tr>
<td>DANC 2872</td>
<td>Foundations of Dance Education</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DANC 3811</td>
<td>Field Experience in Dance</td>
<td>2</td>
</tr>
<tr>
<td>DANC 3812</td>
<td>Creative Process in Dance</td>
<td>3</td>
</tr>
<tr>
<td>DANC 3813</td>
<td>Dance Repertory II</td>
<td>3</td>
</tr>
</tbody>
</table>
or DANC 4811
DANC 3817  Modern Dance Technique III A (two semesters) 2/2
DANC 3818  Modern Dance Technique III B (two semesters) 2/2
DANC 3851  Lighting Design for Dance 3

Select one of the following:
DANC 3871  Dance and the Child 3
DANC 4874  Dance Repertory III (by audition only)

Alternate Dance Elective
DANC 3896  Dancing Cultures (WI) 3
DANC 3897  Making Meaning in Dance (WI) 3
DANC 4815  Modern Dance Technique IV A (two semesters) 2/2
DANC 4817  Modern Dance Technique IV B (two semesters) 2/2
DANC 4861  Dance Science and Somatics 3
DANC 4884  Senior Choreographic Project 3
DANC 4896  Senior Seminar (WI) 3
or DANC 4864  Dance Education Project
DANC 4897  Creating Dance Histories (WI) 3

Suggested Academic Plan

Bachelor of Fine Arts in Dance

Requirements for New Students starting in the 2015-2016 Academic Year

**Year 1**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DANC 1801 First Year Seminar in Dance</td>
<td>1</td>
</tr>
<tr>
<td>DANC 1841 Music for Dancers</td>
<td>2</td>
</tr>
<tr>
<td>DANC 1811 Movement Improvisation I</td>
<td>2</td>
</tr>
<tr>
<td>Select one of the following courses: 1</td>
<td></td>
</tr>
<tr>
<td>DANC 1813 Dance Repertory I</td>
<td></td>
</tr>
<tr>
<td>DANC 1819 Dance Production</td>
<td></td>
</tr>
<tr>
<td>DANC 1815 Modern Dance Technique I A</td>
<td>2</td>
</tr>
<tr>
<td>DANC 1817 Modern Dance Technique I B</td>
<td>2</td>
</tr>
<tr>
<td>DANC 1831 Ballet I A</td>
<td>2</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902 Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select one of the following courses: 1</td>
<td></td>
</tr>
<tr>
<td>DANC 1813 Dance Repertory I</td>
<td></td>
</tr>
<tr>
<td>DANC 1819 Dance Production</td>
<td></td>
</tr>
<tr>
<td>DANC 1815 Modern Dance Technique I A</td>
<td>2</td>
</tr>
<tr>
<td>DANC 1817 Modern Dance Technique I B</td>
<td>2</td>
</tr>
<tr>
<td>DANC 1832 Ballet I B</td>
<td>2</td>
</tr>
<tr>
<td>DANC 1852 Ways of Knowing Dance</td>
<td>2</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td></td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

**Year 2**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DANC 2813 Dance Composition I</td>
<td>2</td>
</tr>
<tr>
<td>DANC 2815 Modern Dance Technique II A</td>
<td>2</td>
</tr>
<tr>
<td>DANC 2817 Modern Dance Technique II B</td>
<td>2</td>
</tr>
<tr>
<td>DANC 2831 Ballet II A</td>
<td>2</td>
</tr>
</tbody>
</table>
Select one of the following courses: ²

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>DANC 3851</td>
<td>Lighting Design for Dance</td>
</tr>
<tr>
<td>DANC 4811</td>
<td>African Dance Repertory</td>
</tr>
<tr>
<td>DANC 3813</td>
<td>Dance Repertory II</td>
</tr>
<tr>
<td>DANC 2853</td>
<td>African Dance I</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring</td>
<td>16</td>
</tr>
</tbody>
</table>

**Year 3**

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>DANC 3896</td>
<td>Dancing Cultures [WI]</td>
</tr>
<tr>
<td>DANC 3817</td>
<td>Modern Dance Technique III A</td>
</tr>
<tr>
<td>DANC 3818</td>
<td>Modern Dance Technique III B</td>
</tr>
<tr>
<td>DANC 4861</td>
<td>Dance Science and Somatics</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
</tr>
</tbody>
</table>

**Term Credit Hours**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>13</td>
</tr>
</tbody>
</table>

**Spring**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>DANC 3812</td>
<td>Creative Process in Dance</td>
</tr>
<tr>
<td>DANC 4897</td>
<td>Creating Dance Histories [WI]</td>
</tr>
<tr>
<td>DANC 3817</td>
<td>Modern Dance Technique III A</td>
</tr>
<tr>
<td>DANC 3818</td>
<td>Modern Dance Technique III B</td>
</tr>
<tr>
<td>Select one of the following courses:</td>
<td></td>
</tr>
<tr>
<td>DANC 4874</td>
<td>Dance Repertory III (By audition only)</td>
</tr>
<tr>
<td>DANC 3871</td>
<td>Dance and the Child</td>
</tr>
<tr>
<td>DANC 3897</td>
<td>Making Meaning in Dance [WI]</td>
</tr>
<tr>
<td>Alternate Dance Elective</td>
<td></td>
</tr>
</tbody>
</table>

**Term Credit Hours**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring</td>
<td>16</td>
</tr>
</tbody>
</table>

**Year 4**

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>DANC 4884</td>
<td>Senior Choreographic Project</td>
</tr>
<tr>
<td>DANC 4815</td>
<td>Modern Dance Technique IV A</td>
</tr>
<tr>
<td>DANC 4817</td>
<td>Modern Dance Technique IV B (or Technique Elective)</td>
</tr>
<tr>
<td>Select one of the following courses:</td>
<td></td>
</tr>
<tr>
<td>DANC 3811</td>
<td>Field Experience in Dance</td>
</tr>
<tr>
<td>Dance Elective</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
</tr>
</tbody>
</table>

**Term Credit Hours**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>15</td>
</tr>
</tbody>
</table>

**Spring**

Select one of the following courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>DANC 4896</td>
<td>Senior Seminar [WI]</td>
</tr>
<tr>
<td>DANC 4874</td>
<td>Dance Repertory III (By audition only)</td>
</tr>
<tr>
<td>DANC 3871</td>
<td>Dance and the Child</td>
</tr>
<tr>
<td>DANC 3897</td>
<td>Making Meaning in Dance [WI]</td>
</tr>
</tbody>
</table>

| Alternate Dance Elective |                      |

**Term Credit Hours**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring</td>
<td>15</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>15</td>
</tr>
</tbody>
</table>

**Spring**

Select one of the following courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>DANC 4896</td>
<td>Senior Seminar [WI]</td>
</tr>
<tr>
<td>DANC 4874</td>
<td>Dance Repertory III (By audition only)</td>
</tr>
<tr>
<td>DANC 3871</td>
<td>Dance and the Child</td>
</tr>
<tr>
<td>DANC 3897</td>
<td>Making Meaning in Dance [WI]</td>
</tr>
</tbody>
</table>

| Alternate Dance Elective |                      |

**Term Credit Hours**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring</td>
<td>15</td>
</tr>
</tbody>
</table>
Minor in Dance

The Minor in Dance is a 22 credit hour program available to undergraduate students in other departments and colleges. The minor provides a foundation in technique, followed by a small amount of specialization in dance theory. The course requirements consist of:

<table>
<thead>
<tr>
<th>Course Type</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technique Courses</td>
<td>14</td>
</tr>
<tr>
<td>Dance Production Course</td>
<td>1</td>
</tr>
<tr>
<td>Theory Courses</td>
<td>7</td>
</tr>
</tbody>
</table>

Total Credit Hours: 22

A limited number of slots are available each semester, and an interview and audition are required to begin this program. Interested students are advised to contact the Dance Department via email at dance@temple.edu for further information.

Once accepted, students must follow the academic policies and procedures of the Dance Department for all dance courses. Minor credit will not be awarded for grades below a B- in Dance coursework. Upon graduation, a notation on the undergraduate transcript will indicate successful completion of the minor.

Course Limitations/Restrictions: All technique courses are repeatable two times only, which will allow a student to enroll in the same level of technique for two semesters thus ensuring opportunity to develop full competencies associated with that level. Theory courses are not repeatable, although students may enroll in courses other than those listed in the requirements with permission of the instructor.

Transfer Students: Students transferring large numbers of credits in dance who wish to complete the Dance Minor must secure an evaluation of these credits prior to beginning their course of study. All students in this category must complete a minimum of 9 credits of dance courses at Temple including one theory course and three technique courses.

Requirements

Technique Courses
Select from the following for a total of 14 credits:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>DANC 1815</td>
<td>Modern Dance Technique I A</td>
</tr>
<tr>
<td>DANC 1817</td>
<td>Modern Dance Technique I B</td>
</tr>
<tr>
<td>DANC 2815</td>
<td>Modern Dance Technique II A</td>
</tr>
<tr>
<td>DANC 2817</td>
<td>Modern Dance Technique II B</td>
</tr>
<tr>
<td>DANC 3817</td>
<td>Modern Dance Technique III A</td>
</tr>
<tr>
<td>DANC 3818</td>
<td>Modern Dance Technique III B</td>
</tr>
<tr>
<td>DANC 2853</td>
<td>African Dance I</td>
</tr>
<tr>
<td>DANC 3853</td>
<td>African Dance II</td>
</tr>
<tr>
<td>DANC 1811</td>
<td>Movement Improvisation I</td>
</tr>
<tr>
<td>DANC 4871</td>
<td>Movement Improvisation II</td>
</tr>
<tr>
<td>DANC 2822</td>
<td>Pilates: Body Conditioning</td>
</tr>
<tr>
<td>DANC 1807</td>
<td>Hatha Yoga I</td>
</tr>
<tr>
<td>DANC 1831</td>
<td>Ballet I A</td>
</tr>
<tr>
<td>DANC 1832</td>
<td>Ballet I B</td>
</tr>
<tr>
<td>DANC 2831</td>
<td>Ballet II A</td>
</tr>
<tr>
<td>DANC 2832</td>
<td>Ballet II B</td>
</tr>
<tr>
<td>DANC 3831</td>
<td>Ballet Technique III A</td>
</tr>
<tr>
<td>DANC 3832</td>
<td>Ballet Technique III B</td>
</tr>
<tr>
<td>DANC 4832</td>
<td>Ballet Technique IV A</td>
</tr>
<tr>
<td>DANC 4833</td>
<td>Ballet Technique IV B</td>
</tr>
</tbody>
</table>
DANC 2844 Hip Hop
DANC 1804 Jazz Dance I
DANC 1805 Tap Technique I

Dance Production Course
DANC 1819 Dance Production 1

Theory Courses
Select from the following for a total of 7 credits:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>DANC 1852</td>
<td>Ways of Knowing Dance (This course is compulsory)</td>
</tr>
<tr>
<td>DANC 1841</td>
<td>Music for Dancers</td>
</tr>
<tr>
<td>DANC 2872</td>
<td>Foundations of Dance Education</td>
</tr>
<tr>
<td>DANC 3896</td>
<td>Dancing Cultures</td>
</tr>
<tr>
<td>DANC 3897</td>
<td>Making Meaning in Dance</td>
</tr>
<tr>
<td>DANC 4897</td>
<td>Creating Dance Histories</td>
</tr>
</tbody>
</table>

Performance Requirements
Students must participate in at least ONE performance, whether as a choreographer or performer.

Total Credit Hours 22

Instrumental Studies

Terell Stafford, Chair
215-204-8036
terell.stafford@temple.edu

Matthew Brunner
Director of Athletic Bands; Academic Advisor for Woodwinds and Brass
215-204-2162
matthew.brunner@temple.edu

Vladimir Dyo
Ensembles Coordinator for Strings
215-204-8334
vladimir.dyo@temple.edu

Phillip O'Banion
Artistic Director, Ensembles Coordinator and Academic Advisor for Percussion
215-204-8329
phillip.obanion@temple.edu

Eduard Schmieder
Artistic Director for Strings
215-204-8071
eduard.schmieder@temple.edu

Jeffrey Solow
Academic Advisor for Strings
215-204-8025
jeffrey.solow@temple.edu

Emily Threinen
Director of Bands; Artistic Director and Ensembles Coordinator for Woodwinds and Brass
215-204-8335
emily.threinen@temple.edu

Programs

• Bachelor of Music in Jazz Studies/Performance, Instrumental Concentration (p. 298)
• Bachelor of Music in Performance, Classical Guitar Concentration (p. 299)
• Bachelor of Music in Performance, Instrumental Concentration (p. 301)
Bachelor of Music in Jazz Studies/Performance, Instrumental Concentration

Terell Stafford, Director
215-204-8036
tstaffor@temple.edu

Students of Temple's Jazz Studies program have the opportunity to participate in both large and small ensembles. Jazz Band, Lab Band, Brass Ensemble, Fusion Ensemble, Percussion Ensemble, Guitar Ensemble, Vocal Ensemble, and New Music by Temple Composers provide a comprehensive performance experience in solo as well as ensemble playing for both instrumentalists and vocalists. All of the performing groups are coached by an experienced faculty of musician-educators. Graduates are prepared to begin a career as professional performers.

Bachelor of Music: Jazz Studies Instrumental Performance

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td></td>
</tr>
<tr>
<td>MUSC 1503</td>
<td>Instrumental Major</td>
</tr>
<tr>
<td>MUSC 1405</td>
<td>Secondary Piano for Music Majors</td>
</tr>
<tr>
<td>MUSC 3100</td>
<td>Small Jazz Ensemble</td>
</tr>
<tr>
<td>MUST 1711</td>
<td>Theory I</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
</tr>
<tr>
<td>Total Term Credit Hours</td>
<td></td>
</tr>
<tr>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td>MUSC 1504</td>
<td>Instrumental Major</td>
</tr>
<tr>
<td>MUST 1106</td>
<td>Jazz Secondary Piano</td>
</tr>
<tr>
<td>MUSC 3100</td>
<td>Small Jazz Ensemble</td>
</tr>
<tr>
<td>MUST 1712</td>
<td>Theory II (Jazz)</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td></td>
</tr>
<tr>
<td>Total Term Credit Hours</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td></td>
</tr>
<tr>
<td>MUSC 2503</td>
<td>Instrumental Major</td>
</tr>
<tr>
<td>MUST 2105</td>
<td>Jazz Secondary Piano</td>
</tr>
<tr>
<td>MUSC 3100</td>
<td>Small Jazz Ensemble</td>
</tr>
<tr>
<td>Jazz Ensemble</td>
<td></td>
</tr>
<tr>
<td>MUST 2711</td>
<td>Theory III (Jazz)</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
</tr>
<tr>
<td>Total Term Credit Hours</td>
<td></td>
</tr>
<tr>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td>MUSC 2504</td>
<td>Instrumental Major</td>
</tr>
<tr>
<td>MUST 2106</td>
<td>Jazz Secondary Piano</td>
</tr>
<tr>
<td>MUSC 3100</td>
<td>Small Jazz Ensemble</td>
</tr>
<tr>
<td>MUST 2712</td>
<td>Theory IV (Jazz)</td>
</tr>
<tr>
<td>MUST 4113</td>
<td>Jazz Improvisation: Theory and Practice I</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
</tr>
<tr>
<td>Ensemble</td>
<td></td>
</tr>
<tr>
<td>Total Term Credit Hours</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td></td>
</tr>
<tr>
<td>MUSC 3503</td>
<td>Instrumental Major</td>
</tr>
<tr>
<td>MUSC 3100</td>
<td>Small Jazz Ensemble</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>Jazz Ensemble</td>
<td>Jazz Arranging I</td>
</tr>
<tr>
<td>MUST 4112</td>
<td>Jazz Improvisation: Theory and Practice II</td>
</tr>
<tr>
<td>MUST 4114</td>
<td>History of Pop [WI]</td>
</tr>
<tr>
<td>MUST 3196</td>
<td>Business of Music I</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 16

### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 3504</td>
<td>Instrumental Major</td>
<td>4</td>
</tr>
<tr>
<td>Small Ensemble</td>
<td>Small Ensemble</td>
<td>1</td>
</tr>
<tr>
<td>Ensemble</td>
<td>Jazz Style and Analysis</td>
<td>2</td>
</tr>
<tr>
<td>MUST 2114</td>
<td>History of Jazz</td>
<td>3</td>
</tr>
<tr>
<td>MUST 2704</td>
<td>Music in History</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 14

### Year 4

### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 4503</td>
<td>Instrumental Major</td>
<td>4</td>
</tr>
<tr>
<td>MUSC 3100</td>
<td>Small Jazz Ensemble</td>
<td>1</td>
</tr>
<tr>
<td>Ensemble</td>
<td>Basic Conducting</td>
<td>1</td>
</tr>
<tr>
<td>MUSC 2323</td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 13

### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 4584</td>
<td>Instrumental Major</td>
<td>4</td>
</tr>
<tr>
<td>MUSC 3100</td>
<td>Small Jazz Ensemble</td>
<td>1</td>
</tr>
<tr>
<td>Music Technology Elective (see list below)</td>
<td>Music Technology Elective (see list below)</td>
<td>3</td>
</tr>
<tr>
<td>MUST 3896</td>
<td>Theory Seminar II [WI]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 14

**Total Credit Hours:** 124

**Music Technology Electives**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUST 4712</td>
<td>Computer Synthesis of Music (Spring)</td>
<td>3</td>
</tr>
<tr>
<td>MUST 4713</td>
<td>Sound Recording (Fall)</td>
<td>3</td>
</tr>
<tr>
<td>MUST 4714</td>
<td>Sound Editing (Spring)</td>
<td>3</td>
</tr>
<tr>
<td>MUST 4716</td>
<td>Composing Music for Films (Fall)</td>
<td>3</td>
</tr>
<tr>
<td>MUST 4719</td>
<td>MIDI (Fall)</td>
<td>3</td>
</tr>
<tr>
<td>MUST 4762</td>
<td>Music Technology (Spring)</td>
<td>3</td>
</tr>
</tbody>
</table>

### Bachelor of Music in Performance, Classical Guitar Concentration

The Instrumental Major program centers on intensive coaching and private study with a renowned faculty of teachers, many of whom are members of The Philadelphia Orchestra and other professional performing organizations. Opportunity to perform a vast repertoire abounds in the number and types of ensemble experiences available. The programs of study provide the training necessary to compete in the professional performance world.

### Bachelor of Music: Classical Guitar Performance

#### Year 1

### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 1503</td>
<td>Instrumental Major</td>
<td>4</td>
</tr>
<tr>
<td>MUSC 4560</td>
<td>Seminar in Guitar Performance and Literature</td>
<td>1</td>
</tr>
<tr>
<td>Choral Ensemble</td>
<td>Choral Ensemble</td>
<td>1</td>
</tr>
<tr>
<td>MUST 1711</td>
<td>Theory I</td>
<td>4</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credit Hours</td>
</tr>
<tr>
<td>-------------</td>
<td>------------------------------------------------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>MUSC 1405</td>
<td>Secondary Piano for Music Majors</td>
<td>1</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSC 1504</td>
<td>Instrumental Major</td>
<td>4</td>
</tr>
<tr>
<td>MUSC 4560</td>
<td>Seminar in Guitar Performance and Literature</td>
<td>1</td>
</tr>
<tr>
<td>Choral Ensemble</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>MUST 1712</td>
<td>Theory II</td>
<td>4</td>
</tr>
<tr>
<td>MUSC 1406</td>
<td>Secondary Piano for Music Majors</td>
<td>1</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td><strong>Year 2</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSC 2503</td>
<td>Instrumental Major</td>
<td>4</td>
</tr>
<tr>
<td>MUSC 4560</td>
<td>Seminar in Guitar Performance and Literature</td>
<td>1</td>
</tr>
<tr>
<td>Choral Ensemble</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>MUST 2711</td>
<td>Theory III</td>
<td>4</td>
</tr>
<tr>
<td>MUST 2703</td>
<td>Music in History</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 2405</td>
<td>Secondary Piano for Music Majors</td>
<td>1</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>17</strong></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSC 2504</td>
<td>Instrumental Major</td>
<td>4</td>
</tr>
<tr>
<td>MUSC 4560</td>
<td>Seminar in Guitar Performance and Literature</td>
<td>1</td>
</tr>
<tr>
<td>Choral Ensemble</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>MUST 2712</td>
<td>Theory IV</td>
<td>4</td>
</tr>
<tr>
<td>MUST 2704</td>
<td>Music in History</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 2406</td>
<td>Secondary Piano for Music Majors</td>
<td>1</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td><strong>Year 3</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSC 3503</td>
<td>Instrumental Major</td>
<td>4</td>
</tr>
<tr>
<td>Instrumental Ensemble</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>MUST 3696</td>
<td>Music in History [WI]</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 2323</td>
<td>Basic Conducting</td>
<td>1</td>
</tr>
<tr>
<td>Music Elective</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>MUSC 4560</td>
<td>Seminar in Guitar Performance and Literature</td>
<td>1</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSC 3504</td>
<td>Instrumental Major</td>
<td>4</td>
</tr>
<tr>
<td>Instrumental Ensemble</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>MUSC 2324</td>
<td>Conducting Intermediate</td>
<td>1</td>
</tr>
<tr>
<td>Music Elective</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>MUSC 4560</td>
<td>Seminar in Guitar Performance and Literature</td>
<td>1</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td><strong>Year 4</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSC 4503</td>
<td>Instrumental Major</td>
<td>4</td>
</tr>
</tbody>
</table>
Instrumental Ensemble 1
Music Elective 3
MUSC 4560 Seminar in Guitar Performance and Literature 1
GenEd Breadth Course 3
GenEd Breadth Course 3

Term Credit Hours 15

Spring
MUSC 4584 Instrumental Major 4
Instrumental Ensemble 1
MUST 3796 Music in History [WI] 3
Music Elective 3
MUSC 4560 Seminar in Guitar Performance and Literature 1
GenEd Breadth Course 3

Term Credit Hours 15

Total Credit Hours: 124

NOTE: You must take at least one elective from List A and one from List B.

Suggested Music Electives

List A
MUST 3713 Orchestration 3
MUST 4722 Advanced Orchestration 2
MUST 3741 Keyboard Harmony 3
or MUED 3662 Keyboard Harmony - Music Education 3
MUST 4717 Counterpoint 3
MUST 3748 Composition Junior Seminar I 2
or MUST 3749 Composition Junior Seminar II 3
MUST 4718 Analysis 3

List B
MUST 2114 History of Jazz 3
MUST 1118 Business of Music I 2
MUSC 4323 Conducting (Choral) 2
or MUSC 4324 Conducting (Instrumental) 3
MUST 4712 Computer Synthesis of Music 3
MUST 4713 Sound Recording 3
MUST 4714 Sound Editing 3
MUST 4716 Composing Music for Films 3
MUST 4719 MIDI 3
MUST 4762 Music Technology 3
MUED 2665 Music Learning & Development 3
MUSC 3300 Choral Ensemble 1
MUST 4710 Early Music Ensemble 1
MUSC 4570 Orchestral Repertoire 1
MUSC 1211 Voice Class 1
or MUSC 1212 Voice Class 1

This course can be repeated once for music elective credit.

Bachelor of Music in Performance, Instrumental Concentration

The Instrumental Major program centers on intensive coaching and private study with a renowned faculty of teachers, many of whom are members of The Philadelphia Orchestra and other professional performing organizations. Opportunity to perform a vast repertoire abounds in the number and types of ensemble experiences available. The programs of study provide the training necessary to compete in the professional performance world.
# Bachelor of Music: Instrumental Performance

## Year 1

### Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 1503</td>
<td>Instrumental Major</td>
<td>4</td>
</tr>
<tr>
<td>Instrumental Ensemble</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Instrumental Ensemble</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>MUSC 1405</td>
<td>Secondary Piano for Music Majors</td>
<td>1</td>
</tr>
<tr>
<td>MUST 1711</td>
<td>Theory I</td>
<td>4</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 15

### Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 1504</td>
<td>Instrumental Major</td>
<td>4</td>
</tr>
<tr>
<td>Instrumental Ensemble</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Instrumental Ensemble</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>MUSC 1406</td>
<td>Secondary Piano for Music Majors</td>
<td>1</td>
</tr>
<tr>
<td>MUSC 4570</td>
<td>Orchestral Repertoire</td>
<td>1</td>
</tr>
<tr>
<td>MUST 1712</td>
<td>Theory II</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 16

## Year 2

### Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 2503</td>
<td>Instrumental Major</td>
<td>4</td>
</tr>
<tr>
<td>Instrumental Ensemble</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Instrumental Ensemble</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>MUSC 2405</td>
<td>Secondary Piano for Music Majors</td>
<td>1</td>
</tr>
<tr>
<td>MUST 2711</td>
<td>Theory III</td>
<td>4</td>
</tr>
<tr>
<td>MUST 2703</td>
<td>Music in History</td>
<td>3</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 17

### Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 2504</td>
<td>Instrumental Major</td>
<td>4</td>
</tr>
<tr>
<td>Instrumental Ensemble</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Instrumental Ensemble</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>MUSC 2406</td>
<td>Secondary Piano for Music Majors</td>
<td>1</td>
</tr>
<tr>
<td>MUST 2712</td>
<td>Theory IV</td>
<td>4</td>
</tr>
<tr>
<td>MUST 2704</td>
<td>Music in History</td>
<td>3</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 17

## Year 3

### Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 3503</td>
<td>Instrumental Major</td>
<td>4</td>
</tr>
<tr>
<td>Instrumental Ensemble</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Instrumental Ensemble</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>MUSC 2323</td>
<td>Basic Conducting</td>
<td>1</td>
</tr>
<tr>
<td>MUST 3696</td>
<td>Music in History [WI]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 16

### Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 3504</td>
<td>Instrumental Major</td>
<td>4</td>
</tr>
<tr>
<td>Instrumental Ensemble</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Instrumental Ensemble</td>
<td>Conducting Intermediate</td>
<td>1</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-------------------------</td>
<td>---</td>
</tr>
<tr>
<td>MUSC 2324</td>
<td>Orchestral Repertoire</td>
<td>1</td>
</tr>
<tr>
<td>MUSC 4570</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours** | 14

**Year 4**

**Fall**

- MUSC 4503 Instrumental Major | 4
- Instrumental Ensemble | 1
- Instrumental Ensemble | 1
- Music Elective | 3
- GenEd Breadth Course | 3
- GenEd Breadth Course | 3

**Spring**

- MUSC 4584 Instrumental Major | 4
- Instrumental Ensemble | 1
- Instrumental Ensemble | 1
- MUSC 4570 Orchestral Repertoire | 1
- MUST 3796 Music in History [WI] | 3
- Elective | 4

**Term Credit Hours** | 15

**Total Credit Hours:** | 124

Students must take at least one elective from List A and one from List B.

### Suggested Music Electives

**List A**

- MUST 3713 Orchestration | 3
- MUST 4722 Advanced Orchestration | 2
- MUST 3741 Keyboard Harmony | 3
- MUST 3748 Composition Junior Seminar I | 2
- MUST 4718 Analysis | 3

**List B**

- MUST 2114 History of Jazz | 3
- MUST 1118 Business of Music I | 2
- MUSC 4323 Conducting (Choral) | 2
- MUST 4712 Computer Synthesis of Music | 3
- MUST 4713 Sound Recording | 3
- MUST 4714 Sound Editing | 3
- MUST 4716 Composing Music for Films | 3
- MUST 4719 MIDI | 3
- MUST 4762 Music Technology | 3
- MUED 2665 Music Learning & Development | 3
- MUSC 3300 Choral Ensemble | 1
- MUST 4710 Early Music Ensemble ¹ | 1
- MUSC 1211 Voice Class ¹ | 1
This course can be repeated once for music elective credit.

Bass performance majors must enroll for 8 credit hours of orchestra and 4 additional credit hours of ensembles. It is suggested that Early Music Ensemble be one of these credit hours. The remaining 4 credit hours of ensemble may be taken as free music electives.

Saxophone performance majors may register for up to 4 credit hours of ensembles in reading jazz ensembles (Jazz Band or Jazz Lab Band) with prior approval of the Instrumental Department chair and coordinator of the Jazz program. The 2 semester hours of orchestral repertoire classes are to be replaced by elective(s).

Keyboard Instruction

Keyboard Instruction

Charles Abramovic, Chair
215-204-7388
charles.abramovic@temple.edu

The Department of Keyboard Instruction offers a variety of programs of study to meet the individual needs of potential solo artists, chamber musicians, accompanists, and teachers, and also provides a keyboard concentration for those majoring in music education, music therapy, music history, music theory, composition, and jazz studies. Weekly private lessons are reinforced by regular performance classes, and a series of master classes taught by faculty members and guests artists focuses on special topics essential to the keyboard performer.

Recent guest artists have included:

- Marc-André Hamelin
- Leon Bates
- Menahem Pressler
- Lydia Artymiw
- Claude Frank
- Arnaldo Cohen
- Marc Durand
- Anton Kuerti
- Chang Biao Liu
- Gaby Casadesus
- Dorothy Taubman

Programs

- Bachelor of Music in Performance, Harpsichord Concentration (p. 304)
- Bachelor of Music in Performance, Piano Concentration (p. 306)
- Bachelor of Music in Piano Pedagogy (p. 307)

Bachelor of Music in Performance, Harpsichord Concentration

Performance, Keyboard/Harpsichord Instruction

Charles Abramovic, Chair, Keyboard Studies
215-204-7388
charles.abramovic@temple.edu

The Keyboard Instruction Department emphasizes training for careers in performance, piano accompaniment and chamber music, piano pedagogy, and piano and opera coaching.

Bachelor of Music: Harpsichord Performance

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td></td>
</tr>
<tr>
<td>MUSC 1603</td>
<td>Harpsichord Major</td>
</tr>
<tr>
<td>MUSC 1428</td>
<td>Accompanying and Piano Ensemble</td>
</tr>
<tr>
<td>Year 1</td>
<td>Term</td>
</tr>
<tr>
<td>-------</td>
<td>------</td>
</tr>
<tr>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Year 2</strong></td>
</tr>
<tr>
<td>Fall</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
</tr>
<tr>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Year 3</strong></td>
</tr>
<tr>
<td>Fall</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
</tr>
<tr>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Year 4</strong></td>
</tr>
<tr>
<td>Fall</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Bachelor of Music in Performance, Piano Concentration

Charles Abramovic, Chair, Keyboard Studies
215-204-7388
charles.abramovic@temple.edu

The Keyboard Instruction Department emphasizes training for careers in performance, piano accompaniment and chamber music, piano pedagogy, and piano and opera coaching.

Bachelor of Music: Piano Performance

**Year 1**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 1403</td>
<td>Piano Major</td>
</tr>
<tr>
<td>MUSC 1428</td>
<td>Accompanying and Piano Ensemble</td>
</tr>
<tr>
<td>Choral Ensemble</td>
<td>1</td>
</tr>
<tr>
<td>MUST 1711</td>
<td>Theory I</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 1404</td>
<td>Piano Major</td>
</tr>
<tr>
<td>MUSC 1429</td>
<td>Accompanying and Piano Ensemble</td>
</tr>
<tr>
<td>Choral Ensemble</td>
<td>1</td>
</tr>
<tr>
<td>MUST 1712</td>
<td>Theory II</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

**Year 2**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 2403</td>
<td>Piano Major</td>
</tr>
<tr>
<td>MUSC 1428</td>
<td>Accompanying and Piano Ensemble</td>
</tr>
<tr>
<td>Choral Ensemble</td>
<td>1</td>
</tr>
<tr>
<td>MUST 2711</td>
<td>Theory III</td>
</tr>
<tr>
<td>MUST 2703</td>
<td>Music in History</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 2404</td>
<td>Piano Major</td>
</tr>
<tr>
<td>MUSC 1429</td>
<td>Accompanying and Piano Ensemble</td>
</tr>
<tr>
<td>Choral Ensemble</td>
<td>1</td>
</tr>
<tr>
<td>MUST 2712</td>
<td>Theory IV</td>
</tr>
</tbody>
</table>
### Bachelor of Music in Piano Pedagogy

*The Bachelor of Music in Piano Pedagogy program will not be accepting admissions applications beyond the Spring 2013 semester.*

Charles Abramovic, Chair, Keyboard Studies  
215-204-7388  
charles.abramovic@temple.edu

The Keyboard Instruction Department emphasizes training for careers in performance, piano accompaniment and chamber music, piano pedagogy, and piano and opera coaching.

### Bachelor of Music: Piano Pedagogy

#### Year 1

<table>
<thead>
<tr>
<th>Term</th>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>MUSC 1403</td>
<td>Piano Major</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>MUSC 1428</td>
<td>Accompanying and Piano Ensemble</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>MUSC 1415</td>
<td>Introduction to Piano Pedagogy</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>MUSC 3443</td>
<td>Listening Learning Skills for Pianists I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credit Hours</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td>Spring</td>
<td>MUSC 4484</td>
<td>Piano Major</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>MUSC 4510</td>
<td>Instrumental Ensemble</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>MUSC 3423</td>
<td>Keyboard Literature</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MUST 3796</td>
<td>Music in History [WI]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Elective</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credit Hours</strong></td>
<td></td>
<td><strong>13</strong></td>
</tr>
</tbody>
</table>

#### Year 2

<table>
<thead>
<tr>
<th>Term</th>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>MUSC 3403</td>
<td>Piano Major</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>MUSC 1429</td>
<td>Accompanying and Piano Ensemble</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>MUSC 3415</td>
<td>Pedagogy of Children</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>MUSC 3611</td>
<td>Harpsichord for Pianists</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credit Hours</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td>Spring</td>
<td>MUSC 4484</td>
<td>Piano Major</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>MUSC 4510</td>
<td>Instrumental Ensemble</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>MUSC 3423</td>
<td>Keyboard Literature</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MUST 3796</td>
<td>Music in History [WI]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Elective</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credit Hours</strong></td>
<td></td>
<td><strong>13</strong></td>
</tr>
</tbody>
</table>

#### Year 3

<table>
<thead>
<tr>
<th>Term</th>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>MUSC 3403</td>
<td>Piano Major</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>MUSC 1429</td>
<td>Accompanying and Piano Ensemble</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>MUSC 1415</td>
<td>Introduction to Piano Pedagogy</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>MUSC 3443</td>
<td>Listening Learning Skills for Pianists I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credit Hours</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td>Spring</td>
<td>MUSC 4484</td>
<td>Piano Major</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>MUSC 4510</td>
<td>Instrumental Ensemble</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>MUSC 3423</td>
<td>Keyboard Literature</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MUST 3796</td>
<td>Music in History [WI]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Elective</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credit Hours</strong></td>
<td></td>
<td><strong>13</strong></td>
</tr>
</tbody>
</table>

#### Year 4

<table>
<thead>
<tr>
<th>Term</th>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>MUSC 4484</td>
<td>Piano Major</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>MUSC 4510</td>
<td>Instrumental Ensemble</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>MUSC 3423</td>
<td>Keyboard Literature</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MUST 3796</td>
<td>Music in History [WI]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Elective</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credit Hours</strong></td>
<td></td>
<td><strong>13</strong></td>
</tr>
</tbody>
</table>

#### Total Credit Hours: 124
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 3421</td>
<td>Suzuki for Pianists</td>
<td>2</td>
</tr>
<tr>
<td>MUST 1711</td>
<td>Theory I</td>
<td>4</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>17</strong></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSC 1404</td>
<td>Piano Major(^1)</td>
<td>4</td>
</tr>
<tr>
<td>MUSC 1429</td>
<td>Accompanying and Piano Ensemble</td>
<td>1</td>
</tr>
<tr>
<td>MUSC 2415</td>
<td>Pedagogy of Technique</td>
<td>2</td>
</tr>
<tr>
<td>Choral Ensemble</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>MUST 1712</td>
<td>Theory II</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td><strong>Year 2</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSC 2403</td>
<td>Piano Major(^1)</td>
<td>4</td>
</tr>
<tr>
<td>MUSC 1428</td>
<td>Accompanying and Piano Ensemble</td>
<td>1</td>
</tr>
<tr>
<td>MUST 2711</td>
<td>Theory III</td>
<td>4</td>
</tr>
<tr>
<td>MUST 2703</td>
<td>Music in History</td>
<td>3</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSC 2404</td>
<td>Piano Major(^1)</td>
<td>4</td>
</tr>
<tr>
<td>MUSC 2416</td>
<td>Creative Activities for the Piano Teacher</td>
<td>2</td>
</tr>
<tr>
<td>MUST 2712</td>
<td>Theory IV</td>
<td>4</td>
</tr>
<tr>
<td>MUST 2704</td>
<td>Music in History</td>
<td>3</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td><strong>Year 3</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSC 3403</td>
<td>Piano Major(^1)</td>
<td>4</td>
</tr>
<tr>
<td>MUSC 3422</td>
<td>Keyboard Literature</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 3415</td>
<td>Pedagogy of Children</td>
<td>2</td>
</tr>
<tr>
<td>MUST 4717</td>
<td>Counterpoint</td>
<td>3</td>
</tr>
<tr>
<td>MUST 3696</td>
<td>Music in History [WI]</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSC 3404</td>
<td>Piano Major(^1)</td>
<td>4</td>
</tr>
<tr>
<td>MUSC 3423</td>
<td>Keyboard Literature</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 3416</td>
<td>Pedagogy of the College Non-Music Major</td>
<td>2</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td><strong>Year 4</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSC 4403</td>
<td>Piano Major(^1)</td>
<td>4</td>
</tr>
<tr>
<td>MUSC 1428</td>
<td>Accompanying and Piano Ensemble</td>
<td>1</td>
</tr>
<tr>
<td>MUST 2105</td>
<td>Jazz Secondary Piano</td>
<td>1</td>
</tr>
<tr>
<td>MUST 3741</td>
<td>Keyboard Harmony</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
MUSC 4484 Piano Major 4
MUSC 1429 Accompanying and Piano Ensemble 1
MUSC 2406 Secondary Piano for Music Majors 1
MUST 3796 Music in History [WI] 3
GenEd Breadth Course 3
GenEd Breadth Course 3

**Term Credit Hours** 15

**Total Credit Hours:** 124

1 Piano major sequence requires a minimum of four (4) hours of daily practice.

## Music Education & Music Therapy

Rollo Dilworth
Chair, Music Education and Music Therapy Department
215-204-8310
rollo.dilworth@temple.edu

Darlene Brooks
Director of Music Therapy Program
215-204-8340
dmbrooks@temple.edu

Wendy Magee
Coordinator of Undergraduate Music Therapy Program
215-204-8314
wmagee@temple.edu

The Department of Music Education and Music Therapy offers Bachelor of Music degree programs in Music Education as well as Music Therapy.

### Music Education

The bachelor's degree program in Music Education concentrates on developing music educators at the undergraduate level who will be ready for successful entry into the teaching profession.

Faculty recommendations for student teaching are not automatic. They must be earned by the student through demonstrated potential in the field, a 3.0 GPA, and passing of Praxis exams I and II. Students not recommended for student teaching may be permitted to graduate after successful completion of additional coursework, but will not be recommended for Pennsylvania State Music Teacher Certification.

Upon successful completion of the four-year program of study, the five-year double major program of study, or the five-year program with Jazz Component, and upon achieving passing scores on the Praxis Series Assessments (Professional Assessments for Beginning Teachers), students qualify for Pennsylvania state certification for public school music teachers, K-12.

Concentrations for Bachelor of Music in Music Education:

- Voice Concentration
- Piano Concentration, Choral/General Emphasis
- Piano Concentration, Band/Orchestra Emphasis
- Instrumental Concentration
- Piano/Jazz Studies, Band/Orchestra Emphasis
- Piano/Jazz Studies, Choral/General Emphasis
- Instrumental Concentration with Jazz Studies
- Voice Concentration with Jazz Studies

### Music Therapy

Fully approved by the American Music Therapy Association, this bachelor's degree program is designed to prepare students for entry-level clinical positions in music therapy. Upon successful completion of the degree, graduates are eligible to take the national examination of the Certification Board for Music Therapists and thereby qualify for professional certification in the field.
The Music Therapy degree program is a four and a half year degree program, including post-academic clinical training. The Music Therapy clinical training continues one semester past the Second Semester of the Senior Year.

Concentrations for Bachelor of Music in Music Therapy:

- Traditional Concentration
- Jazz Concentration

**Programs**

- Bachelor of Music in Music Education (p. 310)
- Bachelor of Music in Music Education/Jazz (p. 316)
- Bachelor of Music in Music Therapy (p. 324)
- Bachelor of Music in Music Therapy/Jazz (p. 327)

**Bachelor of Music in Music Education**

Rollo Dilworth  
Chair, Music Education and Music Therapy Department  
215-204-8310  
rollo.dilworth@temple.edu

The bachelor's degree program in Music Education concentrates on developing music educators at the undergraduate level who will be ready for successful entry into the teaching profession.

Faculty recommendations for student teaching are not automatic. They must be earned by the student through demonstrated potential in the field, a 3.0 GPA, and passing of Praxis exams I and II. Students not recommended for student teaching may be permitted to graduate after successful completion of additional coursework, but will not be recommended for Pennsylvania State Music Teacher Certification.

Upon successful completion of the four-year program of study, the five-year double major program of study, or the five-year program with Jazz Component, and upon achieving passing scores on the Praxis Series Assessments (Professional Assessments for Beginning Teachers), students qualify for Pennsylvania state certification for public school music teachers, K-12.

The Bachelor of Music in Music Education consists of several concentrations. The academic plans for those concentrations follow.

- Instrumental Concentration (p. 310)
- Piano Concentration, Band/Orchestra Emphasis (p. 312)
- Piano Concentration, Choral/General Emphasis (p. 313)
- Voice Concentration (p. 315)

**Instrumental Concentration**

| Year 1 |  |  |  |
|--------|----------------|--------|
| Fall  |  | Credit Hours |
| MUSC 1501 | Instrumental Concentration | 2  |
| Instrumental Ensemble¹ |  | 1  |
| MUST 1711 | Theory I | 4  |
| MUSC 1405 | Secondary Piano for Music Majors | 1  |
| Music Education Instrumental Pedagogy |  | 2  |
| MUED 4666 | Assessment of Music Learning | 3  |
| GenEd Quantitative Literacy [GQ] |  | 4  |
| **Term Credit Hours** |  | **17** |

| Spring |  |  |  |
|--------|----------------|--------|
| MUSC 1502 | Instrumental Concentration | 2  |
| Instrumental Ensemble¹ |  | 1  |
| MUSC 1406 | Secondary Piano for Music Majors | 1  |
| MUST 1712 | Theory II | 4  |
| Music Education Instrumental Pedagogy |  | 2  |
| MUED 3661 | Introduction to Teaching Students with Special Needs | 3  |
| ENG 0802, 0812, or 0902 | Analytical Reading and Writing [GW] | 4 |

**Year 2**

| Term Credit Hours | 17 |

<table>
<thead>
<tr>
<th>Fall</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 2501</td>
</tr>
<tr>
<td>Instrumental Ensemble¹</td>
</tr>
<tr>
<td>MUSC 2405</td>
</tr>
<tr>
<td>MUST 2711</td>
</tr>
<tr>
<td>MUSC 2323</td>
</tr>
<tr>
<td>Music Education Instrumental Pedagogy</td>
</tr>
<tr>
<td>MUST 2703</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 2502</td>
</tr>
<tr>
<td>Instrumental Ensemble¹</td>
</tr>
<tr>
<td>MUST 2712</td>
</tr>
<tr>
<td>MUST 2704</td>
</tr>
<tr>
<td>MUSC 2324</td>
</tr>
<tr>
<td>MUED 2665</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Term Credit Hours</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fall</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 3501</td>
</tr>
<tr>
<td>Instrumental Ensemble¹</td>
</tr>
<tr>
<td>Vocal Pedagogy</td>
</tr>
<tr>
<td>MUSC 2406</td>
</tr>
<tr>
<td>MUSC 4324</td>
</tr>
<tr>
<td>MUED 2696</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 3502</td>
</tr>
<tr>
<td>Instrumental Ensemble¹</td>
</tr>
<tr>
<td>MUST 3696</td>
</tr>
<tr>
<td>MUED 3662</td>
</tr>
<tr>
<td>MUED 2673</td>
</tr>
<tr>
<td>MUED 4667</td>
</tr>
<tr>
<td>MUED 1671</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Term Credit Hours</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instrumental Ensemble¹</td>
</tr>
<tr>
<td>Choral Ensemble</td>
</tr>
<tr>
<td>MUED 4669</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
</tr>
</tbody>
</table>

| Term Credit Hours | 17 |
### Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUED 4668</td>
<td>Senior Student Teaching Seminar</td>
<td>3</td>
</tr>
<tr>
<td>MUED 4689</td>
<td>Student Teaching-Elementary</td>
<td>3</td>
</tr>
<tr>
<td>MUED 4789</td>
<td>Student Teaching - Secondary</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 9

**Total Credit Hours:** 128

---

1. One semester of Marching Band is required for students whose principal instruments are woodwinds, brass, and percussion. Normally this requirement is fulfilled in the fall semester of freshman year. Although the requirement is only one semester, students may register for Marching Band as often as they would like.

### Piano Concentration, Band/Orchestra Emphasis

#### Year 1

**Fall**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 1401</td>
<td>Piano Concentration</td>
<td>2</td>
</tr>
<tr>
<td>Choral Ensemble</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>MUST 1711</td>
<td>Theory I</td>
<td>4</td>
</tr>
<tr>
<td>Music Education Vocal Pedagogy</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Music Education Instrumental Pedagogy</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>MUED 4666</td>
<td>Assessment of Music Learning</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 17

---

**Spring**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 1402</td>
<td>Piano Concentration</td>
<td>2</td>
</tr>
<tr>
<td>Choral Ensemble</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>MUST 1712</td>
<td>Theory II</td>
<td>4</td>
</tr>
<tr>
<td>Music Education Vocal Pedagogy</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Music Education Instrumental Pedagogy</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>MUED 3661</td>
<td>Introduction to Teaching Students with Special Needs</td>
<td>3</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 17

---

#### Year 2

**Fall**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 2401</td>
<td>Piano Concentration</td>
<td>2</td>
</tr>
<tr>
<td>Choral Ensemble</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>MUST 2711</td>
<td>Theory III</td>
<td>4</td>
</tr>
<tr>
<td>MUST 2703</td>
<td>Music in History</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 2323</td>
<td>Basic Conducting</td>
<td>1</td>
</tr>
<tr>
<td>Music Education Instrumental Pedagogy</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>MUSC 1428</td>
<td>Accompanying and Piano Ensemble</td>
<td>1</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 17

---

**Spring**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 2402</td>
<td>Piano Concentration</td>
<td>2</td>
</tr>
<tr>
<td>MUSC 1429</td>
<td>Accompanying and Piano Ensemble</td>
<td>1</td>
</tr>
<tr>
<td>MUSC 2324</td>
<td>Conducting Intermediate</td>
<td>1</td>
</tr>
<tr>
<td>MUST 2712</td>
<td>Theory IV</td>
<td>4</td>
</tr>
<tr>
<td>MUST 2704</td>
<td>Music in History</td>
<td>3</td>
</tr>
<tr>
<td>MUED 2665</td>
<td>Music Learning Development</td>
<td>3</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 17
## Year 3

### Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 3401</td>
<td>Piano Concentration</td>
<td>2</td>
</tr>
<tr>
<td>Choral Ensemble</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>MUSC 4323</td>
<td>Conducting (Choral)</td>
<td>2</td>
</tr>
<tr>
<td>MUED 2696</td>
<td>Teaching General Music to Inclusive Populations (TGMIP) [WI]</td>
<td>3</td>
</tr>
<tr>
<td>MUED 4669</td>
<td>Teaching Choral Music to Inclusive Populations</td>
<td>3</td>
</tr>
<tr>
<td>MUED 3662</td>
<td>Keyboard Harmony - Music Education</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 17

### Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 3402</td>
<td>Piano Concertation</td>
<td>2</td>
</tr>
<tr>
<td>Instrumental Ensemble</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>MUST 3696</td>
<td>Music in History [WI]</td>
<td>3</td>
</tr>
<tr>
<td>Music Education Instrumental Pedagogy</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>MUED 4667</td>
<td>Teaching Instrumental Music to Inclusive Populations</td>
<td>3</td>
</tr>
<tr>
<td>MUED 1671</td>
<td>Collaboration Creativity in the New Music Community</td>
<td>3</td>
</tr>
<tr>
<td>MUED 2674</td>
<td>Jazz Education - Vocal</td>
<td>2</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 16

### Year 4

### Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instrumental Ensemble</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 16

### Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUED 4668</td>
<td>Senior Student Teaching Seminar</td>
<td>3</td>
</tr>
<tr>
<td>MUED 4689</td>
<td>Student Teaching-Elementary</td>
<td>3</td>
</tr>
<tr>
<td>MUED 4789</td>
<td>Student Teaching - Secondary</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 9

**Total Credit Hours:** 126

Eight semester hours of ensembles are required for the Piano Concentration, Band/Orchestra Emphasis:

- Choral Ensembles - 4 semester hours;
- Instrumental Ensembles - 2 semester hours;
- Piano/Accompanying Ensembles - 2 semester hour.

## Piano Concentration, Choral/General Emphasis

### Year 1

### Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 1401</td>
<td>Piano Concentration</td>
<td>2</td>
</tr>
<tr>
<td>Choral Ensemble</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>MUST 1711</td>
<td>Theory I</td>
<td>4</td>
</tr>
<tr>
<td>Music Education Vocal Pedagogy</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Music Education Instrumental Pedagogy</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>MUED 4666</td>
<td>Assessment of Music Learning</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 17

### Spring
<table>
<thead>
<tr>
<th>Year 2</th>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td></td>
</tr>
<tr>
<td>MUSC 2401</td>
<td>Piano Concentration</td>
</tr>
<tr>
<td>Choral Ensemble</td>
<td></td>
</tr>
<tr>
<td>MUST 2711</td>
<td>Theory III</td>
</tr>
<tr>
<td>MUST 2703</td>
<td>Music in History</td>
</tr>
<tr>
<td>MUSC 2323</td>
<td>Basic Conducting</td>
</tr>
<tr>
<td>Music Education Instrumental Pedagogy</td>
<td></td>
</tr>
<tr>
<td>MUSC 1428</td>
<td>Accompanying and Piano Ensemble</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
</tr>
<tr>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td>MUSC 2402</td>
<td>Piano Concentration</td>
</tr>
<tr>
<td>MUSC 1429</td>
<td>Accompanying and Piano Ensemble</td>
</tr>
<tr>
<td>MUSC 2324</td>
<td>Conducting Intermediate</td>
</tr>
<tr>
<td>MUST 2712</td>
<td>Theory IV</td>
</tr>
<tr>
<td>MUST 2704</td>
<td>Music in History</td>
</tr>
<tr>
<td>MUED 2665</td>
<td>Music Learning Development</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3</th>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td></td>
</tr>
<tr>
<td>MUSC 3401</td>
<td>Piano Concentration</td>
</tr>
<tr>
<td>Choral Ensemble</td>
<td></td>
</tr>
<tr>
<td>MUSC 4323</td>
<td>Conducting (Choral)</td>
</tr>
<tr>
<td>MUED 2696</td>
<td>Teaching General Music to Inclusive Populations (TGMIP) [WI]</td>
</tr>
<tr>
<td>MUED 4669</td>
<td>Teaching Choral Music to Inclusive Populations</td>
</tr>
<tr>
<td>MUED 2674</td>
<td>Jazz Education - Vocal</td>
</tr>
<tr>
<td>Music Education Instrumental Pedagogy</td>
<td></td>
</tr>
<tr>
<td>MUED 3662</td>
<td>Keyboard Harmony - Music Education</td>
</tr>
<tr>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td>MUSC 3402</td>
<td>Piano Concentration</td>
</tr>
<tr>
<td>Choral Ensemble</td>
<td></td>
</tr>
<tr>
<td>MUST 3696</td>
<td>Music in History [WI]</td>
</tr>
<tr>
<td>Music Education Instrumental Pedagogy</td>
<td></td>
</tr>
<tr>
<td>MUED 4667</td>
<td>Teaching Instrumental Music to Inclusive Populations</td>
</tr>
<tr>
<td>MUED 1671</td>
<td>Collaboration Creativity in the New Music Community</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
</tr>
<tr>
<td>Year 4</td>
<td>Term Credit Hours</td>
</tr>
<tr>
<td>-------</td>
<td>------------------</td>
</tr>
<tr>
<td>Fall</td>
<td></td>
</tr>
<tr>
<td>Choral Ensemble</td>
<td></td>
</tr>
<tr>
<td>MUSC 1225</td>
<td>English Diction</td>
</tr>
</tbody>
</table>
GenEd Breadth Course

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>17</th>
</tr>
</thead>
</table>

Spring
- MUED 4668  Senior Student Teaching Seminar  3
- MUED 4689  Student Teaching-Elementary  3
- MUED 4789  Student Teaching - Secondary  3

Total Credit Hours:  127

Eight semester hours of ensembles are required for the Piano Concentration, Choral/General Emphasis:

- Choral Ensembles - 6 semester hours;
- Piano/Accompanying Ensembles - 2 semester hour.

**Voice Concentration**

### Year 1

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 1201</td>
<td>Voice Concentration</td>
<td>2</td>
</tr>
<tr>
<td>Choral Ensemble</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>MUSC 1405</td>
<td>Secondary Piano for Music Majors</td>
<td>1</td>
</tr>
<tr>
<td>MUST 1711</td>
<td>Theory I</td>
<td>4</td>
</tr>
<tr>
<td>Music Education Instrumental Pedagogy</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>MUSC 1225</td>
<td>English Diction</td>
<td>1</td>
</tr>
<tr>
<td>MUED 4666</td>
<td>Assessment of Music Learning</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

| 17 |

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 1202</td>
<td>Voice Concentration</td>
<td>2</td>
</tr>
<tr>
<td>Choral Ensemble</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>MUSC 1406</td>
<td>Secondary Piano for Music Majors</td>
<td>1</td>
</tr>
<tr>
<td>MUST 1712</td>
<td>Theory II</td>
<td>4</td>
</tr>
<tr>
<td>Music Education Vocal Pedagogy</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>MUED 3661</td>
<td>Introduction to Teaching Students with Special Needs</td>
<td>3</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

| 17 |

### Year 2

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 2201</td>
<td>Voice Concentration</td>
<td>2</td>
</tr>
<tr>
<td>Choral Ensemble</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>MUSC 2405</td>
<td>Secondary Piano for Music Majors</td>
<td>1</td>
</tr>
<tr>
<td>MUST 2711</td>
<td>Theory III</td>
<td>4</td>
</tr>
<tr>
<td>MUST 2703</td>
<td>Music in History</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 2323</td>
<td>Basic Conducting</td>
<td>1</td>
</tr>
<tr>
<td>Music Education Instrumental Pedagogy</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

| 17 |

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 2202</td>
<td>Voice Concentration</td>
<td>2</td>
</tr>
<tr>
<td>Choral Ensemble</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Name</td>
<td>Credits</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>MUST 2704</td>
<td>Music in History</td>
<td>3</td>
</tr>
<tr>
<td>MUST 2712</td>
<td>Theory IV</td>
<td>4</td>
</tr>
<tr>
<td>MUSC 2324</td>
<td>Conducting Intermediate</td>
<td>1</td>
</tr>
<tr>
<td>MUED 2665</td>
<td>Music Learning Development</td>
<td>3</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
</tbody>
</table>

**Year 3**

<table>
<thead>
<tr>
<th>Term</th>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>MUSC 3201</td>
<td>Voice Concentration</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Choral Ensemble</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MUSC 4323</td>
<td>Conducting (Choral)</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>MUSC 2406</td>
<td>Secondary Piano for Music Majors</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>MUED 2696</td>
<td>Teaching General Music to Inclusive Populations (TGMIP) [WI]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MUED 2674</td>
<td>Jazz Education - Vocal</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>MUED 4669</td>
<td>Teaching Choral Music to Inclusive Populations</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 17

<table>
<thead>
<tr>
<th>Term</th>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring</td>
<td>MUSC 3202</td>
<td>Voice Concentration</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>MUST 3696</td>
<td>Music in History [WI]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Choral Ensemble</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Music Education Vocal Pedagogy</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MUED 3662</td>
<td>Keyboard Harmony - Music Education</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MUED 4667</td>
<td>Teaching Instrumental Music to Inclusive Populations</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MUED 1671</td>
<td>Collaboration Creativity in the New Music Community</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 17

<table>
<thead>
<tr>
<th>Year 4</th>
<th>Term</th>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>Choral Ensemble</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Music Education Instrumental Pedagogy</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 17

<table>
<thead>
<tr>
<th>Term</th>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring</td>
<td>MUED 4668</td>
<td>Senior Student Teaching Seminar</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MUED 4689</td>
<td>Student Teaching-Elementary</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MUED 4789</td>
<td>Student Teaching - Secondary</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 9

**Total Credit Hours:** 128

---

**Bachelor of Music in Music Education/Jazz**

Rollo Dilworth  
Chair, Music Education and Music Therapy Department  
215-204-8310  
rollo.dilworth@temple.edu

The Bachelor of Music in Music Education/Jazz consists of several concentrations. The academic plans for those concentrations follow.

- Instrumental Concentration with Jazz Studies (p. 317)
- Piano/Jazz Studies Concentration, Band/Orchestra Emphasis (p. 319)
### Instrumental Concentration with Jazz Studies

#### Bachelor of Music (5 Year): Music Education/Jazz

<table>
<thead>
<tr>
<th>Year 1</th>
<th></th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td><strong>Course</strong></td>
<td><strong>Credit</strong></td>
</tr>
<tr>
<td>MUSC 1501</td>
<td>Instrumental Concentration</td>
<td>2</td>
</tr>
<tr>
<td>Instrumental Ensemble</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>MUSC 1405</td>
<td>Secondary Piano for Music Majors</td>
<td>1</td>
</tr>
<tr>
<td>MUST 1711</td>
<td>Theory I (Traditional)</td>
<td>4</td>
</tr>
<tr>
<td>MUED 4666</td>
<td>Assessment of Music Learning</td>
<td>3</td>
</tr>
<tr>
<td>Music Education Vocal Pedagogy</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td><strong>Total Credit Hours</strong></td>
<td></td>
<td><strong>17</strong></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td><strong>Course</strong></td>
<td><strong>Credit</strong></td>
</tr>
<tr>
<td>MUSC 1502</td>
<td>Instrumental Concentration</td>
<td>2</td>
</tr>
<tr>
<td>Instrumental Ensemble</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>MUST 1106</td>
<td>Jazz Secondary Piano</td>
<td>1</td>
</tr>
<tr>
<td>MUST 1712</td>
<td>Theory II</td>
<td>4</td>
</tr>
<tr>
<td>MUED 3661</td>
<td>Introduction to Teaching Students with Special Needs</td>
<td>3</td>
</tr>
<tr>
<td>Music Education Instrumental Pedagogy</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total Credit Hours</strong></td>
<td></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th></th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td><strong>Course</strong></td>
<td><strong>Credit</strong></td>
</tr>
<tr>
<td>MUSC 2501</td>
<td>Instrumental Concentration</td>
<td>2</td>
</tr>
<tr>
<td>MUST 2105</td>
<td>Jazz Secondary Piano</td>
<td>1</td>
</tr>
<tr>
<td>Instrumental Ensemble</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>MUST 1134</td>
<td>Harmony II: Jazz</td>
<td>4</td>
</tr>
<tr>
<td>MUST 2703</td>
<td>Music in History</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credit Hours</strong></td>
<td></td>
<td><strong>17</strong></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td><strong>Course</strong></td>
<td><strong>Credit</strong></td>
</tr>
<tr>
<td>MUSC 2502</td>
<td>Instrumental Concentration</td>
<td>2</td>
</tr>
<tr>
<td>MUST 2106</td>
<td>Jazz Secondary Piano</td>
<td>1</td>
</tr>
<tr>
<td>MUST 2704</td>
<td>Music in History</td>
<td>3</td>
</tr>
<tr>
<td>MUST 2712</td>
<td>Theory IV (Jazz)</td>
<td>4</td>
</tr>
<tr>
<td>Instrumental Ensemble</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>MUED 2665</td>
<td>Music Learning Development</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credit Hours</strong></td>
<td></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3</th>
<th></th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td><strong>Course</strong></td>
<td><strong>Credit</strong></td>
</tr>
<tr>
<td>MUSC 3501</td>
<td>Instrumental Concentration</td>
<td>2</td>
</tr>
<tr>
<td>MUST 2711</td>
<td>Theory III (Traditional)</td>
<td>4</td>
</tr>
<tr>
<td>Jazz Ensemble</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>MUSC 2323</td>
<td>Basic Conducting</td>
<td>1</td>
</tr>
<tr>
<td>Music Education Instrumental Pedagogy</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>MUED 2696</td>
<td>Teaching General Music to Inclusive Populations (TGMIP) [WI]</td>
<td>3</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>MUST 4717</td>
<td>Counterpoint</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 16

**Spring**
- MUSC 3502 Instrumental Concentration 2
- MUST 3696 Music in History [WI] 3
- Jazz Ensemble\(^1\) 1
- MUSC 2324 Conducting Intermediate 1
- Music Education Instrumental Pedagogy 2
- MUED 4669 Teaching Choral Music to Inclusive Populations 3
- GenEd Breadth Course 3
- MUST 4113 Jazz Improvisation: Theory and Practice I 2

**Term Credit Hours:** 17

**Year 4**

**Fall**
- MUSC 4501 Instrumental Concentration 2
- MUST 4112 Jazz Arranging I 3
- Jazz Ensemble\(^1\) 1
- MUST 3196 History of Pop [WI] 3
- Music Studies Jazz Elective 3
- MUED 1671 Collaboration Creativity in the New Music Community 3
- MUSC 4324 Conducting (Instrumental) 2

**Term Credit Hours:** 17

**Spring**
- MUSC 4502 Instrumental Concentration 2
- Jazz Ensemble\(^1\) 1
- MUED 3662 Keyboard Harmony - Music Education 3
- MUED 4667 Teaching Instrumental Music to Inclusive Populations 3
- MUST 2114 History of Jazz 3
- Music Studies Technology Elective 3
- MUED 2673 Jazz Education - Instrumental 2
- Senior Project 0

**Term Credit Hours:** 17

**Year 5**

**Fall**
- MUST 3713 Orchestration 3
- Choral Ensemble\(^1\) 1
- GenEd Breadth Course 3
- GenEd Breadth Course 3
- GenEd Breadth Course 3
- GenEd Breadth Course 3

**Term Credit Hours:** 16

**Spring**
- MUED 4668 Senior Student Teaching Seminar 3
- MUED 4689 Student Teaching-Elementary 3
- MUED 4789 Student Teaching - Secondary 3

**Term Credit Hours:** 9

**Total Credit Hours:** 160

---

\(^1\) One semester of Marching Band is required. Normally this requirement is fulfilled in the fall term of the freshman year. Although the requirement is only one semester, students may register for Marching Band as often as they would like. A total of 8 credit hours of instrumental ensembles are required: Traditional Ensembles – 4 semester hours, including Marching Band – 1 semester hour; Jazz Ensembles – 4 semester hours. A total of 1 credit hour of choral ensemble is required.
### Piano/Jazz Studies, Band/Orchestra Emphasis
#### Bachelor of Music (5 Year): Music Education/Jazz

**Year 1**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MUSC 1401</strong></td>
<td>Piano Concentration</td>
</tr>
<tr>
<td>Instrumental Ensemble 1</td>
<td></td>
</tr>
<tr>
<td><strong>MUST 1711</strong></td>
<td>Theory I (Traditional)</td>
</tr>
<tr>
<td><strong>MUED 4666</strong></td>
<td>Assessment of Music Learning</td>
</tr>
<tr>
<td>Music Education Vocal Pedagogy</td>
<td></td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MUSC 1402</strong></td>
<td>Piano Concentration</td>
</tr>
<tr>
<td>Instrumental Ensemble 1</td>
<td></td>
</tr>
<tr>
<td><strong>MUST 1712</strong></td>
<td>Theory II (Jazz)</td>
</tr>
<tr>
<td>Music Education Instrumental Pedagogy</td>
<td></td>
</tr>
<tr>
<td><strong>MUED 3661</strong></td>
<td>Introduction to Teaching Students with Special Needs</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Year 2**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MUSC 2401</strong></td>
<td>Piano Concentration</td>
</tr>
<tr>
<td><strong>MUST 1134</strong></td>
<td>Harmony II: Jazz (Jazz)</td>
</tr>
<tr>
<td><strong>MUST 2703</strong></td>
<td>Music in History</td>
</tr>
<tr>
<td><strong>IH 0851 or 0951</strong></td>
<td>Mosaic: Humanities Seminar I [GY]</td>
</tr>
<tr>
<td>Instrumental Ensemble 1</td>
<td></td>
</tr>
<tr>
<td><strong>MUSC 1428</strong></td>
<td>Accompanying and Piano Ensemble</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MUSC 2402</strong></td>
<td>Piano Concentration</td>
</tr>
<tr>
<td><strong>MUSC 1429</strong></td>
<td>Accompanying and Piano Ensemble</td>
</tr>
<tr>
<td><strong>MUST 2704</strong></td>
<td>Music in History</td>
</tr>
<tr>
<td><strong>MUST 2712</strong></td>
<td>Theory IV</td>
</tr>
<tr>
<td>Instrumental Ensemble 1</td>
<td></td>
</tr>
<tr>
<td><strong>MUED 2665</strong></td>
<td>Music Learning Development</td>
</tr>
<tr>
<td><strong>IH 0852 or 0952</strong></td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Year 3**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MUSC 3401</strong></td>
<td>Piano Concentration</td>
</tr>
<tr>
<td><strong>MUST 2711</strong></td>
<td>Theory III (Traditional)</td>
</tr>
<tr>
<td><strong>MUSC 2323</strong></td>
<td>Basic Conducting</td>
</tr>
<tr>
<td><strong>MUST 4717</strong></td>
<td>Counterpoint</td>
</tr>
<tr>
<td>Jazz Ensemble 1</td>
<td></td>
</tr>
<tr>
<td>Music Education Instrumental Pedagogy</td>
<td></td>
</tr>
<tr>
<td><strong>MUED 2696</strong></td>
<td>Teaching General Music to Inclusive Populations (TGMIP) [WI]</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MUSC 3402</strong></td>
<td>Piano Concentration</td>
</tr>
<tr>
<td>Jazz Ensemble 1</td>
<td></td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
</tr>
<tr>
<td>-------------</td>
<td>------------------------------------------------</td>
</tr>
<tr>
<td>MUST 4113</td>
<td>Jazz Improvisation: Theory and Practice I</td>
</tr>
<tr>
<td>MUST 3696</td>
<td>Music in History [WI]</td>
</tr>
<tr>
<td>MUSC 2324</td>
<td>Conducting Intermediate</td>
</tr>
<tr>
<td>MUED 4669</td>
<td>Teaching Choral Music to Inclusive Populations</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 17

**Year 4**

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 4401</td>
<td>Piano Concentration</td>
<td>2</td>
</tr>
<tr>
<td>MUED 3662</td>
<td>Keyboard Harmony - Music Education</td>
<td>3</td>
</tr>
<tr>
<td>Jazz Ensemble</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>MUST 4112</td>
<td>Jazz Arranging I</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 4323</td>
<td>Conducting (Choral)</td>
<td>2</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 17

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 4402</td>
<td>Piano Concentration</td>
<td>2</td>
</tr>
<tr>
<td>Jazz Ensemble</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>MUED 4667</td>
<td>Teaching Instrumental Music to Inclusive Populations</td>
<td>3</td>
</tr>
<tr>
<td>MUST 2114</td>
<td>History of Jazz</td>
<td>3</td>
</tr>
<tr>
<td>MUED 1671</td>
<td>Collaboration Creativity in the New Music Community</td>
<td>3</td>
</tr>
<tr>
<td>MUED 2673</td>
<td>Jazz Education - Instrumental</td>
<td>2</td>
</tr>
</tbody>
</table>

**Spring**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUST 3713</td>
<td>Orchestration</td>
<td>3</td>
</tr>
<tr>
<td>MUST 3196</td>
<td>History of Pop [WI]</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 16

**Year 5**

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUED 4668</td>
<td>Senior Student Teaching Seminar</td>
<td>3</td>
</tr>
<tr>
<td>MUED 4689</td>
<td>Student Teaching-Elementary</td>
<td>3</td>
</tr>
<tr>
<td>MUED 4789</td>
<td>Student Teaching - Secondary</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 9

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUED 4668</td>
<td>Senior Student Teaching Seminar</td>
<td>3</td>
</tr>
<tr>
<td>MUED 4689</td>
<td>Student Teaching-Elementary</td>
<td>3</td>
</tr>
<tr>
<td>MUED 4789</td>
<td>Student Teaching - Secondary</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credit Hours:** 158

---

1. Nine semesters of ensembles are required: Choral Ensembles - 1 semester hours; Instrumental Ensembles OR Piano/Accompanying Ensembles- 4 semester hours, including 1 semester hour of Marching Band; Jazz Ensembles - 4 semester hours.

**Piano/Jazz Studies, Choral/General Emphasis**

**Bachelor of Music (5 Year): Music Education/Jazz**

**Year 1**

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 1401</td>
<td>Piano Concentration</td>
<td>2</td>
</tr>
<tr>
<td>Choral Ensemble</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Term</td>
<td>Course Code</td>
<td>Course Title</td>
</tr>
<tr>
<td>--------------</td>
<td>-------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>Spring</td>
<td>MUST 1711</td>
<td>Theory I (Traditional)</td>
</tr>
<tr>
<td></td>
<td>MUED 4666</td>
<td>Assessment of Music Learning</td>
</tr>
<tr>
<td></td>
<td>Music Education Vocal Pedagogy</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>MUSC 1402</td>
<td>Piano Concentration</td>
</tr>
<tr>
<td></td>
<td>CHOR 1112</td>
<td>Harmony II: Jazz (Jazz)</td>
</tr>
<tr>
<td></td>
<td>MUST 1712</td>
<td>Theory II (Jazz)</td>
</tr>
<tr>
<td></td>
<td>MUED 3661</td>
<td>Introduction to Teaching Students with Special Needs</td>
</tr>
<tr>
<td></td>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Term Credit Hours</strong></td>
</tr>
<tr>
<td>Fall</td>
<td>MUSC 2401</td>
<td>Piano Concentration</td>
</tr>
<tr>
<td></td>
<td>MUST 1134</td>
<td>Harmony II: Jazz (Jazz)</td>
</tr>
<tr>
<td></td>
<td>MUST 2703</td>
<td>Music in History</td>
</tr>
<tr>
<td></td>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
</tr>
<tr>
<td></td>
<td>CHOR 1428</td>
<td>Accompanying and Piano Ensemble</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Term Credit Hours</strong></td>
</tr>
<tr>
<td>Spring</td>
<td>MUSC 2402</td>
<td>Piano Concentration</td>
</tr>
<tr>
<td></td>
<td>MUSC 1429</td>
<td>Accompanying and Piano Ensemble</td>
</tr>
<tr>
<td></td>
<td>MUST 2704</td>
<td>Music in History</td>
</tr>
<tr>
<td></td>
<td>MUST 2712</td>
<td>Theory IV (Jazz)</td>
</tr>
<tr>
<td></td>
<td>Piano/Accompanying Ensemble</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>MUED 2665</td>
<td>Music Learning Development</td>
</tr>
<tr>
<td></td>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Term Credit Hours</strong></td>
</tr>
<tr>
<td>Fall</td>
<td>MUSC 3401</td>
<td>Piano Concentration</td>
</tr>
<tr>
<td></td>
<td>MUST 2711</td>
<td>Theory III (Traditional)</td>
</tr>
<tr>
<td></td>
<td>MUSC 2323</td>
<td>Basic Conducting</td>
</tr>
<tr>
<td></td>
<td>MUST 4717</td>
<td>Counterpoint</td>
</tr>
<tr>
<td></td>
<td>Jazz Ensemble</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Music Education Instrumental Pedagogy</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>MUED 2696</td>
<td>Teaching General Music to Inclusive Populations (TGMIP) [WI]</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Term Credit Hours</strong></td>
</tr>
<tr>
<td>Spring</td>
<td>MUSC 3402</td>
<td>Piano Concentration</td>
</tr>
<tr>
<td></td>
<td>Jazz Ensemble</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>MUST 4113</td>
<td>Jazz Improvisation: Theory and Practice I</td>
</tr>
<tr>
<td></td>
<td>MUST 3696</td>
<td>Music in History [WI]</td>
</tr>
<tr>
<td></td>
<td>Music Education Instrumental Pedagogy</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>MUSC 2324</td>
<td>Conducting Intermediate</td>
</tr>
<tr>
<td></td>
<td>MUED 4669</td>
<td>Teaching Choral Music to Inclusive Populations</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Term Credit Hours</strong></td>
</tr>
</tbody>
</table>
### Year 4

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 4401</td>
<td>Piano Concentration</td>
<td>2</td>
</tr>
<tr>
<td>MUED 3662</td>
<td>Keyboard Harmony - Music Education</td>
<td>3</td>
</tr>
<tr>
<td>Jazz Ensemble¹</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>MUST 3196</td>
<td>History of Pop [WI]</td>
<td>3</td>
</tr>
<tr>
<td>Music Studies Jazz Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>MUST 4112</td>
<td>Jazz Arranging I</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 4323</td>
<td>Conducting (Choral)</td>
<td>2</td>
</tr>
</tbody>
</table>

**Spring**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 4402</td>
<td>Piano Concentration</td>
<td>2</td>
</tr>
<tr>
<td>Jazz Ensemble¹</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>MUED 4667</td>
<td>Teaching Instrumental Music to Inclusive Populations</td>
<td>3</td>
</tr>
<tr>
<td>MUST 2114</td>
<td>History of Jazz</td>
<td>3</td>
</tr>
<tr>
<td>MUED 1671</td>
<td>Collaboration Creativity in the New Music Community</td>
<td>3</td>
</tr>
<tr>
<td>MUED 2674</td>
<td>Jazz Education - Vocal</td>
<td>2</td>
</tr>
<tr>
<td>Music Studies Technology Elective</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Senior Project**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
</table>

**Term Credit Hours**

17

### Year 5

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUST 3713</td>
<td>Orchestration</td>
<td>3</td>
</tr>
<tr>
<td>Choral Ensemble¹</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Spring**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUED 4668</td>
<td>Senior Student Teaching Seminar</td>
<td>3</td>
</tr>
<tr>
<td>MUED 4689</td>
<td>Student Teaching-Elementary</td>
<td>3</td>
</tr>
<tr>
<td>MUED 4789</td>
<td>Student Teaching - Secondary</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

16

### Total Credit Hours:

158

¹ Nine semesters of ensembles are required: Choral Ensembles - 4 semester hours; Jazz Ensembles - 4 semester hours; Piano/Accompanying Ensemble - 1 semester hour.

---

### Voice Concentration with Jazz Studies

**Bachelor of Music (5 Year): Music Education/Jazz**

### Year 1

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 1201</td>
<td>Voice Concentration</td>
<td>2</td>
</tr>
<tr>
<td>MUSC 1405</td>
<td>Secondary Piano for Music Majors</td>
<td>1</td>
</tr>
<tr>
<td>MUST 1711</td>
<td>Theory I</td>
<td>4</td>
</tr>
<tr>
<td>Choral Ensemble¹</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>MUED 4666</td>
<td>Assessment of Music Learning</td>
<td>3</td>
</tr>
<tr>
<td>Music Education Vocal Pedagogy</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>

**Spring**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
</table>

**Term Credit Hours**

17
<table>
<thead>
<tr>
<th>Year 2</th>
<th>Term Credit Hours</th>
<th>17</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSC 2201</td>
<td>Voice Concentration</td>
<td>2</td>
</tr>
<tr>
<td>MUST 2105</td>
<td>Jazz Secondary Piano</td>
<td>1</td>
</tr>
<tr>
<td>Choral Ensemble$^1$</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>MUST 1134</td>
<td>Harmony II: Jazz</td>
<td>4</td>
</tr>
<tr>
<td>MUST 2703</td>
<td>Music in History</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring</th>
<th>Term Credit Hours</th>
<th>17</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 2202</td>
<td>Voice Concentration</td>
<td>2</td>
</tr>
<tr>
<td>MUST 2106</td>
<td>Jazz Secondary Piano</td>
<td>1</td>
</tr>
<tr>
<td>MUST 2712</td>
<td>Theory IV (Jazz)</td>
<td>4</td>
</tr>
<tr>
<td>Choral Ensemble$^1$</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>MUST 2704</td>
<td>Music in History</td>
<td>3</td>
</tr>
<tr>
<td>MUED 2665</td>
<td>Music Learning Development</td>
<td>3</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3</th>
<th>Term Credit Hours</th>
<th>17</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSC 3201</td>
<td>Voice Concentration</td>
<td>2</td>
</tr>
<tr>
<td>MUSC 2323</td>
<td>Basic Conducting</td>
<td>1</td>
</tr>
<tr>
<td>MUST 2711</td>
<td>Theory III (Traditional)</td>
<td>4</td>
</tr>
<tr>
<td>Music Education Vocal Pedagogy</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Jazz Ensemble$^1$</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Music Education Instrumental Pedagogy</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>MUED 2696</td>
<td>Teaching General Music to Inclusive Populations (TGMIP) [WI]</td>
<td>3</td>
</tr>
<tr>
<td>MUST 4717</td>
<td>Counterpoint</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring</th>
<th>Term Credit Hours</th>
<th>17</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 3202</td>
<td>Voice Concentration</td>
<td>2</td>
</tr>
<tr>
<td>MUST 3696</td>
<td>Music in History [WI]</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 2324</td>
<td>Conducting Intermediate</td>
<td>1</td>
</tr>
<tr>
<td>MUST 4113</td>
<td>Jazz Improvisation: Theory and Practice I</td>
<td>2</td>
</tr>
<tr>
<td>MUSC 1225</td>
<td>English Diction</td>
<td>1</td>
</tr>
<tr>
<td>Jazz Ensemble$^1$</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Music Education Instrumental Pedagogy</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>MUED 4696</td>
<td>Teaching Choral Music to Inclusive Populations</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 4</th>
<th>Term Credit Hours</th>
<th>17</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSC 4201</td>
<td>Voice Concentration</td>
<td>2</td>
</tr>
</tbody>
</table>
Jazz Ensemble<br>MUST 4112 Jazz Arranging I 3<br>MUED 2674 Jazz Education - Vocal 2<br>MUED 4667 Teaching Instrumental Music to Inclusive Populations 3<br>Music Studies Jazz Elective 3<br>GenEd Breadth Course 3

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>17</th>
</tr>
</thead>
</table>

### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 4202</td>
<td>Voice Concentration</td>
<td>2</td>
</tr>
<tr>
<td>Jazz Ensemble</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>MUST 3741</td>
<td>Keyboard Harmony</td>
<td>3</td>
</tr>
<tr>
<td>MUED 1671</td>
<td>Collaboration Creativity in the New Music Community</td>
<td>3</td>
</tr>
<tr>
<td>Music Studies Technology Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>MUST 2114</td>
<td>History of Jazz</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 4323</td>
<td>Conducting (Choral)</td>
<td>2</td>
</tr>
<tr>
<td>Senior Project</td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>

### Year 5
### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choral Ensemble</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>MUST 3713</td>
<td>Orchestration</td>
<td>3</td>
</tr>
<tr>
<td>MUST 3196</td>
<td>History of Pop [WI]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>16</th>
</tr>
</thead>
</table>

### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUED 4668</td>
<td>Senior Student Teaching Seminar</td>
<td>3</td>
</tr>
<tr>
<td>MUED 4689</td>
<td>Student Teaching-Elementary</td>
<td>3</td>
</tr>
<tr>
<td>MUED 4789</td>
<td>Student Teaching - Secondary</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>9</th>
</tr>
</thead>
</table>

Total Credit Hours: 161

1 Nine semesters of vocal ensembles are required: Traditional Ensembles – 5 semester hours; Jazz Ensembles – 4 semester hours.

## Bachelor of Music in Music Therapy

Rollo Dilworth  
Chair, Music Education and Music Therapy Department  
215-204-8310  
rollo.dilworth@temple.edu

Darlene Brooks  
Director of Music Therapy Program  
215-204-8340  
dmbrooks@temple.edu

Wendy Magee  
Coordinator of Undergraduate Music Therapy Program  
215-204-8314  
wmagee@temple.edu

Fully approved by the American Music Therapy Association, this bachelor's degree program is designed to prepare students for entry-level clinical positions in music therapy. Upon successful completion of the degree, graduates are eligible to take the national examination of the Certification Board for Music Therapists and thereby qualify for professional certification in the field.
The Music Therapy degree program is a four and a half year degree program, including post-academic clinical training. The Music Therapy clinical training continues one semester past the Second Semester of the Senior Year.

Music Therapy Requirements

Clinical Training

A total of 1200 hours of supervised clinical training is required prior to graduation.

Students must be continually enrolled in MUED 4685 Music Therapy Clinical Internship for a total of 1000 hours. A student beginning an internship in Year 4 Spring will also need to register for this in the Year 4 Summer session and possibly Year 5 Fall; credits can be distributed across semesters differently but must total 6.

Music Therapy Grades

Grades below B- in any music therapy course may not be applied toward degree requirements in music therapy. Students may retake such courses only once, and only with faculty approval. If a grade below B- is earned upon retaking the course, the student will not be permitted to continue as a music therapy major but may be eligible to change to a different curriculum.

Bachelor of Music: Music Therapy

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td></td>
</tr>
<tr>
<td>MUSC 1405</td>
<td>Secondary Piano for Music Majors 1</td>
</tr>
<tr>
<td>MUSC 1211</td>
<td>Voice Class 1</td>
</tr>
<tr>
<td>MUED 4611</td>
<td>Music Therapy Overview</td>
</tr>
<tr>
<td>MUED 1658</td>
<td>Guitar I 1</td>
</tr>
<tr>
<td>Ensemble</td>
<td></td>
</tr>
<tr>
<td>MUST 1711</td>
<td>Theory I</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
</tr>
<tr>
<td><strong>Select one of the following:</strong></td>
<td></td>
</tr>
<tr>
<td>MUSC 1201</td>
<td>Voice Concentration</td>
</tr>
<tr>
<td>MUSC 1401</td>
<td>Piano Concentration</td>
</tr>
<tr>
<td>MUSC 1501</td>
<td>Instrumental Concentration</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>17</strong></td>
</tr>
<tr>
<td>Spring</td>
<td>Credit Hours</td>
</tr>
<tr>
<td>MUST 1106</td>
<td>Jazz Secondary Piano 1</td>
</tr>
<tr>
<td>MUSC 1212</td>
<td>Voice Class 1</td>
</tr>
<tr>
<td>MUED 1659</td>
<td>Guitar II 1</td>
</tr>
<tr>
<td>Ensemble</td>
<td></td>
</tr>
<tr>
<td>MUST 1712</td>
<td>Theory II</td>
</tr>
<tr>
<td><strong>GenEd Quantitative Literacy Course [GQ]</strong></td>
<td></td>
</tr>
<tr>
<td>PSY 1001</td>
<td>Introduction to Psychology</td>
</tr>
<tr>
<td><strong>Select one of the following:</strong></td>
<td></td>
</tr>
<tr>
<td>MUSC 1202</td>
<td>Voice Concentration</td>
</tr>
<tr>
<td>MUSC 1402</td>
<td>Piano Concentration</td>
</tr>
<tr>
<td>MUSC 1502</td>
<td>Instrumental Concentration</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>17</strong></td>
</tr>
<tr>
<td>Year 2</td>
<td>Credit Hours</td>
</tr>
<tr>
<td>Fall</td>
<td></td>
</tr>
<tr>
<td>MUST 2105</td>
<td>Jazz Secondary Piano 1</td>
</tr>
<tr>
<td>MUED 3635</td>
<td>Functional Guitar I 1</td>
</tr>
<tr>
<td>MUSC 2323</td>
<td>Basic Conducting</td>
</tr>
<tr>
<td>Ensemble</td>
<td></td>
</tr>
<tr>
<td>MUST 2711</td>
<td>Theory III</td>
</tr>
<tr>
<td>MUED 4641</td>
<td>Music Therapy Experiences I: Creative Methods</td>
</tr>
<tr>
<td>MUED 4616</td>
<td>Developmental Music Therapy</td>
</tr>
</tbody>
</table>
IH 0851 or 0951  Mosaic: Humanities Seminar I [GY]  3  
Select one of the following:  2  
  MUSC 2201  Voice Concentration  
  MUSC 2401  Piano Concentration  
  MUSC 2501  Instrumental Concentration  

| Term Credit Hours | 17 |

**Spring**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUST 2106</td>
<td>Jazz Secondary Piano (^1)</td>
<td>1</td>
</tr>
<tr>
<td>MUED 3636</td>
<td>Functional Guitar II (^1)</td>
<td>1</td>
</tr>
<tr>
<td>MUSC 2324</td>
<td>Conducting Intermediate</td>
<td>1</td>
</tr>
<tr>
<td>Ensemble</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>MUST 2712</td>
<td>Theory IV</td>
<td>4</td>
</tr>
</tbody>
</table>

IH 0852 or 0952  Mosaic: Humanities Seminar II [GZ]  3  
PSY 2301  Foundations of Developmental Psychology  3  
MUED 4642  Music Therapy Experiences II: Recreative Methods  1  
Select one of the following:  2  
  MUSC 2202  Voice Concentration  
  MUSC 2402  Piano Concentration  
  MUSC 2502  Instrumental Concentration  

| Term Credit Hours | 17 |

**Year 3**

**Fall**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUED 3633</td>
<td>Functional Piano (^1)</td>
<td>1</td>
</tr>
<tr>
<td>MUED 3631</td>
<td>Functional Voice (^1)</td>
<td>1</td>
</tr>
<tr>
<td>MUST 3196</td>
<td>History of Pop [WI]</td>
<td>3</td>
</tr>
<tr>
<td>MUED 4614</td>
<td>Psychiatric Music Therapy</td>
<td>3</td>
</tr>
<tr>
<td>MUED 4643</td>
<td>Music Therapy Experiences III: Receptive Methods</td>
<td>1</td>
</tr>
<tr>
<td>MUED 3689</td>
<td>Fieldwork in Music Therapy</td>
<td>2</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

| Term Credit Hours | 17 |

**Spring**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUED 3634</td>
<td>Functional Piano II (^1)</td>
<td>1</td>
</tr>
<tr>
<td>MUED 3632</td>
<td>Functional Voice II (^1)</td>
<td>1</td>
</tr>
<tr>
<td>MUED 3789</td>
<td>Fieldwork in Music Therapy II</td>
<td>2</td>
</tr>
<tr>
<td>MUST 2704</td>
<td>Music in History</td>
<td>3</td>
</tr>
<tr>
<td>PSY 2201</td>
<td>Foundations of Psychopathology</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

| Term Credit Hours | 16 |

**Year 4**

**Fall**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUED 4696</td>
<td>Music Therapy Research [WI]</td>
<td>3</td>
</tr>
<tr>
<td>MUST 3696</td>
<td>Music in History [WI]</td>
<td>3</td>
</tr>
<tr>
<td>MUED 3889</td>
<td>Fieldwork in Music Therapy III</td>
<td>2</td>
</tr>
<tr>
<td>MUED 4619</td>
<td>Medical/Rehabilitative Music Therapy</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

| Term Credit Hours | 17 |

**Spring**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUED 4613</td>
<td>Music Therapy Foundations</td>
<td>3</td>
</tr>
</tbody>
</table>
Music Therapy/Jazz Requirements

Clinical Training

A total of 1200 hours of supervised clinical training is required prior to graduation.

Students must be continually enrolled in MUED 4685 Music Therapy Clinical Internship for a total of 1000 hours. A student beginning an internship in Year 4 Spring will also need to register for this in the Year 4 Summer session and possibly Fall; credits can be distributed across semesters differently but must total 6.
Music Therapy Grades

Grades below B- in any music therapy course may not be applied toward degree requirements in music therapy. Students may retake such courses only once, only with faculty approval. If a grade below B- is earned upon retaking the course, the student will not be permitted to continue as a music therapy major, but may be eligible to change to a different curriculum.

Bachelor of Music: Music Therapy/Jazz

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 1405</td>
<td>Secondary Piano for Music Majors</td>
<td>1</td>
</tr>
<tr>
<td>MUSC 1211</td>
<td>Voice Class</td>
<td>1</td>
</tr>
<tr>
<td>MUED 4611</td>
<td>Music Therapy Overview</td>
<td>3</td>
</tr>
<tr>
<td>MUED 1658</td>
<td>Guitar I</td>
<td>1</td>
</tr>
<tr>
<td>Ensemble</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>MUST 1711</td>
<td>Theory I</td>
<td>4</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>MUSC 1201</td>
<td>Voice Concentration</td>
<td></td>
</tr>
<tr>
<td>MUSC 1401</td>
<td>Piano Concentration</td>
<td></td>
</tr>
<tr>
<td>MUSC 1501</td>
<td>Instrumental Concentration</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>17</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Spring</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUST 1106</td>
<td>Jazz Secondary Piano</td>
<td>1</td>
</tr>
<tr>
<td>MUSC 1212</td>
<td>Voice Class</td>
<td>1</td>
</tr>
<tr>
<td>MUED 1659</td>
<td>Guitar II</td>
<td>1</td>
</tr>
<tr>
<td>Ensemble</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>MUST 1712</td>
<td>Theory II (Jazz)</td>
<td>4</td>
</tr>
<tr>
<td>PSY 1001</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>MUSC 1202</td>
<td>Voice Concentration</td>
<td></td>
</tr>
<tr>
<td>MUSC 1402</td>
<td>Piano Concentration</td>
<td></td>
</tr>
<tr>
<td>MUSC 1502</td>
<td>Instrumental Concentration</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>17</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUST 2105</td>
<td>Jazz Secondary Piano</td>
<td>1</td>
</tr>
<tr>
<td>MUED 3635</td>
<td>Functional Guitar I</td>
<td>1</td>
</tr>
<tr>
<td>MUSC 2323</td>
<td>Basic Conducting</td>
<td>1</td>
</tr>
<tr>
<td>Ensemble</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>MUST 2711</td>
<td>Theory III (Jazz)</td>
<td>4</td>
</tr>
<tr>
<td>MUED 4641</td>
<td>Music Therapy Experiences I: Creative Methods</td>
<td>1</td>
</tr>
<tr>
<td>MUED 4616</td>
<td>Developmental Music Therapy</td>
<td>3</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>MUSC 2201</td>
<td>Voice Concentration</td>
<td></td>
</tr>
<tr>
<td>MUSC 2401</td>
<td>Piano Concentration</td>
<td></td>
</tr>
<tr>
<td>MUSC 2501</td>
<td>Instrumental Concentration</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>17</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Spring</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUST 2106</td>
<td>Jazz Secondary Piano</td>
<td>1</td>
</tr>
<tr>
<td>MUED 3636</td>
<td>Functional Guitar II</td>
<td>1</td>
</tr>
<tr>
<td>MUSC 2324</td>
<td>Conducting Intermediate</td>
<td>1</td>
</tr>
<tr>
<td>Courses</td>
<td>Credit Hours</td>
<td></td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>--------------</td>
<td></td>
</tr>
<tr>
<td>Ensemble</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>MUST 2712 Theory IV (Jazz)</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>PSY 2301 Foundations of Developmental Psychology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MUED 4642 Music Therapy Experiences II: Recreational Methods</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>IH 0852 or 0952 Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>MUSC 2202 Voice Concentration</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>MUSC 2402 Piano Concentration</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>MUSC 2502 Instrumental Concentration</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

**Term Credit Hours** 17

<table>
<thead>
<tr>
<th>Year 3</th>
</tr>
</thead>
</table>

**Fall**

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUED 3633 Functional Piano I</td>
<td>1</td>
</tr>
<tr>
<td>MUED 3631 Functional Voice I</td>
<td>1</td>
</tr>
<tr>
<td>MUST 3196 History of Pop [WI]</td>
<td>3</td>
</tr>
<tr>
<td>MUED 4614 Psychiatric Music Therapy</td>
<td>3</td>
</tr>
<tr>
<td>MUED 4643 Music Therapy Experiences III: Receptive Methods</td>
<td>1</td>
</tr>
<tr>
<td>MUED 3689 Fieldwork in Music Therapy</td>
<td>2</td>
</tr>
</tbody>
</table>

GenEd Breadth Course 3

GenEd Breadth Course 3

**Term Credit Hours** 17

**Spring**

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUED 3634 Functional Piano II</td>
<td>1</td>
</tr>
<tr>
<td>MUED 3632 Functional Voice II</td>
<td>1</td>
</tr>
<tr>
<td>MUED 3789 Fieldwork in Music Therapy II</td>
<td>2</td>
</tr>
<tr>
<td>MUST 2704 Music in History</td>
<td>3</td>
</tr>
<tr>
<td>PSY 2201 Foundations of Psychopathology</td>
<td>3</td>
</tr>
</tbody>
</table>

GenEd Breadth Course 3

GenEd Breadth Course 3

**Term Credit Hours** 16

<table>
<thead>
<tr>
<th>Year 4</th>
</tr>
</thead>
</table>

**Fall**

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUED 4696 Music Therapy Research [WI]</td>
<td>3</td>
</tr>
<tr>
<td>MUED 3889 Fieldwork in Music Therapy III</td>
<td>2</td>
</tr>
<tr>
<td>MUST 3696 Music in History [WI]</td>
<td>3</td>
</tr>
<tr>
<td>MUED 4619 Medical/Rehabilitative Music Therapy</td>
<td>3</td>
</tr>
</tbody>
</table>

GenEd Breadth Course 3

GenEd Breadth Course 3

**Term Credit Hours** 17

**Spring**

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUED 4613 Music Therapy Foundations</td>
<td>3</td>
</tr>
<tr>
<td>MUST 2105 Jazz Secondary Piano</td>
<td>1</td>
</tr>
<tr>
<td>MUED 4618 Music Therapy Ethics</td>
<td>2</td>
</tr>
<tr>
<td>MUED 4685 Music Therapy Clinical Internship²</td>
<td>2</td>
</tr>
</tbody>
</table>

**Term Credit Hours** 17

**Summer**

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUED 4685 Music Therapy Clinical Internship²</td>
<td>2</td>
</tr>
</tbody>
</table>

**Term Credit Hours** 2

<table>
<thead>
<tr>
<th>Year 5</th>
</tr>
</thead>
</table>

**Fall**
MUED 4685  Music Therapy Clinical Internship

Term Credit Hours

Total Credit Hours: 130

1  Voice Concentration
   - In lieu of MUSC 1211 and MUSC 1212, classical singers can take MUST 2112 or MUST 2114; jazz singers can take MUST 2112 or MUST 4112.
   - Classical and jazz singers must take MUED 3631 and MUED 3632, unless waived by examination.

2  Piano Concentration
   - In lieu of MUSC 1405, classical pianists can take MUST 2112 or MUST 2114; jazz pianists can take MUST 2112 or MUST 4112.
   - In lieu of MUSC 1405 and MUST 1106, classical pianists must take two credits of jazz piano; jazz pianists must take two credits of jazz electives.
   - Both classical and jazz pianists must take MUED 3633 and MUED 3634 unless waived upon examination by instructor.

   Guitar Concentration
   - In lieu of MUED 1658 and MUED 1659, classical guitarists can take MUST 2112 or MUST 2114; jazz guitarists can take MUST 2112 or MUST 4112.
   - Both classical and jazz guitarists must take MUED 3635 and MUED 3636, unless waived upon examination by the instructor.

2  Must be continually enrolled in MUED 4685 Music Therapy Clinical Internship for a total of 1000 hours. A student beginning an internship in Spring will also need to register for this in the Summer session and possibly Fall; credits can be distributed across semesters differently but must total 6.

Music Studies

Michael Klein, Chair, Music Studies
215-204-8322
mklein01@temple.edu

The Music Studies Department consists of three areas:

- Composition
- Music History
- Music Theory

The Composition area offers courses in composition for various media, including electronic music. Creativity, the development of personal expression through music, and the assessment of music's role in the 21st-century societal context are the focal points for composition majors.

The Music History area emphasizes a historic and analytical approach to the study of music and the development of scholarly research skills.

The Music Theory area prepares its majors to be well-rounded practical musicians able to apply skills and knowledge to performance, composition, analysis, research, and teaching.

Programs

- Bachelor of Music in Composition (p. 330)
- Bachelor of Music in Jazz Studies/Composition (p. 332)
- Bachelor of Music in Music History (p. 334)
- Bachelor of Music in Theory (p. 336)
- Bachelor of Science in Music (p. 338)
- Minor in Music (p. 339)

Bachelor of Music in Composition

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td></td>
</tr>
<tr>
<td>MUST 1758</td>
<td>Composition Lesson I</td>
</tr>
<tr>
<td>MUSC 1405</td>
<td>Secondary Piano for Music Majors</td>
</tr>
<tr>
<td>MUSC 2323</td>
<td>Basic Conducting</td>
</tr>
<tr>
<td>MUST 1711</td>
<td>Theory I</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
</tr>
</tbody>
</table>

Term Credit Hours 16
<table>
<thead>
<tr>
<th>Term</th>
<th>Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring</td>
<td>MUST 1759: Composition Lesson II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MUSC 1406: Secondary Piano for Music Majors</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>MUSC 2324: Conducting Intermediate</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>MUST 1712: Theory II</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>IH 0851 or 0951: Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td>Year 2</td>
<td>MUST 2758: Composition Lesson III</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MUSC 2405: Secondary Piano for Music Majors</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>MUST 2711: Theory III</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>MUST 2703: Music in History</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>IH 0852 or 0952: Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>17</strong></td>
</tr>
<tr>
<td>Spring</td>
<td>MUST 2759: Composition Lesson IV</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MUSC 2406: Secondary Piano for Music Majors</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>MUST 2712: Theory IV</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>MUST 2704: Music in History</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>17</strong></td>
</tr>
<tr>
<td>Year 3</td>
<td>MUST 3758: Composition Lesson V</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MUST 3696: Music in History [WI]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MUST 4717: Counterpoint</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MUST 4719: MIDI</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Ensemble</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Music Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td>Spring</td>
<td>MUST 3759: Composition Lesson VI</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MUST 4712: Computer Synthesis of Music</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Ensemble</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>MUST 4723: Score Reading</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MUST 3713: Orchestration</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td>Year 4</td>
<td>MUST 4758: Composition Lesson VII</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MUST 4724: Print Mus Scores Parts</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MUST 4720: New Music Seminar</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>13</strong></td>
</tr>
<tr>
<td>Spring</td>
<td>MUST 4759: Composition Lesson VIII</td>
<td>3</td>
</tr>
</tbody>
</table>
Bachelor of Music in Jazz Studies/Composition

Terell Stafford, Director
215-204-8036
tstaffor@temple.edu

Students of Temple’s Jazz Studies program have the opportunity to participate in both large and small ensembles. Jazz Band, Lab Band, Brass Ensemble, Fusion Ensemble, Percussion Ensemble, Guitar Ensemble, Vocal Ensemble, and New Music by Temple Composers provide a comprehensive performance experience in solo as well as ensemble playing for both instrumentalists and vocalists. All of the performing groups are coached by an experienced faculty of musician-educators. Graduates are prepared to begin a career as professional performers.

Year 1

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 1405</td>
<td>Secondary Piano for Music Majors</td>
</tr>
<tr>
<td>MUSC 3100</td>
<td>Small Jazz Ensemble</td>
</tr>
<tr>
<td>MUST 1711</td>
<td>Theory I</td>
</tr>
<tr>
<td>MUST 1118</td>
<td>Business of Music I</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>2</td>
</tr>
<tr>
<td>MUSC 1201</td>
<td>Voice Concentration</td>
</tr>
<tr>
<td>MUSC 1401</td>
<td>Piano Concentration</td>
</tr>
<tr>
<td>MUSC 1501</td>
<td>Instrumental Concentration</td>
</tr>
<tr>
<td>Term Credit Hours</td>
<td>17</td>
</tr>
</tbody>
</table>

Spring

| MUST 1106                    | Jazz Secondary Piano | 1 |
| MUSC 3100                    | Small Jazz Ensemble | 1 |
| MUST 1712                    | Theory II (Jazz)    | 4 |
| GenEd Breadth Course         | 3 |
| GenEd Quantitative Literacy Course [GQ] | 4 |
| Select one of the following: | 2 |
| MUSC 1202                    | Voice Concentration | |
| MUSC 1402                    | Piano Concentration | |
| MUSC 1502                    | Instrumental Concentration | |
| Term Credit Hours            | 15 |

Year 2

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUST 2105</td>
<td>Jazz Secondary Piano</td>
</tr>
<tr>
<td>MUSC 3100</td>
<td>Small Jazz Ensemble</td>
</tr>
<tr>
<td>Ensemble</td>
<td>1</td>
</tr>
<tr>
<td>MUST 2711</td>
<td>Theory III (Jazz)</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>2</td>
</tr>
<tr>
<td>MUSC 2201, 2401, or 2501</td>
<td>Voice Concentration</td>
</tr>
<tr>
<td>MUSC 2401</td>
<td>Piano Concentration</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
</tr>
<tr>
<td>-------------</td>
<td>------------------------------------</td>
</tr>
<tr>
<td>MUST 2106</td>
<td>Jazz Secondary Piano</td>
</tr>
<tr>
<td>MUSC 3100</td>
<td>Small Jazz Ensemble</td>
</tr>
<tr>
<td>MUST 2712</td>
<td>Theory IV (Jazz)</td>
</tr>
<tr>
<td>MUST 4113</td>
<td>Jazz Improvisation: Theory Practice I</td>
</tr>
<tr>
<td>MUST 2704</td>
<td>Music in History</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>Voice Concentration</td>
</tr>
<tr>
<td>MUSC 2202</td>
<td>Piano Concentration</td>
</tr>
<tr>
<td>MUSC 2402</td>
<td>Instrumental Concentration</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Term Credit Hours</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUST 4112</td>
<td>Jazz Arranging I</td>
</tr>
<tr>
<td>MUST 4114</td>
<td>Jazz Improvisation: Theory Practice II</td>
</tr>
<tr>
<td>MUSC 3100</td>
<td>Small Jazz Ensemble</td>
</tr>
<tr>
<td>MUST 4110</td>
<td>Seminar in Jazz Composition and Arranging</td>
</tr>
<tr>
<td>MUSC 2323</td>
<td>Basic Conducting</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>History of Pop [WI]</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>Voice Concentration</td>
</tr>
<tr>
<td>MUSC 3201</td>
<td>Piano Concentration</td>
</tr>
<tr>
<td>MUSC 3501</td>
<td>Instrumental Concentration</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Term Credit Hours</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUST 4115</td>
<td>Jazz Arranging II</td>
</tr>
<tr>
<td>MUSC 3100</td>
<td>Small Jazz Ensemble</td>
</tr>
<tr>
<td>MUST 4111</td>
<td>Jazz Style and Analysis</td>
</tr>
<tr>
<td>MUST 4110</td>
<td>Seminar in Jazz Composition and Arranging</td>
</tr>
<tr>
<td>MUST 2114</td>
<td>History of Jazz</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>Voice Concentration</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>Piano Concentration</td>
</tr>
<tr>
<td>MUSC 3202</td>
<td>Instrumental Concentration</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Term Credit Hours</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 3100</td>
<td>Small Jazz Ensemble</td>
</tr>
<tr>
<td>MUST 4110</td>
<td>Seminar in Jazz Composition and Arranging</td>
</tr>
<tr>
<td>MUST 4120</td>
<td>Seminar in Advanced Jazz Composition and Arranging</td>
</tr>
<tr>
<td>MUST 3713</td>
<td>Orchestration</td>
</tr>
<tr>
<td>Music Technology Elective (see list below)</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>Voice Concentration</td>
</tr>
<tr>
<td>MUSC 4201</td>
<td>Piano Concentration</td>
</tr>
</tbody>
</table>
### Bachelor of Music in Music History

#### Year 1

<table>
<thead>
<tr>
<th>Term</th>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSC 1405</td>
<td>Secondary Piano for Music Majors</td>
<td>1</td>
</tr>
<tr>
<td>Choral/Instrumental Ensemble</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>MUST 1711</td>
<td>Theory I</td>
<td>4</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>MUSC 1201</td>
<td>Voice Concentration</td>
<td></td>
</tr>
<tr>
<td>MUSC 1401</td>
<td>Piano Concentration</td>
<td></td>
</tr>
<tr>
<td>MUSC 1501</td>
<td>Instrumental Concentration</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credit Hours</strong></td>
<td>16</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term</th>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSC 1406</td>
<td>Secondary Piano for Music Majors</td>
<td>1</td>
</tr>
<tr>
<td>Choral/Instrumental Ensemble</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>MUST 1712</td>
<td>Theory II</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>MUSC 1202</td>
<td>Voice Concentration</td>
<td></td>
</tr>
<tr>
<td>MUSC 1402</td>
<td>Piano Concentration</td>
<td></td>
</tr>
<tr>
<td>MUSC 1502</td>
<td>Instrumental Concentration</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credit Hours</strong></td>
<td>17</td>
<td></td>
</tr>
</tbody>
</table>

#### Year 2

<table>
<thead>
<tr>
<th>Term</th>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSC 2405</td>
<td>Secondary Piano for Music Majors</td>
<td>1</td>
</tr>
<tr>
<td>Choral/Instrumental Ensemble</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>MUST 2711</td>
<td>Theory III</td>
<td>4</td>
</tr>
</tbody>
</table>

## Music Technology Electives

- **MUST 4712** Computer Synthesis of Music (Spring) 3
- **MUST 4713** Sound Recording (Fall) 3
- **MUST 4714** Sound Editing (Spring) 3
- **MUST 4716** Composing Music for Films (Fall) 3
- **MUST 4719** MIDI (Fall) 3
- **MUST 4762** Music Technology (Spring) 3
<table>
<thead>
<tr>
<th>MUST 2703</th>
<th>Music in History</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSC 2201</td>
<td>Voice Concentration</td>
<td>2</td>
</tr>
<tr>
<td>MUSC 2401</td>
<td>Piano Concentration</td>
<td></td>
</tr>
<tr>
<td>MUSC 2501</td>
<td>Instrumental Concentration</td>
<td></td>
</tr>
</tbody>
</table>

**Term Credit Hours** | 17

**Spring**

<table>
<thead>
<tr>
<th>MUSC 2406</th>
<th>Secondary Piano for Music Majors</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choral/Instrumental Ensemble</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>MUST 2712</td>
<td>Theory IV</td>
<td>4</td>
</tr>
<tr>
<td>MUST 2704</td>
<td>Music in History</td>
<td>3</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSC 2202</td>
<td>Voice Concentration</td>
<td>2</td>
</tr>
<tr>
<td>MUSC 2402</td>
<td>Piano Concentration</td>
<td></td>
</tr>
<tr>
<td>MUSC 2502</td>
<td>Instrumental Concentration</td>
<td></td>
</tr>
</tbody>
</table>

**Year 3**

**Fall**

| Choral/Instrumental Ensemble |                | 1   |
| GenEd Breadth Course         |                | 3   |
| MUST 4717                   | Counterpoint    | 3   |
| MUST 3696                   | Music in History [WI] | 3   |
| Foreign Language I           |                | 4   |
| Select one of the following: |
| MUSC 3201                  | Voice Concentration | 2   |
| MUSC 3401                  | Piano Concentration |     |
| MUSC 3501                  | Instrumental Concentration | |

**Term Credit Hours** | 16

**Spring**

| Choral/Instrumental Ensemble |                | 1   |
| MUST 3796                   | Music in History [WI] | 3   |
| Foreign Language II         |                | 4   |
| Music Elective\(^1\)        |                | 2   |
| Elective\(^2\)              |                | 3   |
| Select one of the following: |
| MUSC 3202                  | Voice Concentration | 2   |
| MUSC 3402                  | Piano Concentration |     |
| MUSC 3502                  | Instrumental Concentration | |

**Year 4**

**Fall**

| Ensemble                  |                | 1   |
| Music History Elective    |                | 3   |
| Elective                  |                | 3   |
| MUSC 2323                  | Basic Conducting | 1   |
| Foreign Language III      |                | 3   |
| Select one of the following: |
| MUSC 4201                  | Voice Concentration | 2   |

**Term Credit Hours** | 15
MUSC 4401  Piano Concentration
MUSC 4501  Instrumental Concentration

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
</tr>
</tbody>
</table>

**Spring**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ensemble</td>
<td>1</td>
</tr>
<tr>
<td>Music Studies Elective&lt;sup&gt;1&lt;/sup&gt;</td>
<td>2</td>
</tr>
<tr>
<td>MUST 4718 Analysis</td>
<td>3</td>
</tr>
<tr>
<td>Elective&lt;sup&gt;2&lt;/sup&gt;</td>
<td>2</td>
</tr>
<tr>
<td>Foreign Language IV</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>2</td>
</tr>
<tr>
<td>MUSC 4202 Voice Concentration</td>
<td></td>
</tr>
<tr>
<td>MUSC 4402 Piano Concentration</td>
<td></td>
</tr>
<tr>
<td>MUSC 4502 Instrumental Concentration</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
</tr>
</tbody>
</table>

**Total Credit Hours:** 124

---

<sup>1</sup> MUST 3741 Keyboard Harmony and MUST 3713 Orchestration are recommended.

<sup>2</sup> Art History strongly recommended.

---

**Bachelor of Music in Theory**

**Year 1**

**Fall**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 1211 Voice Class</td>
<td>1</td>
</tr>
<tr>
<td>MUSC 1405 Secondary Piano</td>
<td>1</td>
</tr>
<tr>
<td>Choral/Instrumental Ensemble</td>
<td>1</td>
</tr>
<tr>
<td>MUST 1711 Theory I</td>
<td>4</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902 Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>2</td>
</tr>
<tr>
<td>MUSC 1201 Voice Concentration</td>
<td></td>
</tr>
<tr>
<td>MUSC 1401 Piano Concentration</td>
<td></td>
</tr>
<tr>
<td>MUSC 1501 Instrumental Concentration</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
</tr>
</tbody>
</table>

**Spring**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 1212 Voice Class</td>
<td>1</td>
</tr>
<tr>
<td>MUSC 1406 Secondary Piano</td>
<td>1</td>
</tr>
<tr>
<td>Choral/Instrumental Ensemble</td>
<td>1</td>
</tr>
<tr>
<td>MUST 1712 Theory II</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>2</td>
</tr>
<tr>
<td>MUSC 1202 Voice Concentration</td>
<td></td>
</tr>
<tr>
<td>MUSC 1402 Piano Concentration</td>
<td></td>
</tr>
<tr>
<td>MUSC 1502 Instrumental Concentration</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
</tr>
</tbody>
</table>

**Year 2**

**Fall**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 2405 Secondary Piano</td>
<td>1</td>
</tr>
<tr>
<td>Choral/Instrumental Ensemble</td>
<td>1</td>
</tr>
<tr>
<td>MUST 2703 Music in History</td>
<td>3</td>
</tr>
<tr>
<td>MUST 2711 Theory III</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
</tbody>
</table>

---

---
IH 0851 or 0951  Mosaic: Humanities Seminar I [GY]  3
Select one of the following:
- MUSC 2201  Voice Concentration  2
- MUSC 2401  Piano Concentration
- MUSC 2501  Instrumental Concentration

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>17</th>
</tr>
</thead>
</table>

**Spring**
- MUSC 2406  Secondary Piano for Music Majors  1
- Choral/Instrumental Ensemble  1
- MUST 2704  Music in History  3
- MUST 2712  Theory IV  4
- GenEd Breadth Course  3
- IH 0852 or 0952  Mosaic: Humanities Seminar II [GZ]  3
Select one of the following:
- MUSC 2202  Voice Concentration  2
- MUSC 2402  Piano Concentration
- MUSC 2502  Instrumental Concentration

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>17</th>
</tr>
</thead>
</table>

**Year 3**

**Fall**
- MUSC 3405  Secondary Piano for Music Majors  1
- Choral/Instrumental Ensemble  1
- MUST 3696  Music in History [WI]  3
- MUST 4717  Counterpoint  3
- GenEd Breadth Course  3
- GER 1001  Introduction to German I [LA]  4
Select one of the following:
- MUSC 3201  Voice Concentration  2
- MUSC 3401  Piano Concentration
- MUSC 3501  Instrumental Concentration

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>17</th>
</tr>
</thead>
</table>

**Spring**
- MUSC 3406  Secondary Piano for Music Majors  1
- MUST 3896  Theory Seminar II [WI]  3
- MUST 4718  Analysis  3
- GER 1002  Introduction to German II [LA]  4
- GenEd Breadth Course  3
Select one of the following:
- MUSC 3202  Voice Concentration  2
- MUSC 3402  Piano Concentration
- MUSC 3502  Instrumental Concentration

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>16</th>
</tr>
</thead>
</table>

**Year 4**

**Fall**
- MUSC 2323  Basic Conducting  1
- MUST 3713  Orchestration  3
- MUST 3741  Keyboard Harmony  3
- MUST 2748  Composition I  2
- GER 1003  Introduction to German III [LB]  3

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>12</th>
</tr>
</thead>
</table>

**Spring**
- MUST 3896  Theory Seminar II [WI]  3
Bachelor of Science in Music

Michael Klein, Chair
215-204-8322
mklein01@temple.edu

This program is designed to prepare students for such fields as library science, the publishing industry, communications, the computer software industry, and other new and diverse areas of the music profession. Applicants must arrange to take examinations in the area of musicianship before qualifying for admission to the program. This may be done by contacting Mr. James Short (215-204-8598) at the Boyer College of Music.

Bachelor of Science in Music

### Year 1

#### Fall
- **MUSC 1405**: Secondary Piano for Music Majors (1)
- **Choral Ensemble** (1)
- **MUST 1711**: Theory I (4)
- **Elective** (3)
- **ENG 0802, 0812, or 0902**: Analytical Reading and Writing [GW] (4)
- **GenEd Breadth Course** (3)

**Term Credit Hours**: 16

#### Spring
- **MUSC 1406**: Secondary Piano for Music Majors (1)
- **Choral Ensemble** (1)
- **MUST 1712**: Theory II (4)
- **GenEd Quantitative Literacy Course [GQ]** (4)
- **GenEd Breadth Course** (3)
- **MUST 4715**: World Music (3)

**Term Credit Hours**: 16

### Year 2

#### Fall
- **MUSC 2405**: Secondary Piano for Music Majors (1)
- **Choral Ensemble** (1)
- **MUST 2711**: Theory III (4)
- **MUST 2703**: Music in History (3)
- **IH 0851 or 0951**: Mosaic: Humanities Seminar I [GY] (3)
- **GenEd Breadth Course** (3)

**Term Credit Hours**: 15

#### Spring
- **MUSC 2406**: Secondary Piano for Music Majors (1)
- **Choral Ensemble** (1)
- **MUST 2712**: Theory IV (4)
- **MUST 2704**: Music in History (3)
- **GenEd Breadth Course** (3)
- **IH 0852 or 0952**: Mosaic: Humanities Seminar II [GZ] (3)

**Term Credit Hours**: 15

### Year 3

#### Fall
Minor in Music

The Department of Music Studies offers an undergraduate Minor in Music. The minor may be earned upon the successful completion of 20 credits.

Requirements

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUST 1701</td>
<td>Music Theory for Non-Music Majors</td>
<td>2</td>
</tr>
<tr>
<td>MUST 1705</td>
<td>Music Theory for Non-Music Majors II</td>
<td>3</td>
</tr>
</tbody>
</table>

NOTE: Students MUST complete the required courses before taking electives in music.

Electives

A combination of courses in music theory, music history, and/or performance/ensembles. Course of study to be determined with a faculty advisor in the Music Studies Department. Possible courses include but are not limited to:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUST 1711</td>
<td>Theory I</td>
</tr>
<tr>
<td>MUST 1712</td>
<td>Theory II</td>
</tr>
<tr>
<td>MUST 2703</td>
<td>Music in History</td>
</tr>
<tr>
<td>MUST 2113</td>
<td>History of Pop</td>
</tr>
<tr>
<td>MUST 2114</td>
<td>History of Jazz</td>
</tr>
</tbody>
</table>
Voice & Opera

Christine Anderson, Chair
215-204-8375
cla@temple.edu

The training provided by the Voice and Opera Department emphasizes vocal technique and repertoire in a challenging program of vocal development. Performance progress is closely guided through private lessons, juries, and recital performances. The program of study prepares singers for careers in concert and recital performance, opera, and private teaching.

Programs

- Bachelor of Music in Jazz Studies/Performance, Jazz Voice Concentration (p. 340)
- Bachelor of Music in Performance, Voice Concentration (p. 342)

Bachelor of Music in Jazz Studies/Performance, Jazz Voice Concentration

Terell Stafford, Director
215-204-8036
tstaffor@temple.edu

Students of Temple’s Jazz Studies program have the opportunity to participate in both large and small ensembles. Jazz Band, Lab Band, Brass Ensemble, Fusion Ensemble, Percussion Ensemble, Guitar Ensemble, Vocal Ensemble, and New Music by Temple Composers provide a comprehensive performance experience in solo as well as ensemble playing for both instrumentalists and vocalists. All of the performing groups are coached by an experienced faculty of musician-educators. Graduates are prepared to begin a career as professional performers.

Bachelor of Music: Jazz Voice Performance

Year 1

<table>
<thead>
<tr>
<th>Term</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>MUSC 1203</td>
<td>Voice Major</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MUSC 1405</td>
<td>Secondary Piano for Music Majors</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>MUSC 3100</td>
<td>Small Jazz Ensemble</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>MUSC 4520</td>
<td>Ensemble</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>MUST 1711</td>
<td>Theory I</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>14</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring</td>
<td>MUSC 1204</td>
<td>Voice Major</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MUST 1106</td>
<td>Jazz Secondary Piano</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>MUSC 3100</td>
<td>Small Jazz Ensemble</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>MUST 1712</td>
<td>Theory II (Jazz)</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

Year 2

<table>
<thead>
<tr>
<th>Term</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>MUSC 2203</td>
<td>Voice Major</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MUST 2105</td>
<td>Jazz Secondary Piano</td>
<td>1</td>
</tr>
<tr>
<td>Term</td>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
</tr>
<tr>
<td>------</td>
<td>-------------</td>
<td>--------------</td>
<td>---------</td>
</tr>
<tr>
<td>Spring</td>
<td>MUSC 2106</td>
<td>Jazz Secondary Piano</td>
<td>1</td>
</tr>
<tr>
<td>Spring</td>
<td>MUST 2712</td>
<td>Theory IV</td>
<td>4</td>
</tr>
<tr>
<td>Spring</td>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>Term Credit Hours</td>
<td></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>Fall</td>
<td>MUSC 2204</td>
<td>Voice Major</td>
<td>3</td>
</tr>
<tr>
<td>Fall</td>
<td>MUST 2106</td>
<td>Jazz Secondary Piano</td>
<td>1</td>
</tr>
<tr>
<td>Fall</td>
<td>MUST 4113</td>
<td>Jazz Improvisation: Theory and Practice I</td>
<td>2</td>
</tr>
<tr>
<td>Fall</td>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>Term Credit Hours</td>
<td></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>Year 3</td>
<td>Fall</td>
<td>MUSC 3203</td>
<td>Voice Major</td>
</tr>
<tr>
<td>Year 3</td>
<td>MUST 4112</td>
<td>Jazz Arranging I</td>
<td>3</td>
</tr>
<tr>
<td>Year 3</td>
<td>MUST 4114</td>
<td>Jazz Improvisation: Theory and Practice II</td>
<td>2</td>
</tr>
<tr>
<td>Year 3</td>
<td>MUSC 3100</td>
<td>Small Jazz Ensemble</td>
<td>1</td>
</tr>
<tr>
<td>Year 3</td>
<td>MUSC 4112</td>
<td>Jazz Arranging I</td>
<td>3</td>
</tr>
<tr>
<td>Year 3</td>
<td>GenEd Breadth Course</td>
<td>History of Pop [WI]</td>
<td>3</td>
</tr>
<tr>
<td>Term Credit Hours</td>
<td></td>
<td></td>
<td>17</td>
</tr>
<tr>
<td>Spring</td>
<td>MUSC 3204</td>
<td>Voice Major</td>
<td>3</td>
</tr>
<tr>
<td>Spring</td>
<td>MUST 3100</td>
<td>Small Jazz Ensemble</td>
<td>1</td>
</tr>
<tr>
<td>Spring</td>
<td>MUST 4112</td>
<td>Jazz Arranging I</td>
<td>3</td>
</tr>
<tr>
<td>Spring</td>
<td>MUST 4114</td>
<td>Jazz Improvisation: Theory and Practice II</td>
<td>2</td>
</tr>
<tr>
<td>Spring</td>
<td>MUSC 2323</td>
<td>Basic Conducting</td>
<td>1</td>
</tr>
<tr>
<td>Spring</td>
<td>MUST 3896</td>
<td>Theory Seminar II [WI]</td>
<td>3</td>
</tr>
<tr>
<td>Spring</td>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Term Credit Hours</td>
<td></td>
<td></td>
<td>17</td>
</tr>
<tr>
<td>Year 4</td>
<td>Fall</td>
<td>MUSC 4203</td>
<td>Voice Major</td>
</tr>
<tr>
<td>Year 4</td>
<td>MUST 3100</td>
<td>Small Jazz Ensemble</td>
<td>1</td>
</tr>
<tr>
<td>Year 4</td>
<td>MUST 4203</td>
<td>Voice Major</td>
<td>3</td>
</tr>
<tr>
<td>Year 4</td>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Year 4</td>
<td>Music Technology Elective (see list below)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Term Credit Hours</td>
<td></td>
<td></td>
<td>14</td>
</tr>
<tr>
<td>Spring</td>
<td>MUSC 4284</td>
<td>Voice Major</td>
<td>3</td>
</tr>
<tr>
<td>Spring</td>
<td>MUST 3100</td>
<td>Small Jazz Ensemble</td>
<td>1</td>
</tr>
<tr>
<td>Spring</td>
<td>MUST 2114</td>
<td>History of Jazz</td>
<td>3</td>
</tr>
<tr>
<td>Spring</td>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Spring</td>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>
Electives

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUST 4712</td>
<td>Computer Synthesis of Music (Spring)</td>
<td>3</td>
</tr>
<tr>
<td>MUST 4713</td>
<td>Sound Recording (Fall)</td>
<td>3</td>
</tr>
<tr>
<td>MUST 4714</td>
<td>Sound Editing (Spring)</td>
<td>3</td>
</tr>
<tr>
<td>MUST 4716</td>
<td>Composing Music for Films (Fall)</td>
<td>3</td>
</tr>
<tr>
<td>MUST 4719</td>
<td>MIDI (Fall)</td>
<td>3</td>
</tr>
<tr>
<td>MUST 4762</td>
<td>Music Technology</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credit Hours: 124

Music Technology Electives

Bachelor of Music in Performance, Voice Concentration

Christine Anderson, Chair
215-204-8375
cia@temple.edu

The training provided by the Voice and Opera Department emphasizes vocal technique and repertoire in a challenging program of vocal development. Performance progress is closely guided through private lessons, juries, and recital performances. The program of study prepares singers for careers in concert and recital performance, opera, and private teaching.

Bachelor of Music: Voice Performance

### Year 1

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 1203</td>
<td>Voice Major</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 1405</td>
<td>Secondary Piano for Music Majors</td>
<td>1</td>
</tr>
<tr>
<td>Choral Ensemble</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>MUST 1711</td>
<td>Theory I</td>
<td>4</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>Foreign Language I</td>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>

Term Credit Hours: 17

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 1204</td>
<td>Voice Major</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 1406</td>
<td>Secondary Piano for Music Majors</td>
<td>1</td>
</tr>
<tr>
<td>Choral Ensemble</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>MUST 1712</td>
<td>Theory II</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Foreign Language II</td>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>

Term Credit Hours: 17

### Year 2

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 2203</td>
<td>Voice Major</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 2405</td>
<td>Secondary Piano for Music Majors</td>
<td>1</td>
</tr>
<tr>
<td>Choral Ensemble</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>MUST 2711</td>
<td>Theory III</td>
<td>4</td>
</tr>
<tr>
<td>MUSC 1225</td>
<td>English Diction</td>
<td>1</td>
</tr>
<tr>
<td>MUST 2703</td>
<td>Music in History</td>
<td>3</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
</tbody>
</table>

Term Credit Hours: 16

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 2204</td>
<td>Voice Major</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 2406</td>
<td>Secondary Piano for Music Majors</td>
<td>1</td>
</tr>
<tr>
<td>Choral Ensemble</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Courses</td>
<td>Credits</td>
<td></td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>---------</td>
<td></td>
</tr>
<tr>
<td>MUST 2712 Theory IV</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>MUST 2704 Music in History</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>IH 0852 or 0952 Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Year 3</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSC 3203 Voice Major</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Choral Ensemble</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSC 3267 Vocal Repertoire</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>MUSC 4226 Diction Skills</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>MUSC 2323 Basic Conducting</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>FREN 1001 Introduction to French I [LA]</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSC 3204 Voice Major</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Choral Ensemble</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSC 4227 Diction Skills</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>MUSC 3268 Vocal Repertoire</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>FREN 1002 Introduction to French II [LA]</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>17</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Year 4</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSC 4203 Voice Major</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Choral Ensemble</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSC 4228 Opera Workshop</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>13</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSC 4284 Voice Major</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MUST 3696 Music in History [WI]</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MUSC 4296 Vocal Pedagogy [WI]</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MUSC 4229 Opera Workshop</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>14</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Total Credit Hours:</strong></td>
<td><strong>124</strong></td>
<td></td>
</tr>
</tbody>
</table>
School of Theater, Film and Media Arts

Dr. Robert T. Stroker, Dean and Vice Provost for the Arts at Temple University

http://tfma.temple.edu/

The School of Theater, Film and Media Arts is part of the Center for the Performing and Cinematic Arts at Temple University.

The Department of Film and Media Arts is located in Annenberg Hall, which includes television and film production areas (studios and editing, graphics, and film labs) as well as extensive video and film editing areas, a 75-seat multimedia screening room, photographic labs, two news writing labs and smart classrooms.

The Department of Theater is located in Tomlinson Hall, which features two theaters, as well as rehearsal rooms, costume, and scene shops.

History

The School of Theater, Film and Media Arts, comprised of the Department of Theater and the Department of Film and Media Arts, was initially formed as the Division of Theater, Film and Media Arts (DTFMA) during the summer of 2012 as part of a university-wide academic realignment initiative. All of Temple’s distinguished fine and performing arts schools and programs were aligned under a new administrative consortium, the Center for the Arts, linking DTFMA with the distinguished Boyer College of Music and Dance and the renowned Tyler School of Art.

Theater was initially organized as an extracurricular activity at Temple until 1931, when formal courses in the discipline were developed and offered, gaining full status as the Department of Theater in 1967.

Radio-Television became an instructional division in 1947, and extensive film offerings were added in 1967. That year, both Radio-Television-Film and Theater became part of a new School of Communications and Theater which also included Journalism, Advertising and Strategic Communication. The school was restructured in 1995 and Radio-Television-Film became two departments, Broadcast, Television and Mass Media (BTMM) and the Department of Film and Media Arts.

On July 1, 2012, as a part of the realignment, the School of Communications and Theater was renamed the School of Media and Communication and the Division of Theater, Film and Media Arts was created.

In October 2015, the Center for the Arts was renamed the Center for the Performing and Cinematic Arts and DTFMA was renamed the School of Theater, Film and Media Arts.

The School of Theater, Film and Media Arts houses two outstanding departments with professional and undergraduate degree programs historically ranked in the top tier nationally and internationally.

Special Programs

Internship Program

Although the requirements may vary, internships are available to junior and senior students. Internships are for academic credit and must involve professional activity related to the student’s course of study. The internships must be approved by the administrator or faculty member charged with supervising internships.

Los Angeles Internship & Study Program

Offered by the Film and Media Arts Department, the Los Angeles Internship & Study Program is open to students from any major on both the upper-level undergraduate (63 credit hours completed) and graduate levels who have an interest in working within the Hollywood entertainment industry. This program is offered as an 8-credit summer program that runs from May through the end of July. It includes an on-site internship and ten weeks of concurrent coursework. Additionally, the program is offered in the fall and spring semesters as a full-time program of study combined with an internship component. For more information, please contact Alison Crouse at 215-204-5910.

Student Contact

School of Theater, Film and Media Arts

Prof. Douglas C. Wager
Associate Dean, TFMA
215-204-6127
dwager@temple.edu

Film & Media Arts

Prof. Jeff Rush
FMA Department Chair
Academic Policies & Regulations

Please see the Undergraduate Academic Policies (p. 81) section of this Bulletin. Students are responsible for complying with all university-wide academic policies as well as those of the School of Theater, Film and Media Arts in the Center for the Performing and Cinematic Arts that appear below.

Academic Standing

A matriculated undergraduate student in the university is in Academic Good Standing if enrolled in a baccalaureate degree-seeking program.

Please see the University's policy on Academic Standing (p. 83) for detailed information about Academic Warning, Academic Probation, and Academic Dismissal.

Credits Not Applied Toward the Degree

Credits earned in the following courses are not applied toward a degree in the Center for the Performing and Cinematic Arts' School of Theater, Film & Media Arts: lower-level courses in Military Science, Topical Studies, RCC, ELECT, and Mathematics 0015.

Dean's List

Each fall and spring semester, those undergraduates who have met the credit hour and academic criteria for their school or college are placed on the Dean's List. See the Dean's List (p. 92) policy for specific GPA and credit-hour requirements.
Re-enrollment

Students returning to Temple University after an absence of one semester (unless an approved Leave of Absence form was filed prior to the leave) must use the Undergraduate Bulletin in effect at the time of readmission or any subsequent Undergraduate Bulletin. Credits more than 10 years old may not be applied toward a degree. For application deadlines and the re-enrollment form, please visit: www.temple.edu/vpus/documents/request_to_reenroll.pdf.

Transfer Students

Refer to the Undergraduate Admissions (p. 23) section of this Bulletin for general information on transferring courses to Temple. In addition to these criteria, each department will evaluate any credit to be transferred into a major. This evaluation generally is done at the first meeting with a faculty advisor during the first semester. The maximum number of credit hours allowed to transfer in the major are: 21 hours in Film and Media Arts and 20 hours in Theater.

Requirements for Graduation

The School of Theater, Film and Media Arts requires 124 credits to graduate; completion of the university General Education (GenEd) (p. 143) requirements; completion of departmental requirements, including two writing-intensive courses in the major.

Minimum and maximum credit requirements within each major are listed with the departmental requirements.

Students who are planning to graduate must schedule an official graduation review with an academic advisor and complete the application for graduation one semester prior to the anticipated graduation date. Appointments may be made in the Center for the Performing and Cinematic Arts Academic Advising Office, Tyler building, Suite 212.

Program Descriptions

1. The total number of credit hours at graduation may be greater for some students based on initial placement exams, transfer evaluations, individual curricular choices, and academic progress.
2. Students must fulfill the necessary prerequisites for any given course or course sequence. See the Prerequisites and Co-requisites Policy (p. 99) in the university-wide Academic Policies section of this Bulletin.

Advising

Center for the Performing and Cinematic Arts Academic Advising
Tyler Building, Suite 212
2001 N. 13th Street
Philadelphia, PA 19122
215-777-9229

Advisors

Sherice Chevannes, Film and Media Arts
Tyler Building, Suite 212
sherice.chevannes@temple.edu
215-777-9229

Stephanie Shestakow, Film and Media Arts
Tyler Building, Suite 212
stephanie.shestakow@temple.edu
215-777-9229

Lesley Copans, Theater
Presser Hall 137
lcopans@temple.edu
215-204-8372

For appointments, please utilize the online appointment system: https://apps.cst.temple.edu/advising.pl

Students in Theater and Film and Media Arts are advised by professional academic advisors and faculty advisors. Students make advising appointments in the Center for the Performing and Cinematic Arts Academic Advising Office located on the second floor of the Tyler building, Suite 212. Consult your departmental office for assignment to the appropriate advisor.
Academic advisors attempt to avoid errors when advising students about their program requirements, but schools and colleges cannot assume liability for errors in advising. Therefore, students must assume primary responsibility for knowing the requirements for their degree and for acquiring current information about their academic status.

Most students will be eligible to register for classes online via Self Service Banner through the TU Portal (https://tuportal4.temple.edu/cp/home/displaylogin). However, all students should meet with an advisor prior to the eligible registration period.

Students preparing to graduate must file the necessary paperwork one semester prior to the graduation date. At that time, an appointment should be made with an academic advisor to complete a graduation review and application for graduation.

**Faculty**

*Nora Alter*, Professor, Department of Film and Media Arts, School of Theater, Film and Media Arts; Ph.D., University of Pennsylvania.

*Maggie Anderson*, Assistant Professor (Teaching/Instructional), Department of Theater, School of Theater, Film and Media Arts; M.F.A., University of Cincinnati College-Conservatory of Music.

*Allan S. Barber*, Assistant Professor, Department of Film and Media Arts, School of Theater, Film and Media Arts; M.F.A., Temple University.

*Warren F. Bass*, Professor, Department of Film and Media Arts, School of Theater, Film and Media Arts; M.F.A.

*Nancy Boykin*, Assistant Professor (Teaching/Instructional), Department of Theater, School of Theater, Film and Media Arts; M.F.A., University of North Carolina at Chapel Hill.

*Chris Cagle*, Assistant Professor, Department of Film and Media Arts, School of Theater, Film and Media Arts; Ph.D., Brown University.

*Marie Anne Chiment*, Professor, Department of Theater, School of Theater, Film and Media Arts; M.F.A., New York University Tisch School of the Arts.

*Roderick L. Coover*, Associate Professor, Department of Film and Media Arts, School of Theater, Film and Media Arts; Ph.D., University of Chicago.

*Peter P. d'Agostino*, Professor, Department of Film and Media Arts, School of Theater, Film and Media Arts; M.A.

*Sarah Drury*, Associate Professor, Department of Film and Media Arts, School of Theater, Film and Media Arts; M.A.

*Fred Duer*, Associate Professor, Department of Theater, School of Theater, Film and Media Arts; M.F.A., Ohio University.

*LeAnn Erickson*, Associate Professor, Department of Film and Media Arts, School of Theater, Film and Media Arts; M.F.A.

*Robert Hedley*, Professor, Department of Theater, School of Theater, Film and Media Arts; M.F.A.

*David Ingram*, Associate Professor (Practice), Department of Theater, School of Theater, Film and Media Arts; M.F.A.

*Lynne Innerst*, Associate Professor, Department of Theater, School of Theater, Film and Media Arts; M.F.A., University of Southern California.

*Melanie Julian*, Assistant Professor (Practice), Department of Theater, School of Theater, Film and Media Arts; M.F.A., Point Park University.

*Michael J. Kuetemeyer*, Assistant Professor, Department of Film and Media Arts, School of Theater, Film and Media Arts; M.F.A., Temple University.

*Andrew Laine*, Assistant Professor (Practice), Department of Theater, School of Theater, Film and Media Arts; M.F.A., University of Texas at Austin.

*Deirdre S. Maître*, Assistant Professor, Department of Film and Media Arts, School of Theater, Film and Media Arts; M.F.A., Temple University.

*Matthew Miller*, Assistant Professor (Practice), Department of Theater, School of Theater, Film and Media Arts; M.F.A., University of North Carolina at Chapel Hill.

*Moon Molson*, Assistant Professor (Teaching/Instructional), Department of Film and Media Arts, School of Theater, Film and Media Arts; M.F.A., Columbia University.

*Katherine J. Nigh*, Assistant Professor (Practice), Department of Theater, School of Theater, Film and Media Arts; Ph.D.

*Mary Catherine Pancake*, Assistant Professor, Department of Film and Media Arts, School of Theater, Film and Media Arts; M.F.A., School of the Art Institute of Chicago.

*David A. Parry*, Professor, Department of Film and Media Arts, School of Theater, Film and Media Arts; M.S.

*Eran Preis*, Associate Professor, Department of Film and Media Arts, School of Theater, Film and Media Arts; M.A., Ohio University.

*Peter R. Reynolds*, Associate Professor (Practice), Department of Theater, School of Theater, Film and Media Arts; M.F.A.
Lee Richardson, Associate Professor (Practice), Department of Theater, School of Theater, Film and Media Arts; M.F.A., Rutgers University.

Jeffrey S. Rush, Associate Professor, Department of Film and Media Arts, School of Theater, Film and Media Arts; M.F.A., American Film Institute.

Michael P. Ryan, Professor, Department of Film and Media Arts, School of Theater, Film and Media Arts; Ph.D., University of Iowa.

Donna Snow, Associate Professor, Department of Theater, School of Theater, Film and Media Arts; M.F.A., American Conservatory Theater.

Edward Sobel, Assistant Professor, Department of Theater, School of Theater, Film and Media Arts; M.F.A., Northwestern University.

Elisabeth Subrin, Assistant Professor, Department of Film and Media Arts, School of Theater, Film and Media Arts; M.F.A., School of the Art Institute of Chicago.

Paul Swann, Professor, Department of Film and Media Arts, School of Theater, Film and Media Arts; Ph.D.

Rea Tajiri, Assistant Professor, Department of Film and Media Arts, School of Theater, Film and Media Arts; M.F.A., California Institute of the Arts.

Douglas C. Wager, Professor, Department of Theater, School of Theater, Film and Media Arts; M.F.A.

Kimnika Williams-Witherspoon, Associate Professor, Department of Theater, School of Theater, Film and Media Arts; Ph.D., Temple University.

Lauren Wolkstein, Assistant Professor, Department of Film and Media Arts, School of Theater, Film and Media Arts; M.F.A., Columbia University.

**Film & Media Arts**

Jeff Rush, MFA., Chair
120 Annenberg Hall
2020 N. 13th Street
Philadelphia, PA 19122
215-204-4372
jrush@temple.edu
http://tfma.temple.edu/fma

The Film and Media Arts (FMA) Program focuses on the development of creative expression and technical skills in film, video, audio, digital media, and new technologies, and the theoretical understanding of media and culture. The program recognizes and explores the creative tension between individual expression and the social, political, and economic forces that shape culture at large through the creation and study of film, video, and new media.

Students are trained in developing meaningful content as well as craft, theory, and practice. In learning independent and mainstream approaches to production and theory, graduates will be prepared to develop their own independent productions and to assume a creative role in the motion picture, television and media industries.

FMA faculty have received the Oscar, Emmy, Guggenheim, Rockefeller, NEA, Fulbright, Sundance and international film awards and are authors of some of the important texts in the field. The department also brings in guest media makers and visiting professors from diverse backgrounds for special lectures and workshops. Students may select elective courses from throughout the university, including in such areas as creative writing, theater and fine arts. A highly-recognized graduate program offers undergraduates numerous opportunities to work on advanced productions and participate in advanced research, exhibition and creative work in the field.

**Faculty Mentoring**

FMA faculty strongly believe in the importance of close mentoring. This is particularly important in a department that focuses on individual and collaborative expression. Once each student who enters as a freshman has completed thirty credits or each transfer student has completed fifteen credits, he or she will be assigned a faculty mentor. The faculty mentor will guide each student through his or her remaining years at Temple. The faculty and external jurors review student work submitted to yearly screenings and as portfolios for capstone courses.

**Los Angeles and San Francisco Study-Away Programs**

The Film and Media Arts Department offers a department-run study-away academic and internship program in Los Angeles every semester and a similar program in San Francisco every summer.

Because it is a more structured curriculum than the other sequences, students in the BFA programs who wish to go to Los Angeles should plan to do so during the summer semester or, after careful planning ahead, to go during the fall semester of their junior year. A sample curriculum grid is included on the BFA page (p. 363) that demonstrates how a BFA student can go to Los Angeles during the fall of her/his junior year and still complete the BFA in four years.
Other Internships and Special Programs

Beyond that, FMA has an extensive internship program throughout the year in Philadelphia. Additionally, many organizations in New York, New Jersey, Delaware and Washington, D.C. provide regular opportunities for student professional internships. Temple University offers Temple-run special programs for study and research in Rome and Tokyo.

Degree Offerings

The Film and Media Arts department offers both the BFA and BA degrees, as well as a minor in Screen Studies.

Initially students declare either the Film and Media Arts Major or the Film and Media Arts Major with a Screen Studies Concentration. At the completion of their sophomore year (60 credits), students may apply to enter one of the upper-level BFA programs with Concentrations in Media Arts, Directing and Screenwriting or one of three upper level concentrations: Cinematography, Producing, or Post-Production (see below).

To Apply for a BFA in Film and Media Arts with Concentrations in Directing, Media Arts or Screenwriting

The BFA degree is an upper-level program with three distinct concentrations: Media Arts, Directing, and Screenwriting. Students interested in one of the BFA concentrations must submit a program request form to the department. To be considered students need to complete 60 credits by the end of their sophomore year, earn an average of 3.0 in six foundational and intermediate courses and provide a portfolio. The program request form must be submitted to the department no later than the deadline announced on the Film and Media Studies Undergraduate Listserv in the spring semester in which the student reaches sixty credits. Students with less than an average of 3.0 in the six courses may petition the department for admission to one of the BFA concentrations. (See department for details.) Students who were not admitted to one of the BFA concentrations can continue in the BA in Film and Media Arts or the BA in Film and Media Arts with a Concentration in Screen Studies or apply for one of the three BA production concentrations.

Transfer students may apply for the BFA program. Preference will be given to transfer students who have transferred Film and Media courses with "B's" or better. Transfer students must also present a portfolio. Transfer students with an associate's degree in a related field who are accepted into the BFA program will most likely need additional semesters to complete their degree.

To Apply for a BA in Film and Media Arts with Concentrations in Cinematography, Producing or Post-Production

Students interested in a BA in one of the three concentrations must have completed five foundational and intermediate courses with an average of 3.0 and submit a concentration request form to the department. If a student has less than an average of 3.0 in these courses, the student may petition the department for admission into one of the three upper level concentrations or choose to remain in their initial program -- either the BA in Film and Media Arts or the BA in Film and Media Arts with a Concentration in Screen Studies.

Minor in Screen Studies

Students from across the university may enroll in the Film and Media Arts Minor in Screen Studies (p. 375).

Foundation Courses

Students will take Foundation Courses appropriate to the chosen concentration. However, students who choose to switch to another concentration will need to meet with the department chair to discuss how the foundation courses previously completed can apply to the student's new concentration.

Programs

- Bachelor of Arts in Film and Media Arts (p. 349)
- Bachelor of Arts in Film and Media Arts: Concentration in Cinematography (p. 352)
- Bachelor of Arts in Film and Media Arts: Concentration in Post Production (p. 355)
- Bachelor of Arts in Film and Media Arts: Concentration in Producing (p. 357)
- Bachelor of Arts in Film and Media Arts: Concentration in Screen Studies (p. 360)
- Bachelor of Fine Arts in Film and Media Arts: Concentration in Directing (p. 363)
- Bachelor of Fine Arts in Film and Media Arts: Concentration in Media Arts (p. 367)
- Bachelor of Fine Arts in Film and Media Arts: Concentration in Screenwriting (p. 370)
- Certificate in Film (p. 373)
- Certificate in Media Arts (p. 373)
- Certificate in Screen Studies (p. 374)
- Screen Studies Minor (p. 375)

Bachelor of Arts in Film and Media Arts

Allan Barber, Sequence Director
215-204-8399
The Bachelor of Arts in Film and Media Arts is designed for students who wish to have a more general approach to the major or wish to conclude the degree with something other than a year-long capstone film, feature length screenplay or a supervised written thesis. After completing the FMA core, students must take one production or writing course in either Filmmaking, Videography, Experimental Video or Screenwriting, along with one 2000-level or higher studies course. Students then design their own program with approval of their advisors, choosing a range of middle- and upper-level courses that complete a balanced approach to media study and production or a self directed emphasis in camera, lighting, sound, animation, directing, writing, producing or new media studies or production. The program requires at least one middle-level writing-intensive course, one advanced writing-intensive course, one advanced studies course and one advanced course in studies or production.

**Bachelor of Arts in Film and Media Arts**

**Summary of Requirements for the Degree**

The Bachelor of Arts degree may be conferred upon a student majoring in Film and Media Arts by recommendation of the faculty and upon satisfactory completion of a minimum of 121 credit hours. Students must complete:

1. **University requirements**:
   - New students are required to complete the General Education (GenEd) curriculum.
   - All students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for this major are listed below and identified with the code "WI".

2. No more than 21 FMA credits can be transferred to the major.

3. Students must earn a grade of "C-" or better in all Film and Media Arts courses that count towards the degree.

4. Students may take up to 6 internship credits in Film and Media Arts.

5. Students may count at least 42 credits and a maximum of 66 credits toward the 121 credit hours required for the degree.

**Meeting 42 Credit Requirement**

The following represents requirements for completing the BA in Film and Media Arts. Because some of these courses are variable credits, they may not add up to the 42 credits required for the degree. In that case, students must take additional FMA electives at the 2000+ level to reach the required 42 credits.

**FMA Foundation Courses**

Film and Media Arts students will complete the following courses by the end of the sophomore year:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMA 1141</td>
<td>Media Arts I</td>
<td>4</td>
</tr>
<tr>
<td>FMA 1142</td>
<td>Media Arts II</td>
<td>4</td>
</tr>
<tr>
<td>FMA 1171</td>
<td>Media &amp; Culture</td>
<td>3</td>
</tr>
<tr>
<td>FMA 1172</td>
<td>Introduction to Film and Video Analysis</td>
<td>3</td>
</tr>
</tbody>
</table>

**Major Requirements**

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMA 2241</td>
<td>Filmmaking</td>
<td>4</td>
</tr>
<tr>
<td>FMA 2242</td>
<td>Videography</td>
<td></td>
</tr>
<tr>
<td>FMA 2451</td>
<td>Experimental Video and Multi-Media</td>
<td></td>
</tr>
<tr>
<td>FMA 2396</td>
<td>Screenwriting I</td>
<td>1</td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMA 1451</td>
<td>Survey of New Media</td>
<td></td>
</tr>
<tr>
<td>FMA 2675</td>
<td>Film History I (1895-1950)</td>
<td></td>
</tr>
<tr>
<td>FMA 2676</td>
<td>Film History II (1950-Present)</td>
<td></td>
</tr>
<tr>
<td>FMA 2678</td>
<td>History of Experimental Film and Video Art</td>
<td></td>
</tr>
</tbody>
</table>

Two FMA 2000+ level Studies or Production Electives 1

FMA 3000+ Writing-Intensive Elective (WI) 4

FMA 3000+ level Studies Elective 2 3-4

FMA 3000+ level Production or Studies Elective 2,3 3-4

---

1. If FMA 2396 is not taken, then one of the 2000+ Studies or Production electives must be Writing Intensive.

2. With faculty advisor's approval
For which the student has completed the prerequisites.

### Suggested Academic Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

**Bachelor of Arts in Film and Media Arts**

**Requirements for New Students Starting in the 2015-2016 Academic Year**

<table>
<thead>
<tr>
<th>Year 1</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td>Credit Hours</td>
<td></td>
</tr>
<tr>
<td>FMA 1141</td>
<td>Media Arts I</td>
<td>4</td>
</tr>
<tr>
<td>FMA 1171</td>
<td>Media Culture</td>
<td>3</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FMA 1142</td>
<td>Media Arts II</td>
<td>4</td>
</tr>
<tr>
<td>FMA 1172</td>
<td>Introduction to Film and Video Analysis</td>
<td>3</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>16</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3-4</td>
<td></td>
</tr>
<tr>
<td>FMA 1451</td>
<td>Survey of New Media</td>
<td></td>
</tr>
<tr>
<td>FMA 2675</td>
<td>Film History I (1895-1950)</td>
<td></td>
</tr>
<tr>
<td>FMA 2676</td>
<td>Film History II (1950-Present)</td>
<td></td>
</tr>
<tr>
<td>FMA 2678</td>
<td>History of Experimental Film and Video Art</td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>FMA 2241</td>
<td>Filmmaking</td>
<td></td>
</tr>
<tr>
<td>FMA 2242</td>
<td>Videography</td>
<td></td>
</tr>
<tr>
<td>FMA 2451</td>
<td>Experimental Video and Multi-Media</td>
<td></td>
</tr>
<tr>
<td>FMA 2396</td>
<td>Screenwriting I [WI]</td>
<td></td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>16-17</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FMA 2000+ Studies or Production Elective</td>
<td>3-4</td>
<td></td>
</tr>
<tr>
<td>FMA 2000+ Studies or Production Elective</td>
<td>3-4</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>15-17</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FMA 3000+ Studies Elective</td>
<td>3-4</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3-4</td>
<td></td>
</tr>
<tr>
<td>Electives</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>15-17</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3-4</td>
<td></td>
</tr>
</tbody>
</table>
Bachelor of Arts in Film and Media Arts: Concentration in Cinematography

Summary of Requirements for the Degree

The Bachelor of Arts degree may be conferred upon a student majoring in Film and Media Arts with a concentration in Cinematography by recommendation of the faculty and upon satisfactory completion of a minimum of 120 credit hours. Students must complete:

1. University requirements:
   • New students are required to complete the General Education (GenEd (p. 143)) curriculum.
   • All students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for this major are listed below and identified with the code "WI".

2. No more than 21 FMA credits can be transferred to the major.
3. A student must earn a grade of "C-" or better in all Film and Media Arts courses that count towards the degree.
4. Students may take up to 6 internship credits in Film and Media Arts.
5. Students may count a maximum of 66 FMA credit hours toward the 120 credit hours required for the degree.

FMA Foundation Courses

Film and Media Arts students will complete the following courses by the end of the sophomore year:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMA 1141</td>
<td>Media Arts I</td>
<td>4</td>
</tr>
<tr>
<td>FMA 1142</td>
<td>Media Arts II</td>
<td>4</td>
</tr>
<tr>
<td>FMA 1171</td>
<td>Media &amp; Culture</td>
<td>3</td>
</tr>
<tr>
<td>FMA 1172</td>
<td>Introduction to Film and Video Analysis</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credit Hours</strong></td>
<td></td>
<td><strong>14</strong></td>
</tr>
</tbody>
</table>

Concentration Requirements

Courses required after completion of FMA Foundation Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMA 2241</td>
<td>Filmmaking</td>
<td>4</td>
</tr>
<tr>
<td>FMA 2242</td>
<td>Videography</td>
<td>4</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FMA 2551</td>
<td>Editing Film and Video</td>
<td>4</td>
</tr>
</tbody>
</table>
### Bachelor of Arts in Film and Media Arts: Cinematography Concentration

#### Requirements for New Students starting in the 2015-2016 Academic Year

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>FMA 1141</td>
<td>Media Arts I</td>
</tr>
<tr>
<td>FMA 1171</td>
<td>Media Culture</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>FMA 1142</td>
<td>Media Arts II</td>
</tr>
<tr>
<td>FMA 1172</td>
<td>Introduction to Film and Video Analysis</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>FMA 2241</td>
<td>Filmmaking</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
</tr>
</tbody>
</table>

---

1. If FMA 2396 is not taken, then free elective must be Writing Intensive.

2. The following are the Writing Intensive courses in Film and Media Arts: FMA 2396 Screenwriting I; FMA 3696 Writing Intensive Film Study; FMA 3896 Advanced Film Analysis; FMA 4697 Advanced Film History; and FMA 4698 History of Documentary.

---

**Suggested Academic Plan**

Please note that this is a *suggested* academic plan. Depending on your situation, your academic plan may look different.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMA 1451</td>
<td>Survey of New Media</td>
<td></td>
</tr>
<tr>
<td>FMA 2675</td>
<td>Film History I (1895-1950)</td>
<td></td>
</tr>
<tr>
<td>FMA 2676</td>
<td>Film History II (1950-Present)</td>
<td></td>
</tr>
<tr>
<td>FMA 2678</td>
<td>History of Experimental Film and Video Art</td>
<td></td>
</tr>
</tbody>
</table>

**Spring**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMA 2242</td>
<td>Videography</td>
<td>4</td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FMA 2551</td>
<td>Editing Film and Video</td>
<td>4</td>
</tr>
<tr>
<td>FMA 2396</td>
<td>Screenwriting I [WI]</td>
<td></td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 13-14

**Year 3**

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMA 3244</td>
<td>Lighting for Film and Video</td>
<td>4</td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FMA 3246</td>
<td>Making Documentaries</td>
<td>4</td>
</tr>
<tr>
<td>FMA 2674</td>
<td>History of Photography</td>
<td></td>
</tr>
<tr>
<td>FMA 2244</td>
<td>Still Photography for Filmmakers</td>
<td></td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 17

**Spring**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMA 3473</td>
<td>Moving Camera</td>
<td>4</td>
</tr>
<tr>
<td>FMA 2000+ Writing Intensive Studies Elective [WI]</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>THTR 2511</td>
<td>Lighting for the Theater</td>
<td></td>
</tr>
<tr>
<td>THTR 3611</td>
<td>Visual History I</td>
<td></td>
</tr>
<tr>
<td>THTR 3612</td>
<td>Visual History II</td>
<td></td>
</tr>
<tr>
<td>THTR 4582</td>
<td>Lighting Design</td>
<td></td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 14

**Year 4**

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMA 4245</td>
<td>Cinematography Master Class I</td>
<td>4</td>
</tr>
<tr>
<td>FMA 3000+ Advanced Writing Intensive Course [WI]</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Electives</td>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 14

**Spring**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMA 4246</td>
<td>Cinematography Master Class II</td>
<td>4</td>
</tr>
<tr>
<td>FMA 2000+ Free Elective</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Electives</td>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 14

**Total Credit Hours**: 120-121

---

1 FMA 2396 Screenwriting I counts as a Writing Intensive course. FMA 2551 Editing Film and Video does not.
2 Students who have already completed their 2000-level Writing Intensive requirement by taking FMA 2396 Screenwriting I may take any 2000+ FMA course as an elective. Students who have not completed their 2000-level Writing Intensive requirement must take a 2000-level Writing Intensive course.
Bachelor of Arts in Film and Media Arts: Concentration in Post Production

The B.A. in Film and Media Arts with a Concentration in Post Production is a liberal arts degree that prepares students to enter graduate film programs or pursue professional careers in the film and television production with a focus on Post Production. Students will complete advanced work in Post Production in a two-semester master class capstone.

Bachelor of Arts in Film and Media Arts: Concentration in Post Production

Summary of Requirements for the Degree

The Bachelor of Arts degree may be conferred upon a student majoring in Film and Media Arts with a concentration in Post Production by recommendation of the faculty and upon satisfactory completion of a minimum of 121 credit hours. Students must complete:

1. University requirements:
   - New students are required to complete the General Education (GenEd (p. 143)) curriculum.
   - All students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for this major are listed below and identified with the code "WI".
2. No more than 21 FMA credits can be transferred to the major.
3. A student must earn a grade of "C-" or better in all Film and Media Arts courses that count towards the degree.
4. Students may take up to 6 internship credits in Film and Media Arts.
5. Students may count a maximum of 66 FMA credit hours toward the 121 credit hours required for the degree.

FMA Foundation Courses

Film and Media Arts students will complete the following courses by the end of the sophomore year:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMA 1141</td>
<td>Media Arts I</td>
<td>4</td>
</tr>
<tr>
<td>FMA 1142</td>
<td>Media Arts II</td>
<td>4</td>
</tr>
<tr>
<td>FMA 1171</td>
<td>Media &amp; Culture</td>
<td>3</td>
</tr>
<tr>
<td>FMA 1172</td>
<td>Introduction to Film and Video Analysis</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credit Hours</strong></td>
<td><strong>14</strong></td>
</tr>
</tbody>
</table>

Concentration Requirements

Courses required after completion of FMA Foundation Courses:

Select one of the following:

- FMA 2241 Filmmaking
- FMA 2242 Videography
- FMA 2000+ Writing Intensive Elective [WI] 1  3-4
- FMA 2551 Editing Film and Video
- FMA 3551 Advanced Editing
- FMA 2243 Audio: Production and Aesthetics

Select one of the following:

- FMA 4451 Digital Animation, Compositing and Modeling
- FMA 4243 Film and Video Sound
- Media Arts Elective

Select one of the following:

- FMA 1451 Survey of New Media
- FMA 2675 Film History I (1895-1950)
- FMA 2676 Film History II (1950-Present)
- FMA 2678 History of Experimental Film and Video Art
- FMA 3000+ Writing Intensive Elective [WI] 1  3-4
- FMA 3085 Internship

Select one of the following:

- FMA 3246 Making Documentaries
- FMA 3242 Experimental Media Workshop
FMA 3341  Scene Analysis for Writers and Directors
FMA 4341  Screen Directing
FMA 4253
FMA 4254

Total Credit Hours 45-48

1 The following are the Writing Intensive courses in Film and Media Arts: FMA 2396 Screenwriting I; FMA 3696 Writing Intensive Film Study; FMA 3896 Advanced Film Analysis; FMA 4697 Advanced Film History; and FMA 4698 History of Documentary.

Suggested Academic Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Arts in Film and Media Arts: Concentration in Post Production

Requirements for New Students starting in the 2015-2016 Academic Year

Year 1

Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMA 1141</td>
<td>Media Arts I</td>
<td>4</td>
</tr>
<tr>
<td>FMA 1171</td>
<td>Media Culture</td>
<td>3</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>

Term Credit Hours 15

Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMA 1142</td>
<td>Media Arts II</td>
<td>4</td>
</tr>
<tr>
<td>FMA 1172</td>
<td>Introduction to Film and Video Analysis</td>
<td>3</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

Term Credit Hours 16

Year 2

Fall

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMA 2241</td>
<td>Filmmaking</td>
</tr>
<tr>
<td>FMA 2242</td>
<td>Videography</td>
</tr>
<tr>
<td>FMA 2000+ Writing Intensive Studies Elective [WI]</td>
<td></td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td></td>
</tr>
</tbody>
</table>

Term Credit Hours 16-17

Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMA 2243</td>
<td>Audio: Production and Aesthetics</td>
<td>4</td>
</tr>
<tr>
<td>FMA 2551</td>
<td>Editing Film and Video</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

Term Credit Hours 14

Year 3

Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMA 3551</td>
<td>Advanced Editing</td>
<td>4</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>FMA 3246</td>
<td>Making Documentaries</td>
<td></td>
</tr>
<tr>
<td>FMA 3242</td>
<td>Experimental Media Workshop</td>
<td></td>
</tr>
<tr>
<td>FMA 3341</td>
<td>Scene Analysis for Writers and Directors</td>
<td></td>
</tr>
<tr>
<td>FMA 4341</td>
<td>Screen Directing</td>
<td></td>
</tr>
</tbody>
</table>
Bachelor of Arts in Film and Media Arts: Concentration in Producing

The Bachelor of Arts degree may be conferred upon a student majoring in Film and Media Arts with a concentration in Producing by recommendation of the faculty and upon satisfactory completion of a minimum of 120 credit hours. Students must complete:

1. University requirements:
   - New students are required to complete the General Education (GenEd) curriculum.
   - All students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for this major are listed below and identified with the code "WI".

2. No more than 21 FMA credits can be transferred to the major.
3. A student must earn a grade of "C-" or better in all Film and Media Arts courses that count towards the degree.
4. Students may take up to 6 internship credits in Film and Media Arts.
5. Students may count a maximum of 66 FMA credit hours toward the 120 credit hours required for the degree.

FMA Foundation Courses

Film and Media Arts students will complete the following courses by the end of the sophomore year:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMA 1141</td>
<td>Media Arts I</td>
<td>4</td>
</tr>
<tr>
<td>FMA 1142</td>
<td>Media Arts II</td>
<td>4</td>
</tr>
</tbody>
</table>
FMA 1171  Media & Culture  3
FMA 1172  Introduction to Film and Video Analysis  3

Total Credit Hours  14

Concentration Requirements

Courses required after completion of FMA Foundation Courses:

Select one of the following:

FMA 2241  Filmmaking  4
FMA 2242  Videography  4
FMA 2771  Producing  4

Select one of the following:

FMA 2551  Editing Film and Video  4
FMA 2396  Screenwriting I  1,2  3
FMA 3771  Exhibition and Distribution of Independent Media  3
FMA 3772  Fundraising for Independent Media  3

Select one of the following:

FMA 1451  Survey of New Media  3-4
FMA 2675  Film History I (1895-1950)  3-4
FMA 2676  Film History II (1950-Present)  3-4
FMA 2678  History of Experimental Film and Video Art  3-4
FMA 2000+ Free Elective  3-4
FMA 3000+ Writing Intensive Elective [WI]  3-4
FMA 3085  Internship (may be split over two different internships)  3-6

Select one of the following:

FMA 3242  Experimental Media Workshop  4
FMA 3246  Making Documentaries  4
FMA 3341  Scene Analysis for Writers and Directors  4
FMA 4341  Screen Directing  4
FMA 4251  4
FMA 4252  4

Total Credit Hours  43-48

1  If FMA 2396 is not taken, then free elective must be Writing Intensive.
2  The following are the Writing Intensive courses in Film and Media Arts: FMA 2396 Screenwriting I; FMA 3696 Writing Intensive Film Study; FMA 3896 Advanced Film Analysis; FMA 4697 Advanced Film History; and FMA 4698 History of Documentary.

Suggested Academic Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Arts in Film and Media Arts: Concentration in Producing

Requirements for New Students starting in the 2015-2016 Academic Year

Year 1

Fall

FMA 1141  Media Arts I  4
FMA 1171  Media Culture  3
ENG 0802, 0812, or 0902  Analytical Reading and Writing [GW]  4
GenEd Quantitative Literacy Course [GQ]  4

Term Credit Hours  15

Spring

FMA 1142  Media Arts II  4
FMA 1172  Introduction to Film and Video Analysis  3
IH 0851 or 0951  Mosaic: Humanities Seminar I [GY]  3
<table>
<thead>
<tr>
<th>Year 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>4</td>
</tr>
<tr>
<td>FMA 2241</td>
<td>Filmmaking</td>
</tr>
<tr>
<td>FMA 2242</td>
<td>Videography</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3-4</td>
</tr>
<tr>
<td>FMA 1451</td>
<td>Survey of New Media</td>
</tr>
<tr>
<td>FMA 2675</td>
<td>Film History I (1895-1950)</td>
</tr>
<tr>
<td>FMA 2676</td>
<td>Film History II (1950-Present)</td>
</tr>
<tr>
<td>FMA 2678</td>
<td>History of Experimental Film and Video Art</td>
</tr>
<tr>
<td>FMA 2000+ Free Elective</td>
<td>3-4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 16

<table>
<thead>
<tr>
<th>Year 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>4</td>
</tr>
<tr>
<td>FMA 2396</td>
<td>Screenwriting I [WI]²</td>
</tr>
<tr>
<td>FMA 2551</td>
<td>Editing Film and Video²</td>
</tr>
<tr>
<td>FMA 2771</td>
<td>Producing</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 13-15

<table>
<thead>
<tr>
<th>Year 3</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>FMA 3771</td>
<td>Exhibition and Distribution of Independent Media</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>4</td>
</tr>
<tr>
<td>FMA 3242</td>
<td>Experimental Media Workshop</td>
</tr>
<tr>
<td>FMA 3246</td>
<td>Making Documentaries</td>
</tr>
<tr>
<td>FMA 3341</td>
<td>Scene Analysis for Writers and Directors</td>
</tr>
<tr>
<td>FMA 4341</td>
<td>Screen Directing</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>6</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 16

<table>
<thead>
<tr>
<th>Year 3</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>FMA 3772</td>
<td>Fundraising for Independent Media</td>
</tr>
<tr>
<td>FMA 3085</td>
<td>Internship</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 13

<table>
<thead>
<tr>
<th>Year 4</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>FMA 4251</td>
<td></td>
</tr>
<tr>
<td>FMA 3000+ Advanced Writing Intensive Course [WI]</td>
<td>4</td>
</tr>
<tr>
<td>Electives</td>
<td>6</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 14

<table>
<thead>
<tr>
<th>Year 4</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>FMA 4252</td>
<td>4</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 4
Bachelor of Arts in Film and Media Arts: Concentration in Screen Studies

The B.A. in Film and Media Arts with a Concentration in Screen Studies is a liberal arts degree that allows students to study in depth the aesthetics, history, and cultural significance of moving-image media. It draws upon the fields of cinema studies and humanities-based disciplines of media studies and media arts theory, while also encouraging students to approach screen cultures from neighboring disciplines, such as cultural studies, area studies, art history, or visual studies.

Summary of Requirements for the Degree

The Bachelor of Arts degree may be conferred upon a student majoring in Film and Media Arts with a concentration in Screen Studies by recommendation of the faculty and upon satisfactory completion of a minimum of 121 credit hours. Students must complete:

1. University requirements:
   - New students are required to complete the General Education (GenEd) curriculum.
   - All students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for this major are listed below and identified with the code "WI".

2. No more than 21 FMA credits can be transferred to the major.

3. A student must earn a grade of "C-" or better in all Film and Media Arts courses that count towards the degree.

4. Students may take up to 6 internship credits in Film and Media Arts.

5. Students may count a maximum of 66 FMA credit hours toward the 121 credit hours required for the degree.

FMA Foundation Courses

Film and Media Arts students will complete the following courses by the end of the sophomore year:

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMA 1141</td>
<td>Media Arts I</td>
<td>4</td>
</tr>
<tr>
<td>FMA 1144</td>
<td>Media Arts for Non-Production Majors</td>
<td>4</td>
</tr>
<tr>
<td>FMA 1171</td>
<td>Media &amp; Culture</td>
<td>3</td>
</tr>
<tr>
<td>FMA 1172</td>
<td>Introduction to Film and Video Analysis</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credit Hours 10

Concentration Requirements

Courses required after completion of Screen Studies Foundation Courses:

Select two of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMA 1451</td>
<td>Survey of New Media</td>
<td>4</td>
</tr>
<tr>
<td>FMA 2674</td>
<td>History of Photography</td>
<td>4</td>
</tr>
<tr>
<td>FMA 2675</td>
<td>Film History I (1895-1950)</td>
<td>3</td>
</tr>
<tr>
<td>FMA 2676</td>
<td>Film History II (1950-Present)</td>
<td>3</td>
</tr>
<tr>
<td>FMA 2678</td>
<td>History of Experimental Film and Video Art</td>
<td>3</td>
</tr>
<tr>
<td>FMA 4698</td>
<td>History of Documentary</td>
<td>3</td>
</tr>
</tbody>
</table>

FMA 2000+ Writing Intensive Studies Elective [WI] 3

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMA 3671</td>
<td>Theory and Practice of Media Culture</td>
<td>4</td>
</tr>
<tr>
<td>FMA 3871</td>
<td>Film Theory</td>
<td>4</td>
</tr>
</tbody>
</table>

FMA 3872
Select one of the following:  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMA 2670</td>
<td>Topics in Film Study</td>
</tr>
<tr>
<td>FMA 2671</td>
<td>Film Noir</td>
</tr>
<tr>
<td>FMA 2672</td>
<td>Film Comedy</td>
</tr>
<tr>
<td>FMA 3670</td>
<td>Topics in Media Culture</td>
</tr>
<tr>
<td>FMA 3770</td>
<td>Topics in Film Study</td>
</tr>
<tr>
<td>FMA 3696</td>
<td>Writing Intensive Film Study</td>
</tr>
<tr>
<td>FMA 3679</td>
<td></td>
</tr>
</tbody>
</table>

Select two of the following:  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMA 3677</td>
<td>American Film</td>
</tr>
<tr>
<td>FMA 3678</td>
<td></td>
</tr>
<tr>
<td>FMA 4673</td>
<td>International Cinema</td>
</tr>
<tr>
<td>FMA 4674</td>
<td>Anthropological Film/Video</td>
</tr>
</tbody>
</table>

Select one of the following:  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMA 2673</td>
<td>Independent Film/Video</td>
</tr>
<tr>
<td>FMA 3341</td>
<td>Scene Analysis for Writers and Directors</td>
</tr>
<tr>
<td>FMA 3672</td>
<td>Contemporary Screen Studies</td>
</tr>
<tr>
<td>FMA 4675</td>
<td>Women Film/Video Artists</td>
</tr>
</tbody>
</table>

Select one of the following:  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMA 4697</td>
<td>Advanced Film History</td>
</tr>
<tr>
<td>FMA 4896</td>
<td></td>
</tr>
</tbody>
</table>

Two Semesters of Foreign Language  

Total Credit Hours  

The following are the Writing Intensive courses in Film and Media Arts: FMA 2396 Screenwriting I; FMA 3696 Writing Intensive Film Study; FMA 3896 Advanced Film Analysis; FMA 4697 Advanced Film History; and FMA 4698 History of Documentary.  

Suggested Academic Plan  

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.  

Bachelor of Arts in Film and Media Arts: Concentration in Screen Studies  

Requirements for New Students starting in the 2015-2016 Academic Year  

Year 1  

Fall  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMA 1451</td>
<td>Survey of New Media</td>
<td>3-4</td>
</tr>
<tr>
<td>FMA 1141</td>
<td>Media Arts I</td>
<td>4</td>
</tr>
<tr>
<td>FMA 1144</td>
<td>Media Arts for Non-Production Majors</td>
<td>4</td>
</tr>
<tr>
<td>One Semester of Foreign Language (may be continuation of prior language study)</td>
<td>3-4</td>
<td></td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

Spring  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMA 1171</td>
<td>Media Culture</td>
<td>3</td>
</tr>
<tr>
<td>FMA 1172</td>
<td>Introduction to Film and Video Analysis</td>
<td>3</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

Term Credit Hours  

Year 2  

Fall  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMA 1141</td>
<td>Media Arts I</td>
<td>4</td>
</tr>
<tr>
<td>FMA 1144</td>
<td>Media Arts for Non-Production Majors</td>
<td>4</td>
</tr>
</tbody>
</table>

One Semester of Foreign Language (may be continuation of prior language study)  

Term Credit Hours  

1  

The following are the Writing Intensive courses in Film and Media Arts: FMA 2396 Screenwriting I; FMA 3696 Writing Intensive Film Study; FMA 3896 Advanced Film Analysis; FMA 4697 Advanced Film History; and FMA 4698 History of Documentary.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMA 2674</td>
<td>History of Photography</td>
<td>3-4</td>
</tr>
<tr>
<td>FMA 2675</td>
<td>Film History I (1895-1950)</td>
<td></td>
</tr>
<tr>
<td>FMA 2676</td>
<td>Film History II (1950-Present)</td>
<td></td>
</tr>
<tr>
<td>FMA 2678</td>
<td>History of Experimental Film and Video Art</td>
<td></td>
</tr>
<tr>
<td>FMA 4698</td>
<td>History of Documentary [WI]</td>
<td></td>
</tr>
<tr>
<td>FMA 2000+</td>
<td>Writing Intensive Studies Elective [WI]</td>
<td>3-4</td>
</tr>
<tr>
<td>IH 0852 or</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 15-17

### Year 3

#### Fall

Select one of the following: 3-4

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMA 1451</td>
<td>Survey of New Media</td>
</tr>
<tr>
<td>FMA 2674</td>
<td>History of Photography</td>
</tr>
<tr>
<td>FMA 2675</td>
<td>Film History I (1895-1950)</td>
</tr>
<tr>
<td>FMA 2676</td>
<td>Film History II (1950-Present)</td>
</tr>
<tr>
<td>FMA 2678</td>
<td>History of Experimental Film and Video Art</td>
</tr>
<tr>
<td>FMA 4698</td>
<td>History of Documentary [WI]</td>
</tr>
</tbody>
</table>

Electives 6

GenEd Breadth Course 3

**Term Credit Hours**: 15-16

#### Spring

Select one of the following: 4

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMA 3671</td>
<td>Theory and Practice of Media Culture</td>
</tr>
<tr>
<td>FMA 3871</td>
<td>Film Theory</td>
</tr>
<tr>
<td>FMA 3872</td>
<td></td>
</tr>
</tbody>
</table>

Select one of the following: 3-4

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMA 2670</td>
<td>Topics in Film Study</td>
</tr>
<tr>
<td>FMA 2671</td>
<td>Film Noir</td>
</tr>
<tr>
<td>FMA 2672</td>
<td>Film Comedy</td>
</tr>
<tr>
<td>FMA 3670</td>
<td>Topics in Media Culture</td>
</tr>
<tr>
<td>FMA 3696</td>
<td>Writing Intensive Film Study [WI]</td>
</tr>
<tr>
<td>FMA 3679</td>
<td></td>
</tr>
<tr>
<td>FMA 3770</td>
<td>Topics in Film Study</td>
</tr>
</tbody>
</table>

Electives 6

GenEd Breadth Course 3

**Term Credit Hours**: 16-17

### Year 4

#### Fall

Select two from the following: 7-8

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMA 2673</td>
<td>Independent Film/Video</td>
</tr>
<tr>
<td>FMA 3341</td>
<td>Scene Analysis for Writers and Directors</td>
</tr>
<tr>
<td>FMA 3672</td>
<td>Contemporary Screen Studies</td>
</tr>
<tr>
<td>FMA 4675</td>
<td>Women Film/Video Artists</td>
</tr>
</tbody>
</table>

Electives 6

GenEd Breadth Course 3

GenEd Breadth Course 3

**Term Credit Hours**: 16

---

*Temple University Undergraduate Bulletin 2015-2016*
Bachelor of Fine Arts in Film and Media Arts: Concentration in Directing

The BFA in Media Arts with a Concentration in Directing is an intensive, professional degree that prepares students to enter graduate Film programs or pursue professional careers in screen directing. It focuses on both fictional and non-fictional directing. Studies will culminate in the direction of an advanced creative production in the BFA Directing Project Classes. Narrative and documentary students will take the same curriculum except as follows. Narrative students will choose two from a list of three courses: Screen Directing, Screen Performance, and Scene Analysis. Documentary students will choose two from a list of four courses: Making Documentaries, Experimental Media Workshop, Anthropological Film/Media or Researching and Developing Documentaries. The total FMA credits required is 71-73.

Students interested in the Directing concentration must submit a program request form to the department. To be considered students need to complete 60 credits by the end of their sophomore year, earn an average of 3.0 in six foundational and intermediate courses and provide a portfolio. The program request form must be submitted to the department no later than the deadline announced on the Film and Media Studies Undergraduate Listserv in the spring semester in which the student reaches sixty credits. Students with less than an average of 3.0 in the six courses may petition the department for admission to the BFA Directing concentration. (See department for details.) Students who were not admitted to the BFA Directing concentration can continue in the BA in Film and Media Arts or the BA in Film and Media Arts with a Concentration in Screen Studies or apply for one of the three BA production concentrations.

Transfer students who have transferred Film and Media Arts courses with a grade of B or better may apply to the BFA program. These students must also present a portfolio. Transfer students with an associate’s degree in a related field who are accepted into the BFA program will most likely need additional semesters to complete their degree.

Bachelor of Fine Arts in Film and Media Studies: Concentration in Directing

Summary of Requirements for the Degree

The Bachelor of Fine Arts degree may be conferred upon a student majoring in Film and Media Arts by recommendation of the faculty and upon satisfactory completion of a minimum of 122 credit hours. Students must complete:

1. University Requirements:
   - New students are required to complete the General Education (GenEd (p. 143)) curriculum.
   - All students must take a minimum of two writing-intensive courses specified by the major. The specific writing-intensive courses requirement for this major are listed below and identified with the code "WI".

2. No more than 21 FMA credits can be transferred to the major.
3. A student must earn a grade of "C-" or better in all Film and Media Arts courses that count towards the degree.
4. Students may take up to 6 internship credits in Film and Media Arts.
5. Students may count a maximum of 84 FMA credit hours toward the 122 credit hours required for the degree.

FMA Foundation Courses

Film and Media Arts students will complete the following courses by the end of the sophomore year:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMA 1141</td>
<td>Media Arts I</td>
<td>4</td>
</tr>
<tr>
<td>FMA 1142</td>
<td>Media Arts II</td>
<td>4</td>
</tr>
<tr>
<td>FMA 1171</td>
<td>Media &amp; Culture</td>
<td>3</td>
</tr>
</tbody>
</table>
FMA 1172  
Introduction to Film and Video Analysis  

Total Credit Hours  14

Concentration Requirements

Courses required after completion of FMA Foundation Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMA 2241</td>
<td>Filmmaking</td>
<td>4</td>
</tr>
<tr>
<td>FMA 2242</td>
<td>Videography</td>
<td>4</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>3-4</td>
</tr>
<tr>
<td>FMA 1451</td>
<td>Survey of New Media</td>
<td></td>
</tr>
<tr>
<td>FMA 2675</td>
<td>Film History I (1895-1950)</td>
<td></td>
</tr>
<tr>
<td>FMA 2676</td>
<td>Film History II (1950-Present)</td>
<td></td>
</tr>
<tr>
<td>FMA 2678</td>
<td>History of Experimental Film and Video Art</td>
<td></td>
</tr>
<tr>
<td>FMA 2396</td>
<td>Screenwriting I</td>
<td>4</td>
</tr>
<tr>
<td>FMA 2551</td>
<td>Editing Film and Video</td>
<td>4</td>
</tr>
<tr>
<td>FMA 2771</td>
<td>Producing</td>
<td>4</td>
</tr>
<tr>
<td>FMA 3000+</td>
<td>Studies Elective</td>
<td>3-4</td>
</tr>
<tr>
<td>FMA 3773</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Select two of the following:</td>
<td></td>
<td>7-8</td>
</tr>
<tr>
<td>(for Narrative students)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FMA 4341</td>
<td>Screen Directing</td>
<td></td>
</tr>
<tr>
<td>FMA 3361</td>
<td>Screen Performance</td>
<td></td>
</tr>
<tr>
<td>FMA 3341</td>
<td>Scene Analysis for Writers and Directors</td>
<td></td>
</tr>
<tr>
<td>(for Documentary students)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FMA 3246</td>
<td>Making Documentaries</td>
<td></td>
</tr>
<tr>
<td>FMA 3242</td>
<td>Experimental Media Workshop</td>
<td></td>
</tr>
<tr>
<td>FMA 3247</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FMA 4674</td>
<td>Anthropological Film/Media</td>
<td></td>
</tr>
<tr>
<td>FMA 3343</td>
<td>Screenwriting II</td>
<td>4</td>
</tr>
<tr>
<td>FMA 3241</td>
<td>BFA Junior Directing Projects</td>
<td>4</td>
</tr>
<tr>
<td>FMA 4241</td>
<td>Senior Project I</td>
<td>4</td>
</tr>
<tr>
<td>FMA 4242</td>
<td>Senior Project II</td>
<td>4</td>
</tr>
<tr>
<td>FMA</td>
<td>Advanced Writing Intensive Elective (WI)</td>
<td>4</td>
</tr>
</tbody>
</table>

Total Credit Hours  57-60

The following are the Writing Intensive courses in Film and Media Arts: FMA 2396 Screenwriting I; FMA 3696 Writing Intensive Film Study; FMA 3896 Advanced Film Analysis; FMA 4697 Advanced Film History; and FMA 4698 History of Documentary.

Suggested Academic Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Fine Arts in Film and Media Arts with Concentration in Directing

Requirements for New Students starting in the 2015-2016 Academic Year

Year 1

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>FMA 1141</td>
<td>Media Arts I</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>FMA 1171</td>
<td>Media Culture</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Term Credit Hours</td>
<td>15</td>
</tr>
<tr>
<td>Spring</td>
<td>FMA 1142</td>
<td>Media Arts II</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>FMA 1172</td>
<td>Introduction to Film and Video Analysis</td>
<td>3</td>
</tr>
<tr>
<td>Year 2</td>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td>------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FMA 2241</td>
<td>Filmmaking</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>FMA 2551</td>
<td>Editing Film and Video</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>16</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Select one of the following:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FMA 1451</td>
<td>Survey of New Media</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FMA 2675</td>
<td>Film History I (1895-1950)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FMA 2676</td>
<td>Film History II (1950-Present)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FMA 2678</td>
<td>History of Experimental Film and Video Art</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Year 3**

<table>
<thead>
<tr>
<th>Year 3</th>
<th>Fall</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMA 3773</td>
<td></td>
</tr>
<tr>
<td><strong>Select two of the following:</strong></td>
<td></td>
</tr>
<tr>
<td>Narrative students select from</td>
<td></td>
</tr>
<tr>
<td>FMA 4341</td>
<td>Screen Directing</td>
</tr>
<tr>
<td>FMA 3361</td>
<td>Screen Performance</td>
</tr>
<tr>
<td>FMA 3341</td>
<td>Scene Analysis for Writers and Directors</td>
</tr>
<tr>
<td>Documentary students select from</td>
<td></td>
</tr>
<tr>
<td>FMA 3246</td>
<td>Making Documentaries</td>
</tr>
<tr>
<td>FMA 3242</td>
<td>Experimental Media Workshop</td>
</tr>
<tr>
<td>FMA 3247</td>
<td></td>
</tr>
<tr>
<td>FMA 4674</td>
<td>Anthropological Film/Media</td>
</tr>
<tr>
<td><strong>GenEd Breadth Course</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Elective</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Term Credit Hours**

<table>
<thead>
<tr>
<th>Year 4</th>
<th>Fall</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMA 4241</td>
<td>Senior Project I</td>
</tr>
<tr>
<td>FMA 3000+ Studies Elective</td>
<td></td>
</tr>
<tr>
<td><strong>GenEd Breadth Course</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Electives</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Term Credit Hours**

<table>
<thead>
<tr>
<th>Year 4</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMA 4242</td>
<td>Senior Project II</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Fall</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMA 2241</td>
<td>Filmmaking</td>
</tr>
<tr>
<td>FMA 2551</td>
<td>Editing Film and Video</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Select one of the following:</strong></td>
<td></td>
</tr>
<tr>
<td>FMA 1451</td>
<td>Survey of New Media</td>
</tr>
<tr>
<td>FMA 2675</td>
<td>Film History I (1895-1950)</td>
</tr>
<tr>
<td>FMA 2676</td>
<td>Film History II (1950-Present)</td>
</tr>
<tr>
<td>FMA 2678</td>
<td>History of Experimental Film and Video Art</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
</tr>
</tbody>
</table>

**Year 3**

<table>
<thead>
<tr>
<th>Year 3</th>
<th>Fall</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMA 3773</td>
<td></td>
</tr>
<tr>
<td><strong>Select two of the following:</strong></td>
<td></td>
</tr>
<tr>
<td>Narrative students select from</td>
<td></td>
</tr>
<tr>
<td>FMA 4341</td>
<td>Screen Directing</td>
</tr>
<tr>
<td>FMA 3361</td>
<td>Screen Performance</td>
</tr>
<tr>
<td>FMA 3341</td>
<td>Scene Analysis for Writers and Directors</td>
</tr>
<tr>
<td>Documentary students select from</td>
<td></td>
</tr>
<tr>
<td>FMA 3246</td>
<td>Making Documentaries</td>
</tr>
<tr>
<td>FMA 3242</td>
<td>Experimental Media Workshop</td>
</tr>
<tr>
<td>FMA 3247</td>
<td></td>
</tr>
<tr>
<td>FMA 4674</td>
<td>Anthropological Film/Media</td>
</tr>
<tr>
<td><strong>GenEd Breadth Course</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Elective</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Term Credit Hours**

<table>
<thead>
<tr>
<th>Year 4</th>
<th>Fall</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMA 4241</td>
<td>Senior Project I</td>
</tr>
<tr>
<td>FMA 3000+ Studies Elective</td>
<td></td>
</tr>
<tr>
<td><strong>GenEd Breadth Course</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Electives</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Term Credit Hours**

<table>
<thead>
<tr>
<th>Year 4</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMA 4242</td>
<td>Senior Project II</td>
</tr>
</tbody>
</table>
Suggested Academic Plan for LA-Away Program

Please note that the following academic plan is for students attending the LA-Away Program in the Fall of their Junior year.

Bachelor of Fine Arts in Film and Media Arts with Concentration in Directing: LA-Away Program

Requirements for New Students starting in the 2015-2016 Academic Year

### Year 1

<table>
<thead>
<tr>
<th>Term</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>FMA 1141</td>
<td>Media Arts I</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>FMA 1171</td>
<td>Media Culture</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>Spring</td>
<td>FMA 1142</td>
<td>Media Arts II</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>FMA 1172</td>
<td>Introduction to Film and Video Analysis</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>16</td>
</tr>
</tbody>
</table>

### Year 2

<table>
<thead>
<tr>
<th>Term</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>FMA 2241</td>
<td>Filmmaking</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>FMA 2551</td>
<td>Editing Film and Video</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Select one of the following:</td>
<td></td>
<td>3-4</td>
</tr>
<tr>
<td></td>
<td>FMA 1451</td>
<td>Survey of New Media</td>
<td></td>
</tr>
<tr>
<td></td>
<td>FMA 2675</td>
<td>Film History I (1895-1950)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>FMA 2676</td>
<td>Film History II (1950-Present)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>FMA 2678</td>
<td>History of Experimental Film and Video Art</td>
<td></td>
</tr>
<tr>
<td></td>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>14-15</td>
</tr>
<tr>
<td>Spring</td>
<td>FMA 2396</td>
<td>Screenwriting I [WI]</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>FMA 2242</td>
<td>Videography</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>FMA 2771</td>
<td>Producing</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

### Year 3

<table>
<thead>
<tr>
<th>Term</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>FMA 3085</td>
<td>Internship</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>FMA 3770</td>
<td>Topics in Film Study (Entertainment Industry Perspectives)</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>FMA 3696</td>
<td>Writing Intensive Film Study [WI]</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

Spring
FMA 3241  BFA Junior Directing Projects  4
FMA 3343  Screenwriting II  4
Select two of the following:  7-8

Narrative students select from
FMA 4341  Screen Directing
FMA 3361  Screen Performance
FMA 3341  Scene Analysis for Writers and Directors

Documentary students select from
FMA 3246  Making Documentaries
FMA 3242  Experimental Media Workshop
FMA 3247
FMA 4674  Anthropological Film/Media

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15-16</th>
</tr>
</thead>
</table>

Year 4

Fall
FMA 4241  Senior Project I  4
FMA 3773
GenEd Breadth Course  3
GenEd Breadth Course  3
Electives  3

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>17</th>
</tr>
</thead>
</table>

Spring
FMA 4242  Senior Project II  4
GenEd Breadth Course  3
GenEd Breadth Course  3
GenEd Breadth Course  3
Electives  3

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>16</th>
</tr>
</thead>
</table>

Total Credit Hours:  123-125

Bachelor of Fine Arts in Film and Media Arts: Concentration in Media Arts

The BFA in Film and Media Arts with a Concentration in Media Arts is an intensive, professional degree that prepares students to enter graduate Media Arts programs or pursue artistic careers in the media arts including installations with one or more screens, arts with an element of performance (media projection design for Theater and Dance), narrative mapping, location-based virtual sculpture viewed through smartphones or tables, arts engaged by an interactive sensor, interactive narrative, video games, and/or other forms of experimental media. Studies will culminate in the completion and exhibition of an advanced creative project in the Media Arts Project Classes. The total FMA credits required is 71-73.

Students interested in the Media Arts concentration must submit a program request form to the department. To be considered students need to complete 60 credits by the end of their sophomore year, earn an average of 3.0 in six foundational and intermediate courses and provide a portfolio. The program request form must be submitted to the department no later than the deadline announced on the Film and Media Studies Undergraduate Listserv in the spring semester in which the student reaches sixty credits. Students with less than an average of 3.0 in the six courses may petition the department for admission to the BFA Media Arts concentration. (See department for details.) Students who were not admitted to the BFA Media Arts concentration can continue in the BA in Film and Media Arts or the BA in Film and Media Arts with a Concentration in Screen Studies or apply for one of the three BA production concentrations.

Transfer students who have transferred Film and Media Arts courses with a grade of B or better may apply to the BFA program. These students must also present a portfolio. Transfer students with an associate’s degree in a related field who are accepted into the BFA program will most likely need additional semesters to complete their degree.
Bachelor of Fine Arts in Film and Media Studies: Concentration in Media Arts

Summary of Requirements for the Degree

The Bachelor of Fine Arts degree may be conferred upon a student majoring in Film and Media Arts by recommendation of the faculty and upon satisfactory completion of a minimum of 120 credit hours. Students must complete:

1. University Requirements:
   • New students are required to complete the General Education (GenEd (p. 143)) curriculum.
   • All students must take a minimum of two writing-intensive courses specified by the major. The specific writing-intensive courses requirement for this major are listed below and identified with the code "WI".
2. No more than 21 FMA credits can be transferred to the major.
3. A student must earn a grade of "C-" or better in all Film and Media Arts courses that count towards the degree.
4. Students may take up to 6 internship credits in Film and Media Arts.
5. Students may count a maximum of 84 FMA credit hours toward the 120 credit hours required for the degree.

FMA Foundation Courses

Students seeking to enter the BFA with a Concentration in Media Arts will complete the following courses by the end of the sophomore year:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMA 1141</td>
<td>Media Arts I</td>
<td>4</td>
</tr>
<tr>
<td>FMA 1142</td>
<td>Media Arts II</td>
<td>4</td>
</tr>
<tr>
<td>FMA 1171</td>
<td>Media &amp; Culture</td>
<td>3</td>
</tr>
<tr>
<td>FMA 1451</td>
<td>Survey of New Media</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credit Hours</strong></td>
<td><strong>14</strong></td>
</tr>
</tbody>
</table>

Concentration Requirements

Courses required after completion of FMA Foundation Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMA 2242</td>
<td>Videography</td>
<td>4</td>
</tr>
<tr>
<td>FMA 3453</td>
<td>Interdisciplinary Media Studio</td>
<td>4</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>FMA 2452</td>
<td>Web Art &amp; Design</td>
<td></td>
</tr>
<tr>
<td>FMA 4441</td>
<td>Physical Computing</td>
<td></td>
</tr>
<tr>
<td>FMA 4451</td>
<td>Digital Animation, Compositing and Modeling</td>
<td></td>
</tr>
<tr>
<td>FMA 2451</td>
<td>Experimental Video and Multi-Media</td>
<td>4</td>
</tr>
<tr>
<td>FMA 2000+</td>
<td>Writing Intensive Elective (WI) 1</td>
<td>3-4</td>
</tr>
<tr>
<td>Select four of the following:</td>
<td></td>
<td>16</td>
</tr>
<tr>
<td>FMA 4248</td>
<td>Introduction to 3D: Modeling</td>
<td></td>
</tr>
<tr>
<td>FMA 4249</td>
<td>Introduction to 3D: Animation</td>
<td></td>
</tr>
<tr>
<td>FMA 2243</td>
<td>Audio: Production and Aesthetics</td>
<td></td>
</tr>
<tr>
<td>FMA 4441</td>
<td>Physical Computing</td>
<td></td>
</tr>
<tr>
<td>FMA 3242</td>
<td>Experimental Media Workshop</td>
<td></td>
</tr>
<tr>
<td>FMA 4461</td>
<td>Interactive Narrative</td>
<td></td>
</tr>
<tr>
<td>FMA 4462</td>
<td>Video Game Theory and Writing</td>
<td></td>
</tr>
<tr>
<td>FMA 4463</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FMA 3452</td>
<td>New Technologies Lab</td>
<td>4</td>
</tr>
<tr>
<td>FMA</td>
<td>Studies Elective in Digital Arts</td>
<td>3-4</td>
</tr>
<tr>
<td>FMA</td>
<td>Media History Studies Elective</td>
<td>3</td>
</tr>
<tr>
<td>FMA 3000+</td>
<td>Advanced Writing Intensive Elective (WI) 1</td>
<td></td>
</tr>
<tr>
<td>FMA 4442</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>FMA 4443</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credit Hours</strong></td>
<td><strong>57-59</strong></td>
</tr>
</tbody>
</table>

1 The following are Writing Intensive courses in Film and Media Arts: FMA 2396 Screenwriting I; FMA 3696 Writing Intensive Film Study; FMA 3896 Advanced Film Analysis; FMA 4697 Advanced Film History; and FMA 4698 History of Documentary.
## Suggested Academic Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

### Bachelor of Fine Arts in Film and Media Arts with Concentration in Media Arts

#### Requirements for New Students starting in the 2015-2016 Academic Year

<table>
<thead>
<tr>
<th>Year 1</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td>Credit Hours</td>
<td></td>
</tr>
<tr>
<td>FMA 1141 Media Arts I</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>FMA 1171 Media Culture</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902 Analytical Reading and Writing [GW]</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>15</td>
<td></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FMA 1142 Media Arts II</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>FMA 1451 Survey of New Media</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>IH 0851 or 0951 Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>16</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FMA 2242 Videography</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>FMA 2000+ Writing Intensive Elective [WI]</td>
<td>3-4</td>
<td></td>
</tr>
<tr>
<td>FMA 2451 Experimental Video and Multi-Media</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>14-15</td>
<td></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>FMA 2452 Web Art Design</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FMA 4441 Physical Computing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FMA 4451 Digital Animation, Compositing and Modeling</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FMA Studies Elective in Digital Arts</td>
<td>3-4</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>IH 0852 or 0952 Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>16-17</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FMA 3453 Interdisciplinary Media Studio</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Select two of the following:</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>FMA 4248 Introduction to 3D: Modeling</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FMA 4249 Introduction to 3D: Animation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FMA 2243 Audio: Production and Aesthetics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FMA 4441 Physical Computing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FMA 3242 Experimental Media Workshop</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FMA 4461 Interactive Narrative</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FMA 4462 Video Game Theory and Writing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FMA 4463</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>15</td>
<td></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Bachelor of Fine Arts in Film and Media Arts: Concentration in Screenwriting

The BFA in Film and Media Arts with a Concentration in Screenwriting is an intensive, professional degree that prepares students to enter graduate Film programs or pursue professional careers in Film and Serial writing. It focuses on narrative feature-film and serial writing. Studies will culminate in the writing and polishing of a feature screenplay or long-form television serial bible in the BFA Screenwriting Final Project Classes. The total FMA credits required is 70-73.

Students interested in the Screenwriting concentration must submit a program request form to the department. To be considered students need to complete 60 credits by the end of their sophomore year, earn an average of 3.0 in six foundational and intermediate courses and provide a portfolio. The program request form must be submitted to the department no later than the deadline announced on the Film and Media Studies Undergraduate Listserv in the spring semester in which the student reaches sixty credits. Students with less than an average of 3.0 in the six courses may petition the department for admission to the BFA Screenwriting concentration. (See department for details.) Students who were not admitted to the BFA Screenwriting concentration can continue in the BA in Film and Media Arts or the BA in Film and Media Arts with a Concentration in Screen Studies or apply for one of the three BA production concentrations.

Transfer students who have transferred Film and Media Arts courses with a grade of B or better may apply to the BFA program. These students must also present a portfolio. Transfer students with an associate’s degree in a related field who are accepted into the BFA program will most likely need additional semesters to complete their degree.

Bachelor of Fine Arts in Film and Media Studies: Concentration in Screenwriting

Summary of Requirements for the Degree

The Bachelor of Fine Arts degree may be conferred upon a student majoring in Film and Media Arts by recommendation of the faculty and upon satisfactory completion of a minimum of 122 credit hours. Students must complete:

1. University Requirements:
   - New students are required to complete the General Education (GenEd (p. 143)) curriculum.
• All students must take a minimum of two writing-intensive courses specified by the major. The specific writing-intensive courses requirement for this major are listed below and identified with the code "WI".

2. No more than 21 FMA credits can be transferred to the major.
3. A student must earn a grade of "C-" or better in all Film and Media Arts courses that count towards the degree.
4. Students may take up to 6 internship credits in Film and Media Arts.
5. Students may count a maximum of 84 FMA credit hours toward the 122 credit hours required for the degree.

FMA Foundation Courses
Film and Media Arts students will complete the following courses by the end of the sophomore year:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMA 1141</td>
<td>Media Arts I</td>
<td>4</td>
</tr>
<tr>
<td>FMA 1142</td>
<td>Media Arts II</td>
<td>4</td>
</tr>
<tr>
<td>FMA 1171</td>
<td>Media &amp; Culture</td>
<td>3</td>
</tr>
<tr>
<td>FMA 1172</td>
<td>Introduction to Film and Video Analysis</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credit Hours 14

Concentration Requirements
Courses required after completion of FMA Foundation Courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMA 2241</td>
<td>Filmmaking</td>
<td>4</td>
</tr>
<tr>
<td>ENG 2004</td>
<td>Creative Writing: Fiction</td>
<td>3</td>
</tr>
<tr>
<td>THTR 3801</td>
<td>Playwriting</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMA 1451</td>
<td>Survey of New Media</td>
<td>3</td>
</tr>
<tr>
<td>FMA 2675</td>
<td>Film History I (1895-1950)</td>
<td>4</td>
</tr>
<tr>
<td>FMA 2676</td>
<td>Film History II (1950-Present)</td>
<td>4</td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMA 2678</td>
<td>History of Experimental Film and Video Art</td>
<td>4</td>
</tr>
<tr>
<td>FMA 2396</td>
<td>Screenwriting I</td>
<td>4</td>
</tr>
<tr>
<td>FMA 2551</td>
<td>Editing Film and Video</td>
<td>4</td>
</tr>
<tr>
<td>FMA 2771</td>
<td>Producing</td>
<td>4</td>
</tr>
<tr>
<td>FMA 3000+</td>
<td>Studies Elective</td>
<td>3-4</td>
</tr>
<tr>
<td>FMA 3773</td>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>

Select two of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMA 4341</td>
<td>Screen Directing</td>
<td>4</td>
</tr>
<tr>
<td>FMA 3361</td>
<td>Screen Performance</td>
<td>4</td>
</tr>
<tr>
<td>FMA 3341</td>
<td>Scene Analysis for Writers and Directors</td>
<td>4</td>
</tr>
<tr>
<td>FMA 3343</td>
<td>Screenwriting II</td>
<td>4</td>
</tr>
<tr>
<td>FMA 3342</td>
<td>Serial Writing</td>
<td>4</td>
</tr>
<tr>
<td>FMA 3000+</td>
<td>Advanced Writing Intensive Elective (WI)</td>
<td>4</td>
</tr>
<tr>
<td>FMA 4342</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>FMA 4343</td>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>

Total Credit Hours 56-59

1 The following are Writing Intensive courses in Film and Media Arts: FMA 2396 Screenwriting I; FMA 3696 Writing Intensive Film Study; FMA 3896 Advanced Film Analysis; FMA 4697 Advanced Film History; and FMA 4698 History of Documentary.

Suggested Academic Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.
## Bachelor of Fine Arts in Film and Media Arts with Concentration in Screenwriting

**Requirements for New Students starting in the 2015-2016 Academic Year**

### Year 1

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMA 1141</td>
<td>Media Arts I</td>
<td>4</td>
</tr>
<tr>
<td>FMA 1171</td>
<td>Media Culture</td>
<td>3</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMA 1142</td>
<td>Media Arts II</td>
<td>4</td>
</tr>
<tr>
<td>FMA 1172</td>
<td>Introduction to Film and Video Analysis</td>
<td>3</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

### Year 2

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMA 2241</td>
<td>Filmmaking</td>
<td>4</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>3-4</td>
</tr>
<tr>
<td>FMA 1451</td>
<td>Survey of New Media</td>
<td></td>
</tr>
<tr>
<td>FMA 2675</td>
<td>Film History I (1895-1950)</td>
<td></td>
</tr>
<tr>
<td>FMA 2676</td>
<td>Film History II (1950-Present)</td>
<td></td>
</tr>
<tr>
<td>FMA 2678</td>
<td>History of Experimental Film and Video Art</td>
<td></td>
</tr>
<tr>
<td>FMA 2551</td>
<td>Editing Film and Video</td>
<td>4</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>14-15</strong></td>
</tr>
</tbody>
</table>

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMA 2396</td>
<td>Screenwriting I [WI]</td>
<td>4</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ENG 2004</td>
<td>Creative Writing: Fiction</td>
<td></td>
</tr>
<tr>
<td>THTR 3801</td>
<td>Playwriting</td>
<td></td>
</tr>
<tr>
<td>FMA 2771</td>
<td>Producing</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

### Year 3

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMA 3773</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>3-4</td>
</tr>
<tr>
<td>FMA 4341</td>
<td>Screen Directing</td>
<td></td>
</tr>
<tr>
<td>FMA 3361</td>
<td>Screen Performance</td>
<td></td>
</tr>
<tr>
<td>FMA 3341</td>
<td>Scene Analysis for Writers and Directors</td>
<td></td>
</tr>
<tr>
<td>FMA 3342</td>
<td>Serial Writing</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>14-15</strong></td>
</tr>
</tbody>
</table>

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMA 3000+ Advanced Writing Intensive Elective [WI]</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>3-4</td>
</tr>
<tr>
<td>FMA 4341</td>
<td>Screen Directing</td>
<td></td>
</tr>
<tr>
<td>FMA 3361</td>
<td>Screen Performance</td>
<td></td>
</tr>
</tbody>
</table>
Certificate in Film

The Certificate in Film introduces students to both the study and production of film. It is open to all Temple University undergraduates. The certificate requires four courses:

- FMA 1141 Media Arts I, an introductory production course that emphasizes individual students' rigorous exploration of creative, personal visions, along with mainstream applications;
- FMA 1142 Media Arts II, a second-level production course that adds an increased emphasis on aesthetics, genres, writing, and project design;
- FMA 1171 Media & Culture, which concentrates on the cultural production, distribution, and reception of film and media arts; and,
- FMA 1172 Introduction to Film and Video Analysis, which introduces students to the conceptual and theoretical tools to analyze film, television, and video.

All four courses count toward the Film and Media Arts major if students decide they want to continue on.

Students who complete the certificate will achieve the following learning outcomes:

- Experience translating creative, personal vision into audio and video projects;
- Consideration of personal work in the context of larger aesthetic theories;
- Initial experience in writing for film as well as working from a script;
- An overview of the role of film, video and media arts in the larger American culture; and,
- Experience analyzing film, television and video from a number of critical perspectives.

Assessment is based on creative audio, video and media arts projects; written scripts; written papers and examinations.

**Requirements**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMA 1141</td>
<td>Media Arts I</td>
<td>4</td>
</tr>
<tr>
<td>FMA 1142</td>
<td>Media Arts II 1</td>
<td>4</td>
</tr>
<tr>
<td>FMA 1171</td>
<td>Media &amp; Culture</td>
<td>3</td>
</tr>
<tr>
<td>FMA 1172</td>
<td>Introduction to Film and Video Analysis</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credit Hours: 14**

1 Students must first receive at least a C- in FMA 1141 before enrolling in FMA 1142.

Certificate in Media Arts

The Certificate in Media Arts introduces students to both the study and production of media arts. It is open to all Temple University undergraduates. The certificate requires four courses:
• FMA 1141 Media Arts I, an introductory production course that emphasizes individual students' rigorous exploration of creative, personal visions, along with mainstream applications;
• FMA 1142 Media Arts II, a second-level production course that adds an increased emphasis on aesthetics, genres, writing, and project design;
• FMA 1171 Media & Culture, which concentrates on the cultural production, distribution, and reception of film and media arts; and,
• FMA 1451 Survey of New Media, which introduces students to the history, theory and aesthetics of digital and networked media arts.

All four courses count toward the Film and Media Arts major if students decide they want to continue on.

Students who complete the certificate will achieve the following learning outcomes:

• Experience translating creative, personal vision into audio, video and media arts projects;
• Consideration of personal work in the context of larger aesthetic theories;
• Initial experience in writing for film as well as working from a script;
• An overview of the role of film, video and media arts in the larger American culture; and,
• Critical perspectives on how new technologies have shaped our world, as well as aesthetic and interactional strategies for alternative ways of seeing, understanding and reconfiguring our world via digital media.

Assessment is based on creative audio, video and media arts projects; written scripts; written papers, blogs, and examinations.

Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMA 1141</td>
<td>Media Arts I</td>
<td>4</td>
</tr>
<tr>
<td>FMA 1142</td>
<td>Media Arts II</td>
<td>4</td>
</tr>
<tr>
<td>FMA 1171</td>
<td>Media &amp; Culture</td>
<td>3</td>
</tr>
<tr>
<td>FMA 1451</td>
<td>Survey of New Media</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credit Hours</strong></td>
<td><strong>14</strong></td>
<td></td>
</tr>
</tbody>
</table>

1 Students must first received at least a C- in FMA 1141 before enrolling in FMA 1142.

Certificate in Screen Studies

The Certificate in Screen Studies introduces students to the study and the history of film, experimental film, video art and/or media arts. The certificate requires four courses:

• FMA 1141 Media Arts I, an introductory production course that emphasizes individual students' rigorous exploration of creative, personal visions, along with mainstream applications;
• FMA 1171 Media & Culture, which concentrates on the cultural production, distribution, and reception of film and media arts; and,
• FMA 1172 Introduction to Film and Video Analysis, which introduces students to the conceptual and theoretical tools to analyze film, television, and video
• A Film or Media Arts History course selected from a specific list.

Students who complete the certificate will achieve the following learning outcomes:

• Experience translating creative, personal vision into audio and video projects;
• Consideration of personal work in the context of larger aesthetic theories;
• An overview of the role of film, video and media arts in the larger American culture;
• Experience analyzing film, television and video from a number of critical perspectives; and,
• An historical awareness of the development of Film and Video, of New Media, or of Experimental Film and Video Art.

Assessment is based on creative audio, video and media arts projects; blogs; critical papers and/or examinations.

Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMA 1141</td>
<td>Media Arts I</td>
<td>4</td>
</tr>
<tr>
<td>FMA 1171</td>
<td>Media &amp; Culture</td>
<td>3</td>
</tr>
<tr>
<td>FMA 1172</td>
<td>Introduction to Film and Video Analysis</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following Film or Media Arts History courses: 1</td>
<td>3-4</td>
<td></td>
</tr>
<tr>
<td>FMA 1451</td>
<td>Survey of New Media</td>
<td></td>
</tr>
<tr>
<td>FMA 2675</td>
<td>Film History I (1895-1950)</td>
<td></td>
</tr>
<tr>
<td>FMA 2676</td>
<td>Film History II (1950-Present)</td>
<td></td>
</tr>
</tbody>
</table>

1 Students must first received at least a C- in FMA 1141 before enrolling in FMA 1142.
FMA 2678  History of Experimental Film and Video Art

Total Credit Hours  13-14

1  Students must first receive at least a C- in FMA 1171 and FMA 1172 before enrolling in this course.

Screen Studies Minor

The Film and Media Arts Minor in Screen Studies provides students the opportunity to sample the aesthetics, history, and cultural significance of moving-image media. It draws upon the fields of cinema studies and humanities-based disciplines of media studies and media arts theory, while also encouraging students to approach screen cultures from neighboring disciplines, such as cultural studies, area studies, art history, or visual studies.

The Minor in Screen Studies requires a minimum of 19 credits.

FMA 1172  Introduction to Film and Video Analysis  3
Select one of the following:  3-4
   FMA 1171  Media & Culture
   FMA 1144  Media Arts for Non-Production Majors
Select one of the following:  3-4
   FMA 2675  Film History I (1895-1950)
   FMA 2676  Film History II (1950-Present)
   FMA 4698  History of Documentary
   FMA 1451  Survey of New Media
   FMA 2674  History of Photography
   FMA 2678  History of Experimental Film and Video Art
Select one of the following:  4
   FMA 3671  Theory and Practice of Media Culture
   FMA 3871  Film Theory
Select one of the following:  3-4
   FMA 3677  American Film
   FMA 4673  International Cinema
   FMA 4674  Anthropological Film/Media
Select one of the following:  3-4
   FMA 2670  Topics in Film Study
   FMA 2671  Film Noir
   FMA 2672  Film Comedy
   FMA 2673  Independent Film/Video
   FMA 3341  Scene Analysis for Writers and Directors
   FMA 3670  Topics in Media Culture
   FMA 3696  Writing Intensive Film Study
   FMA 3770  Topics in Film Study
   FMA 4675  Women Film/Video Artists
   FMA 4697  Advanced Film History
   FMA 3896  Advanced Film Analysis
   FMA 1144  Media Arts for Non-Production Majors

Total Credit Hours  19

Theater

Robert Hedley, MFA, Chair
Tomlinson Theater 201
215-204-8413
robert.hedley@temple.edu

Peter Reynolds, MFA, Director of Theater Undergraduate Affairs/Assistant Chair
Tomlinson Theater 210B
215-204-8628
The Theater Department is accredited by the National Association of Schools of Theatre (NAST) and is a member of the University Resident Theater Association (U/RTA). These affiliations characterize it as amongst an elite group of highly-recognized Theater Programs. The Theater Department was recently ranked by *U.S. News & World Report* among the top 25 theater programs in the nation.

Temple Theaters has established itself as one of the finest theater training programs in the nation. The faculty are accomplished professionals and scholars, who generously offer their expertise and great passion for the craft and creation of theater. As a theater department in the heart of a culturally rich urban setting, Temple University's Theater Department is immersed in and among some of the most important regional and national theaters in the country.

With both graduate and undergraduate programs, the Department of Theater offers countless opportunities for creative and academic collaboration between all levels. The BA program features strong professional concentrations in Musical Theater, Acting, Directing, and Design. In addition, Masters of Fine Arts degrees are offered in Acting, Directing, Design, and Playwriting. The graduate program has distinguished itself as one of the foremost theater training and performance institutions in the nation, and as an important contributor to the Philadelphia theater landscape.

The production program is at the center of the pedagogy, serving as a creative laboratory for experiential learning across disciplines. Temple Theaters offers a full season of productions each year, bringing exciting, contemporary theater to a diverse audience. Temple Theaters has been noted for premiering many new works for Philadelphians as well as producing vital stagings of classic works. Past productions have included big musicals - *Hair*, *Oklahoma!*; *Spring Awakening*; classic dramas - *Macbeth*, *A View From The Bridge*, *Tartuffe*; new American plays - *The Brother/Sister Plays*, *Expecting Isabel*; and original devised works - *In Conflict* and *Odd Girl Out*.

The successful theater student graduates from our program with excellent communication and collaboration skills, a broad-based and substantive liberal arts background, developed abilities within the discipline of theater, a peerless commitment to achieving and appreciating artistic excellence, and a passion for life-long learning that will enable success in a wide variety of future endeavors. Our alumni are not only successful artists in theater and all of the entertainment industries, but they are also leaders in many other fields. We strive to graduate well-educated and enlightened "Citizen Artists" who possess the creative capacity and commitment to make a difference in the quality of community life regardless of their chosen field of endeavor.

**Faculty Advising and Mentoring**

Students in Theater and Film and Media Arts are advised by professional academic advisors and faculty advisors. Students make advising appointments in the Center for the Performing and Cinematic Arts Academic Advising Office located on the second floor of the Tyler building, Suite 212. Consult the Directors of Undergraduate Affairs in Film and Media Arts or Theater for assignment to the appropriate advisor.

Academic advisors attempt to avoid errors when advising students about their program requirements, but schools and colleges cannot assume liability for errors in advising. Therefore, students must assume primary responsibility for knowing the requirements for their degree and for acquiring current information about their academic status.

Most students will be eligible to register for classes online via Self Service Banner through the TUportal (https://tuportal4.temple.edu/cp/home/displaylogin). However, all students should meet with an advisor prior to the eligible registration period.

Students preparing to graduate must file the necessary paperwork one semester prior to the graduation date. At that time, an appointment should be made with an academic advisor to complete a graduation review and application for graduation.

**Programs**

- Bachelor of Arts in Theater (p. 376)
- Certificate in Acting (p. 388)
- Certificate in Stage Management (p. 389)
- Certificate in Theater Education (p. 389)
- Certificate in Theater and Community Engagement (p. 390)
- Certificate in Voice and Speech for the Actor (p. 390)
- Theater Minor (p. 391)

**Bachelor of Arts in Theater**

Theater majors are advised to select courses that will best prepare them to succeed in the future. Toward this end, students may select courses according to their particular interests through the Theater Studies Sequence or choose from four Theater Concentrations:
• Acting,
• Design,
• Directing, or
• Musical Theater

Theater Studies Sequence

The Theater Studies Sequence prepares students to enter graduate programs or pursue careers in theater, other entertainment industries, or other fields. It is within this sequence that entrepreneurial students, the student who wishes to explore future interdisciplinary linkages, or those most interested in playwriting, might best fit. The student who follows the Theater Studies Sequence may select any courses offered by the department as long as required prerequisites are completed with applicable proficiencies as indicated in some courses, by a grade of C or better.

Theater Studies Sequence students must complete the Theater Foundation Courses. However, they are encouraged to meet with a Theater Department faculty member to discuss their goals and what selection of courses might best prepare them to achieve their professional aspirations after graduation.

Acting Concentration

The Acting Concentration prepares students to enter graduate acting programs or pursue professional careers in theater, television and film. The coursework provides the highest caliber of training possible within the context of a liberal arts education, so students can thrive either in a graduate conservatory program or in the profession. Through intensive and varied classes in acting, combined with experiential work in minimalist to full-scale productions, students develop the skills needed for creative communication and artistic leadership, tools they will need to pursue their professional goals.

Notes:

1. In order for the student to progress to the next level of study, prerequisites for admission to some classes are required.
2. A student is not officially a part of the Acting Concentration until successfully auditioning before the Acting Faculty. These auditions are held every semester and are announced in advance by the Head of Undergraduate Acting.
3. Some Voice, Movement, Speech, and Acting classes may be repeated for credit.
4. Performance courses are available to those students electing the Acting Concentration and to other students in the department who meet the prerequisite requirements.
5. Certification officials from the Society of Fight Directors are invited to the final projects of *Swordplay for the Actor* classes, and some students receive certification in various combat specialties.

Design/Technology Concentration

The Design/Technology Concentration prepares students to enter graduate Design or Technology Programs or pursue professional careers in theater, television and film. The coursework provides the highest caliber of training possibilities within the context of a liberal arts education, so students can thrive either in a graduate conservatory program or in the profession. Through intensive and varied classes in design and technology, combined with experiential hands-on work with creative teams for full-scale and minimalist productions, students develop the skills needed for creative communication and artistic leadership - tools they will need to pursue their professional goals.

Note: In order for the student to progress to the next level of study, prerequisites for admission to some classes are required.

Directing Concentration

The Directing Concentration prepares students to enter graduate directing programs or pursue professional careers in theater, television and film. The coursework provides the highest caliber of training possible within the context of a liberal arts education, so students can thrive either in a graduate conservatory program or in the profession. Through intensive and varied classes combined with experiential work in minimalist to full-scale productions, students develop the skills needed for creative communication and artistic leadership, tools they will need to pursue their professional goals.

Notes:

1. In order for the student to progress to the next level of study, prerequisites for admission to some classes are required.
2. The Directing Concentration culminates with a Senior Research class production project to be proposed and approved in consultation with the Head of Directing.

Musical Theater Concentration

The Musical Theater Concentration prepares students to pursue professional careers in musical theater, theater, television and film, or to pursue graduate study. The coursework provides the highest caliber of training possible within the context of a liberal arts education, so students can thrive either in a graduate conservatory program or in the profession. Through intensive and varied classes combined with experiential work in minimalist
to full-scale productions, students develop the skills needed for creative communication and artistic leadership, tools they will need to pursue their professional goals.

Notes:

1. In order for the student to progress to the next level of study, prerequisites for admission to some classes are required.
2. The Head of Musical Theater, Dance and/or Movement Professors, and a representative from the Acting Program audition interested incoming theater students in the spring semester of the school year prior to the desired fall admission semester. Students must be selected through this audition process to gain entrance into the Musical Theater Concentration. Selection through this process does not guarantee admission to Temple University. The audition is rigorous and includes singing, dancing and acting.
3. The Musical Theater Concentration culminates in THTR 4133, an intensive audition and performance seminar specially designed to prepare students for the rigorous demands of auditioning for and performing in professional Musical Theater.
4. Throughout the Musical Theater Concentration student's four years of study, workshops and seminars are made available which feature Musical Theater professionals from New York City and Philadelphia.
5. To support the Musical Theater Concentration, Temple Theaters will produce an annual musical, either in the fall or spring semester. A small musical or cabaret featuring Musical Theater Concentration students will be produced in the alternate semester.

Bachelor of Arts in Theater

Summary of Requirements for the Degree

The Bachelor of Arts degree in Theater may be conferred upon a student by recommendation of the faculty and by satisfactory completion of a minimum of 124 credit hours. Students must complete:

- University requirements: All students are required to complete the university's General Education (GenEd (p. 143)) curriculum.
- There will be no requirement to take the GenEd Arts course if all of the following courses are completed with a C- or better: THTR 1003, THTR 1096 and THTR 1231. If the student changes majors before completing all four courses, s/he must complete a GenEd Arts course to satisfy the requirement for General Education.
- All students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for this major are listed below and identified with the code "WI".
- Theater Department foundation courses with a grade of C or better in each course
- No more than 20 credits of work in the major field may be transferred from another institution. Students must complete at least 16 semester hours in Theater courses at Temple University.
- All Theater majors must take placement tests in English and mathematics. If a student places into ENG 0701 or MATH 0701 or MATH 0702, these courses must be completed prior to taking the General Education requirement for English and Quantitative Literacy.

Theater Foundation Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>THTR 1003</td>
<td>Creativity: Basic</td>
<td>3</td>
</tr>
<tr>
<td>THTR 1096</td>
<td>Introduction to Theater Process (WI)</td>
<td>3</td>
</tr>
<tr>
<td>THTR 1231</td>
<td>Acting I</td>
<td>3</td>
</tr>
<tr>
<td>THTR 1411</td>
<td>Welcome Backstage</td>
<td>3</td>
</tr>
<tr>
<td>THTR 2411</td>
<td>Introduction to Design</td>
<td>3</td>
</tr>
<tr>
<td>THTR 3001</td>
<td>History of the Theater I</td>
<td>3</td>
</tr>
<tr>
<td>THTR 3002</td>
<td>History of the Theater II</td>
<td>3</td>
</tr>
<tr>
<td>THTR 4097</td>
<td>World of the Play (WI)</td>
<td>3</td>
</tr>
<tr>
<td>THTR 1087</td>
<td>Production Practicum (1 s.h. each semester the student is enrolled as a major)</td>
<td>1-8</td>
</tr>
<tr>
<td></td>
<td>Art History Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Required Elective (in non-dramatic literature)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Required Elective Concentration 2,3</td>
<td>9</td>
</tr>
<tr>
<td><strong>Total Credit Hours</strong></td>
<td></td>
<td><strong>40-47</strong></td>
</tr>
</tbody>
</table>

1. Musical Theater Concentration students complete THTR 3012 American Musical Theater and THTR 3001 History of the Theater I for their Theater history requirements. THTR 3002 History of the Theater II may be taken as an elective.
2. The 9 semester hours of the required elective concentration may be in any one department, preferably in the Arts or an interdisciplinary study approved by the Theater Department advisor or chair.
3. The concentration may include the required course in art history or the required course in non-dramatic literature. It may not include ENG 0802, ENG 0812, or ENG 0902.
### Acting Concentration

#### Required Courses in addition to the Foundation Courses

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>THTR 2221 Voice for the Actor</td>
<td>3</td>
</tr>
<tr>
<td>THTR 2231 Speech for the Actor</td>
<td>3</td>
</tr>
<tr>
<td>THTR 2241 Basic Movement</td>
<td>3</td>
</tr>
<tr>
<td>THTR 2261 Acting II</td>
<td>3</td>
</tr>
<tr>
<td>THTR 3279 Acting III</td>
<td>3</td>
</tr>
<tr>
<td>THTR 4212 Acting IV</td>
<td>3</td>
</tr>
<tr>
<td>THTR 4222 Acting V</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Acting Concentration Electives

Select four of the following:

<table>
<thead>
<tr>
<th>Elective Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>THTR 1202 Fundamentals of Voice and Movement</td>
<td>3</td>
</tr>
<tr>
<td>THTR 2251 Dance for the Actor</td>
<td>3</td>
</tr>
<tr>
<td>THTR 2252 Alexander Technique</td>
<td>3</td>
</tr>
<tr>
<td>THTR 2271 Dialects for the Actor</td>
<td>3</td>
</tr>
<tr>
<td>THTR 3132 Musical Theater Voice &amp; Acting</td>
<td>3</td>
</tr>
<tr>
<td>THTR 3210 Theater Workshop</td>
<td>3</td>
</tr>
<tr>
<td>THTR 3220 Theater Workshop</td>
<td>3</td>
</tr>
<tr>
<td>THTR 3241 Combat &amp; Stunts for the Actor</td>
<td>3</td>
</tr>
<tr>
<td>THTR 3278 Acting for Film and TV</td>
<td>3</td>
</tr>
<tr>
<td>THTR 3301 Introduction to the Director's Art</td>
<td>3</td>
</tr>
<tr>
<td>THTR 4241 Swordplay for the Actor</td>
<td>3</td>
</tr>
<tr>
<td>THTR 4299 Thesis for Acting Emphasis</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credit Hours**: 33

For students who transfer from other departments, schools and universities, there are several alternative routes to fulfill the Acting Concentration that can be discussed with your Theater advisor and/or the head of the Acting Program.

### Design/Technology Concentration

#### Required Courses in addition to the Foundation Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>THTR 2711 Drawing and Rendering Techniques I</td>
<td>3</td>
</tr>
<tr>
<td>THTR 2712 Drawing and Rendering Techniques II</td>
<td>3</td>
</tr>
<tr>
<td>THTR 3611 Visual History I</td>
<td>3</td>
</tr>
<tr>
<td>THTR 3612 Visual History II</td>
<td>3</td>
</tr>
<tr>
<td>THTR 4711 History of Modern Scenic Design</td>
<td>3</td>
</tr>
<tr>
<td>THTR 2511 Lighting for the Theater</td>
<td>3</td>
</tr>
<tr>
<td>THTR 2721 Scene Design I</td>
<td>4</td>
</tr>
<tr>
<td>THTR 2612 Costume Design I</td>
<td>3</td>
</tr>
<tr>
<td>THTR 3191 Research</td>
<td>1</td>
</tr>
</tbody>
</table>

Select three of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>THTR 2441 Stage Management I</td>
<td>3</td>
</tr>
<tr>
<td>THTR 2611 Make-Up</td>
<td>3</td>
</tr>
<tr>
<td>THTR 4511 Creativity in Lighting</td>
<td>3</td>
</tr>
<tr>
<td>THTR 2421 Creative Sound Technique</td>
<td>3</td>
</tr>
<tr>
<td>THTR 3421 Technical Direction for the Theater</td>
<td>3</td>
</tr>
<tr>
<td>THTR 2442 Propcraft</td>
<td>3</td>
</tr>
<tr>
<td>THTR 2713 Design Drafting</td>
<td>3</td>
</tr>
<tr>
<td>THTR 3431 Scene Painting I</td>
<td>3</td>
</tr>
<tr>
<td>THTR 3432 Scene Painting II</td>
<td>3</td>
</tr>
<tr>
<td>THTR 3621 Costume Production</td>
<td>3</td>
</tr>
<tr>
<td>Course</td>
<td>Title</td>
</tr>
<tr>
<td>----------</td>
<td>--------------------------------------------</td>
</tr>
<tr>
<td>THTR 3622</td>
<td>Draping and Flat Pattern Drafting</td>
</tr>
<tr>
<td>THTR 4582</td>
<td>Lighting Design</td>
</tr>
<tr>
<td>THTR 4611</td>
<td>Costume Design II</td>
</tr>
<tr>
<td>THTR 4782</td>
<td>Scene Design</td>
</tr>
</tbody>
</table>

**Total Credit Hours**: 35

**Note**: The concentration must total a minimum of 35 semester hours beyond the Foundation Courses.

### Directing Concentration

**Additional Courses Required for the Directing Concentration**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>THTR 4511</td>
<td>Creativity in Lighting</td>
<td>3</td>
</tr>
<tr>
<td>THTR 1202</td>
<td>Fundamentals of Voice and Movement</td>
<td>3</td>
</tr>
<tr>
<td>or THTR 2241</td>
<td>Basic Movement</td>
<td></td>
</tr>
<tr>
<td>THTR 2261</td>
<td>Acting II</td>
<td>3</td>
</tr>
<tr>
<td>or THTR 3132</td>
<td>Musical Theater Voice &amp; Acting</td>
<td></td>
</tr>
<tr>
<td>THTR 3241</td>
<td>Combat &amp; Stunts for the Actor</td>
<td>3</td>
</tr>
<tr>
<td>THTR 2441</td>
<td>Stage Management I</td>
<td>3</td>
</tr>
<tr>
<td>THTR 3051</td>
<td>Modern Directions</td>
<td>3</td>
</tr>
<tr>
<td>THTR 3301</td>
<td>Introduction to the Director's Art</td>
<td>3</td>
</tr>
<tr>
<td>THTR 4301</td>
<td>Advanced Directing</td>
<td>4</td>
</tr>
<tr>
<td>THTR 3191</td>
<td>Research</td>
<td>2</td>
</tr>
</tbody>
</table>

Select one of the following: 3-4

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>THTR 4711</td>
<td>History of Modern Scenic Design</td>
<td></td>
</tr>
<tr>
<td>THTR 2721</td>
<td>Scene Design I</td>
<td></td>
</tr>
<tr>
<td>THTR 2612</td>
<td>Costume Design I</td>
<td></td>
</tr>
<tr>
<td>THTR 4003</td>
<td>Production Dramaturgy</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credit Hours**: 33-34

### Musical Theater Concentration

**Additional Courses Required for the Musical Theater Concentration**

**Required Theater Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>THTR 2231</td>
<td>Speech for the Actor</td>
<td>3</td>
</tr>
<tr>
<td>THTR 2261</td>
<td>Acting II</td>
<td>3</td>
</tr>
<tr>
<td>THTR 3012</td>
<td>American Musical Theater</td>
<td>3</td>
</tr>
<tr>
<td>THTR 3279</td>
<td>Acting III</td>
<td>3</td>
</tr>
<tr>
<td>THTR 2101</td>
<td>Ballet I for Musical Theater</td>
<td>1</td>
</tr>
<tr>
<td>THTR 2121</td>
<td>Ballet II for Musical Theater</td>
<td>1</td>
</tr>
<tr>
<td>THTR 3131</td>
<td>Advanced Jazz for Musical Theater</td>
<td>1</td>
</tr>
<tr>
<td>THTR 3101</td>
<td>Jazz I for Musical Theater</td>
<td>1</td>
</tr>
<tr>
<td>THTR 3121</td>
<td>Jazz II for Musical Theater</td>
<td>1</td>
</tr>
<tr>
<td>THTR 4101</td>
<td>Tap for Musical Theater</td>
<td>1</td>
</tr>
<tr>
<td>THTR 4121</td>
<td>Musical Theater Dance Techniques</td>
<td>1</td>
</tr>
</tbody>
</table>

**Required Boyer Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 1256</td>
<td>Private Voice for Non-Music Majors</td>
<td>1</td>
</tr>
<tr>
<td>MUSC 1257</td>
<td>Private Voice for Non-Music Majors</td>
<td>1</td>
</tr>
<tr>
<td>MUSC 1407</td>
<td>Piano for Non-Music Majors I</td>
<td>1</td>
</tr>
<tr>
<td>MUST 1701</td>
<td>Music Theory for Non-Music Majors</td>
<td>2</td>
</tr>
<tr>
<td>MUST 1705</td>
<td>Music Theory for Non-Music Majors II</td>
<td>3</td>
</tr>
<tr>
<td>MUST 1741</td>
<td>Aural Theory I</td>
<td>2</td>
</tr>
<tr>
<td>MUSC 3300</td>
<td>Choral Ensemble</td>
<td>1</td>
</tr>
<tr>
<td>MUSC 3300</td>
<td>Choral Ensemble</td>
<td>1</td>
</tr>
</tbody>
</table>
### MUSC 3300
Choral Ensemble
1

### MUSC 3300
Choral Ensemble
1

### MUSC 2201
Voice Concentration
2

### MUSC 2202
Voice Concentration
2

### MUSC 3231
Musical Theater Scene Study
2

### MUSC 3232
Musical Theater Voice & Acting
2

### MUSC 3201
Voice Concentration
2

### MUSC 3202
Voice Concentration
2

### MUSC 4201
Voice Concentration
2

### MUSC 4202
Voice Concentration
2

### MUSC 4233
Musical Theater: Dress Rehearsal
2

### Electives
General Electives
8

### Total Credit Hours
59

---

Suggested Academic Plans

Please note that these are suggested academic plans. Depending on your situation, your academic plan may look different.

### Bachelor of Arts in Theater (General)

#### Requirements for New Students starting in the 2015-2016 Academic Year

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>THTR 1003</td>
<td>Creativity: Basic[^1]</td>
</tr>
<tr>
<td>THTR 1411</td>
<td>Welcome Backstage</td>
</tr>
<tr>
<td>THTR 1087</td>
<td>Production Practicum</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total Credit Hours</strong></td>
<td>15</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>THTR 1096</td>
<td>Introduction to Theater Process [WI][^1]</td>
</tr>
<tr>
<td>THTR 1231</td>
<td>Acting[^1]</td>
</tr>
<tr>
<td>THTR 1087</td>
<td>Production Practicum</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credit Hours</strong></td>
<td>16</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>THTR 2411</td>
<td>Introduction to Design</td>
</tr>
<tr>
<td>THTR 1087</td>
<td>Production Practicum</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credit Hours</strong></td>
<td>16</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>THTR 1087</td>
<td>Production Practicum</td>
</tr>
<tr>
<td>Elective</td>
<td>3-4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
</tbody>
</table>

[^1]: For tuition and fee rates associated with the Boyer College of Music and Dance, refer to the Bursar's Office (http://bursar.temple.edu/tuition-and-fees).
### Bachelor of Arts in Theater (Acting Concentration)

**Requirements for New Students starting in the 2015-2016 Academic Year**

#### Year 1

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>THTR 1231</td>
<td>Acting I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>THTR 2221</td>
<td>Voice for the Actor</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>THTR 1003</td>
<td>Creativity: Basic</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>THTR 1087</td>
<td>Production Practicum</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total Credit Hours:</strong></td>
<td><strong>17</strong></td>
<td></td>
</tr>
</tbody>
</table>

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>THTR 2261</td>
<td>Acting II</td>
<td>3</td>
</tr>
<tr>
<td>THTR 2231</td>
<td>Speech for the Actor</td>
<td>3</td>
</tr>
<tr>
<td>THTR 1096</td>
<td>Introduction to Theater Process [WI]</td>
<td>3</td>
</tr>
<tr>
<td>THTR 1087</td>
<td>Production Practicum</td>
<td>1</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credit Hours:</strong></td>
<td><strong>17</strong></td>
<td></td>
</tr>
</tbody>
</table>
### Year 2

#### Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>THTR 2241</td>
<td>Basic Movement</td>
<td>3</td>
</tr>
<tr>
<td>Theater Concentration Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>THTR 1411</td>
<td>Welcome Backstage</td>
<td>3</td>
</tr>
<tr>
<td>THTR 1087</td>
<td>Production Practicum</td>
<td>1</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>GenEd Breadth Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 16

#### Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>THTR 3279</td>
<td>Acting III</td>
<td>3</td>
</tr>
<tr>
<td>THTR 2411</td>
<td>Introduction to Design</td>
<td>3</td>
</tr>
<tr>
<td>THTR 1087</td>
<td>Production Practicum</td>
<td>1</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 16

### Year 3

#### Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>THTR 4212</td>
<td>Acting IV</td>
<td>3</td>
</tr>
<tr>
<td>Theater Concentration Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>THTR 3001</td>
<td>History of the Theater I</td>
<td>3</td>
</tr>
<tr>
<td>THTR 1087</td>
<td>Production Practicum</td>
<td>1</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 16

#### Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theater Concentration Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Theater Concentration Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>THTR 3002</td>
<td>History of the Theater II</td>
<td>3</td>
</tr>
<tr>
<td>THTR 1087</td>
<td>Production Practicum</td>
<td>1</td>
</tr>
<tr>
<td>Non-Dramatic Literature Class</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Exploratory Concentration Class</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 16

### Year 4

#### Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>THTR 4222</td>
<td>Acting V</td>
<td>3</td>
</tr>
<tr>
<td>THTR 4097</td>
<td>World of the Play [WI]</td>
<td>3</td>
</tr>
<tr>
<td>THTR 1087</td>
<td>Production Practicum</td>
<td>1</td>
</tr>
<tr>
<td>Art History Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Exploratory Concentration Class</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 13

#### Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>THTR 1087</td>
<td>Production Practicum</td>
<td>1</td>
</tr>
<tr>
<td>Exploratory Concentration Class</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td></td>
<td>9</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 13

**Total Credit Hours**: 124

---

2. Students must select an Art History course. For questions or recommendations, students should see their advisor.
**Bachelor of Arts in Theater (Design/Technology Concentration)**

**Requirements for New Students starting in the 2015-2016 Academic Year**

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>THTR 1087</td>
<td>Production Practicum</td>
</tr>
<tr>
<td>THTR 1003</td>
<td>Creativity: Basic ¹</td>
</tr>
<tr>
<td>THTR 1411</td>
<td>Welcome Backstage</td>
</tr>
<tr>
<td>THTR 1231</td>
<td>Acting ¹</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>17</strong></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>THTR 1087</td>
<td>Production Practicum</td>
</tr>
<tr>
<td>THTR 1096</td>
<td>Introduction to Theater Process [WI] ¹</td>
</tr>
<tr>
<td>THTR 2411</td>
<td>Introduction to Design</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td></td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>THTR 1087</td>
<td>Production Practicum</td>
</tr>
<tr>
<td>THTR 2711</td>
<td>Drawing and Rendering Techniques I</td>
</tr>
<tr>
<td>Theater Concentration Elective</td>
<td></td>
</tr>
<tr>
<td>IH 0852 or THTR 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>THTR 1087</td>
<td>Production Practicum</td>
</tr>
<tr>
<td>THTR 2712</td>
<td>Drawing and Rendering Techniques II</td>
</tr>
<tr>
<td>THTR 2721</td>
<td>Scene Design I</td>
</tr>
<tr>
<td>Non-Dramatic Literature Class</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>THTR 1087</td>
<td>Production Practicum</td>
</tr>
<tr>
<td>THTR 3001</td>
<td>History of the Theater I</td>
</tr>
<tr>
<td>THTR 3611</td>
<td>Visual History I</td>
</tr>
<tr>
<td>THTR 4711</td>
<td>History of Modern Scenic Design</td>
</tr>
<tr>
<td>Elective</td>
<td></td>
</tr>
<tr>
<td>Exploratory Concentration Class</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>THTR 1087</td>
<td>Production Practicum</td>
</tr>
<tr>
<td>THTR 3612</td>
<td>Visual History II</td>
</tr>
<tr>
<td>THTR 3002</td>
<td>History of the Theater II</td>
</tr>
<tr>
<td>Theater Concentration Elective</td>
<td></td>
</tr>
<tr>
<td>Art History Elective ²</td>
<td></td>
</tr>
</tbody>
</table>
Exploratory Concentration Class

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>16</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Year 4</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>THTR 1087</td>
<td>Production Practicum</td>
</tr>
<tr>
<td>THTR 2511</td>
<td>Lighting for the Theater</td>
</tr>
<tr>
<td>THTR 2612</td>
<td>Costume Design I</td>
</tr>
<tr>
<td>THTR 3191</td>
<td>Research</td>
</tr>
<tr>
<td>Theater Concentration Elective</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>13</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>THTR 1087</td>
<td>Production Practicum</td>
</tr>
<tr>
<td>THTR 4097</td>
<td>World of the Play [WI]</td>
</tr>
<tr>
<td>Exploratory Concentration Class</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>5</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>12</td>
</tr>
<tr>
<td><strong>Total Credit Hours:</strong></td>
<td>124</td>
</tr>
</tbody>
</table>

2. Students must select an Art History course. For questions or recommendations, students should see their advisor.

Bachelor of Arts in Theater (Directing)

Requirements for New Students starting in the 2015-2016 Academic Year

**Year 1**

<table>
<thead>
<tr>
<th>Credit Hours</th>
<th>17</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>THTR 1087</td>
<td>Production Practicum</td>
</tr>
<tr>
<td>THTR 1003</td>
<td>Creativity: Basic¹</td>
</tr>
<tr>
<td>THTR 1231</td>
<td>Acting I²</td>
</tr>
<tr>
<td>THTR 1411</td>
<td>Welcome Backstage</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3</td>
</tr>
<tr>
<td>THTR 1202</td>
<td>Fundamentals of Voice and Movement</td>
</tr>
<tr>
<td>THTR 2241</td>
<td>Basic Movement</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>17</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>THTR 1087</td>
<td>Production Practicum</td>
</tr>
<tr>
<td>THTR 1096</td>
<td>Introduction to Theater Process [WI]¹</td>
</tr>
<tr>
<td>THTR 2411</td>
<td>Introduction to Design</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>17</td>
</tr>
<tr>
<td><strong>Year 2</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>THTR 1087</td>
<td>Production Practicum</td>
</tr>
<tr>
<td>THTR 2441</td>
<td>Stage Management I</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3</td>
</tr>
<tr>
<td>THTR 2261</td>
<td>Acting II</td>
</tr>
</tbody>
</table>

¹ GenEd Arts (GA) Waiver: Completion of THTR 1003, THTR 1096 and THTR 1231.
² Students must select an Art History course. For questions or recommendations, students should see their advisor.
<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>THTR 3132</td>
<td>Musical Theater Voice Acting</td>
<td>16</td>
</tr>
</tbody>
</table>

**Spring**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>THTR 1087</td>
<td>Production Practicum</td>
<td>1</td>
</tr>
<tr>
<td>THTR 3241</td>
<td>Combat Stunts for the Actor</td>
<td>3</td>
</tr>
<tr>
<td>Non-Dramatic Literature Class</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 16

**Year 3**

**Fall**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>THTR 1087</td>
<td>Production Practicum</td>
<td>1</td>
</tr>
<tr>
<td>THTR 3001</td>
<td>History of the Theater I</td>
<td>3</td>
</tr>
<tr>
<td>THTR 4511</td>
<td>Creativity in Lighting</td>
<td>3</td>
</tr>
<tr>
<td>THTR 3301</td>
<td>Introduction to the Director's Art</td>
<td>3</td>
</tr>
<tr>
<td>THTR 3051</td>
<td>Modern Directions</td>
<td>3</td>
</tr>
<tr>
<td>Art History Elective</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 16

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>THTR 1087</td>
<td>Production Practicum</td>
<td>1</td>
</tr>
<tr>
<td>THTR 3002</td>
<td>History of the Theater II</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>THTR 2612</td>
<td>Costume Design I</td>
<td>3-4</td>
</tr>
<tr>
<td>THTR 2721</td>
<td>Scene Design I</td>
<td></td>
</tr>
<tr>
<td>THTR 4711</td>
<td>History of Modern Scenic Design</td>
<td></td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 16

**Spring**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>THTR 1087</td>
<td>Production Practicum</td>
<td>1</td>
</tr>
<tr>
<td>THTR 4301</td>
<td>Advanced Directing</td>
<td>4</td>
</tr>
<tr>
<td>THTR 3191</td>
<td>Research</td>
<td>2</td>
</tr>
<tr>
<td>Exploratory Concentration Class</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 13

**Year 4**

**Fall**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>THTR 1087</td>
<td>Production Practicum</td>
<td>1</td>
</tr>
<tr>
<td>THTR 4097</td>
<td>World of the Play [WI]</td>
<td>3</td>
</tr>
<tr>
<td>THTR 4003</td>
<td>Production Dramaturgy</td>
<td>3</td>
</tr>
<tr>
<td>Exploratory Concentration Class</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 13

**Spring**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>THTR 1087</td>
<td>Production Practicum</td>
<td>1</td>
</tr>
<tr>
<td>THTR 4097</td>
<td>World of the Play [WI]</td>
<td>3</td>
</tr>
<tr>
<td>THTR 4003</td>
<td>Production Dramaturgy</td>
<td>3</td>
</tr>
<tr>
<td>Exploratory Concentration Class</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 13

**Total Credit Hours**: 124

---

1 GenEd Arts (GA) Waiver: Completion of THTR 1003, THTR 1096 and THTR 1231.
2 Students must select an Art History course. For questions or recommendations, students should see their advisor.
# Bachelor of Arts in Theater (Musical Theater)

## Requirements for New Students starting in the 2015-2016 Academic Year

### Year 1

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>THTR 1087</td>
<td>Production Practicum</td>
<td>1</td>
</tr>
<tr>
<td>THTR 2101</td>
<td>Ballet I for Musical Theater</td>
<td>1</td>
</tr>
<tr>
<td>MUST 1701</td>
<td>Music Theory for Non-Music Majors</td>
<td>2</td>
</tr>
<tr>
<td>THTR 1003</td>
<td>Creativity: Basic</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 1256</td>
<td>Private Voice for Non-Music Majors</td>
<td>1</td>
</tr>
<tr>
<td>THTR 1231</td>
<td>Acting I</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 3300</td>
<td>Choral Ensemble</td>
<td>1</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
</tbody>
</table>

**Term Credit Hours**  
16

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>THTR 1087</td>
<td>Production Practicum</td>
<td>1</td>
</tr>
<tr>
<td>MUSC 1407</td>
<td>Piano for Non-Music Majors I</td>
<td>1</td>
</tr>
<tr>
<td>MUST 1741</td>
<td>Aural Theory I</td>
<td>2</td>
</tr>
<tr>
<td>THTR 2261</td>
<td>Acting II</td>
<td>3</td>
</tr>
<tr>
<td>THTR 3101</td>
<td>Jazz I for Musical Theater</td>
<td>1</td>
</tr>
<tr>
<td>MUSC 2201</td>
<td>Voice Concentration</td>
<td>2</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 3300</td>
<td>Choral Ensemble</td>
<td>1</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>

**Term Credit Hours**  
17

### Year 2

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>THTR 1087</td>
<td>Production Practicum</td>
<td>1</td>
</tr>
<tr>
<td>MUSC 1407</td>
<td>Piano for Non-Music Majors I</td>
<td>1</td>
</tr>
<tr>
<td>MUST 1741</td>
<td>Aural Theory I</td>
<td>2</td>
</tr>
<tr>
<td>THTR 2261</td>
<td>Acting II</td>
<td>3</td>
</tr>
<tr>
<td>THTR 3101</td>
<td>Jazz I for Musical Theater</td>
<td>1</td>
</tr>
<tr>
<td>MUSC 2201</td>
<td>Voice Concentration</td>
<td>2</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 3300</td>
<td>Choral Ensemble</td>
<td>1</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**  
17

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>THTR 1087</td>
<td>Production Practicum</td>
<td>1</td>
</tr>
<tr>
<td>MUSC 3231</td>
<td>Musical Theater Scene Study</td>
<td>2</td>
</tr>
<tr>
<td>MUST 1705</td>
<td>Music Theory for Non-Music Majors II</td>
<td>3</td>
</tr>
<tr>
<td>THTR 3101</td>
<td>Jazz II for Musical Theater</td>
<td>1</td>
</tr>
<tr>
<td>MUSC 2202</td>
<td>Voice Concentration</td>
<td>2</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 3300</td>
<td>Choral Ensemble</td>
<td>1</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**  
16

### Year 3

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>THTR 1087</td>
<td>Production Practicum</td>
<td>1</td>
</tr>
<tr>
<td>THTR 3001</td>
<td>History of the Theater I</td>
<td>3</td>
</tr>
<tr>
<td>THTR 2411</td>
<td>Introduction to Design</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 3232</td>
<td>Musical Theater Voice Acting</td>
<td>2</td>
</tr>
</tbody>
</table>

**Term Credit Hours**  
16
<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 3201</td>
<td>Voice Concentration</td>
<td>2</td>
</tr>
<tr>
<td>THTR 4101</td>
<td>Tap for Musical Theater</td>
<td>1</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>THTR 1087</td>
<td>Production Practicum</td>
<td>1</td>
</tr>
<tr>
<td>THTR 3012</td>
<td>American Musical Theater</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 3202</td>
<td>Voice Concentration</td>
<td>2</td>
</tr>
<tr>
<td>THTR 3279</td>
<td>Acting III</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>THTR 1087</td>
<td>Production Practicum</td>
<td>1</td>
</tr>
<tr>
<td>MUSC 4233</td>
<td>Musical Theater: Dress Rehearsal</td>
<td>2</td>
</tr>
<tr>
<td>MUSC 4201</td>
<td>Voice Concentration</td>
<td>2</td>
</tr>
<tr>
<td>THTR 4097</td>
<td>World of the Play [WI]</td>
<td>3</td>
</tr>
<tr>
<td>THTR 3131</td>
<td>Advanced Jazz for Musical Theater</td>
<td>1</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Art History Elective$^2$</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>THTR 1087</td>
<td>Production Practicum</td>
<td>1</td>
</tr>
<tr>
<td>THTR 4121</td>
<td>Musical Theater Dance Techniques</td>
<td>1</td>
</tr>
<tr>
<td>MUSC 4202</td>
<td>Voice Concentration</td>
<td>2</td>
</tr>
<tr>
<td>GenEd Breadth Course$^3$</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Elective (Non-Dramatic Literature Class if not taken as GG)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

**Total Credit Hours: 124**

2. Students must select an Art History course. For questions or recommendations, students should see their advisor.
3. Either *The Detective Novel* or *World Society in Literature and Film* is suggested for GenEd Global/World Society (GG).

## Certificate in Acting

The Certificate in Acting allows undergraduates from other disciplines to pursue their interest in acting. For myriad reasons, interested undergraduates pursue a major outside of Theater and the performing arts, but their passion for acting remains from experiences in middle school and high school productions, clubs, camps and childhood. The Certificate in Acting allows a student to continue acting training with professional actors and faculty from the Department of Theater at Temple University and the rich theatrical community of Philadelphia. Skills acquired from the Certificate in Acting complement requisite expertise in most professions. Confidence in public speaking and presentation, creativity, collaboration, professionalism and empathy are just some of the qualities enhanced through the study of acting.

As part of this program, Theater offers the undergraduate Certificate in Acting on the Main Campus only. The certificate consists of a four-course, 12-credit sequence.

Students must be concurrently enrolled in a baccalaureate degree and the certificate to earn the certificate.

Students interested in declaring this certificate in the Department of Theater can do so by submitting a Change of Program Request form to Theater Advisor Lesley Copans (lcopans@temple.edu). If approved, the form will be submitted electronically to the Office of the University Registrar. In 3 to 5 business days, the request will be processed and then visible within Self-Service Banner (Student Information).

To seek assistance in monitoring their progress with the certificate declared, students are asked to meet with David Ingram (dingra@temple.edu, 215-204-6257). Meetings should take place regularly from the time of declaration to applying for graduation within their home school/college.
Requirements

A grade of C- or higher must be earned in all required courses.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>THTR 1008</td>
<td>Poetry as Performance</td>
<td>3</td>
</tr>
<tr>
<td>or THTR 2262</td>
<td>Improvisation</td>
<td></td>
</tr>
<tr>
<td>THTR 1202</td>
<td>Fundamentals of Voice and Movement</td>
<td>3</td>
</tr>
<tr>
<td>THTR 1211</td>
<td>Fundamentals of Acting</td>
<td>3</td>
</tr>
<tr>
<td>THTR 2201</td>
<td>Acting Styles</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credit Hours: 12

Certificate in Stage Management

The Certificate in Stage Management allows undergraduates from other disciplines to pursue their interest in the backstage organization of live theater; adds to student's self-confidence, leadership, and presentation skills; and allows the student to participate in Department of Theater productions for academic credit.

While students may not be outright Theater majors, they may have a desire to be involved with productions. Skills acquired from the Certificate in Stage Management include confidence in public speaking and presentation, creativity, collaboration, professionalism and many more, enhanced through the study within the Department of Theater coursework.

As part of this program, Theater offers the undergraduate Certificate in Stage Management on the Main Campus only. The certificate consists of a four-course, 12-credit sequence.

Students must be concurrently enrolled in a baccalaureate degree and the certificate to earn the certificate.

Students interested in declaring this certificate in the Department of Theater can do so by submitting a Change of Program Request form to Theater Advisor Lesley Copans (lcopans@temple.edu). If approved, the form will be submitted electronically to the Office of the University Registrar. In 3 to 5 business days, the request will be processed and then visible within Self-Service Banner (Student Information).

To seek assistance in monitoring their progress with the certificate declared, students are asked to meet with Matthew Miller (mbmiller@temple.edu, 215-204-4263). Meetings should take place regularly from the time of declaration to applying for graduation within their home school/college.

Requirements

A grade of C or higher must be earned in THTR 1411 in order to register for THTR 2441. A grade of C- or higher must be earned in all other required courses.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>THTR 1411</td>
<td>Welcome Backstage</td>
<td>3</td>
</tr>
<tr>
<td>THTR 2441</td>
<td>Stage Management I</td>
<td>3</td>
</tr>
<tr>
<td>THTR 3442</td>
<td>Theater Management I</td>
<td>3</td>
</tr>
<tr>
<td>THTR 3080</td>
<td>Special Topics (in stage management)</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credit Hours: 12

Certificate in Theater Education

The Certificate in Theater Education allows undergraduates from other disciplines to pursue their interest in education combined with Theater courses, adds to student's self-confidence and presentation skills, and makes the student doubly marketable and employable because they have an extra skillset applicable to classes, after-school activities, and a better classroom presence. While students may not be outright Theater majors, they may have a desire to teach drama or lead drama after-school programs in a secondary setting. Their desire to one day enter the classroom - even teaching some other area such as math, science, social studies, or special education - is what drives them to also go for the Certificate in Theater Education. The Certificate in Theater Education allows a student to gain theater training which would enable them to take on additional responsibilities once attaining a job teaching another area. Skills acquired from the Certificate in Theater Education include confidence in public speaking and presentation, creativity, collaboration, professionalism and empathy, which are qualities enhanced through the study within the Department of Theater coursework.

As part of this program, Theater offers the undergraduate Certificate in Theater Education on the Main Campus only. The undergraduate certificate consists of a five-course, 15-credit sequence.

Students must be concurrently enrolled in a baccalaureate degree and the certificate to earn the certificate.
Students interested in declaring this certificate in the Department of Theater can do so by submitting a Change of Program Request form to Theater Advisor Lesley Copans (lcopans@temple.edu). If approved, the form will be submitted electronically to the Office of the University Registrar. In 3 to 5 business days, the request will be processed and then visible within Self-Service Banner (Student Information).

To seek assistance in monitoring their progress with the certificate declared, students are asked to meet with Matthew Miller (mbmiller@temple.edu, 215-204-4263). Meetings should take place regularly from the time of declaration to applying for graduation within their home school/college.

**Requirements**

A grade of C- or higher must be earned in all required courses, except where noted.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>THTR 1411</td>
<td>Welcome Backstage (must earn a grade of C or higher)</td>
<td>3</td>
</tr>
<tr>
<td>THTR 1202</td>
<td>Fundamentals of Voice and Movement</td>
<td>3</td>
</tr>
<tr>
<td>THTR 2441</td>
<td>Stage Management</td>
<td>1</td>
</tr>
<tr>
<td>THTR 3011</td>
<td>Methods of Teaching Artistry</td>
<td>3</td>
</tr>
<tr>
<td>THTR 3013</td>
<td>Methods of Teaching Theater</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

1 The prerequisite for this course is THTR 1411 with a grade of C or higher.

**Certificate in Theater and Community Engagement**

The Certificate in Theater and Community Engagement allows undergraduates from other disciplines to pursue their interest in theater and how it relates to the world at large. The required course for the Certificate, Community Engaged Theater, will give students the opportunity to explore how theater companies and individual artists from the United States and abroad have used performance to address local to global social issues. Students can then choose among a menu of courses that address more specific issues of identity, representation and oppression including gender, race and sexuality. This certificate will allow students to utilize art and creativity to address issues that impact their lives and the lives of those in their communities. This certificate will develop skills in creativity and community organization; will enhance students' experience at Temple University; will prepare them for graduate-level work and will increase their awareness of social issues that are relevant in the workplace, in the classroom and in our daily lives.

The Department of Theater offers this undergraduate Certificate in Theater and Community Engagement on the Main Campus only. The certificate consists of a four-course, 12-credit sequence.

Students must be concurrently enrolled in a baccalaureate degree and the certificate to earn the certificate.

Students interested in declaring this certificate in the Department of Theater can do so by submitting a Change of Program Request form to Theater Advisor Lesley Copans (lcopans@temple.edu). If approved, the form will be submitted electronically to the Office of the University Registrar. In 3 to 5 business days, the request will be processed and then visible within Self-Service Banner (Student Information).

To seek assistance in monitoring their progress with the certificate declared, students are asked to meet with David Ingram (dingra@temple.edu, 215-204-6257). Meetings should take place regularly from the time of declaration to applying for graduation within their home school/college.

**Requirements**

A grade of C- or higher must be earned in all required courses.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>THTR 3058</td>
<td>Community Engaged Theater</td>
<td>3</td>
</tr>
<tr>
<td>Select 3 from the following:</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>THTR 1008</td>
<td>Poetry as Performance</td>
<td></td>
</tr>
<tr>
<td>THTR 2008</td>
<td>Poetic Ethnography</td>
<td></td>
</tr>
<tr>
<td>THTR 3052</td>
<td>Theater of Protest</td>
<td></td>
</tr>
<tr>
<td>THTR 3053</td>
<td>Women in Theater</td>
<td></td>
</tr>
<tr>
<td>THTR 3054</td>
<td>African-American Theater</td>
<td></td>
</tr>
<tr>
<td>THTR 3055</td>
<td>Performance Art</td>
<td></td>
</tr>
<tr>
<td>THTR 3057</td>
<td>Queer Theater</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credit Hours</strong></td>
<td></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

**Certificate in Voice and Speech for the Actor**

The Certificate in Voice and Speech for the Actor allows undergraduates from other disciplines to pursue their interest in voice and speech. The Department of Theater at Temple University boasts two master teachers and one associate teacher of the renowned Fitzmaurice voice method.
Participants in the Certificate in Voice and Speech for the Actor study with these teachers and with instructors trained by them. For myriad reasons, interested undergraduates pursue a major outside of Theater and the performing arts, but their passion for performance and hunger for training remains. The Certificate in Voice and Speech for the Actor allows a student to continue training with professional actors and faculty from the Department of Theater at Temple and the rich theatrical community of Philadelphia. Skills acquired from the Certificate in Voice and Speech for the Actor complement requisite expertise in most professions. Confidence in public speaking and presentation, creativity, collaboration, professionalism and communication are just some of the qualities enhanced through the study of voice and speech.

As part of this program, Theater offers the undergraduate Certificate in Voice and Speech for the Actor on the Main Campus only. The certificate consists of a four-course, 12-credit sequence.

Students must be concurrently enrolled in a baccalaureate degree and the certificate to earn the certificate.

Students interested in declaring this certificate in the Department of Theater can do so by submitting a Change of Program Request form to Theater Advisor Lesley Copans (lcopans@temple.edu). If approved, the form will be submitted electronically to the Office of the University Registrar. In 3 to 5 business days, the request will be processed and then visible within Self-Service Banner (Student Information).

To seek assistance in monitoring their progress with the certificate declared, students are asked to meet with Donna Snow (dsnow@temple.edu, 215-204-8414). Meetings should take place regularly from the time of declaration to applying for graduation within their home school/college.

Requirements

A grade of C- or higher must be earned in all required courses.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>THTR 1202</td>
<td>Fundamentals of Voice and Movement</td>
<td>3</td>
</tr>
<tr>
<td>THTR 1008</td>
<td>Poetry as Performance</td>
<td>3</td>
</tr>
<tr>
<td>THTR 2221</td>
<td>Voice for the Actor</td>
<td>3</td>
</tr>
<tr>
<td>THTR 2231</td>
<td>Speech for the Actor</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credit Hours</strong></td>
<td></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

Theater Minor

A 20 credit-hour minor is available to undergraduate students in other departments and colleges. The minor is intended to give some broad introduction in theater followed by a small amount of specialization. A notation on the transcript will indicate successful completion of the minor.

**STUDENTS ELECTING THE THEATER MINOR MAY APPLY UP TO SIX TRANSFER CREDITS TOWARD THE TWENTY CREDITS REQUIRED FOR THE MINOR. THTR 1087 IS NOT AVAILABLE AS AN EQUIVALENCY FOR ANY ARTICULATED CREDIT IN TRANSFER.** Students must receive the permission of their advisor before starting in this program. Once the minor has been approved, students must follow the academic rules of the Department of Theater for all Theater courses. Minor credit is not given for Theater grades below C. Students must maintain at least a 2.0 GPA in the minor. Students with theater averages under 2.0 GPA for more than two semesters will be dropped from the program. Students with averages under 2.0 GPA may not begin the program. Students minoring in Theater should collaborate with a Theater Department Advisor in the selection of course work.

Requirements

**Required Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>THTR 1002</td>
<td>Theater: The Collaborative Art</td>
<td>3</td>
</tr>
<tr>
<td>THTR 4097</td>
<td>World of the Play</td>
<td>3</td>
</tr>
<tr>
<td>THTR 3051</td>
<td>Modern Directions</td>
<td>3</td>
</tr>
<tr>
<td>THTR 1087</td>
<td>Production Practicum (2 semesters required)</td>
<td>1/1</td>
</tr>
<tr>
<td><strong>Theater Electives - Select 3 courses from either or a combination of the Additional Courses below:</strong></td>
<td>9</td>
<td></td>
</tr>
</tbody>
</table>

**Additional Courses in Theater History and Literature**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>THTR 3096</td>
<td>Classical Tradition</td>
</tr>
<tr>
<td>THTR 3097</td>
<td>Romantic Tradition</td>
</tr>
<tr>
<td>THTR 3012</td>
<td>American Musical Theater</td>
</tr>
<tr>
<td>THTR 3070</td>
<td>Seminar in Drama</td>
</tr>
<tr>
<td>THTR 4711</td>
<td>History of Modern Scenic Design</td>
</tr>
<tr>
<td>THTR 3611</td>
<td>Visual History I</td>
</tr>
<tr>
<td>THTR 3057</td>
<td>Queer Theater</td>
</tr>
<tr>
<td>THTR 3056</td>
<td>Shakespeare on Film</td>
</tr>
<tr>
<td>THTR 3801</td>
<td>Playwriting</td>
</tr>
</tbody>
</table>
### Additional Courses in Theater Performance

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>THTR 1231</td>
<td>Acting I</td>
</tr>
<tr>
<td>THTR 2261</td>
<td>Acting II</td>
</tr>
<tr>
<td>THTR 2262</td>
<td>Improvisation</td>
</tr>
<tr>
<td>THTR 1008</td>
<td>Poetry as Performance</td>
</tr>
<tr>
<td>THTR 1003</td>
<td>Creativity: Basic</td>
</tr>
<tr>
<td>THTR 3132</td>
<td>Musical Theater Voice &amp; Acting</td>
</tr>
<tr>
<td>THTR 2221</td>
<td>Voice for the Actor</td>
</tr>
<tr>
<td>THTR 2241</td>
<td>Basic Movement</td>
</tr>
<tr>
<td>THTR 2231</td>
<td>Speech for the Actor</td>
</tr>
<tr>
<td>THTR 2251</td>
<td>Dance for the Actor</td>
</tr>
<tr>
<td>THTR 1232</td>
<td>Jacques Lecoq Technique Part 1</td>
</tr>
</tbody>
</table>

### Additional Courses in Theater Design and Technology

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>THTR 1411</td>
<td>Welcome Backstage</td>
</tr>
<tr>
<td>THTR 2511</td>
<td>Lighting for the Theater</td>
</tr>
<tr>
<td>THTR 2612</td>
<td>Costume Design I</td>
</tr>
<tr>
<td>THTR 2411</td>
<td>Introduction to Design</td>
</tr>
<tr>
<td>THTR 4582</td>
<td>Lighting Design</td>
</tr>
<tr>
<td>THTR 4782</td>
<td>Scene Design</td>
</tr>
</tbody>
</table>

### Additional Courses in Theater Producing/Directing

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>THTR 1411</td>
<td>Welcome Backstage</td>
</tr>
<tr>
<td>THTR 1231</td>
<td>Acting I</td>
</tr>
<tr>
<td>THTR 2441</td>
<td>Stage Management I</td>
</tr>
<tr>
<td>THTR 3301</td>
<td>Introduction to the Director's Art</td>
</tr>
</tbody>
</table>

**Total Credit Hours**: 20
College of Education

Founded 1919

Dr. Gregory M. Anderson, Dean
245 Ritter Hall
1301 Cecil B. Moore Avenue
Philadelphia, PA 19122-6091
215-204-8017
COEdean@temple.edu

http://education.temple.edu/

Mission Statement

The College of Education at Temple University believes that education improves the lives of children and their families. By ensuring access to high-quality education and empowering all students with the tools they need to achieve, the education profession protects our democratic institutions and promotes social justice. The College of Education aims to play a critical role in promoting educational opportunity both locally and nationally.

As a result of its strategic location in North Philadelphia and its long-term history of collaboration with the School District of Philadelphia, the College of Education is uniquely situated to impact educational practice in city schools. The preparation of teachers, administrators and other school professionals to improve the quality of education, especially in urban settings, remains a core activity of the college.

College faculty conduct and promote research that addresses significant issues of national importance that have immediate practical applications. They investigate problems, evaluate strategic responses to those problems and provide evidence for new practice.

History

While the official date for the founding of the College of Education is usually given as 1919, the college has included teacher preparation as part of its curricula almost from its inception. It is clear from Temple’s history that the unofficial founder of the college was Laura Carnell, who began a program for the preparation of kindergarten teachers as early as 1895. This preparation program was expanded into elementary and then secondary areas largely in response to the Philadelphia School District’s decision that higher positions in the city’s school system would be open only to those with a college degree. In response to this need, the college began offering two, three, and four-year programs to teachers, as well as extension work, day and evening courses, five days a week and on Saturday mornings. This intimate relationship between the college and the School District of Philadelphia characterizes almost all of the college’s history. The college was one of the first institutions to schedule courses so that teachers could take them after school hours. Programs of graduate study at the master’s level were introduced in 1923, with the Doctor of Education being first awarded in 1931.

The first dean of the college was George Walk, who took over “Teachers College” in 1919 from Laura Carnell (the official name was changed to the “College of Education” in 1960). At present, there are three departments in the college: the Department of Teaching and Learning, the Department of Psychological Studies in Education, and the Department of Policy, Organizational, and Leadership Studies.

Historically, Temple’s College of Education has had a significant impact on local and regional practice. It has always been the largest college of education in the region and one of the largest in the country. The college continues to be the major provider of teachers for the Philadelphia School District and for many suburban districts. Many principals and superintendents of the neighboring regions have received their degrees from Temple. Many of the school psychologists, counselors, educational researchers, and other education professionals have been prepared at Temple. In a very real sense, the College of Education has helped to shape the educational direction of the region.

Accreditation

The College of Education is an accredited member of the Middle States Accreditation (http://www.msche.org).

The College offers programs approved by the Pennsylvania Department of Education (http://www.education.state.pa.us/portal/server.pt/community/pennsylvania_department_of_education/7237) (PDE) that are designed for students seeking certificates to teach in early childhood/elementary, middle-grades, secondary, special education and business education settings.

The undergraduate programs in the College of Education are designed to prepare students for careers in education, both in schools and in non-school settings. Secondary education programs require students to take extensive course work in a specific specialization area. The College also offers the Adult and Organizational Development and Human Development and Community Engagement programs (non-certification majors) designed for students who are interested in careers in non-profit advocacy organizations, childcare agencies, museum education, training or other education-related careers.
Academic Opportunities

4+1 Programs

Eligible undergraduate students begin graduate courses to fulfill requirements for their undergraduate degree. Upon graduation from their undergraduate program, students move seamlessly into their graduate program, which they complete in one additional year. Interested students should see an Academic Advisor for more information including GPA requirements, application process and deadlines (usually in spring each year), and overview of the programs. The College of Education offers its own 4+1 programs in Adult & Organizational Dynamics and Early Childhood Education/Special Education while also partnering with the College of Liberal Arts, the College of Science and Technology and the College of Engineering to offer students in these colleges opportunities to earn graduate degrees in education. Students can read more about available 4+1 programs on the College of Education web site and in this Bulletin (p. 53). Students wishing to apply to a College of Education 4+1 program can do so on the College of Education web site (http://education.temple.edu/admissions/accelerated).

Certificates

• ESL: Because of the dramatic increase in the number of English language learners in the K-12 population, it would be beneficial for prospective teachers to get ESL certification in addition to their content area certification. The ESL Certificate Program at Temple provides an excellent opportunity to get the add-on ESL certification. For more information and how to apply for this certificate as an undergraduate student, visit http://education.temple.edu/tesol/current-students.

• Instructional Technology Specialist Certification: Institutions across the nation require educators who understand and can effectively utilize technology in learning environments. This certificate program provides students with the expertise and competencies to implement learning strategies through the use of technology. All certification requirements can be met through online course work. The Instructional Technology Specialist Certification features an innovative curriculum designed for students to enhance careers in a variety of settings. For more information, visit http://education.temple.edu/ilt

Diamond Research Scholars Program

The Diamond Research Scholars Program provides Temple undergraduates the opportunity to engage in a focused, mentored research or creative arts project during the summer and fall. The program requires that students participate in the two-day Undergraduate Research Institute, devote ten weeks during the summer to develop a research project in their area of interest under the direction of their faculty mentor, and complete the project during the fall semester while registered for an independent study/research course. For eligibility and other information, please visit http://www.temple.edu/vpus/opportunities/researchscholars.htm; students can also visit the College of Education web site for research opportunities within the College.

Career and Student Development

The College of Education is committed to support and prepare students entering today’s competitive job market, while providing them with the tools to help them excel in their chosen fields. Career and Student Development is a vital link between students’ collegiate experience aligned to their career and professional outcomes. Career planning is an ongoing process that begins early. While partnering with the Career Center, the College of Education ensures all undergraduate and graduate students develop the requisite professional skills that will help them locate meaningful internships, externships and permanent jobs with regional and national employers. We guide students on comprehensive strategies to start on a successful career search, including: employment agencies, career fairs, networking, web sites, professional associations, chambers of commerce, job search clubs, informational interviewing, etc. We can also connect students to our active network of alumni. Being successful requires a balance of good academic performance, an understanding of the markets and industry expectations, and experience gained through active involvement in Student Organizations.

The College of Education Career and Student Development can assist with:

• Selecting or refining career goals and interests
• Developing resumes, cover letters and thank you letters
• Finding and applying for internships or full-time employment
• Mock Interviewing and networking guidance
• On campus recruitment & Career Fairs
• Professional Development workshops

Scholarships and Awards

Through the generous support of our loyal alumni, faculty, staff and friends of the College of Education, we are able to offer a limited number of scholarships to our incoming and current students based on merit and/or need. Scholarship amounts range from $500 to $6,000 and are only for students who are currently enrolled in the College of Education.

Current information regarding scholarships available can be found on the College of Education Scholarships web site (http://education.temple.edu/services/scholarships-graduation-awards) and on the College of Education Undergraduate Community on Blackboard.

Key Contact Information

Shimada Resource Center (http://education.temple.edu/services)
College of Education  
150 Ritter Annex  
1301 Cecil B. Moore Ave.  
Philadelphia, PA 19122  
215-204-8011 (phone)  
215-204-4383 (fax)  
Office Hours: 8:30 a.m. - 5:00 p.m. Monday through Friday.  

Ambler Campus advising - West Hall 109, 267-468-8200

**Undergraduate Academic and Student Affairs / Advising** - Main Campus  
Janet Distel, MSW  
Senior Director of Undergraduate and Graduate Academic and Student Affairs  
jdistel@temple.edu  

Daniel Gilbert, M.Ed.  
Assistant Director of Academic Advising  
dgilbert@temple.edu  

Madeleine DeBot, M.A.  
Academic Advisor II  
mdebot@temple.edu  

Carly Salvadore, M.S.Ed.  
Academic Advisor I  
carly.salvadore@temple.edu  

Meghan Byrnes, M.S., NCC  
Academic Advisor I  
mbyrnes@temple.edu  

Maryann McGrory  
Coordinator for Undergraduate Academic and Student Affairs  
mmcgrory@temple.edu  

**Teacher Education Certification**  
Linda Jones, M.Ed.  
Director of External Programs and Certification  
linda.jones@temple.edu  

**Office of Field Placement** (edfield@temple.edu)  
Juliet Curci, PhD  
Director of School and Community Partnerships  
 juliet.curci@temple.edu  

Bernie McGee, Ed.M.  
Assistant Director of Field Placement  
mgeo@temple.edu  

Tonya Thomas  
Field Placement Coordinator  
tontom@temple.edu  

Mary Jenkins  
Field Placement Administrator  
mjenkins@temple.edu  

**Contacts & Directories**  
Directories include name, department, office location, phone number, and preferred e-mail. The directories also include links to résumé/CV where available.  

- Office of the Dean (http://education.temple.edu/coe/office-dean-staff-directory)
Academic Policies & Regulations

Students are responsible for complying with all university and college policies and procedures. Additional and unique policies related to state requirements for teacher certification are aligned with the Pennsylvania Department of Education (P.D.E.) and College of Education requirements.

Academic Overload Requests

Students in the College of Education must petition through an Academic Advisor when requesting permission to take more than 18 credits in either the fall or spring semesters (12-17 credits is considered full time for financial aid purposes) or more than 8 credits in either summer session. Each petition is evaluated individually and a decision rendered; submission of a petition does not guarantee approval. The student will be alerted of the decision via e-mail. The following items are considered when reviewing an overload petition:

- Current cumulative GPA
- The number of credits completed
- Previous semesters, if any, in which a student took an overload and GPA earned in such semesters
- The amount of overload credits requested
- What courses the student will be taking in that semester.

Candidacy

All students enrolled in teacher certification programs must achieve Candidacy to progress to teaching methods courses and student teaching. Students should read more about Candidacy in the College Requirements (p. 399) section of this Bulletin.

Change of Program

Changing into a College of Education Program From Another Program at Temple

Students wishing to change their program to a teacher certification program: Early Childhood (with or without the Special Education Concentration), Middle Grades, Secondary Education or Career and Technical Education must register for and attend a Change of Program (COP) workshop at the College of Education. After attending this workshop, students are then eligible to schedule an individual appointment with an Academic Advisor; this is the final step in changing the program of study. Students seeking to transfer into a certification program in the College of Education must have a minimum cumulative GPA of 3.0, no exceptions are made to this GPA requirement. Students interested in a certification program who do not yet have a 3.0 or are still deciding if the program is right for them are eligible to take certain courses prior to officially changing their program; students interested in doing so must attend a COP workshop and meet with an Advisor to discuss which courses they are eligible to take that would apply to their prospective program. Students should call 215-204-8011 to schedule their COP workshop.

Students wishing to change their program to a non-certification program: Adult and Organizational Development (AOD) or Human Development and Community Engagement (HDCE) are not required to attend a Change of Program workshop. Instead, students should call 215-204-8011 to schedule an advising appointment, a required step in this change of program process. Students must identify themselves as a student changing his/her major to AOD or HDCE and must request a one hour appointment. Students wishing to change their program to AOD or HDCE must have a minimum cumulative GPA of 2.0. Students interested in AOD are also advised to contact Cynthia Belliveau, Ph.D. (cynthia.belliveau@temple.edu) to schedule a meeting during which the AOD program, goals and crafting a meaningful academic plan are discussed. Students wishing to change their program to AOD must have a minimum cumulative GPA of 2.0. Students should call 215-204-8011 to schedule their advising appointment, a required step in this process. Students must identify themselves as a student changing his/her major to AOD and should request a one hour appointment.

Students interested in HDCE are also advised to contact Shanta Hattikudur, Ph.D. (shanta.hattikudur@temple.edu) to schedule a meeting during which the HDCE program, goals and crafting a meaningful academic plan are discussed. Students wishing to change their program to HDCE must have a minimum cumulative GPA of 2.0. Students should call 215-204-8011 to schedule their advising appointment, a required step in this process. Students must identify themselves as a student changing his/her major to HDCE and should request a one hour appointment.

1 Students who are in their first semester at Temple University who have not yet established a GPA are eligible to begin the Change of Program process.
Changing Programs Within the College of Education

Students must be in good academic standing in their program to change their major into another program within the College of Education. To change majors within the College of Education, a student must schedule a one hour Change of Program appointment with an Academic Advisor. Call 215-204-8011 to schedule.

Clearances

The College of Education’s Clearances Policy requires that all undergraduate (and graduate) students enrolled in Temple teacher education courses which require fieldwork submit updated copies of the following clearances to the College annually, via its online platform, EdPortal:

1. Pennsylvania State Police Criminal History Record (Act 34)
2. Pennsylvania Department of Public Welfare Child Abuse History Clearance (Act 151)
3. Federal Criminal History Background Check (FBI/fingerprint check) (Act 114)
4. P.P.D. (TB) Test (School Health regulations, 28 PA Code, Section 23.44)

Students must renew clearances annually beginning in May and must upload those to Edportal on or before July 1st of each year to ensure the clearances are valid throughout both the Fall and Spring semesters; students must maintain valid and current clearances while enrolled in the College of Education.

Students should refer to the College of Education clearance web site (http://education.temple.edu/ofp/clearances) and to the College’s Undergraduate Community on Blackboard for current details about how to secure each clearance and for a list of courses which require clearances. Students with any questions about clearances should contact the Office of Field Placement in the Shimada Resource Center at edfield@temple.edu.

Co-requisites and Prerequisites

Students may be de-enrolled from courses for which they do not meet prerequisites and co-requisites. Students are responsible for reviewing and abiding by all course prerequisites and co-requisites. (Candidacy approval is considered a prerequisite to all teaching methods courses.)

Courses Over Five Years Old

Courses over five years old are subject to review to fulfill certification requirements. Courses over ten years old will not count toward a degree nor certification requirements in the College of Education.

Dean's List

Each fall and spring semester those undergraduates who have met the credit hour and academic criteria for their school or college are placed on the Dean’s List. For specific GPA and credit-hour requirements for each college, see the University's Dean's List policy (p. 92). Dean’s List letters are sent from the University Registrar.

Educators’ Code of Professional Conduct

The College of Education at Temple University promotes education as a primary mechanism for social mobility and social justice for all learners. Our mission is to prepare all of our students to be ethical and effective professionals who will employ leading-edge understandings and evidence-based practices in whatever setting they work. In order for us to achieve that mission, we have to have high expectations for our students from the onset of their studies. Our Code of Professional Conduct articulates those expectations and delineates the process the College employs when they are not met. This is a supplement, not a substitution, for the University’s Code of Conduct.

I. Expectations for ethical behaviors in Temple courses include the following:

1. Students must demonstrate professional responsibility through full participation in all course activities and compliance with academic and attendance policies as described in each course syllabus.
2. Students must not attend class under the influence of any non-prescribed drugs or medications or alcohol.
3. Students must manifest respect for others regardless of race, culture, gender, social class, sexual orientation, religion, disability or ability level.
4. Students must avoid classroom behaviors that interfere with the learning of others, including, but not limited to, irresponsible use of cell phones, laptops or Ipads, or regularly making negative or disruptive comments.
5. Students must exhibit a professional level of respect for both professors and classmates and shall not engage in physical intimidation or any other inappropriately aggressive behavior.
6. Students must submit only their original work.
7. Students must obtain permission to use and shall give appropriate citations for any work of another person used in her/his assignments, including classmates.
8. Students shall not submit work done for another class without the express approval of an instructor.
9. Students must comply with all fair use and copyright requirements when installing and using software on any computer.
10. Students must use electronic communication in a responsible and professional manner at all times and shall not display, send, or forward any sexually explicit or other inappropriate materials or any harassing or discriminatory communications.

11. Students must not falsify or misrepresent any information to faculty, supervising teachers, and university supervisors.

II. Expectations for ethical behavior in field placements include the following:


2. Students must comply with all policies, statutes, rules and procedures established by Temple University, state and local agencies, and any school or other institution in which the student is doing any field experience.

3. Students must treat supervising teachers; other school faculty, administrators, and staff; university supervisors; and their own students with respect at all times.

4. Student shall recognize, respect, and plan for the diversity that exists in the classroom and greater community.

5. The student shall develop and adhere to appropriate professional boundaries in all relationships. Developing a romantic and/or sexual relationship with a student, instructor, staff member, or supervisor is unacceptable.

6. Students must exhibit a professional commitment to their work in schools and must not demonstrate unprofessional behavior through poorly prepared lessons, unprofessional appearance, or low expectations for self and others.

7. Students must not attend field assignments under the influence of any non-prescribed drugs or medications or alcohol.

8. Students shall become knowledgeable about and abide by rules set forth by all schools in which they are doing field experience.

Graduation without Certification

Only students who have successfully completed all requirements other than those requirements indicated in the 8th semester of a student’s 8 semester academic plan are eligible to petition to graduate without certification.

- Students enrolled in a teacher certification program who have completed all academic requirements other than those listed in the 8th semester of their plan must meet with an Academic Advisor to 1) review reasons for petitioning to graduate without certification, 2) develop an alternate academic plan and, 3) complete the Graduation without Certification Petition; receipt of the Petition is documented by the Advisor and then forwarded to the Director of Undergraduate Academic and Student Affairs for review and the student is notified of the decision via email.

- Students enrolled in a teacher certification program who decide they no longer want to pursue teacher certification, but have not completed all requirements other than student teaching and senior seminar are not eligible to Graduate without Certification. Such students are advised to meet with an Academic Advisor to discuss non-certification programs within the College of Education or external options.

Students who have begun to student teach and decide not to (or cannot) continue:

- During the drop period must 1) drop their student teaching and senior seminar, 2) meet with the Office of Field Placement to review the reason(s) for ending the student teaching, and 3) must meet with an Academic Advisor to develop an alternate academic plan and either complete the Graduation without Certification Petition or change their major to a non-certification program. If petitioning, receipt of the Petition is documented by the Advisor and then forwarded to the Director of Undergraduate Academic and Student Affairs for review and the student is notified of the decision via email.

- During the Withdraw period, must 1) withdraw from their student teaching and senior seminar (students are financially responsible for all tuition and fees during the withdraw period), 2) meet with the Office of Field Placement to review the reason(s) for ending the student teaching, and 3) must meet with an Academic Advisor to develop an alternate academic plan and either complete the Graduation without Certification Petition or change their major to a non-certification program. If petitioning, receipt of the Petition is documented by the Advisor and then forwarded to the Director of Undergraduate Academic and Student Affairs for review and the student is notified of the decision via email.

- After the Withdraw period* must 1) meet with the Office of Field Placement to review the reason(s) for ending the student teaching, 2) must meet with Academic Advisor to develop an alternate academic plan, as needed, and complete the Graduation without Certification Petition or change their major to a non-certification program. If petitioning, receipt of the Petition is documented by the Advisor and then forwarded to the Director of Undergraduate Academic and Student Affairs for review and the student is notified of the decision via email. Students who do not continue student teaching and senior seminar after the Withdraw deadline will be graded based on work already completed. Students who do not earn passing grades may need to complete additional coursework to earn the minimum credits required for the degree program. Students are financially responsible for tuition and fees for courses for which they are registered after the Drop deadline, so students in this instance are obligated to pay for all credits in which they are enrolled.

* Discontinuing student teaching after the withdraw period is a serious matter and should only be considered in extenuating circumstances; such circumstances must be discussed with the Office of Field Placement prior to ending the placement.

Grievances

Whenever a student has a grievance, the College encourages the student to address his or her concern with the professor to seek an informal resolution without the assistance of outside parties. When that cannot be achieved, the student is encouraged to contact the Ombudsperson to begin the formal Appeal process. The Ombudsperson’s role is to mediate disputes arising over an academic issue within the College and to make sure the parties are
aware of the various policies that have bearing on the case. The goal is to bring the dispute to a quick resolution. The Ombudsperson can be contacted at education.ombudsperson@temple.edu.

College of Education students with grade grievances in courses outside of the College of Education must follow the process in the College/School who manages the course.

Letters of Completion
Any student in a teacher certification program who has successfully completed all requirements of the program and whose degree has been officially conferred by the University Registrar may request a Letter of Completion. As per the University Registrar, no Letter of Completion is provided until the University's graduation clearance and degree conferral process is completed. Students should refer to the College of Education's graduation web site for the Letter of Completion request form and for specific dates of degree conferral each semester.

Permission to Take Courses At Another Institution
Consistent with University policy, students will not receive transfer credit for courses taken at another institution while they are matriculated (Degree Seeking) at Temple University unless prior permission has been obtained. Permission forms are available on the Senior Vice Provost for Undergraduate Studies web site under Forms. Students should carefully review the criteria on the form and must make an appointment with an Academic Advisor to review and submit the form. Students should allow at least two weeks for review and processing of these forms.

Prerequisites
See Co-requisites and Prerequisites, above.

Re-enrollment
Students who have not been registered for one (or more) semesters are no longer an active student as per University policy and therefore must complete a Re-enrollment Request and submit that request to the school/college in which they wish to re-enroll. (Students do not submit the request to their former school/college if they wish to switch into a new school/college.) The College of Education reviews Re-enrollment Requests on a rolling basis and students are alerted of the decision via the e-mail address provided on their Re-enrollment Request form.

University policy dictates that if the student's original curriculum is no longer available, the student must follow the most current curriculum or choose a different current curriculum (major) upon his/her return; this applies to any student who has not registered for a single semester or more and it can have significant impact on degree progress. Upon Re-enrollment approval, students are directed to meet with an Advisor and topics such as remaining requirements and anticipated graduation date are discussed at this appointment.

University-established deadlines for Re-enrollment Requests are:
- For the fall semester: August 1*
- For the spring semester: December 1*
- For summer sessions I and II: April 1*

* Any Re-enrollment Requests received after these dates are reviewed at the discretion of the College of Education.

Important Note about Transcripts and Holds for Students wishing to Re-enroll:
- Students who have attended another institution since last enrolled at Temple are required to submit any and all transcripts with the Re-enrollment Request form; failure to submit all transcripts will result in a denial of the re-enrollment request. When transcripts are provided, a review of the request can be conducted. If transcripts are provided after the University-established deadlines noted above, review of the Re-enrollment Request will be at the discretion of the College of Education.
- Students with any type of hold on their record must clear the hold prior to submitting a Re-enrollment Request; failure to clear all holds will result in a denial of the re-enrollment request. When all holds are cleared, a review of the request will be conducted. If a hold is not cleared until after the University-established deadlines noted above, review of the Re-enrollment Request will be at the discretion of the College of Education.

Repeating a Course
As per University policy, students may attempt a course two times without restriction, but a third attempt of any course is not guaranteed and requires the student to petition; students must make this third attempt petition by bringing the completed petition form to a scheduled advising appointment. Petitions for a third attempt of a course are reviewed by the Director of Undergraduate Academic and Student Affairs and the student is notified of the decision via e-mail from the Advisor with whom they met to initiate the petition process. Each petition will be reviewed individually; submission of a petition does not guarantee approval. Approvals of third attempt petitions may come with stipulations for development an academic plan and/or required meetings with advising and/or referrals to university resources, etc. Please refer to the University policy on Repeating a Course (p. 99) for further information. Students in the College of Education are encouraged to meet with an Advisor prior to attempting a course for the second time.
Temple University Requirements

- All students must complete Temple University’s General Education (GenEd (p. 143)) curriculum.
- All students must take a minimum of two writing-intensive courses at Temple University (including transfer students).

College of Education Graduation and Certification Requirements

College of Education Stipulations

The College of Education does not award Bachelor of Arts or Bachelor of Science degrees to students who have already completed an accredited first Bachelor's, Master's, or Ph.D. degree, regardless of when the degree was completed.

Teacher Certification Education Programs: Bachelor of Science in Education Degree

Early Childhood Education (with or without the Special Education Concentration), Middle Grades Education, Secondary Education, and Career and Technical Education

Areas of Certification within the College of Education

All curricula leading to Pennsylvania certification are organized to meet the standards established by the Pennsylvania Department of Education. The following areas of certification have been approved by Temple University's Board of Trustees and the Pennsylvania Department of Education

- Career and Technical Education
  - Business, Computer, and Information Technology K-12 (Formerly Business Education)
  - Cooperative Education
  - Marketing Education K-12
  - Industrial (Career Technical) Education
- Early Childhood-Elementary Education (Pre K to 4)
  - Early Childhood-Elementary Education with Special Education Concentration (dual certification)
- Middle Grades Education (grades 4 to 8)
  - Mathematics
  - Science
  - Language Arts
  - Social Studies
  - Mathematics and Science
  - Mathematics and English/Language Arts
  - Science and English/Language Arts
- Secondary Education (grades 7-12)
  - English
  - Mathematics
  - Science
  - Social Studies
- K-12 Certification in World Languages
  - French
  - German
  - Italian
  - Latin
  - Spanish

Students receive a Bachelor of Science in Education degree by meeting the following minimum College requirements:

- Completion of program requirements as detailed on the 8-semester academic plan.\(^1\)
- Earn a "C-" or above in all required Education Courses.
- Earn a "C-" or above in all required University General Education Courses.
- Fulfill all University Requirements as noted above

\(^1\) The required total credit hours vary depending on the course of study. These credit hours are satisfied by taking courses in four categories:

1. University General Education requirements
2. Foundational Education courses
3. Teacher Education Certification Courses (i.e. methods and student teaching)
4. Elective courses, as noted in each program of study.

Courses Not Applicable to Certification/Degree Program:
Specific courses are required in order for students to be endorsed for Pennsylvania teacher certification and complete their program of study. Just because a student has reached the minimum credits required for a degree does not mean they have completed the degree as the student may have taken additional courses that are credits not applicable to the program.

Some credits from ROTC and preparatory courses do not count towards the total number of semester hours needed to graduate. Students should meet with an Academic Advisor once per semester to ensure they are on track for completing all degree requirements.

Courses Over Five or Ten Years Old
Courses over five years old are subject to review to fulfill certification requirements.
Courses over ten years old will not count toward a degree nor certification requirements in the College of Education.

Certification Requirements
All students seeking to graduate with the recommendation for Pennsylvania teacher certification must meet the following requirements:

• Must complete the minimum number of credits at Temple as specified by the University.
• Earn a "C-" or above in all required Education Courses. (Students must be aware, that the State of Pennsylvania requires a minimum cumulative GPA for teacher certification (see above); obtaining the minimum grade of "C-" in multiple courses will not create a cumulative GPA sufficient to obtain certification.)
• Earn a "C-" or above in all University General Education Courses.
• Pass Basic Skills Assessment using SAT or ACT scores or, when those scores do not meet minimum scores required, take and pass all three sections (reading, writing and math) of either the PAPA or Praxis Core for Educators tests.
• Pass either PECT PreK-4 (Early Childhood Education program and Special Education concentration) or Praxis II (Middle Grades, Secondary Education, and Career and Technical Education programs) exams.
• Complete six credits of college-level math as specified by your program. Developmental, pre-College and courses at the 0xxx level are not applicable to this requirement.
• Complete six credits of college-level English, specifically 3 credits of composition and 3 credits of literature. Developmental, pre-College and courses at the 0xxx level are not applicable to this requirement.
• Secondary Education students: earn a minimum cumulative 2.0 GPA in the content area. Students must earn a minimum of "C-" (or higher, where stipulated by the program) in all content area courses.
• Middle Grades students: earn a minimum cumulative 2.0 GPA in the concentration area. Students must earn a minimum of "C-" (or higher, where stipulated by the program) in all concentration area courses.
• Students not obtaining Pennsylvania State Teacher certification within five years of completing their programs must take additional coursework before the College of Education will consider recommending them for certification.

Candidacy
Students in teacher certification programs are admitted to Temple University and enrolled in the College of Education where they take foundational courses required; however PDE guidelines mandate that all students must be admitted into the Teacher Education Certification Program through an application process; this process is referred to as "Candidacy". Students complete and submit a Candidacy Application at the midway point of their education (for most programs this occurs in the fourth semester of courses) and must earn Candidacy approval before they are able to progress into teaching methods courses and ultimately, student teaching. Students cannot register for teaching methods courses or the student teaching experience without achieving Candidacy.

Candidacy requirements include:

• Pass Basic Skills Assessment using SAT or ACT scores or, when those scores do not meet minimum scores required, take and pass all three sections (reading, writing and math) of either the PAPA or Praxis Core for Educators tests. (See "Certification Testing" below for more details.)
• Complete all courses stipulated as pre-Candidacy courses, earning a C- or higher in each.
• Complete six credits of college-level math as specified by your program. Developmental, pre-College and courses at the 0xxx level are not applicable to this requirement.
• Complete six credits of college-level English, specifically 3 credits of composition and 3 credits of literature. Developmental, pre-College and courses at the 0xxx level are not applicable to this requirement.
• Earn a minimum cumulative GPA of 3.0*
  • Secondary Education students must also earn a minimum cumulative 2.0 GPA in the content area. Students must earn a minimum of "C-" (or higher, where stipulated by the program) in all content area courses.
Middle Grades students must also earn a minimum cumulative 2.0 GPA in the concentration area. Students must earn a minimum of "C-" (or higher, where stipulated by the program) in all concentration area courses.

* Students who meet other criteria, but do not have a 3.0 should schedule an advising appointment to discuss a possible GPA Appeal Petition.

More information can be found on the College of Education's Candidacy web site (http://education.temple.edu/ugrad/candidacy-application-review).

Certification Testing

Students enrolled in teacher certification programs must successfully complete the Pennsylvania Department of Education's certification exams in order to receive certification from PDE:

- Basic Skills Assessment: students must achieve the minimum scores required by PDE on one of the following Basic Skills Assessments to be approved for Candidacy prior to beginning teaching methods courses:
  - PAPA (Math, Writing and Reading minimum score in each = 220 or the composite score system which requires a total minimum composite score = 686 with minimum scores in each module of Reading: 193, Math: 197, Writing: 192)
  - Praxis Core for Educators (Math minimum score = 150, Reading minimum score = 156, Writing minimum score = 162)
  - SAT (1550 total with no section score below 500)
  - ACT (composite score of 23 along with a combined English/Writing score of 22 and a Math score of 21)
- Praxis II to be certified in Secondary Education, Middle Grades Education or Career and Technical Education
- PECT Prek-4 and/or Special Education to be certified in Early Childhood Education and Special Education

Students can find further details and updates about all certification exam information on the College of Education web site at http://education.temple.edu/services/basic-skills-assessment-options and on the College of Education Undergraduate Community on Blackboard.

Students should visit the PAPA web site (http://www.pa.nesinc.com/GetInfo.aspx?f=PA001_TestPage.html&c=Test%20Information&q=What%20is%20the%20cost%20of%20the%20test%3F&l=PA001&h=FindInfoTestFee), the PECT web site (http://www.pa.nesinc.com) or the Praxis II web site (http://www.ets.org/praxis) to acquire test dates, registration information, minimum score information, and suggestions for preparation.

GPA Information as it Relates to Certification

Graduation from the College of Education does not carry automatic endorsement for state certification. Students must complete all the requirements for their specific Teacher Education Certification Program, including: successfully complete student teaching, earn a minimum cumulative GPA of 3.0 or meet the Pennsylvania Department of Education's Certification Testing and Scores requirements (http://www.education.state.pa.us/portal/server.pt/community/testing_requirements/8638), and must pass all required certification tests.

Field Experience, Practicum and Student Teaching

The College of Education places a great deal of emphasis on students’ in-school experiences. All undergraduates are required to complete courses that place them in school settings for a specified duration.

Student teaching, completed in a student's final semester, constitutes the most important field experience for prospective teachers. Application for student teaching placement must be submitted by the deadline communicated to students by the student teaching placement office.

Any student going into the field must obtain clearances. See the College of Education's clearance web site (http://education.temple.edu/ofp/clearances) for all details.

Performance Assessments

In addition to the teacher certification tests (PAPA and PECT/Praxis II tests) required by the Pennsylvania Department of Education, students are required to complete three performance assessments in order to gauge the extent to which they:

1. Know the content they will teach,
2. Can teach the content, and
3. Embody the professional attributes required of professional educators.

The performance assessments occur at three points in the undergraduate program: initially when prospective students are being admitted to certification programs through Candidacy; in the junior year, prior to student teaching (intermediate assessment); and before graduation, while student teaching (senior assessment). In addition to assessing and informing candidates about their teaching, the performance assessments are intended for use by faculty as a tool for program evaluation.

All undergraduate Education majors seeking certification must successfully complete the Intermediate Performance Assessment (IPA), a Temple University and PA Department of Education requirement for teacher education majors before student teaching. Under state guidelines, a teacher education institution must:

1. Conduct performance assessments throughout the preparation program for all students admitted to a professional educator (certification) program
2. Use the assessment information to determine eligibility for student teaching.

The Intermediate Performance Assessment (IPA) was developed in response to a regulation of the Pennsylvania Department of Education and as part of the College of Education's interest in ensuring teacher candidates' continuous progress in the teacher education certification program. The Temple IPA, like College of Education courses, is aligned to the program's six standards of effective teaching. At the completion of the teacher education program, teacher candidates will have had instruction to help them meet all of these standards in their teaching practice. The IPA measures progress toward these standards part way through the program; students must complete and pass this formal assessment to be eligible to student teach.

The IPA is followed by the Senior Performance Assessment (SPA) in the final semester of the program. All candidates for certification must successfully complete the Intermediate and Senior Performance Assessments. This is both a Temple University and PA Department of Education requirement for teacher education majors. Candidates for certification will not be submitted to the state as having met all requirements if they fail either the IPA or SPA twice.

Professional Education Portfolio

As a culmination of the teacher education certification program, students will be required to develop a professional teaching portfolio. The specific requirements for the portfolio will be available from the Senior Seminar course instructor.

Teacher Certification Programs at Temple University

Temple University provides a variety of ways to obtain teacher certification. These include:

- Early Childhood (preK-4th) Education
- Early Childhood (preK-4th) with Special Education (K-8th)
- Middle Grades (includes 4-6th all elementary subjects combined with 7-8th grade concentrations in Math/Science; Math/Literacy or Science/Literacy)
- Secondary Education: Math, Science, English, Social Studies (7-12th) or World Languages (K-12th)
- Career and Technical Education (Business, Computer, and Information Technology Education or Marketing Education).

Students seeking Teacher Education Certification in other areas should contact the school/college listed below. Information about these teacher education certification programs can also be found within that school or college's section of this Undergraduate Bulletin:

- Art - Tyler School of Art (http://tyler.temple.edu)
- Health and Physical Education - College of Public Health (http://cph.temple.edu)
- Music - Boyer College of Music and Dance (http://www.temple.edu/boyer)
- Speech - College of Public Health (http://cph.temple.edu)
- In addition to the Secondary Math and Science Education programs offered in the College of Education, students can earn teacher certification through TUteach (http://cst.temple.edu/academics/accelerated-programs/tuteach), a joint program between the College of Science and Technology and the College of Education. This program is housed in the College of Science and Technology.

Non-certification Programs: Bachelor of Arts/Bachelor of Science

Non-Certification Programs:

Adult and Organizational Development (BA) and Human Development and Community Engagement (BS)

Students receive a Bachelor of Arts degree by meeting the following minimum College requirements:

- Completion of program requirements as detailed on the 8-semester matrix.
- Earn a "C-" or above in all required Education Courses.
- Earn a "C-" or above in all required University General Education Courses.
- Earn a minimum cumulative GPA of 2.0.
- Fulfill all University Requirements as noted above.

The required total credit hours vary depending on the course of study. These credit hours are satisfied by taking courses in four categories:

1. University General Education requirements
2. Courses required in the Program
3. Elective courses, as noted in each program of study
MINORS

Minor in Education

The 18-credit Minor in Education is designed for Temple University undergraduate students who have either a professional or personal interest in education, urban schools, or children but are majoring in another discipline. The minor in Education provides undergraduate students with broad, foundational knowledge about the state of education, adolescent development, and community and school relationships. Students whose research interests are content-based, such as political science, history, and geography and urban studies, but have connections to education will benefit from exposure to schools through field placements and education theory. This minor is also ideal for students who plan to enter occupations in fields such as policy, counseling, child psychology, which have connections to education. Finally, this minor is an opportunity for students to investigate careers in education. Through coursework and field experience students will be interacting with education majors and working in schools, thus providing them with a sample of some of the work that pre-service teachers do. This carefully designed sequence of courses includes field experiences such as tutoring, observations in after school programs, and work in community centers to support in-class learning.

Academic Advising Information

Undergraduate Academic and Student Affairs
http://education.temple.edu/services
215-204-8011

Overview of Services and the Undergraduate Academic and Student Affairs Unit

The Undergraduate Academic and Student Affairs staff in the College of Education works with and supports students in a variety of areas including orienting students (transfer and freshmen), understanding of curricular requirements, creation of academic plans to ensure progress in the major and timely degree completion, planning for study abroad opportunities, changing programs (majors), developing professionally, addressing academic standing and progress issues, and resolving academic challenges. Services are provided by a staff of the Director for Undergraduate Academic and Student Affairs, professional Academic Advisors, and an Undergraduate Coordinator. The department offers the following services:

- New Student and Transfer Orientations and advising.
- Academic advising and registration assistance for all students in the College of Education.
- Semesterly consultation with each student prior to registration to help students ensure they stay on course for their anticipated graduation date.
- Development of a meaningful education plan compatible with career and life goals.
- Developmental advising for students facing academic challenges, especially those at risk for any reason, students on Academic Warning or Academic Probation, students not achieving critical milestones/not completing critical courses, and students whose midterm reports indicate concerns.
- Change of Program workshops and individual advising for students interested in changing into a College program.
- Submission, review and processing of petitions and other requests including: Re-enrollment Requests, permission to take courses elsewhere; petitions for academic overloads, Third Attempt Petitions, medical/excused withdrawals, etc.
- Workshops on topics relevant to Education students (i.e.: PAPA exam preparedness and Clearances).
- Dissemination of information relevant to Education students.
- Candidacy application information, appointments and academic audits.
- Student Teaching academic audits to determine if students are cleared academically in order to student teach.
- Graduation clearances for all undergraduate students.
- Dean's List letters
- Assistance to the College with development of transfer articulation agreements with other institutions in consultation with the College of Education Faculty and Senior Vice Provost for Undergraduate Studies office.

Undergraduate Advising Appointments

- Same Day Appointments: offered only on Main Campus, Same Day Appointments are available on Mondays throughout fall and spring semesters as well as during peak advising periods (the first two weeks (drop/add period) of each fall and spring semester and during the entirety of the Priority Registration periods in fall and spring semesters). To schedule, students call 215-204-8011 or stop into the Shimada Resource Center at 8:45 a.m. on days Same Day Appointments are offered. (Same Day Appointments are not available in summer.)
- Appointments scheduled in advance: offered on Main Campus on Tuesdays through Fridays in fall and spring semesters and most days in summer. To schedule, students call 215-204-8011 or stop into the Shimada Resource Center to schedule an appointment in person. Appointments can be scheduled up to two weeks in advance. Ambler campus-based students should call 267-468-8200 to schedule an appointment.

All Academic Advisors are trained to evaluate information carefully to give students the best possible advice. However, primary responsibility for course selection and degree completion rests with the student. Every student must be aware of the requirements of his or her degree and should collaborate with an Advisor each semester to ensure timely completion of his or her program.
Faculty

For additional information on the College of Education’s faculty please visit the College’s faculty directory (http://education.temple.edu/coe/faculty).

**Gregory Anderson**, Professor, Department of Policy, Organizational, and Leadership Studies, College of Education; Ph.D., City University of New York.

**Janelle M. Bailey**, Associate Professor (Teaching/Instructional), Department of Teaching and Learning, College of Education; Ph.D., University of Arizona.

**Cynthia S. Belliveau**, Assistant Professor (Teaching/Instructional), Department of Policy, Organizational, and Leadership Studies, College of Education; Ph.D., Temple University.

**Julie L. Booth**, Assistant Professor, Department of Psychological Studies in Education, College of Education; Ph.D., Carnegie Mellon University.

**Jean A. Boyer**, Assistant Professor (Teaching/Instructional), Department of Psychological Studies in Education, College of Education; Ph.D., University of Cincinnati.

**Joseph Boyle**, Associate Professor, Department of Teaching and Learning, College of Education; Ph.D., University of Kansas.

**Carol B. Brandt**, Assistant Professor, Department of Teaching and Learning, College of Education; Ph.D., University of New Mexico.

**Wanda M. Brooks**, Associate Professor, Department of Teaching and Learning, College of Education; Ed.D., University of Pennsylvania.

**James P. Byrnes**, Professor, Department of Psychological Studies in Education, College of Education; Ph.D., Temple University.

**Corinne A. Caldwell**, Professor Emerita, Department of Policy, Organizational, and Leadership Studies, College of Education; Ph.D., University of Pennsylvania.

**Robert W. Clark**, Associate Professor (Teaching/Instructional), Department of Teaching and Learning, College of Education; Ph.D., Pennsylvania State University.

**Sarah A. Cordes**, Assistant Professor, Department of Policy, Organizational, and Leadership Studies, College of Education; Ph.D., New York University.

**Maia Bloomfield Cucchiara**, Assistant Professor, Department of Policy, Organizational, and Leadership Studies, College of Education; Ph.D., University of Pennsylvania.

**James Earl Davis**, Professor, Department of Policy, Organizational, and Leadership Studies, College of Education; Ph.D., Cornell University.

**Meixia Ding**, Assistant Professor, Department of Teaching and Learning, College of Education; Ph.D., Texas A and M University.

**Joseph P. DuCotte**, Professor, Department of Psychological Studies in Education, College of Education; Ph.D., Cornell University.

**Richard M. Englert**, Professor, Department of Policy, Organizational, and Leadership Studies, College of Education; Ed.D., University of California Los Angeles.

**Frank H. Farley**, Professor, Department of Psychological Studies in Education, College of Education; Ph.D., University of London.

**Catherine A. Fiorello**, Professor, Department of Psychological Studies in Education, College of Education; Ph.D., University of Kentucky.

**Amanda G. Fischer**, Assistant Professor, Department of Psychological Studies in Education, College of Education; Ph.D., Ohio State University.

**Joseph P. Folger**, Professor, Department of Policy, Organizational, and Leadership Studies, College of Education; Ph.D., University of Wisconsin-Madison.

**Timothy P. Fukawa-Connelly**, Assistant Professor, Department of Teaching and Learning, College of Education; Ph.D., University of Maryland.

**William Fullard Jr.**, Professor Emeritus, Department of Psychological Studies in Education, College of Education; Ph.D., University of Pennsylvania.

**Steven Jay Gross**, Professor, Department of Policy, Organizational, and Leadership Studies, College of Education; Ed.D., University of Pennsylvania.

**John Hall**, Assistant Professor, Department of Policy, Organizational, and Leadership Studies, College of Education; Ph.D., University of California Berkeley.

**Shanta Hattikudur**, Assistant Professor (Teaching/Instructional), Department of Psychological Studies in Education, College of Education; Ph.D., University of Wisconsin-Madison.

**Joseph Haviland**, Associate Professor (Teaching/Instructional), Department of Teaching and Learning, College of Education; Ed.D., Temple University.

**Annemarie H. Hindman**, Associate Professor, Department of Psychological Studies in Education, College of Education; Ph.D., University of Michigan.
Shana Hornstein, Assistant Professor (Teaching/Instructional), Department of Teaching and Learning, College of Education; Ph.D., Arizona State University.

Portia L. Hunt, Professor Emerita, Department of Psychological Studies in Education, College of Education; Ph.D., Indiana State University.

Vivian W. Ikpa, Associate Professor, Department of Policy, Organizational, and Leadership Studies, College of Education; Ph.D., University of Maryland College Park.

Will J. Jordan, Associate Professor, Department of Policy, Organizational, and Leadership Studies, College of Education; Ph.D., Columbia University, Teachers College.

Yasuko Kanno, Associate Professor, Department of Teaching and Learning, College of Education; Ph.D., University of Toronto.

Avshalom Kaplan, Associate Professor, Department of Psychological Studies in Education, College of Education; Ph.D., University of Michigan.

Novella E. Keith, Associate Professor Emerita, Department of Teaching and Learning, College of Education; Ph.D., Rutgers University.

Julie Beth Kessler, Assistant Professor (Teaching/Instructional), Department of Teaching and Learning, College of Education; Ph.D., Temple University.

Larry J. Kratt, Professor, Department of Policy, Organizational, and Leadership Studies, College of Education; Ph.D., Michigan State University.

Peshe C. Kuriloff, Professor (Teaching/Instructional), Department of Teaching and Learning, College of Education; Ph.D., Bryn Mawr College.

Janice C. Laurence, Associate Professor, Department of Policy, Organizational, and Leadership Studies, College of Education; Ph.D., George Mason University.

Yoon H. Lee, Assistant Professor (Teaching/Instructional), Department of Teaching and Learning, College of Education; Ed.D., Columbia University.

Doug Lombardi, Assistant Professor, Department of Teaching and Learning, College of Education; Ph.D., University of Nevada, Las Vegas.

Christopher W. McGinley, Associate Professor, Department of Policy, Organizational, and Leadership Studies, College of Education; Ed. D., University of Pennsylvania.

Kristina Najera, Assistant Professor (Teaching/Instructional), Department of Teaching and Learning, College of Education; Ph.D., University of Delaware.

Kristie Jones Newton, Associate Professor, Department of Teaching and Learning, College of Education; Ph.D., University of Maryland College Park.

Timothy J. Patterson, Assistant Professor, Department of Teaching and Learning, College of Education; Ph.D., Columbia University.

Aneta Pavlenko, Professor, Department of Teaching and Learning, College of Education; Ph.D., Cornell University.

Laura Pendergast, Assistant Professor, Department of Psychological Studies in Education, College of Education; Ph.D., Pennsylvania State University.

Ivan J. Quandt, Professor, Department of Teaching and Learning, College of Education; Ed.D., Indiana University.

Elizabeth Richard, Assistant Professor (Teaching/Instructional), Department of Teaching and Learning, College of Education; Ph.D., Pennsylvania State University.

Jaymunn S. Sanford-DeShields, Associate Professor, Department of Teaching and Learning, College of Education; Ed.D., Harvard University.

Kenneth G. Schaefer, Professor, Department of Teaching and Learning, College of Education; Ph.D., Columbia University.

Catherine C. Schifter, Associate Professor, Department of Psychological Studies in Education, College of Education; Ph.D., University of Pennsylvania.

Joan Poliner Shapiro, Professor, Department of Policy, Organizational, and Leadership Studies, College of Education; Ed.D., University of Pennsylvania.

Lauren Smith, Assistant Professor (Teaching/Instructional), Department of Psychological Studies in Education, College of Education; Ph.D., University of Miami.

Michael W. Smith, Professor, Department of Teaching and Learning, College of Education; Ph.D., University of Chicago.

Tamara Sniad, Assistant Professor (Teaching/Instructional), Department of Teaching and Learning, College of Education; Ph.D., University of Pennsylvania.

Cathleen S. Soundy, Associate Professor, Department of Teaching and Learning, College of Education; Ed.D., Rutgers University.

Sarah I. Springer, Assistant Professor (Teaching/Instructional), Department of Psychological Studies in Education, College of Education; Ph.D., Montclair State University.
Judith C. Stull, Assistant Professor (Teaching/Instructional), Department of Policy, Organizational, and Leadership Studies, College of Education; Ph.D., Boston College.

Francis J. Sullivan, Associate Professor, Department of Teaching and Learning, College of Education; Ph.D., University of Pennsylvania.

Jill May Swavely, Associate Professor (Teaching/Instructional), Department of Teaching and Learning, College of Education; Ed.D., Temple University.

Neil Theobald, Professor, Department of Policy, Organizational, and Leadership Studies, College of Education; Ph.D., University of Washington.

S. Kenneth Thurman, Professor, Department of Teaching and Learning, College of Education; Ph.D., Vanderbilt University.

Matthew J. Tincani, Associate Professor, Department of Psychological Studies in Education, College of Education; Ph.D., Ohio State University.

Gregory M. Tucker, Associate Professor (Teaching/Instructional), Department of Psychological Studies in Education, College of Education; Ph.D., Temple University.

Nathaniel von der Embse, Assistant Professor, Department of Psychological Studies in Education, College of Education; Ph.D., Michigan State University.

Matthew J. Elvis Wagner, Associate Professor, Department of Teaching and Learning, College of Education; Ed.D., Columbia University.

Barbara A. Wasik, Professor, Department of Psychological Studies in Education, College of Education; Ph.D., Temple University.

Meredith Weber, Assistant Professor (Teaching/Instructional), Department of Teaching and Learning, College of Education; Ph.D., Temple University.

Keith Witham, Assistant Professor, Department of Policy, Organizational, and Leadership Studies, College of Education; Ph.D., University of Southern California.

Christine A. Woyshner, Professor, Department of Teaching and Learning, College of Education; Ed.D., Harvard University.

**Adult & Organizational Development**

Dr. Cynthia Belliveau, Coordinator
215-204-4397
cynthia.belliveau@temple.edu

This program prepares students for careers in the field of adult and organizational development. Coursework in this academic major provides students with the communication skills and analytical abilities to: design adult training programs, conduct organizational interventions, develop change management processes, conduct effective team development programs, facilitate group decision-making, manage interpersonal conflict, and design dispute resolution systems. These skills support adults in reaching professional goals in a diverse range of settings including for-profit and non-profit organizations, educational institutions, governmental agencies, and community organizations. Graduates of the program are prepared to enter adult education professions as trainers, performance assessment specialists, managers, group and organizational consultants, mediators, negotiators, and learning and development specialists.

**Programs**

- Bachelor of Arts in Adult & Organizational Development (p. 407)
- Minor in Adult & Organizational Development (p. 409)

**Bachelor of Arts in Adult & Organizational Development**

**Summary of Requirements**

**University Requirements**

- All students must complete Temple University’s General Education (GenEd (p. 143)) curriculum.
- All students must take a minimum of two writing-intensive courses at Temple University (including transfer students). The specific writing-intensive courses required for this major are AOD 3396 and AOD 4396.

**College Requirements**

Refer to the College Requirements (p. 399) for specific information.

**Program Requirements**

- Students must complete 33 credit hours in the major.
• All courses in the major must be passed with a grade of "C-" or better; students must earn a 2.0 cumulative GPA.
• Complete the following course requirements in Adult and Organizational Development:

### Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AOD 1016</td>
<td>Introduction to Adult Learning and Training</td>
<td>3</td>
</tr>
<tr>
<td>AOD 1166</td>
<td>Interpersonal Communication through the Life Span</td>
<td>3</td>
</tr>
<tr>
<td>AOD 2176</td>
<td>Team Process in Education</td>
<td>3</td>
</tr>
<tr>
<td>AOD 2201</td>
<td>Research Methods in Applied Communication</td>
<td>3</td>
</tr>
<tr>
<td>AOD 2214</td>
<td>Conflict and Communication</td>
<td>3</td>
</tr>
<tr>
<td>AOD 2215</td>
<td>Mediation: Principles and Practice</td>
<td>3</td>
</tr>
<tr>
<td>AOD 3316</td>
<td>Negotiation Processes</td>
<td>3</td>
</tr>
<tr>
<td>AOD 3376</td>
<td>Facilitating Group Decision-Making</td>
<td>3</td>
</tr>
<tr>
<td>AOD 3396</td>
<td>Organizational Communication (WI)</td>
<td>3</td>
</tr>
<tr>
<td>AOD 4016</td>
<td>Advanced Adult Learning and Training</td>
<td>3</td>
</tr>
<tr>
<td>AOD 4396</td>
<td>Field Research: Practice in Professional Settings (WI)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credit Hours** 33

### Suggested Academic Plan

**Bachelor of Arts in Adult & Organizational Development**

#### Requirements for New Students starting in the 2015-2016 Academic Year

**Year 1**

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>AOD 1016</td>
<td>Introduction to Adult Learning and Training</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours** 17

**Spring**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>AOD 2201</td>
<td>Research Methods in Applied Communication</td>
<td>3</td>
</tr>
<tr>
<td>AOD 2215</td>
<td>Mediation: Principles and Practice</td>
<td>3</td>
</tr>
</tbody>
</table>

**Elective** 3

**Term Credit Hours** 15

**Year 2**

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>AOD 2201</td>
<td>Research Methods in Applied Communication</td>
<td>3</td>
</tr>
<tr>
<td>AOD 2215</td>
<td>Mediation: Principles and Practice</td>
<td>3</td>
</tr>
</tbody>
</table>

**Elective** 3

**Term Credit Hours** 15

**Spring**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>AOD 2176</td>
<td>Team Process in Education</td>
<td>3</td>
</tr>
</tbody>
</table>

**Elective** 3

**Elective** 3

**Term Credit Hours** 15

**Year 3**

**Fall**
### GenEd Breadth Course
- **AOD 2214**: Conflict and Communication
- **AOD 3316**: Negotiation Processes
- Elective
- Elective

**Term Credit Hours**: 15

### Spring
- **GenEd Breadth Course**
- **AOD 3376**: Facilitating Group Decision-Making
- **AOD 3396**: Organizational Communication [WI]
- Elective
- Elective

**Term Credit Hours**: 16

### Year 4
#### Fall
- **AOD 4016**: Advanced Adult Learning and Training
- Elective
- Elective
- Elective

**Term Credit Hours**: 16

#### Spring
- **AOD 4396**: Field Research: Practice in Professional Settings [WI]
- Elective
- Elective
- Elective

**Term Credit Hours**: 15

### AOD Electives
- **AOD 2115**: Conflict Resolution in Education
- **AOD 2117**: Nonverbal Communication
- **AOD 2218**: Leadership and Communication
- **AOD 2307**: Interaction Analysis
- **AOD 4382**: Independent Study
- **AOD 4385**: Internship in AOD/Applied Communication

### Minor in Adult & Organizational Development
The minor in Adult and Organizational Development consists of 15 credit hours in Adult & Organizational Development coursework.

Students must complete the following courses:

- **AOD 1016**: Introduction to Adult Learning and Training
- **AOD 1166**: Interpersonal Communication through the Life Span
- **AOD 2176**: Team Process in Education
- **AOD 2214**: Conflict and Communication

Select one of the following:

- **AOD 2215**: Mediation: Principles and Practice
- **AOD 3316**: Negotiation Processes
- **AOD 3376**: Facilitating Group Decision-Making
AOD 3396  Organizational Communication

Total Credit Hours 15

All courses must be completed with a minimum grade of C-.

1 If students have taken the GenEd course AOD 0836 before declaring an Adult & Organizational Development minor, then AOD 1166 will be waived and students will be required to take two courses from the set of four optional courses. Students must discuss this with an Academic Advisor so their records can be properly updated.

Career & Technical Education

Dr. Robert W. Clark, Executive Director
Ritter Hall 338
215-204-8383
robert.clark@temple.edu

The Career and Technical Education Program serves individuals working in the field of workforce development, including secondary and/or post-secondary career and technical education and technical training in industry. The following teacher education degrees/certifications are offered at the undergraduate level:

- business, computer and information technology education;
- industrial education;
- marketing education.

Note: The undergraduate degree and certification programs in Career and Technical Education (Business, Computer, and Information Technology Education [BCITE] and Marketing Education) were revised in the 2013-2014 academic year to address new regulations from the Pennsylvania Department of Education (PDE). All students enrolling in either of these programs are strongly recommended to schedule appointments with an Academic Advisor in the Shimada Resource Center (SRC) in the College of Education each semester to affirm the requirements that pertain to their specific major, for progress checks and to assure they are current with certification requirements (i.e., testing). It is also recommended that students meet with an Advisor before enrolling in classes specific to these majors and leading to certification as a teacher.

Programs

- Business, Computer, & Information Technology Education (p. 410)
- Industrial Education (p. 413)
- Marketing Education (p. 416)
- Certification Programs (p. 418)

Business, Computer, & Information Technology Education

Shimada Resource Center (http://education.temple.edu/services)
College of Education
150 Ritter Annex
1301 Cecil B. Moore Ave.
Philadelphia, PA 19122
215-204-8011 (phone)
215-204-4383 (fax)

The Business, Computer, & Information Technology Education (BCITE) curriculum is designed to prepare students who expect to teach business subjects in K-12 and at the 2-year college level in public and private schools. Subject area content (academic specialization) and professional education content are combined with general education content (university curriculum) in order to provide the student with a general education, a field of specialization, and professional training. Moreover, the curriculum aims to combine these elements in such proportions as to give students the balanced perspective of the relation that business education bears to education as a whole.

Summary of Requirements

University Curriculum

1. All students are required to complete the university's General Education (GenEd (p. 143)) curriculum.
2. All students must take 6 credits of college level math and 6 credits of English (3 in composition and 3 in literature) and pass the required state tests to be certified.
3. All students must take a minimum of two writing-intensive courses at Temple. The writing-intensive courses required for this major are EDUC 2296 and SECE 3796.

### Professional Education

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSED 3241</td>
<td>Methods of Teaching Microcomputer Applications</td>
<td>3</td>
</tr>
<tr>
<td>CTE 3103</td>
<td>Curriculum in Career and Technical Education</td>
<td>3</td>
</tr>
<tr>
<td>CTE 3372</td>
<td>Project-Based Technical Instruction for Children</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 1255</td>
<td>Inclusive Education for a Diverse Society</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 2103</td>
<td>Socio-cultural Foundations of Education in the United States</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 2109</td>
<td>Adolescent Development for Educators</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 2255</td>
<td>Effective Use of Instructional Technology in Classrooms</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 2296</td>
<td>Effective Teaching: Theory and Practice (WI)</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 2306</td>
<td>Assessment and Evaluation</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 4111</td>
<td>Classroom and Conflict Management in Grades 4 through 12</td>
<td>3</td>
</tr>
<tr>
<td>ENES 3338</td>
<td>Foundations of Language Teaching: Teaching English Language Learners in Grades 4 to 12</td>
<td>3</td>
</tr>
<tr>
<td>SECE 3796</td>
<td>Differentiated Literacy Instruction in the Disciplines, 7-12 (WI)</td>
<td>3</td>
</tr>
<tr>
<td>SECE 4688</td>
<td>Student Teaching in Secondary Education</td>
<td>9</td>
</tr>
<tr>
<td>SECE 4801</td>
<td>Senior Seminar and Performance Assessment in Secondary Education</td>
<td>3</td>
</tr>
<tr>
<td>SPED 2231</td>
<td>Introduction to Inclusive Education</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credit Hours**: 51

1. Evidence of Advanced Keyboarding Skill is required to take this course.

### Academic Specialization

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 2101</td>
<td>Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 2102</td>
<td>Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>or ACCT 3526</td>
<td>Accounting Information Systems</td>
<td></td>
</tr>
<tr>
<td>CIS 1055</td>
<td>Computers and Applications</td>
<td>4</td>
</tr>
<tr>
<td>ECON 1101</td>
<td>Macroeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1102</td>
<td>Microeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3033</td>
<td>Entrepreneurial Engineering</td>
<td>3</td>
</tr>
<tr>
<td>ENG 2007</td>
<td>Writing for Business and Industry</td>
<td>3</td>
</tr>
<tr>
<td>HRM 1101</td>
<td>Leadership and Organizational Management</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>IB 2501</td>
<td>Fundamentals of Asian Business</td>
<td></td>
</tr>
<tr>
<td>IB 2502</td>
<td>Fundamentals of Latin American Business</td>
<td></td>
</tr>
<tr>
<td>IB 2503</td>
<td>Fundamentals of European Business</td>
<td></td>
</tr>
<tr>
<td>LGLS 1102</td>
<td>Law of Contracts</td>
<td>3</td>
</tr>
<tr>
<td>MIS 2101</td>
<td>Information Systems in Organizations</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 2101</td>
<td>Marketing Management</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1013</td>
<td>Elements of Statistics (or Introduction Course in Statistics approved by Advisor)</td>
<td>3</td>
</tr>
<tr>
<td>Advanced Keyboarding</td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>

**Total Credit Hours**: 40

### Minimum Hours Required for Graduation

123

Note: Courses in this section have prerequisites. See an advisor or refer to the Course Catalog [here](http://www.temple.edu/apply/common/catcheck.asp).

1. Evidence of Advanced Keyboarding Skill is required. See an advisor.
Suggested Academic Plan

B.S.E.D. in Career & Technical Education: Business, Computer & Information Technology Education Concentration

Requirements for New Students starting in the 2015-2016 Academic Year

(Certain courses require that a student secure clearances as per the College of Education policy; students should check the current list of courses that require clearances found on the College of Education Blackboard Undergraduate Community.)

<table>
<thead>
<tr>
<th>Year 1</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW](^1)</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>EDUC 2103</td>
<td>Socio-cultural Foundations of Education in the United States(^1)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ECON 1101</td>
<td>Macroeconomic Principles</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>16</strong></td>
<td></td>
</tr>
<tr>
<td>Spring</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY](^1)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ](^1)</td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3-4</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>16</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MATH 1013</td>
<td>Elements of Statistics(^1)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>SPED 2231</td>
<td>Introduction to Inclusive Education(^1)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ACCT 2101</td>
<td>Financial Accounting</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CIS 1055</td>
<td>Computers and Applications</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>16</strong></td>
<td></td>
</tr>
<tr>
<td>Spring</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDUC 1255</td>
<td>Inclusive Education for a Diverse Society</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>EDUC 2109</td>
<td>Adolescent Development for Educators(^1)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>EDUC 2296</td>
<td>Effective Teaching: Theory and Practice [WI]</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MIS 2101</td>
<td>Information Systems in Organizations</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ACCT 2102</td>
<td>Managerial Accounting</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ACCT 3526</td>
<td>Accounting Information Systems</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BSED 3241</td>
<td>Methods of Teaching Microcomputer Applications</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CTE 3103</td>
<td>Curriculum in Career and Technical Education</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>LGLS 1102</td>
<td>Law of Contracts</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>HRM 1101</td>
<td>Leadership and Organizational Management</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MKTG 2101</td>
<td>Marketing Management</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
<td></td>
</tr>
<tr>
<td>Spring</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDUC 4111</td>
<td>Classroom and Conflict Management in Grades 4 through 12</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ENES 3338</td>
<td>Foundations of Language Teaching: Teaching English Language Learners in Grades 4 to 12</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ECON 1102</td>
<td>Microeconomic Principles</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>
The Bachelor of Science in Education in Career and Technical Education’s concentration in Industrial Education (B.S.ED in IE) is designed to prepare students who expect to teach career and technical education subjects in grades 7-12 and at the 2-year college level in public and private schools. Subject area content (occupational competency assessment credit for industry experience) and professional education content are combined with general education content (university curriculum) in order to provide the student with a general education, a field of specialization, and professional training. Moreover, the curriculum aims to combine these elements in such proportions as to give students the balanced perspective of the relation that industrial education bears to education as a whole.

For both the B.S.ED in IE degree as well as vocational certification, there is an occupational experience and an occupational competency testing requirement which must be met. The student must pass an occupational competency assessment (or the equivalent) and have completed or complete two years of occupational wage-earning experience (or 4,000 hours) beyond the time needed to learn the occupation.

The B.S.ED in IE program consists of a total of 126-127 credits, of which seventy-eight of those credits may be used to secure a Vocational Instructional I and Vocational Instructional II certification. In addition, the student can also be awarded 24 credits for passing an Occupational Competency Assessment.

1. The total number of credit hours at graduation may be greater for some students based on initial placement exams, transfer evaluations, individual curricular choices, and academic progress.
2. Certain courses fulfill multiple requirements. In consultation with the advisor, students will be able to plan their curriculum more effectively.
3. Students must fulfill the necessary prerequisites for any given course or course sequence. See the Prerequisite and Co-requisite Policy (p. 99) in the university-wide Academic Policies section in this Bulletin.

Summary of Requirements

University Curriculum
1. All students are required to complete the university’s General Education (GenEd (p. 143)) curriculum.
2. All students must take 6 s.h. of college level math and 6 s.h. of English composition and literature and pass the required state tests to be certified.
3. All students must take a minimum of two writing-intensive courses at Temple. The specific writing-intensive courses required for this major are EDUC 2296 and SECE 3796.

### Professional Education

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTE 3101</td>
<td>Principles of Career and Technical Education</td>
<td>3</td>
</tr>
<tr>
<td>CTE 3102</td>
<td>Teaching Strategies in Career and Technical Education</td>
<td>3</td>
</tr>
<tr>
<td>CTE 3103</td>
<td>Curriculum in Career and Technical Education</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 1255</td>
<td>Inclusive Education for a Diverse Society</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 2103</td>
<td>Socio-cultural Foundations of Education in the United States</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 2109</td>
<td>Adolescent Development for Educators</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 2255</td>
<td>Effective Use of Instructional Technology in Classrooms</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 2296</td>
<td>Effective Teaching: Theory and Practice [WI]</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 2306</td>
<td>Assessment and Evaluation</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 4111</td>
<td>Classroom and Conflict Management in Grades 4 through 12</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 4788</td>
<td>Student Teaching in Secondary Education/Career Technical Education</td>
<td>9</td>
</tr>
<tr>
<td>ENES 3338</td>
<td>Foundations of Language Teaching: Teaching English Language Learners in Grades 4 to 12</td>
<td>3</td>
</tr>
<tr>
<td>SECE 3796</td>
<td>Differentiated Literacy Instruction in the Disciplines, 7-12 [WI]</td>
<td>3</td>
</tr>
<tr>
<td>SECE 4801</td>
<td>Senior Seminar and Performance Assessment in Secondary Education</td>
<td>3</td>
</tr>
<tr>
<td>SPED 2231</td>
<td>Introduction to Inclusive Education</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credit Hours** 51

1. Requirement for pre-service candidates only.

### Academic Specialization

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTE 4285</td>
<td>Industry Education Capstone and Field Experience for Work-Based Learning [WI]</td>
<td>3</td>
</tr>
<tr>
<td>or CTE 3389</td>
<td>Supervised Work Experience</td>
<td>3</td>
</tr>
<tr>
<td>CTE 4315</td>
<td>Credit by Examination</td>
<td>24</td>
</tr>
<tr>
<td>CTE 4324</td>
<td>Industry-Based Coordination Methods for Work-Based Learning</td>
<td>3</td>
</tr>
<tr>
<td>CTE 4331</td>
<td>Industry-Based Instructional Methods for Work-Based Learning [WI]</td>
<td>3</td>
</tr>
<tr>
<td>or CTE 3389</td>
<td>Supervised Work Experience</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1101</td>
<td>Macroeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3033</td>
<td>Entrepreneurial Engineering</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1021</td>
<td>College Algebra</td>
<td>4</td>
</tr>
<tr>
<td>or EDUC 1017</td>
<td>Algebra and Algebraic Thinking for Educators</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credit Hours** 43

### Minimum Hours Required for Graduation

126

1. With the permission of the advisor, students may take CTE 3389 for 3 credits instead of CTE 4285. With permission of the advisor, students may also take CTE 3389 for 3 credits instead of CTE 4331.

Note: Matriculated students with work experience who have completed 90 s.h. of acceptable coursework may arrange through a credit by exam process for up to 24 s.h. to be recorded toward their degree. Candidates needing work experience may apply CTE 3389 Supervised Work Experience toward meeting this requirement with an advisor's permission.

### Suggested Academic Plan

**B.S.ED. in Career & Technical Education: Industrial Education**

**Requirements for New Students starting in the 2015-2016 Academic Year**

#### Year 1

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>EDUC 2296</td>
<td>Effective Teaching: Theory and Practice [WI]</td>
<td>3</td>
</tr>
</tbody>
</table>

Note: With the permission of the advisor, students may take CTE 3389 for 3 credits instead of CTE 4285. With permission of the advisor, students may also take CTE 3389 for 3 credits instead of CTE 4331.
<table>
<thead>
<tr>
<th>Term</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring</td>
<td>ECON 1101</td>
<td>Macroeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td></td>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CTE 3101</td>
<td>Principles of Career and Technical Education</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>EDUC 1255</td>
<td>Inclusive Education for a Diverse Society</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td>Year 2</td>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
<td>3-4</td>
</tr>
<tr>
<td></td>
<td>CTE 3102</td>
<td>Teaching Strategies in Career and Technical Education</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>SPED 2231</td>
<td>Introduction to Inclusive Education</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td>Spring</td>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>EDUC 2103</td>
<td>Socio-cultural Foundations of Education in the United States</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CTE 3103</td>
<td>Curriculum in Career and Technical Education</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CTE 4324</td>
<td>Industry-Based Coordination Methods for Work-Based Learning</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Select one of the following:</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>MATH 1021</td>
<td>College Algebra</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EDUC 1017</td>
<td>Algebra and Algebraic Thinking for Educators</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td>Year 3</td>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EDUC 2109</td>
<td>Adolescent Development for Educators</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ENES 3338</td>
<td>Foundations of Language Teaching: Teaching English Language Learners in Grades 4 to 12 (Restrictions: Candidacy Required)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CTE 4315</td>
<td>Credit by Examination</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>14</strong></td>
</tr>
<tr>
<td>Spring</td>
<td>EDUC 4111</td>
<td>Classroom and Conflict Management in Grades 4 through 12</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>EDUC 2255</td>
<td>Effective Use of Instructional Technology in Classrooms</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CTE 4315</td>
<td>Credit by Examination</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Select one of the following:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CTE 3389</td>
<td>Supervised Work Experience&lt;sup&gt;1&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CTE 4331</td>
<td>Industry-Based Instructional Methods for Work-Based Learning</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>17</strong></td>
</tr>
<tr>
<td>Year 4</td>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CTE 4315</td>
<td>Credit by Examination</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>ENGR 3033</td>
<td>Entrepreneurial Engineering&lt;sup&gt;2&lt;/sup&gt;</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>SECE 3796</td>
<td>Differentiated Literacy Instruction in the Disciplines, 7-12 [WI]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Select one of the following:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CTE 3389</td>
<td>Supervised Work Experience&lt;sup&gt;1&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CTE 4285</td>
<td>Industry Education Capstone and Field Experience for Work-Based Learning</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>17</strong></td>
</tr>
<tr>
<td>Spring</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SECE 4801</td>
<td>Senior Seminar and Performance Assessment in Secondary Education&lt;sup&gt;2&lt;/sup&gt;</td>
<td>3</td>
</tr>
</tbody>
</table>
EDUC 4788  Student Teaching in Secondary Education/Career Technical Education  9
EDUC 2306  Assessment and Evaluation  3

**Term Credit Hours**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

**Total Credit Hours:**  126

1  Students may take CTE 3389 for up to 3 credits, with permission of the advisor.
2  Requirement for pre-service candidates only.

**Marketing Education**

Shimada Resource Center ([http://education.temple.edu/services](http://education.temple.edu/services))  
College of Education  
150 Ritter Annex  
1301 Cecil B. Moore Ave.  
Philadelphia, PA 19122  
215-204-8011 (phone)  
215-204-4383 (fax)

The Marketing Education curriculum is designed to prepare students who expect to teach marketing subjects in K-12 and at the 2-year college level in public and private schools. Subject area content (academic specialization) and professional education content are combined with general education content (university curriculum) in order to provide the student with a general education, a field of specialization, and professional training. Moreover, the curriculum aims to combine these elements in such proportions as to give students the balanced perspective of the relation that marketing education bears to education as a whole.

**Summary of Requirements**

**University Curriculum**

1. All students are required to complete the university’s General Education (GenEd (p. 143)) curriculum.

2. All students must take 6 credits of college level math and 6 credits of English (3 in composition and 3 in literature) and pass the required state tests to be certified.

3. All students must take a minimum of two writing-intensive courses at Temple. The specific courses that may satisfy the writing-intensive requirement for this major are EDUC 2296, SECE 3796 and MKTG 3596.

**Professional Education**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSED 3241</td>
<td>Methods of Teaching Microcomputer Applications(^{1})</td>
<td>3</td>
</tr>
<tr>
<td>CTE 3103</td>
<td>Curriculum in Career and Technical Education</td>
<td>3</td>
</tr>
<tr>
<td>CTE 3372</td>
<td>Project-Based Technical Instruction for Children</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 1255</td>
<td>Inclusive Education for a Diverse Society</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 2103</td>
<td>Socio-cultural Foundations of Education in the United States</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 2109</td>
<td>Adolescent Development for Educators</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 2255</td>
<td>Effective Use of Instructional Technology in Classrooms</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 2296</td>
<td>Effective Teaching: Theory and Practice (WI)</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 2306</td>
<td>Assessment and Evaluation</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 4111</td>
<td>Classroom and Conflict Management in Grades 4 through 12</td>
<td>3</td>
</tr>
<tr>
<td>ENES 3338</td>
<td>Foundations of Language Teaching: Teaching English Language Learners in Grades 4 to 12</td>
<td>3</td>
</tr>
<tr>
<td>SECE 3796</td>
<td>Differentiated Literacy Instruction in the Disciplines, 7-12 (WI)</td>
<td>3</td>
</tr>
<tr>
<td>SECE 4688</td>
<td>Student Teaching in Secondary Education</td>
<td>9</td>
</tr>
<tr>
<td>SECE 4801</td>
<td>Senior Seminar and Performance Assessment in Secondary Education</td>
<td>3</td>
</tr>
<tr>
<td>SPED 2231</td>
<td>Introduction to Inclusive Education</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credit Hours:** 51

1  Evidence of Advanced Keyboarding Skill is required to take this course.

**Academic Specialization**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTE 4285</td>
<td>Industry Education Capstone and Field Experience for Work-Based Learning(^{1})</td>
<td>3</td>
</tr>
<tr>
<td>or CTE 3389</td>
<td>Supervised Work Experience</td>
<td>3</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credit Hours</td>
</tr>
<tr>
<td>------------</td>
<td>--------------------------------------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>CTE 4324</td>
<td>Industry-Based Coordination Methods for Work-Based Learning</td>
<td>3</td>
</tr>
<tr>
<td>CTE 4331</td>
<td>Industry-Based Instructional Methods for Work-Based Learning</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1101</td>
<td>Macroeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1102</td>
<td>Microeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3033</td>
<td>Entrepreneurial Engineering</td>
<td>3</td>
</tr>
<tr>
<td>LGLS 1102</td>
<td>Law of Contracts</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 2101</td>
<td>Marketing Management</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 3501</td>
<td>Integrated Marketing Communications</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 3504</td>
<td>Sales and Sales Management</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 3553</td>
<td>International Marketing</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 3596</td>
<td>Consumer and Buyer Behavior (WI)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1013</td>
<td>Elements of Statistics (or Introduction Course in Statistics Approved by Advisor)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credit Hours**: 39

**Minimum Hours Required for Graduation**: 122

1. Marketing Education majors are also eligible for the Cooperative Education Certificate provided they can document wage earning experience.

Note: Courses in this section have prerequisites. See an advisor or refer to the Course Catalog (http://www.temple.edu/apply/common/catcheck.asp).

**Suggested Academic Plan**

**B.S.ED. in Career & Technical Education: Marketing Education Concentration**

**Requirements for New Students starting in the 2015-2016 Academic Year**

(Certain courses require that a student secure clearances as per the College of Education policy; students should check the current list of courses that require clearances found on the College of Education Blackboard Undergraduate Community.)

### Year 1

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]^1</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>EDUC 2103</td>
<td>Socio-cultural Foundations of Education in the United States^1</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1101</td>
<td>Macroeconomic Principles</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 16

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]^1</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]^1</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>EDUC 2255</td>
<td>Effective Use of Instructional Technology in Classrooms</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 16

### Year 2

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1013</td>
<td>Elements of Statistics (or Introductory Course in Statistics Approved by Advisor)^1</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1102</td>
<td>Microeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>LGLS 1102</td>
<td>Law of Contracts</td>
<td>3</td>
</tr>
<tr>
<td>SPED 2231</td>
<td>Introduction to Inclusive Education^1</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 15

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 1255</td>
<td>Inclusive Education for a Diverse Society</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 2109</td>
<td>Adolescent Development for Educators^1</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 2296</td>
<td>Effective Teaching: Theory and Practice [WI]</td>
<td>3</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td></td>
</tr>
<tr>
<td>-------------</td>
<td>-------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>CTE 3103</td>
<td>Curriculum in Career and Technical Education</td>
<td></td>
</tr>
<tr>
<td>MKTG 2101</td>
<td>Marketing Management</td>
<td></td>
</tr>
</tbody>
</table>

**Year 3**

<table>
<thead>
<tr>
<th>Year 3 Term</th>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3-4</td>
</tr>
<tr>
<td></td>
<td>ENES 3338</td>
<td>Foundations of Language Teaching: Teaching English Language Learners in Grades 4 to 12 (Restrictions: Candidacy Required)</td>
</tr>
<tr>
<td></td>
<td>CTE 4324</td>
<td>Industry-Based Coordination Methods for Work-Based Learning</td>
</tr>
<tr>
<td></td>
<td>MKTG 3501</td>
<td>Integrated Marketing Communications</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 15

<table>
<thead>
<tr>
<th>Year 4</th>
<th>Term</th>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td></td>
<td>BSED 3241</td>
<td>Methods of Teaching Microcomputer Applications (Restrictions: Candidacy Required)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SECE 3796</td>
<td>Differentiated Literacy Instruction in the Disciplines, 7-12 [WI] (Restrictions: Candidacy Required)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MKTG 3504</td>
<td>Sales and Sales Management</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MKTG 3553</td>
<td>International Marketing</td>
</tr>
<tr>
<td></td>
<td>Select one of the following:</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>CTE 4285</td>
<td>Industry Education Capstone and Field Experience for Work-Based Learning</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CTE 3389</td>
<td>Supervised Work Experience</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 15

<table>
<thead>
<tr>
<th>Spring</th>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SECE 4801</td>
<td>Senior Seminar and Performance Assessment in Secondary Education</td>
</tr>
<tr>
<td></td>
<td>SECE 4688</td>
<td>Student Teaching in Secondary Education</td>
</tr>
<tr>
<td></td>
<td>EDUC 2306</td>
<td>Assessment and Evaluation</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 15

**Total Credit Hours**: 122

---

1. Course that must be successfully completed to be eligible for Candidacy approval.
2. Marketing Education majors are also eligible for the Cooperative Education Certificate provided they can document wage earning experience.

**Certification Programs**

**Cooperative Education**

Dr. Chester Wichowski, Certification Program Advisor  
Ritter Hall 340  
215-204-6249  
chet.w@temple.edu

School personnel interested in teaching and supervising students in work-based settings in Pennsylvania must be certified in Cooperative Education. This certification covers a variety of work-based settings for secondary students, including capstone programs, diversified occupations programs, shadowing experiences, work experience programs, internships, and job shadowing. The skill and knowledge included in this certification program also has application to post-secondary and adult settings.

Persons wishing to become teachers of cooperative education must apply to the program and provide information about their education and experiential backgrounds. Based on the information provided, a program of studies, which includes an internship, is prepared. Persons who enter this program
holding a valid teaching certificate will work toward earning an "add-on" certificate in Cooperative Education, while others will work toward a "stand-alone" certificate. Persons wishing to enroll in this program should contact an advisor.

**Career & Technical Certification Program**

Ms. Nancy Johnston, Certification Program Advisor  
Ritter Hall 346  
215-204-8376  
nancy.johnston@temple.edu

This curriculum, which is offered in cooperation with the Pennsylvania Department of Education, is designed to prepare in-service teachers of career and technical education (industrial) subjects at the secondary, post-secondary, and 2-year college levels in public and private schools. Career and Technical Teacher Education courses may be taken on three levels: certification, undergraduate, and graduate \(^1\). Persons who meet Pennsylvania Statutory requirements and who have at least two years of work experience beyond the learning period in a trade, technical, or other selected occupation may prepare for certification to teach occupational subjects or related classes in secondary level schools in Pennsylvania.

Certification students must apply and be admitted to the Industrial (Career and Technical) Education Certification Program. All certification students must meet the requirements for admission to the university. In addition, candidates must satisfy the departmental requirements for work experience and must have passed the required Occupational Competency Assessment, OCA. Upon passing the OCA, students are eligible to apply for Intern Level Certification. This program prepares students for Vocational Level I certification in Pennsylvania and, in general, is acceptable in other states. Work taken toward the certification objective may be applied to the undergraduate degree program. The courses are offered on a part-time basis for those who are employed as secondary level teachers in Pennsylvania. Completing 18 semester hours of approved coursework and passing the PRAXIS Core Academic Skills for Reading and Writing Test will permit the issuance of a Vocational Instructional I Certificate, which is valid for six years.

Upon receipt of the Vocational Instructional I Certificate, the student must complete an additional 60 s.h. of college work, earning a minimum of 6 semester hours of credit per year until the requirements for the permanent Vocational Instructional II Certificate (78 s.h. and three years successful teaching) and passing the PRAXIS Core Academic Skills for Mathematics Test are satisfied.

Persons wishing to enroll in this program should contact an advisor.

\(^1\) Persons seeking graduate level certification should refer to the Temple University Graduate Bulletin for further information.

**Early Childhood-Elementary Education (PreK-4)**

Shimada Resource Center (http://education.temple.edu/services)  
College of Education  
150 Ritter Annex  
1301 Cecil B. Moore Ave.  
Philadelphia, PA 19122  
215-204-8011 (phone)  
215-204-4383 (fax)

**Early Childhood-Elementary Education (PreK-4)*

The Early Childhood-Elementary Education (PreK-4) program is designed to prepare teachers to work in programs serving children in pre-kindergarten, kindergarten, primary, and early intermediate grades. The program aims to help students gain an appreciation and understanding of child development and learning, build conceptual and practical expertise about effective instruction, acquire a sound philosophy of education, and develop personally and professionally.

One hallmark of the program is the variety of exciting and diverse field experiences. By working directly with children several times prior to student teaching, students in the program gain hands-on experience with children of various ages and backgrounds, gaining insight into the creation of effective learning situations which meet the needs of all learners.

**Early Childhood-Elementary Education (PreK-4) with Special Education Concentration (Dual Certification)*

The Early Childhood-Elementary Education (PreK-4) with Concentration in Special Education (K-8) program is designed to prepare teachers to work in programs serving diverse learners in a variety of settings in grades pre-kindergarten through four. In addition to certification in early childhood-educational education, students in this concentration will learn to implement evidence-based instructional practices in classrooms with students of diverse abilities. Furthermore, students will apply their skills in a variety of field experiences including a practicum for diverse learners focused on addressing the needs of special education students and English language learners. (Students earn a B.S.Ed. in Early Childhood Education; the transcript reflects the Early Childhood Education major and the Special Education concentration.)
Early Childhood Education students interested in a Master's degree in Special Education should consider the Accelerated 4+1 Program:
Bachelor of Science in Education in Early Childhood Education (B.S.Ed.) and Master of Education in Special Education (PreK-8) (Ed.M.) (http://education.temple.edu/undergradteach/accelerated-earlychildhood-special-education)

Programs
- Bachelor of Science in Education in Early Childhood-Elementary Education (PreK-4) (p. 420)
- Bachelor of Science in Education in Early Childhood-Elementary Education (PreK-4): Special Education (p. 422)

Bachelor of Science in Education in Early Childhood-Elementary Education (PreK-4)

The Early Childhood-Elementary Education (PreK-4) program is designed to prepare teachers to work in programs serving children in pre-kindergarten, kindergarten, primary, and early intermediate grades. The program aims to help students gain an appreciation and understanding of child development and learning, build conceptual and practical expertise about effective instruction, acquire a sound philosophy of education, and develop personally and professionally.

One hallmark of the program is the variety of exciting and diverse field experiences. By working directly with children several times prior to student teaching, students in the program gain hands-on experience with children of various ages and backgrounds, gaining insight into the creation of effective learning situations which meet the needs of all learners.

Summary of Requirements

University Requirements
- All new students are required to complete the university's General Education (GenEd (p. 143)) curriculum (except where a waiver is noted)
- All students must take a minimum of two writing-intensive (WI) courses at Temple University.

College Requirements
- Students must be accepted into the certification program prior to taking methods courses; for further details, see "Candidacy" under College Requirements (p. 399).
- Additional University and College requirements are located on the College of Education's Academic Policies and Regulations (p. 396) page in this Bulletin.

Suggested Academic Plan

B.S.ED. in Early Childhood-Elementary Education (PreK-4)

Requirements for New Students starting in the 2015-2016 Academic Year
(Certain courses require that a student secure clearances as per the College of Education policy; students should check the current list of courses that require clearances found on the College of Education Blackboard Undergraduate Community.)

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
</table>
| ENG 0802, 0812, or 0902 | Analytical Reading and Writing [GW]
| GenEd Breadth Course | 4 |
| GenEd Breadth Course | 3 |
| GenEd Breadth Course | 3 |
| MATH 1015 | Introduction to Numbers Figures
| | 4 |
| **Term Credit Hours** | **17** |

<table>
<thead>
<tr>
<th>Spring</th>
<th>Credit Hours</th>
</tr>
</thead>
</table>
| IH 0851 or 0951 | Mosaic: Humanities Seminar I [GY]
<p>| GenEd Breadth Course | 3 |
| GenEd Breadth Course | 3 |
| GenEd Breadth Course | 3-4 |
| Elective. The following are suggested: | 3 |
| HIST 1101 | U.S. History to 1877 |
| ENG 2301 | Survey of American Literature I |
| SOC 1176 | Introduction to Sociology |</p>
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSCD 1108</td>
<td>Introduction to Linguistics</td>
<td></td>
</tr>
<tr>
<td>EDUC 2255</td>
<td>Effective Use of Instructional Technology in Classrooms</td>
<td></td>
</tr>
</tbody>
</table>

### Year 2

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following: 1,2</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>MATH 1021</td>
<td>College Algebra</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 1017</td>
<td>Algebra and Algebraic Thinking for Educators</td>
<td>3</td>
</tr>
<tr>
<td>ECED 2101</td>
<td>Child Development, Birth to Nine 1,3</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 2103</td>
<td>Socio-cultural Foundations of Education in the United States 1</td>
<td>3</td>
</tr>
<tr>
<td>SPED 2231</td>
<td>Introduction to Inclusive Education 1,3</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECED 2105</td>
<td>Cognition and Learning in the Classroom 1</td>
<td>3</td>
</tr>
<tr>
<td>ECED 2106</td>
<td>Language and Literacy Development in Early Childhood: Birth through Kindergarten 1</td>
<td>3</td>
</tr>
<tr>
<td>ECED 2108</td>
<td>Engaging Children in the Learning Process through Classroom Management 1</td>
<td>3</td>
</tr>
<tr>
<td>ECED 2187</td>
<td>Practicum for Pre-K and Kindergarten 1</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

### Year 3

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECED 3106</td>
<td>Literacy Foundations for the Primary Grades: First Grade through Fourth Grade</td>
<td>3</td>
</tr>
<tr>
<td>ECED 3107</td>
<td>Learning Mathematics for the Primary Grades: First through Fourth Grade 2</td>
<td>3</td>
</tr>
<tr>
<td>ECED 3108</td>
<td>Social Studies for the Early Years, Pre K-4</td>
<td>3</td>
</tr>
<tr>
<td>ECED 3109</td>
<td>Science for the Early Years</td>
<td>3</td>
</tr>
<tr>
<td>ECED 3187</td>
<td>Practicum for the Primary Grades</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECED 3205</td>
<td>Assessment in Early Childhood Education</td>
<td>3</td>
</tr>
<tr>
<td>ECED 3209</td>
<td>Teaching English Language Learners in the Early Grades 3</td>
<td>3</td>
</tr>
<tr>
<td>ECED 3296</td>
<td>Differentiated Reading Instruction in the Early Grades [WI]</td>
<td>3</td>
</tr>
<tr>
<td>SPED 3211</td>
<td>Effective Instructional Strategies for Young Children with Disabilities</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

### Year 4

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECED 4101</td>
<td>Integrating the Arts into Early Childhood Education</td>
<td>3</td>
</tr>
<tr>
<td>ECED 4102</td>
<td>Children's Literature: Pre-K through Fourth Grade</td>
<td>3</td>
</tr>
<tr>
<td>SPED 4105</td>
<td>Assessment in Early Childhood Special Education</td>
<td>3</td>
</tr>
<tr>
<td>ECED 4106</td>
<td>The Learning Community: Family and Community Relationships</td>
<td>3</td>
</tr>
<tr>
<td>SPED 4196</td>
<td>Literacy Instruction for Young Children with Disabilities [WI]</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECED 4588</td>
<td>Student Teaching in Early Childhood Education</td>
<td>9</td>
</tr>
<tr>
<td>ECED 4801</td>
<td>Senior Seminar and Performance Assessment in Early Childhood Education</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credit Hours: 120

1. Course must be successfully completed to be eligible for Candidacy approval.
2. These three courses constitute the waiver for the GenEd Quantitative Literacy category when the GPA requirement is met.
3. These three courses constitute the waiver for the GenEd Human Behavior category when the GPA requirement is met.
Bachelor of Science in Education in Early Childhood-Elementary Education (PreK-4): Special Education

The Early Childhood-Elementary Education (PreK-4) with Concentration in Special Education (K-8) program is designed to prepare teachers to work in programs serving diverse learners in a variety of settings in grades pre-kindergarten through four. In addition to certification in early childhood-elementary education, students in this concentration will learn to implement evidence-based instructional practices in classrooms with students of diverse abilities. Furthermore, students will apply their skills in a variety of field experiences including a practicum for diverse learners focused on addressing the needs of special education students and English language learners.

Summary of Requirements

University Requirements

• All new students are required to complete the university's General Education (GenEd) curriculum (except where a waiver is noted).
• All students must take a minimum of two writing-intensive (WI) courses at Temple University.

College Requirements

• Students must be accepted into the certification program prior to taking methods courses; for further details, see "Candidacy" under College Requirements (p. 399).
• Additional University and College requirements are located on the College of Education's Academic Policies and Regulations page in this Bulletin.

Suggested Academic Plan

B.S.ED. in Early Childhood-Elementary Education (PreK-4): Optional Concentration in Special Education

Requirements for New Students starting in the 2015-2016 Academic Year

(Certain courses require that a student secure clearances as per the College of Education policy; students should check the current list of courses that require clearances found on the College of Education Blackboard Undergraduate Community.)

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]¹</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
</tr>
<tr>
<td>MATH 1015</td>
<td>Introduction to Numbers Figures¹,²</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>17</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]¹</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
</tr>
<tr>
<td>EDUC 2103</td>
<td>Socio-cultural Foundations of Education in the United States¹</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
</tr>
<tr>
<td>Select one of the following:¹,²</td>
<td>College Algebra</td>
</tr>
<tr>
<td>MATH 1021</td>
<td></td>
</tr>
<tr>
<td>EDUC 1017</td>
<td>Algebra and Algebraic Thinking for Educators</td>
</tr>
<tr>
<td>ECED 2101</td>
<td>Child Development, Birth to Nine¹,³</td>
</tr>
<tr>
<td>SPED 2128</td>
<td>Assistive Technology and Universal Design for Learning</td>
</tr>
<tr>
<td>SPED 2231</td>
<td>Introduction to Inclusive Education¹,³</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>16</td>
</tr>
</tbody>
</table>
Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECED 2105</td>
<td>Cognition and Learning in the Classroom(^1)</td>
<td>3</td>
</tr>
<tr>
<td>ECED 2106</td>
<td>Language and Literacy Development in Early Childhood: Birth through Kindergarten(^1)</td>
<td>3</td>
</tr>
<tr>
<td>ECED 2108</td>
<td>Engaging Children in the Learning Process through Classroom Management(^1)</td>
<td>3</td>
</tr>
<tr>
<td>ECED 2187</td>
<td>Practicum for Pre-K and Kindergarten(^1)</td>
<td>3</td>
</tr>
<tr>
<td>ECED 4101</td>
<td>Integrating the Arts into Early Childhood Education</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours** 15

**Year 3**

Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECED 3106</td>
<td>Literacy Foundations for the Primary Grades: First Grade through Fourth Grade</td>
<td>3</td>
</tr>
<tr>
<td>ECED 3107</td>
<td>Learning Mathematics for the Primary Grades: First through Fourth Grade(^2)</td>
<td>3</td>
</tr>
<tr>
<td>ECED 3108</td>
<td>Social Studies for the Early Years, Pre K-4</td>
<td>3</td>
</tr>
<tr>
<td>ECED 3109</td>
<td>Science for the Early Years</td>
<td>3</td>
</tr>
<tr>
<td>ECED 3187</td>
<td>Practicum for the Primary Grades</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours** 15

Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECED 3205</td>
<td>Assessment in Early Childhood Education</td>
<td>3</td>
</tr>
<tr>
<td>ECED 3209</td>
<td>Teaching English Language Learners in the Early Grades(^3)</td>
<td>3</td>
</tr>
<tr>
<td>ECED 3296</td>
<td>Differentiated Reading Instruction in the Early Grades [WI]</td>
<td>3</td>
</tr>
<tr>
<td>SPED 3201</td>
<td>Effective Instructional Strategies for Young Students with Mild to Significant Disabilities</td>
<td>3</td>
</tr>
<tr>
<td>SPED 3287</td>
<td>Practicum for Diverse Learners</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours** 15

**Year 4**

Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECED 4102</td>
<td>Children's Literature: Pre-K through Fourth Grade</td>
<td>3</td>
</tr>
<tr>
<td>SPED 4103</td>
<td>Classroom Management and Positive Behavior Support</td>
<td>3</td>
</tr>
<tr>
<td>ECED 4106</td>
<td>The Learning Community: Family and Community Relationships</td>
<td>3</td>
</tr>
<tr>
<td>SPED 4105</td>
<td>Assessment in Early Childhood Special Education</td>
<td>3</td>
</tr>
<tr>
<td>SPED 4196</td>
<td>Literacy Instruction for Young Children with Disabilities [WI]</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours** 15

Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECED 4588</td>
<td>Student Teaching in Early Childhood Education</td>
<td>9</td>
</tr>
<tr>
<td>ECED 4801</td>
<td>Senior Seminar and Performance Assessment in Early Childhood Education</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours** 12

**Total Credit Hours**: 120

---

1. Course must be successfully completed to be eligible for Candidacy approval.
2. These three courses constitute the waiver for the GenEd Quantitative Literacy category when the GPA requirement is met.
3. These three courses constitute the waiver for the GenEd Human Behavior category when the GPA requirement is met.

### Human Development and Community Engagement

**Dr. Shanta Hattikudur**  
215-204-6101  
shanta@temple.edu

This degree prepares students for applied careers in the fields of Human Development and Community Engagement. Coursework in the academic major provides students with a solid foundation in child development, intercultural communication, research methods, urban education, and organization/leadership. The program culminates with a two semester practicum/internship, which will give students hands-on experience in their field of choice. Many students want to make a difference in children’s lives in other ways besides being a teacher; this program provides the training needed to understand the factors that impede or facilitate the cognitive, social, and physical development of children, particularly in urban communities. This knowledge prepares students to influence the programs, policies, and practices of agencies and governmental bodies with child-focused initiatives. Graduates with this major will also be well equipped to land jobs as workers in non-profit advocacy organizations, childcare directors, personal care aides, museum education coordinators, and the like, or to work in other fields that require application of developmental knowledge.
Programs

- Bachelor of Science in Human Development and Community Engagement (p. 424)

There are three optional concentrations within this program that students can choose:

- Childhood Mental Health
- Community-Based Education
- Non-Profit Organization and Advocacy

See the requirements for each concentration on the Academic Plan (p. 424).

Bachelor of Science in Human Development and Community Engagement

Dr. Shanta Hattikudur
215-204-6101
shanta@temple.edu

This degree prepares students for applied careers in the fields of Human Development and Community Engagement. Coursework in the academic major provides students with a solid foundation in child development, intercultural communication, research methods, urban education, and organization/leadership. The program culminates with a two semester practicum/internship, which will give students hands-on experience in their field of choice. Many students want to make a difference in children’s lives in other ways besides being a teacher; this program provides the training needed to understand the factors that impede or facilitate the cognitive, social, and physical development of children, particularly in urban communities. This knowledge prepares students to influence the programs, policies, and practices of agencies and governmental bodies with child-focused initiatives. Graduates with this major will also be well equipped to land jobs as workers in non-profit advocacy organizations, childcare directors, personal care aides, museum education coordinators, and the like, or to work in other fields that require application of developmental knowledge.

Summary Of Requirements

University Requirements

- All students must complete Temple University's General Education (GenEd (p. 143)) curriculum.
- All students must take a minimum of two writing-intensive courses at Temple University (including transfer students). Writing intensive courses are numbered xx96, xx97 or xx98.

College Requirements

- College requirements are located under Academic Policies and Regulations (p. 396) in the Bulletin.

Program Requirements

- Students must complete 32 credit hours in the major, plus a community internship of 3-12 credits.
- All courses in the major must be passed with a grade of "C-" or better and students must maintain a 2.0 cumulative GPA.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 3332</td>
<td>Professional Seminar in Human Development and Community Engagement I</td>
<td>1</td>
</tr>
<tr>
<td>EDUC 3333</td>
<td>Professional Seminar in Human Development and Community Engagement II</td>
<td>1</td>
</tr>
<tr>
<td>ECED 2101</td>
<td>Child Development, Birth to Nine</td>
<td>3</td>
</tr>
<tr>
<td>SPED 2231</td>
<td>Introduction to Inclusive Education</td>
<td>3</td>
</tr>
<tr>
<td>AOD 2201</td>
<td>Research Methods in Applied Communication</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 2325</td>
<td>Statistics for Decision Making</td>
<td>3</td>
</tr>
<tr>
<td>AOD 2115</td>
<td>Conflict Resolution in Education</td>
<td>3</td>
</tr>
<tr>
<td>AOD 3396</td>
<td>Organizational Communication</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 4333</td>
<td>Effectiveness of Interventions for Children (Zero through 8th Grade)</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 4441</td>
<td>Discourse Practices in Diverse Communities</td>
<td>3</td>
</tr>
<tr>
<td>URBE 4496</td>
<td>Understanding Urban Communities</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 4187</td>
<td>Practicum in Applied Development</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 4185</td>
<td>Community Internship and Seminar</td>
<td>3-12</td>
</tr>
</tbody>
</table>
# Suggested Academic Plan

## Bachelor of Science in Human Development and Community Engagement

### Requirements for New Students starting in the 2015-2016 Academic Year

(Certain courses require that a student secure clearances as per the College of Education policy; students should check the current list of courses that require clearances found on the College of Education Blackboard Undergraduate Community.)

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td>16</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td>15</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td>Content Course</td>
<td>3</td>
</tr>
<tr>
<td>Content Course</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

<table>
<thead>
<tr>
<th>Year 3</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td>13</td>
</tr>
<tr>
<td>EDUC 3332</td>
<td>Professional Seminar in Human Development and Community Engagement I</td>
</tr>
<tr>
<td>ECED 2101</td>
<td>Child Development, Birth to Nine</td>
</tr>
<tr>
<td>SPED 2231</td>
<td>Introduction to Inclusive Education</td>
</tr>
<tr>
<td>AOD 2201</td>
<td>Research Methods in Applied Communication</td>
</tr>
<tr>
<td>Concentration/Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

<table>
<thead>
<tr>
<th>Spring</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 3333</td>
<td>Professional Seminar in Human Development and Community Engagement II</td>
</tr>
<tr>
<td>EPSY 2325</td>
<td>Statistics for Decision Making</td>
</tr>
<tr>
<td>AOD 2115</td>
<td>Conflict Resolution in Education</td>
</tr>
<tr>
<td>AOD 3396</td>
<td>Organizational Communication [WI]</td>
</tr>
<tr>
<td>EDUC 4333</td>
<td>Effectiveness of Interventions for Children (Zero through 8th Grade)</td>
</tr>
</tbody>
</table>
### Concentration/Elective

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>16</th>
</tr>
</thead>
</table>

#### Year 4

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 4441</td>
<td>Discourse Practices in Diverse Communities</td>
<td>3</td>
</tr>
<tr>
<td>URB 4426</td>
<td>Understanding Urban Communities [WI]</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 4187</td>
<td>Practicum in Applied Development</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Concentration/Elective</th>
<th>3</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
</table>

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 4185</td>
<td>Community Internship and Seminar (3, 6, 9 or 12 credits)</td>
<td>12</td>
</tr>
<tr>
<td>Elective (11, 8, 5 or 2 credits)</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>14</th>
</tr>
</thead>
</table>

### Total Credit Hours: 120

---

1. Students planning to take a concentration should consult with a College of Education Advisor before registering for an elective in this semester as waiting to take this elective until first semester, Junior year when a student can opt for a concentration course, is the preferred path for such students.

2. A content course is a course that is part of any program/major offered in the University. All four content courses must come from the same program/major.

3. At least one semester of Professional Seminar (EDUC 3332 or EDUC 3333) must be completed before taking the Practicum in Applied Development (EDUC 4187).

4. Students are able to elect to take an Internship for 3/6/9/12 credits and Elective(s) for 11/8/5/2 credits, respectively. Total credits to earn the degree must equal the required minimum of 120.

### Optional Concentrations:

#### Childhood Mental Health Concentration:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPSY 2271</td>
<td>Introduction to School Psychology</td>
<td>3</td>
</tr>
<tr>
<td>CPSY 3571</td>
<td>Introduction to Counseling Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

Select TWO of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AOD 2215</td>
<td>Mediation: Principles and Practice</td>
<td>3</td>
</tr>
<tr>
<td>ECED 2105</td>
<td>Cognition and Learning in the Classroom</td>
<td>3</td>
</tr>
<tr>
<td>ABA 3301</td>
<td>Understanding Autism</td>
<td>3</td>
</tr>
<tr>
<td>ECED 4106</td>
<td>The Learning Community: Family and Community Relationships</td>
<td>3</td>
</tr>
</tbody>
</table>

| Total Credit Hours | 12 |

#### Community-Based Education Concentration:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 1255</td>
<td>Inclusive Education for a Diverse Society</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 2296</td>
<td>Effective Teaching: Theory and Practice</td>
<td>3</td>
</tr>
</tbody>
</table>

Select TWO of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AOD 3376</td>
<td>Facilitating Group Decision-Making</td>
<td>3</td>
</tr>
<tr>
<td>ECED 2105</td>
<td>Cognition and Learning in the Classroom</td>
<td>3</td>
</tr>
<tr>
<td>ECED 4106</td>
<td>The Learning Community: Family and Community Relationships</td>
<td>3</td>
</tr>
<tr>
<td>ABA 3301</td>
<td>Understanding Autism</td>
<td>3</td>
</tr>
</tbody>
</table>

| Total Credit Hours | 12 |

#### Non-Profit Organization and Advocacy Concentration:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AOD 2218</td>
<td>Leadership and Communication</td>
<td>3</td>
</tr>
<tr>
<td>AOD 4376</td>
<td>Innovation and Mission-Driven Organizations</td>
<td>3</td>
</tr>
</tbody>
</table>

Select TWO of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AOD 2215</td>
<td>Mediation: Principles and Practice</td>
<td>3</td>
</tr>
</tbody>
</table>
Middle Grades Education

Shimada Resource Center (http://education.temple.edu/services)
College of Education
150 Ritter Annex
1301 Cecil B. Moore Ave.
Philadelphia, PA 19122
215-204-8011 (phone)
215-204-4383 (fax)

The Bachelor of Science in Education in Middle Grades Education prepares undergraduate students for middle level teaching (fourth to eighth grades). Middle grades teachers, particularly in math and science education, are increasingly sought out and in high-demand in Pennsylvania as well as across the country.

The College of Education program in Middle Grades Education is designed to ensure not only that there are certified teachers to fill the growing vacancies, but that our students graduate highly knowledgeable about learning and teaching as well as committed to pre/adolescent learners from diverse ethnic, economic and geographic backgrounds. To that end, our program focuses on building deep content-specific pedagogical knowledge aligned to the breadth of academic standards and the wide-ranging developmental needs of middle grades students. To develop a strong link between learning theories and actual pedagogical practice, we also require that our students engage in early, often and strategic field/clinical education experiences in middle grades settings.

Our program stands out as cutting-edge because we prepare undergraduate students to teach in both the upper elementary and middle grades classrooms.

In addition to becoming certified to teach all elementary subjects in 4-6th grades, all Middle Grades Education students will pursue either single or dual certification for 7-8th grades in one of the following concentrations:

1. Mathematics and Science
2. Mathematics and Language Arts
3. Science and Language Arts
4. Mathematics
5. Science
6. Language Arts
7. Social Studies

GPA Requirements:

- In order to maintain good standing in Middle Grades Education, students must maintain a 3.0 cumulative grade point average and a 2.0 grade point average in the course work in their concentration areas.

Programs

- Language Arts Concentration (p. 427)
- Mathematics Concentration (p. 430)
- Mathematics and Language Arts Concentration (p. 432)
- Mathematics and Science Concentration (p. 435)
- Science Concentration (p. 437)
- Science and Language Arts Concentration (p. 440)
- Social Studies Concentration (p. 442)

Language Arts Concentration

The Bachelor of Science in Education in Middle Grades Education prepares undergraduate students for middle level teaching (fourth to eighth grades). Middle grades teachers are increasingly sought out and in high-demand in Pennsylvania as well as across the country.

The College of Education program in Middle Grades Education is designed to ensure not only that there are certified teachers to fill the growing vacancies, but that our students graduate highly knowledgeable about learning and teaching as well as committed to pre/adolescent learners from diverse ethnic, economic and geographic backgrounds. To that end, our program focuses on building deep content-specific pedagogical knowledge...
aligned to the breadth of academic standards and the wide-ranging developmental needs of middle grades students. To develop a strong link between learning theories and actual pedagogical practice, we also require that our students engage in early, often and strategic field/clinical education experiences in middle grades settings.

Our program stands out as cutting-edge because we prepare undergraduate students to teach in both the upper elementary and middle grades classrooms.

In addition to becoming certified to teach all elementary subjects in 4-6th, all Middle Grades Education: Language Arts Concentration students will pursue certification for 7-8th grades in the area of Language Arts.

GPA Requirements:

- In order to maintain good standing in Middle Grades Education, students must maintain a 3.0 cumulative grade point average and a 2.0 grade point average in the course work in their concentration area.

**Summary of Requirements**

**University Requirements**

All students are required to complete the university's General Education (GenEd (p. 143)) curriculum.

All students must take a minimum of two writing-intensive (WI) courses at Temple University. Writing intensive course numbers end in 96, 97 and 98.

**College Requirements**

Students receive a Bachelor of Science in Education degree with a recommendation for Pennsylvania teacher certification upon the successful completion of their program requirements with a minimum cumulative GPA of 3.0 or must meet the Pennsylvania Department of Education's Bureau of School Leadership and Teacher Quality GPA Qualifying Praxis Score. All students seeking to graduate with the recommendation for certification must also meet the requirements for Candidacy.

The required total minimum credit hours for the Middle Grades Education concentration in Language Arts is 124. These credit hours are satisfied by taking courses in four categories:

1. University General Education requirements (General Education)
2. Education courses
3. Teacher Education Certification Courses (i.e. methods and student teaching)
4. Concentration courses

**Suggested Academic Plan**

**B.S.ED. in Middle Grades Education: Language Arts Concentration**

**Requirements for New Students starting in the 2015-2016 Academic Year**

To best prepare students in this major for the Praxis II exams, we strongly encourage taking the suggested GenEds listed.

(Certain courses require that a student secure clearances as per the College of Education policy; students should check the current list of courses that require clearances found on the College of Education Blackboard Undergraduate Community.)

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>BIOL 1011 General Biology</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1021 College Algebra$^2$, $^3$</td>
<td>4</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902 Analytical Reading and Writing [GW]$^3$</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course (Global/World Society)$^4$</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>15</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>PHYS 1021 Introduction to General Physics I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1022 Precalculus$^2$, $^3$</td>
<td>4</td>
</tr>
<tr>
<td>CSCD 1108 Introduction to Linguistics</td>
<td>3</td>
</tr>
<tr>
<td>IH 0851 or 0951 Mosaic: Humanities Seminar I [GY]$^3$</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course (Race &amp; Diversity)$^5$</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>17</td>
</tr>
</tbody>
</table>
### Year 2

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1015</td>
<td>Introduction to Numbers Figures</td>
<td>4</td>
</tr>
<tr>
<td>ENG 2301</td>
<td>Survey of American Literature I</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 2103</td>
<td>Socio-cultural Foundations of Education in the United States³</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course (U.S. Society)⁵</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours** 16

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 2302</td>
<td>Survey of American Literature II</td>
<td>3</td>
</tr>
<tr>
<td>ENG 2831</td>
<td>Literacy and Society</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 2109</td>
<td>Adolescent Development for Educators³, ⁷</td>
<td>3</td>
</tr>
<tr>
<td>SPED 2231</td>
<td>Introduction to Inclusive Education³, ⁷</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following:¹ 4

- BIOL 1012 | General Biology II                                                   | 3       |
- PHYS 1022 | Introduction to General Physics II                                   | 3       |

**Term Credit Hours** 16

### Year 3

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GenEd Breadth Course (Arts)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>MGRE 3109</td>
<td>Cognitive Development in the Content Areas³</td>
<td>3</td>
</tr>
<tr>
<td>MGRE 3111</td>
<td>Applications of Learning Theory to Middle Grades Education³</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following: 3

- ENG 2401 | African-American Literature I                                       |       |
- ENG 2160 | Topics in Women's Literature                                        |       |
- ENG 2112 | Children's Literature and Folklore                                  |       |

Select one of the following: 3

- HIST 1101 | U.S. History to 1877                                               |       |
- HIST 1102 | U.S. History since 1877                                            |       |

**Term Credit Hours** 15

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGRE 3145</td>
<td>Teaching and Learning Math in the Middle Grades²</td>
<td>3</td>
</tr>
<tr>
<td>MGRE 4108</td>
<td>Teaching and Learning Science in the Middle Grades</td>
<td>3</td>
</tr>
<tr>
<td>SPED 4109</td>
<td>Educating Students with Disabilities in Inclusive Settings</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following: 3

- ENG 2201 | Survey of English Literature: Beginnings to 1660            |       |
- ENG 2202 | Survey of English Literature: 1660-1900                         |       |

Select one of the following: 3

- ENG 2004 | Creative Writing: Fiction                                        |       |
- ENG 2511 | Modern Poetry                                                    |       |
- ENG 2512 | The Modern Novel                                                  |       |

**Term Credit Hours** 15

### Year 4

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGRE 3196</td>
<td>Teaching and Learning Literacy in the Middle Grades [WI]</td>
<td>3</td>
</tr>
<tr>
<td>MGRE 3296</td>
<td>Cultures, Communities, and Families [WI]</td>
<td>3</td>
</tr>
<tr>
<td>SPED 3187</td>
<td>Integrated Literacy and Special Education Practicum</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 2306</td>
<td>Assessment and Evaluation</td>
<td>3</td>
</tr>
<tr>
<td>ENES 3338</td>
<td>Foundations of Language Teaching: Teaching English Language Learners in Grades 4 to 12⁷</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours** 15

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGRE 4888</td>
<td>Student Teaching in the Middle Grades</td>
<td>9</td>
</tr>
</tbody>
</table>
Temple University Undergraduate Bulletin 2015-2016

MGRE 4801 Senior Seminar and Performance Assessment in Middle Grades Education 3
EDUC 4111 Classroom and Conflict Management in Grades 4 through 12 3

Term Credit Hours 15

Total Credit Hours: 124

1 These two courses constitute the waiver for the GenEd Science category when the GPA requirement is met.
2 These four courses constitute the waiver for the GenEd Quantitative Literacy category when the GPA requirement is met.
3 Course must be successfully completed to be eligible for Candidacy approval.
4 Suggested GenEd Global/World Society courses: ANTH 0867, GUS 0867 or SOC 0867.
5 Suggested GenEd Race & Diversity courses: AAS 0829, ANTH 0829, GUS 0829, HIST 0829, POLS 0829, SOC 0829 or SOC 0929.
6 Suggested GenEd U.S. Society courses: AMST 0848, ANTH 0848, GUS 0848, HIST 0848 or SOC 0848.
7 These three courses constitute the waiver for the GenEd Human Behavior category when the GPA requirement is met.

Mathematics Concentration

The Bachelor of Science in Education in Middle Grades Education prepares undergraduate students for middle level teaching (fourth to eighth grades). Middle grades teachers are increasingly sought out and in high-demand in Pennsylvania as well as across the country.

The College of Education program in Middle Grades Education is designed to ensure not only that there are certified teachers to fill the growing vacancies, but that our students graduate highly knowledgeable about learning and teaching as well as committed to pre/adolescent learners from diverse ethnic, economic and geographic backgrounds. To that end, our program focuses on building deep content-specific pedagogical knowledge aligned to the breadth of academic standards and the wide-ranging developmental needs of middle grades students. To develop a strong link between learning theories and actual pedagogical practice, we also require that our students engage in early, often and strategic field/clinical education experiences in middle grades settings.

Our program stands out as cutting-edge because we prepare undergraduate students to teach in both the upper elementary and middle grades classrooms.

In addition to becoming certified to teach all elementary subjects in 4-6th, all Middle Grades Education: Mathematics Concentration students will pursue certification for 7-8th grades in the area of Mathematics.

GPA Requirements:

• In order to maintain good standing in Middle Grades Education, students must maintain a 3.0 cumulative grade point average and a 2.0 grade point average in the course work in their concentration area.

Summary of Requirements

University Requirements

All students are required to complete the university’s General Education (GenEd (p. 143)) curriculum.

All students must take a minimum of two writing-intensive (WI) courses at Temple University. Writing intensive course numbers end in 96, 97 and 98.

College Requirements

Students receive a Bachelor of Science in Education degree with a recommendation for Pennsylvania teacher certification upon the successful completion of their program requirements with a minimum cumulative GPA of 3.0 or must meet the Pennsylvania Department of Education’s Bureau of School Leadership and Teacher Quality GPA Qualifying Praxis Score. All students seeking to graduate with the recommendation for certification must also meet the requirements for Candidacy.

The required total minimum credit hours for the Middle Grades Education concentration in Mathematics is 125. These credit hours are satisfied by taking courses in four categories:

1. University General Education requirements (General Education)
2. Education courses
3. Teacher Education Certification Courses (i.e. methods and student teaching)
4. Concentration courses
# Suggested Academic Plan

## B.S.ED. in Middle Grades Education: Mathematics Concentration

### Requirements for New Students starting in the 2015-2016 Academic Year

To best prepare students in this major for the Praxis II exams, we strongly encourage taking the suggested GenEds listed.

(Certain courses require that a student secure clearances as per the College of Education policy; students should check the current list of courses that require clearances found on the College of Education Blackboard Undergraduate Community.)

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1011</td>
<td>General Biology I</td>
<td>4</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course (Global/World Society)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>4-5</td>
<td></td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
<td></td>
</tr>
<tr>
<td>MATH 1038</td>
<td>Calculus I with Lab</td>
<td></td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 15

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Spring</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1042</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1021</td>
<td>Introduction to General Physics I</td>
<td>4</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course (Arts)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course (Race &amp; Diversity)</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 17

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 2043</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>MATH 2101</td>
<td>Linear Algebra</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 2103</td>
<td>Socio-cultural Foundations of Education in the United States</td>
<td>3</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course (U.S. Society)</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 16

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Spring</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 2111</td>
<td>Basic Concepts of Math</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>BIOL 1012</td>
<td>General Biology II</td>
<td></td>
</tr>
<tr>
<td>PHYS 1022</td>
<td>Introduction to General Physics II</td>
<td></td>
</tr>
<tr>
<td>EDUC 2109</td>
<td>Adolescent Development for Educators</td>
<td>3</td>
</tr>
<tr>
<td>SPED 2231</td>
<td>Introduction to Inclusive Education</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ENG 2301</td>
<td>Survey of American Literature I</td>
<td></td>
</tr>
<tr>
<td>ENG 2302</td>
<td>Survey of American Literature II</td>
<td></td>
</tr>
<tr>
<td>ENG 2402</td>
<td>African-American Literature II</td>
<td></td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 16

<table>
<thead>
<tr>
<th>Year 3</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select one of the following:</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>HIST 1101</td>
<td>U.S. History to 1877</td>
<td></td>
</tr>
<tr>
<td>HIST 1102</td>
<td>U.S. History since 1877</td>
<td></td>
</tr>
<tr>
<td>MGRE 3109</td>
<td>Cognitive Development in the Content Areas</td>
<td>3</td>
</tr>
<tr>
<td>MGRE 3111</td>
<td>Applications of Learning Theory to Middle Grades Education</td>
<td>3</td>
</tr>
</tbody>
</table>
MATH 3061  
Modern Geometry I  
Select one of the following:  
  MATH 1013  
Elements of Statistics  
  MATH 2031  
Probability and Statistics  

Term Credit Hours: 15

Spring
MGRE 3145  
Teaching and Learning Math in the Middle Grades  
3
MGRE 4108  
Teaching and Learning Science in the Middle Grades  
3
SPED 4109  
Educating Students with Disabilities in Inclusive Settings  
3
MATH 1015  
Introduction to Numbers Figures  
4
Select one of the following:  
  MATH 2021  
Functions and Modeling  
  MATH 3003  
Theory of Numbers  

Term Credit Hours: 16

Year 4
Fall
MGRE 3196  
Teaching and Learning Literacy in the Middle Grades [WI]  
3
MGRE 3296  
Cultures, Communities, and Families [WI]  
3
SPED 3187  
Integrated Literacy and Special Education Practicum  
3
EDUC 2306  
Assessment and Evaluation  
3
ENES 3338  
Foundations of Language Teaching: Teaching English Language Learners in Grades 4 to 12  
7

Term Credit Hours: 15

Spring
MGRE 4888  
Student Teaching in the Middle Grades  
9
MGRE 4801  
Senior Seminar and Performance Assessment in Middle Grades Education  
3
EDUC 4111  
Classroom and Conflict Management in Grades 4 through 12  
3

Term Credit Hours: 15

Total Credit Hours: 125

1. These two courses constitute the waiver for the GenEd Science category when the GPA requirement is met.
2. Course must be successfully completed to be eligible for Candidacy approval.
4. This course constitutes the waiver for the GenEd Quantitative Literacy category when the GPA requirement is met.
5. Suggested GenEd Race & Diversity courses: AAS 0829, ANTH 0829, GUS 0829, HIST 0829, POLS 0829, SOC 0829 or SOC 0929.
7. These three courses constitute the waiver for the GenEd Human Behavior category when the GPA requirement is met.

Mathematics and Language Arts Concentration

The Bachelor of Science in Education in Middle Grades Education prepares undergraduate students for middle level teaching (fourth to eighth grades). Middle grades teachers, particularly in math and science education, are increasingly sought out and in high-demand in Pennsylvania as well as across the country.

The College of Education program in Middle Grades Education is designed to ensure not only that there are certified teachers to fill the growing vacancies, but that our students graduate highly knowledgeable about learning and teaching as well as committed to pre/adolescent learners from diverse ethnic, economic and geographic backgrounds. To that end, our program focuses on building deep content-specific pedagogical knowledge aligned to the breadth of academic standards and the wide-ranging developmental needs of middle grades students. To develop a strong link between learning theories and actual pedagogical practice, we also require that our students engage in early, often and strategic field/clinical education experiences in middle grades settings.

Our program stands out as cutting-edge because we prepare undergraduate students to teach in both the upper elementary and middle grades classrooms.
In addition to becoming certified to teach all elementary subjects in 4-6th, all Middle Grades Education: Mathematics and Language Arts Concentration students will pursue dual certification for 7-8th grades in the areas of Mathematics and Language Arts; the required minimum number of credit hours is 126.

**GPA Requirements:**
- In order to maintain good standing in Middle Grades Education, students must maintain a 3.0 cumulative grade point average and a 2.0 grade point average in the course work in their concentration areas.

**Summary of Requirements**

**University Requirements**
All students are required to complete the university’s General Education (GenEd (p. 143)) curriculum.

All students must take a minimum of two writing-intensive (WI) courses at Temple University. Writing intensive course numbers end in 96, 97 and 98.

**College Requirements**
Students receive a Bachelor of Science in Education degree with a recommendation for Pennsylvania teacher certification upon the successful completion of their program requirements with a **minimum cumulative GPA of 3.0 or must meet the Pennsylvania Department of Education’s Bureau of School Leadership and Teacher Quality GPA Qualifying Praxis Score.**

The required total minimum credit hours for the Middle Grades Education concentration in Mathematics and Language Arts is 126. These credit hours are satisfied by taking courses in four categories:

1. University General Education requirements (General Education)
2. Education courses
3. Teacher Education Certification Courses (i.e. methods and student teaching)
4. Concentration courses

All students seeking to graduate with the recommendation for certification must also meet the requirements for Candidacy.

**Suggested Academic Plan**

**B.S.E.D. in Middle Grades Education: Mathematics and Language Arts Concentration**

**Requirements for New Students starting in the 2015-2016 Academic Year**

To best prepare students in this major for the Praxis II exams, we strongly encourage taking the suggested GenEds listed.

(Certain courses require that a student secure clearances as per the College of Education policy; students should check the current list of courses that require clearances found on the College of Education Blackboard Undergraduate Community.)

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course (Race &amp; Diversity)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BIOL 1011</td>
<td>General Biology I (includes a lab)</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1022</td>
<td>Precalculus</td>
<td>4</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15</strong></td>
<td></td>
</tr>
<tr>
<td>Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course (U.S. Society)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CSCD 1108</td>
<td>Introduction to Linguistics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 1021</td>
<td>Introduction to General Physics I</td>
<td>4</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>4-5</td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
<td></td>
</tr>
<tr>
<td>MATH 1038</td>
<td>Calculus I with Lab</td>
<td></td>
</tr>
<tr>
<td>&amp; MATH 1039</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>17</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Year 2**

**Fall**
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course (Global/World Society)</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>MATH 1042</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>ENG 2831</td>
<td>Literacy and Society</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 2103</td>
<td>Socio-cultural Foundations of Education in the United States 1</td>
<td>3</td>
</tr>
<tr>
<td>Term Credit Hours</td>
<td></td>
<td>16</td>
</tr>
<tr>
<td>Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 1015</td>
<td>Introduction to Numbers Figures</td>
<td>4</td>
</tr>
<tr>
<td>EDUC 2109</td>
<td>Adolescent Development for Educators 1, 7</td>
<td>3</td>
</tr>
<tr>
<td>SPED 2231</td>
<td>Introduction to Inclusive Education 1, 7</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following: 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL 1012</td>
<td>General Biology II (includes a lab)</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1022</td>
<td>Introduction to General Physics II (includes a lab)</td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ENG 1121</td>
<td>Introduction to Fiction</td>
<td></td>
</tr>
<tr>
<td>ENG 1141</td>
<td>Introduction to Literature</td>
<td></td>
</tr>
<tr>
<td>ENG 2004</td>
<td>Creative Writing: Fiction</td>
<td></td>
</tr>
<tr>
<td>ENG 2511</td>
<td>Modern Poetry</td>
<td></td>
</tr>
<tr>
<td>ENG 2512</td>
<td>The Modern Novel</td>
<td></td>
</tr>
<tr>
<td>Year 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course (Arts) 8</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>MGRE 3109</td>
<td>Cognitive Development in the Content Areas (FALL ONLY) 1</td>
<td>3</td>
</tr>
<tr>
<td>MGRE 3111</td>
<td>Applications of Learning Theory to Middle Grades Education (FALL ONLY) 1</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following: 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIST 1101</td>
<td>U.S. History to 1877</td>
<td></td>
</tr>
<tr>
<td>HIST 1102</td>
<td>U.S. History since 1877</td>
<td></td>
</tr>
<tr>
<td>Select one of the following: 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 1013</td>
<td>Elements of Statistics</td>
<td></td>
</tr>
<tr>
<td>MATH 2031</td>
<td>Probability and Statistics</td>
<td></td>
</tr>
<tr>
<td>Term Credit Hours</td>
<td></td>
<td>17</td>
</tr>
<tr>
<td>Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select one of the following: 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 2301</td>
<td>Survey of American Literature I</td>
<td></td>
</tr>
<tr>
<td>ENG 2302</td>
<td>Survey of American Literature II</td>
<td></td>
</tr>
<tr>
<td>ENG 2402</td>
<td>African-American Literature II</td>
<td></td>
</tr>
<tr>
<td>MGRE 3145</td>
<td>Teaching and Learning Math in the Middle Grades (SPRING ONLY)</td>
<td>3</td>
</tr>
<tr>
<td>MGRE 4108</td>
<td>Teaching and Learning Science in the Middle Grades (SPRING ONLY)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 2021</td>
<td>Functions and Modeling</td>
<td></td>
</tr>
<tr>
<td>SPED 4109</td>
<td>Educating Students with Disabilities in Inclusive Settings (SPRING ONLY)</td>
<td>3</td>
</tr>
<tr>
<td>Term Credit Hours</td>
<td></td>
<td>16</td>
</tr>
<tr>
<td>Year 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MGRE 3196</td>
<td>Teaching and Learning Literacy in the Middle Grades [WI] (FALL ONLY)</td>
<td>3</td>
</tr>
<tr>
<td>SPED 3187</td>
<td>Integrated Literacy and Special Education Practicum (FALL ONLY)</td>
<td>3</td>
</tr>
<tr>
<td>MGRE 3296</td>
<td>Cultures, Communities, and Families [WI] (FALL ONLY)</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 2306</td>
<td>Assessment and Evaluation</td>
<td></td>
</tr>
<tr>
<td>ENES 3338</td>
<td>Foundations of Language Teaching: Teaching English Language Learners in Grades 4 to 12 7</td>
<td>3</td>
</tr>
<tr>
<td>Term Credit Hours</td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MGRE 4888</td>
<td>Student Teaching in the Middle Grades</td>
<td>9</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
</tr>
<tr>
<td>------------</td>
<td>-----------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>MGRE 4801</td>
<td>Senior Seminar and Performance Assessment in Middle Grades Education</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 4111</td>
<td>Classroom and Conflict Management in Grades 4 through 12</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 15

Total Credit Hours: 126

1. Course must be successfully completed to be eligible for Candidacy approval.
2. Suggested GenEd Race & Diversity courses: SOC 0829, AAS 0829, ANTH 0829, GUS 0829, HIST 0829, POLS 0829 or SOC 0929.
3. These two courses constitute the waiver for the GenEd Science category when the GPA requirement is met.
4. Suggested GenEd U.S. Society courses: SOC 0848, GUS 0848, ANTH 0848, AMST 0848 or HIST 0848.
5. This course constitutes the waiver for the GenEd Quantitative Literacy category when the GPA requirement is met.
7. These three courses constitute the waiver for the GenEd Human Behavior category when the GPA requirement is met.
8. Suggested GenEd Arts courses: ENG 0826 or ENG 0926.

**Mathematics and Science Concentration**

The Bachelor of Science in Education in Middle Grades Education prepares undergraduate students for middle level teaching (fourth to eighth grades). Middle grades teachers, particularly in math and science education, are increasingly sought out and in high-demand in Pennsylvania as well as across the country.

The College of Education program in Middle Grades Education is designed to ensure not only that there are certified teachers to fill the growing vacancies, but that our students graduate highly knowledgeable about learning and teaching as well as committed to pre/adolescent learners from diverse ethnic, economic and geographic backgrounds. To that end, our program focuses on building deep content-specific pedagogical knowledge aligned to the breadth of academic standards and the wide-ranging developmental needs of middle grades students. To develop a strong link between learning theories and actual pedagogical practice, we also require that our students engage in early, often and strategic field/clinical education experiences in middle grades settings.

Our program stands out as cutting-edge because we prepare undergraduate students to teach in both the upper elementary and middle grades classrooms.

In addition to becoming certified to teach all elementary subjects in 4-6th, all Middle Grades Education: Mathematics and Science Concentration students will pursue dual certification for 7-8th grades in the areas of math and science; required number of credit hours is 127 credits for this concentration.

**GPA Requirements:**

- In order to maintain good standing in Middle Grades Education, students must maintain a 3.0 cumulative grade point average and a 2.0 grade point average in the course work in their concentration areas.

**Summary of Requirements**

**University Requirements**

All students are required to complete the university’s General Education (GenEd (p. 143)) curriculum.

All students must take a minimum of two writing-intensive (WI) courses at Temple University. Writing intensive course numbers end in 96, 97 and 98.

**College Requirements**

Students receive a Bachelor of Science in Education degree with a recommendation for Pennsylvania teacher certification upon the successful completion of their program requirements with a **minimum cumulative GPA of 3.0 or must meet the Pennsylvania Department of Education’s Bureau of School Leadership and Teacher Quality GPA Qualifying Praxis Score**.

The required total minimum credit hours for the Middle Grades Education concentration in Mathematics and Science is 127. These credit hours are satisfied by taking courses in four categories:

1. University General Education requirements (General Education)
2. Education courses
3. Teacher Education Certification Courses (i.e. methods and student teaching)
4. Concentration courses

All students seeking to graduate with the recommendation for Instructional I Certification from Pennsylvania (http://www.portal.state.pa.us/portal/server.pt/community/pa_certification/8635/level_i_to_level_ii/608790) must also meet the requirements for Candidacy.
## Suggested Academic Plan

### B.S.ED. in Middle Grades Education: Mathematics and Science Concentration

#### Requirements for New Students starting in the 2015-2016 Academic Year

To best prepare students in this major for the Praxis II exams, we strongly encourage taking the suggested GenEds listed.

### Year 1

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>4</td>
</tr>
<tr>
<td>Analytical Reading and Writing [GW](^1)</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course (Race &amp; Diversity)(^2)</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 1011</td>
<td>4</td>
</tr>
<tr>
<td>General Biology I (includes a lab)(^3)</td>
<td></td>
</tr>
<tr>
<td>MATH 1022</td>
<td>4</td>
</tr>
<tr>
<td>Precalculus(^1)</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>IH 0851 or 0951</td>
<td>3</td>
</tr>
<tr>
<td>Mosaic: Humanities Seminar I [GY](^1)</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course (U.S. Society)(^4)</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course (Arts)</td>
<td>3-4</td>
</tr>
<tr>
<td>PHYS 1004</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Astronomy</td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>4-5</td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
</tr>
<tr>
<td>MATH 1038 &amp; MATH 1039</td>
<td>Calculus I with Lab</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

### Year 2

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IH 0852 or 0952</td>
<td>3</td>
</tr>
<tr>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course (Global/World Society)(^5)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1042</td>
<td>4</td>
</tr>
<tr>
<td>Calculus II</td>
<td></td>
</tr>
<tr>
<td>CHEM 1021</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Chemistry I</td>
<td></td>
</tr>
<tr>
<td>CHEM 1023</td>
<td>1</td>
</tr>
<tr>
<td>Introduction to Chemistry Laboratory I</td>
<td></td>
</tr>
<tr>
<td>EDUC 2103</td>
<td>3</td>
</tr>
<tr>
<td>Socio-cultural Foundations of Education in the United States(^1)</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Select one of the following:</td>
<td>3</td>
</tr>
<tr>
<td>ENG 2301</td>
<td>Survey of American Literature I</td>
</tr>
<tr>
<td>ENG 2302</td>
<td>Survey of American Literature II</td>
</tr>
<tr>
<td>ENG 2402</td>
<td>African-American Literature II</td>
</tr>
<tr>
<td>MATH 1015</td>
<td>Introduction to Numbers Figures</td>
</tr>
<tr>
<td>CHEM 1022</td>
<td>Introduction to Chemistry II</td>
</tr>
<tr>
<td>CHEM 1024</td>
<td>Introduction to Chemistry Laboratory II</td>
</tr>
<tr>
<td>EDUC 2109</td>
<td>Adolescent Development for Educators(^1,7)</td>
</tr>
<tr>
<td>SPED 2231</td>
<td>Introduction to Inclusive Education(^1,7)</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

### Year 3

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 1021</td>
<td>4</td>
</tr>
<tr>
<td>Introduction to General Physics I</td>
<td></td>
</tr>
<tr>
<td>MGRE 3109</td>
<td>3</td>
</tr>
<tr>
<td>Cognitive Development in the Content Areas (FALL ONLY)(^1)</td>
<td></td>
</tr>
<tr>
<td>MGRE 3111</td>
<td>3</td>
</tr>
<tr>
<td>Applications of Learning Theory to Middle Grades Education (FALL ONLY)(^3)</td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3</td>
</tr>
<tr>
<td>HIST 1101</td>
<td>U.S. History to 1877</td>
</tr>
<tr>
<td>HIST 1102</td>
<td>U.S. History since 1877</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>3</strong></td>
</tr>
</tbody>
</table>
Science Concentration

The Bachelor of Science in Education in Middle Grades Education prepares undergraduate students for middle level teaching (fourth to eighth grades). Middle grades teachers are increasingly sought out and in high-demand in Pennsylvania as well as across the country.

The College of Education program in Middle Grades Education is designed to ensure not only that there are certified teachers to fill the growing vacancies, but that our students graduate highly knowledgeable about learning and teaching as well as committed to pre/adolescent learners from diverse ethnic, economic and geographic backgrounds. To that end, our program focuses on building deep content-specific pedagogical knowledge aligned to the breadth of academic standards and the wide-ranging developmental needs of middle grades students. To develop a strong link between learning theories and actual pedagogical practice, we also require that our students engage in early, often and strategic field/clinical education experiences in middle grades settings.

Our program stands out as cutting-edge because we prepare undergraduate students to teach in both the upper elementary and middle grades classrooms.

In addition to becoming certified to teach all elementary subjects in 4-6th, all Middle Grades Education: Science Concentration students will pursue certification for 7-8th grades in the area of Science.

GPA Requirements:

- In order to maintain good standing in Middle Grades Education, students must maintain a 3.0 cumulative grade point average and a 2.0 grade point average in the course work in their concentration area.
### Summary of Requirements

#### University Requirements

All students are required to complete the university’s General Education (GenEd (p. 143)) curriculum.

All students must take a minimum of two writing-intensive (WI) courses at Temple University. Writing intensive course numbers end in 96, 97 and 98.

#### College Requirements

Students receive a Bachelor of Science in Education degree with a recommendation for Pennsylvania teacher certification upon the successful completion of their program requirements with a minimum cumulative GPA of 3.0 or must meet the Pennsylvania Department of Education’s Bureau of School Leadership and Teacher Quality GPA Qualifying Praxis Score. All students seeking to graduate with the recommendation for certification must also meet the requirements for Candidacy.

The required total minimum credit hours for the Middle Grades Education concentration in Science is 125. These credit hours are satisfied by taking courses in four categories:

1. University General Education requirements (General Education)
2. Education courses
3. Teacher Education Certification Courses (i.e. methods and student teaching)
4. Concentration courses

### Suggested Academic Plan

#### B.S.ED. in Middle Grades Education: Science Concentration

##### Requirements for New Students starting in the 2015-2016 Academic Year

To best prepare students in this major for the Praxis II exams, we strongly encourage taking the suggested GenEds listed.

(Certain courses require that a student secure clearances as per the College of Education policy; students should check the current list of courses that require clearances found on the College of Education Blackboard Undergraduate Community.)

#### Year 1

##### Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course (Global/World Society)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1021</td>
<td>4</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 1011</td>
<td></td>
</tr>
<tr>
<td>CHEM 1021</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 1023</td>
<td></td>
</tr>
<tr>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

##### Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IH 0851 or 0951</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course (Race &amp; Diversity)</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course (U.S. Society)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1022</td>
<td>4</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 1012</td>
<td></td>
</tr>
<tr>
<td>CHEM 1022</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 1024</td>
<td></td>
</tr>
<tr>
<td></td>
<td>17</td>
</tr>
</tbody>
</table>

##### Year 2

##### Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IH 0852 or 0952</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1015</td>
<td>4</td>
</tr>
<tr>
<td>EDUC 2103</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>4</td>
</tr>
</tbody>
</table>

---

### Notes

1. Analytical Reading and Writing [GW]
2. GenEd Breadth Course (Global/World Society)
3. Precalculus
4. Select one of the following:
5. Mosaic: Humanities Seminar I [GY]

---
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1021</td>
<td>Introduction to Chemistry I</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 1023</td>
<td>General Biology I</td>
<td></td>
</tr>
<tr>
<td>BIOL 1011</td>
<td>General Biology I</td>
<td></td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 14

### Spring
- **EDUC 2109**: Adolescent Development for Educators 1, 7 (3)
- **SPED 2231**: Introduction to Inclusive Education 1, 7 (3)

Select one of the following:
- **HIST 1101**: U.S. History to 1877 (3)
- **HIST 1102**: U.S. History since 1877 (4)

Select one of the following:
- **CHEM 1022**: Introduction to Chemistry II (3)
- **CHEM 1024**: General Biology II (3)
- **SPED 2231**: Introduction to Inclusive Education (3)
- **SPED 2234**: Introduction to Inclusive Education (3)

**Term Credit Hours**: 16

**Year 3**

**Fall**
- **EES 2001**: Physical Geology (4)
- **PHYS 1021**: Introduction to General Physics I (4)
- **PHYS 1004**: Introduction to Astronomy (3)
- **MGRE 3109**: Cognitive Development in the Content Areas 1 (3)
- **MGRE 3111**: Applications of Learning Theory to Middle Grades Education 1 (3)

**Term Credit Hours**: 17

### Spring
- **EES 2096**: Climate Change: Oceans To Atmosphere [WI] (4)
- **GenEd Breadth Course (Arts)** (3)
- **MGRE 3145**: Teaching and Learning Math in the Middle Grades 3 (3)
- **MGRE 4108**: Teaching and Learning Science in the Middle Grades (3)
- **SPED 4109**: Educating Students with Disabilities in Inclusive Settings (3)

**Term Credit Hours**: 16

**Year 4**

**Fall**
- **MGRE 3196**: Teaching and Learning Literacy in the Middle Grades [WI] (3)
- **MGRE 3296**: Cultures, Communities, and Families [WI] (3)
- **SPED 3187**: Integrated Literacy and Special Education Practicum (3)
- **EDUC 2306**: Assessment and Evaluation (3)
- **ENES 3338**: Foundations of Language Teaching: Teaching English Language Learners in Grades 4 to 12 7 (3)

**Term Credit Hours**: 15

### Spring
- **MGRE 4888**: Student Teaching in the Middle Grades (9)
- **MGRE 4801**: Senior Seminar and Performance Assessment in Middle Grades Education (3)
- **EDUC 4111**: Classroom and Conflict Management in Grades 4 through 12 (3)

**Term Credit Hours**: 15

**Total Credit Hours**: 125

---

1. Course must be successfully completed to be eligible for Candidacy approval.
2. Suggested GenEd Global/World Society courses: ANTH 0867, GUS 0867 or SOC 0867.
3. These four courses constitute the waiver for the GenEd Quantitative Literacy category when the GPA requirement is met.
These two courses constitute the waiver for the GenEd Science category when the GPA requirement is met.

Suggested GenEd Race & Diversity courses: AAS 0829, ANTH 0829, GUS 0829, HIST 0829, POLS 0829, SOC 0829 or SOC 0929.

Suggested GenEd U.S. Society courses: AMST 0848, ANTH 0848, GUS 0848, HIST 0848 or SOC 0848.

These three courses constitute the waiver for the GenEd Human Behavior category when the GPA requirement is met.

Science and Language Arts Concentration

The Bachelor of Science in Education in Middle Grades Education prepares undergraduate students for middle level teaching (fourth to eighth grades).

The College of Education program in Middle Grades Education is designed to ensure not only that there are certified teachers to fill the growing vacancies, but that our students graduate highly knowledgeable about learning and teaching as well as committed to pre/adolescent learners from diverse ethnic, economic and geographic backgrounds. To that end, our program focuses on building deep content-specific pedagogical knowledge aligned to the breadth of academic standards and the wide-ranging developmental needs of middle grades students. To develop a strong link between learning theories and actual pedagogical practice, we also require that our students engage in early, often and strategic field/clinical education experiences in middle grades settings.

Our program stands out as cutting-edge because we prepare undergraduate students to teach in both the upper elementary and middle grades classrooms.

In addition to becoming certified to teach all elementary subjects in 4-6th, all Middle Grades Education: Science and Language Arts Concentration students will pursue dual certification for 7-8th grades in the areas of Science and Language Arts; required number of credit hours is 126 credits for this concentration.

GPA Requirements:

- In order to maintain good standing in Middle Grades Education, students must maintain a 3.0 cumulative grade point average and a 2.0 grade point average in the course work in their concentration areas.

Summary of Requirements

University Requirements

All students are required to complete the university's General Education (GenEd (p. 143)) curriculum.

All students must take a minimum of two writing-intensive (WI) courses at Temple University. Writing intensive course numbers end in 96, 97 and 98.

College Requirements

Students receive a Bachelor of Science in Education degree with a recommendation for Pennsylvania teacher certification upon the successful completion of their program requirements with a minimum cumulative GPA of 3.0 or must meet the Pennsylvania Department of Education’s Bureau of School Leadership and Teacher Quality GPA Qualifying Praxis Score.

The required total minimum credit hours for Middle Grades Education concentration in Science and Language Arts is 126. These credit hours are satisfied by taking courses in four categories:

1. University General Education requirements (General Education)
2. Education courses
3. Teacher Education Certification Courses (i.e. methods and student teaching)
4. Concentration courses

All students seeking to graduate with the recommendation for Instructional I Certification from Pennsylvania (http://www.portal.state.pa.us/portal/server.pt/community/pa_certification/8635/level_i_to_level_ii/608790) must also meet the requirements for Candidacy.

Suggested Academic Plan

B.S.ED. in Middle Grades Education: Science and Language Arts Concentration

Requirements for New Students starting in the 2015-2016 Academic Year

To best prepare students in this major for the Praxis II exams, we strongly encourage taking the suggested GenEds listed.

(Certain courses require that a student secure clearances as per the College of Education policy; students should check the current list of courses that require clearances found on the College of Education Blackboard Undergraduate Community.)
### Year 1

#### Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]$^1$</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course (Race &amp; Diversity)$^2$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 1021</td>
<td>College Algebra$^1, 3$</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 1011</td>
<td>General Biology I (includes a lab)$^4$</td>
<td>4</td>
</tr>
</tbody>
</table>

**Term Credit Hours** 15

#### Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]$^1$</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course (U.S. Society)$^5$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course (Arts)</td>
<td></td>
<td>3-4</td>
</tr>
<tr>
<td>MATH 1022</td>
<td>Precalculus$^1, 3$</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1004</td>
<td>Introduction to Astronomy</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours** 16

### Year 2

#### Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1015</td>
<td>Introduction to Numbers Figures$^3$</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1021</td>
<td>Introduction to Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1023</td>
<td>Introduction to Chemistry Laboratory I</td>
<td>1</td>
</tr>
<tr>
<td>ENG 2831</td>
<td>Literacy and Society</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 2103</td>
<td>Socio-cultural Foundations of Education in the United States$^1$</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours** 17

#### Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GenEd Breadth Course (Global/World Society)$^6$</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>CSCD 1108</td>
<td>Introduction to Linguistics</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1022</td>
<td>Introduction to Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1024</td>
<td>Introduction to Chemistry Laboratory II</td>
<td>1</td>
</tr>
<tr>
<td>EDUC 2109</td>
<td>Adolescent Development for Educators$^1, 7$</td>
<td>3</td>
</tr>
<tr>
<td>SPED 2231</td>
<td>Introduction to Inclusive Education$^1, 7$</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours** 16

### Year 3

#### Fall

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 1121</td>
<td>Introduction to Fiction</td>
</tr>
<tr>
<td>ENG 1141</td>
<td>Introduction to Literature</td>
</tr>
<tr>
<td>ENG 2004</td>
<td>Creative Writing: Fiction</td>
</tr>
<tr>
<td>ENG 2511</td>
<td>Modern Poetry</td>
</tr>
<tr>
<td>ENG 2512</td>
<td>The Modern Novel</td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 1101</td>
<td>U.S. History to 1877</td>
</tr>
<tr>
<td>HIST 1102</td>
<td>U.S. History since 1877</td>
</tr>
<tr>
<td>PHYS 1021</td>
<td>Introduction to General Physics I</td>
</tr>
<tr>
<td>MGRE 3109</td>
<td>Cognitive Development in the Content Areas (FALL ONLY)$^1$</td>
</tr>
<tr>
<td>MGRE 3111</td>
<td>Applications of Learning Theory to Middle Grades Education (FALL ONLY)$^1$</td>
</tr>
</tbody>
</table>

**Term Credit Hours** 16

#### Spring

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 2301</td>
<td>Survey of American Literature I</td>
</tr>
<tr>
<td>ENG 2302</td>
<td>Survey of American Literature II</td>
</tr>
<tr>
<td>ENG 2402</td>
<td>African-American Literature II</td>
</tr>
<tr>
<td>BIOL 1012</td>
<td>General Biology II (includes a lab)$^4$</td>
</tr>
</tbody>
</table>
MGRE 3145  Teaching and Learning Math in the Middle Grades (SPRING ONLY) 3
MGRE 4108  Teaching and Learning Science in the Middle Grades (SPRING ONLY) 3
SPED 4109  Educating Students with Disabilities in Inclusive Settings (SPRING ONLY) 3

Term Credit Hours 16

Year 4
Fall
MGRE 3196  Teaching and Learning Literacy in the Middle Grades [WI] (FALL ONLY) 3
SPED 3187  Integrated Literacy and Special Education Practicum (FALL ONLY) 3
MGRE 3296  Cultures, Communities, and Families [WI] (FALL ONLY) 3
ENES 3338  Foundations of Language Teaching: Teaching English Language Learners in Grades 4 to 12 3
EDUC 2306  Assessment and Evaluation 3

Term Credit Hours 15

Spring
MGRE 4888  Student Teaching in the Middle Grades 9
MGRE 4801  Senior Seminar and Performance Assessment in Middle Grades Education 3
EDUC 4111  Classroom and Conflict Management in Grades 4 through 12 3

Term Credit Hours 15

Total Credit Hours: 126

1 Course must be successfully completed to be eligible for Candidacy approval.
2 Suggested GenEd Race & Diversity courses: AAS 0829, ANTH 0829, GUS 0829, HIST 0829, POLS 0829, SOC 0829 or SOC 0929.
3 These four courses constitute the waiver for the GenEd Quantitative Literacy category when the GPA requirement is met.
4 These two courses constitute the waiver for the GenEd Science category when the GPA requirement is met.
5 Suggested GenEd U.S. Society courses: AMST 0848, ANTH 0848, GUS 0848, HIST 0848, SOC 0848.
6 Suggested GenEd Global/World Society courses: ANTH 0867, GUS 0867 or SOC 0867.
7 These three courses constitute the waiver for the GenEd Human Behavior category when the GPA requirement is met.

Social Studies Concentration

The Bachelor of Science in Education in Middle Grades Education prepares undergraduate students for middle level teaching (fourth to eighth grades). Middle grades teachers are increasingly sought out and in high-demand in Pennsylvania as well as across the country.

The College of Education program in Middle Grades Education is designed to ensure not only that there are certified teachers to fill the growing vacancies, but that our students graduate highly knowledgeable about learning and teaching as well as committed to pre/adolescent learners from diverse ethnic, economic and geographic backgrounds. To that end, our program focuses on building deep content-specific pedagogical knowledge aligned to the breadth of academic standards and the wide-ranging developmental needs of middle grades students. To develop a strong link between learning theories and actual pedagogical practice, we also require that our students engage in early, often and strategic field/clinical education experiences in middle grades settings.

Our program stands out as cutting-edge because we prepare undergraduate students to teach in both the upper elementary and middle grades classrooms.

In addition to becoming certified to teach all elementary subjects in 4-6th, all Middle Grades Education: Social Studies Concentration students will pursue certification for 7-8th grades in the area of Social Studies.

GPA Requirements:

• In order to maintain good standing in Middle Grades Education, students must maintain a 3.0 cumulative grade point average and a 2.0 grade point average in the course work in their concentration area.

Summary of Requirements

University Requirements

All students are required to complete the university’s General Education (GenEd (p. 143)) curriculum.

All students must take a minimum of two writing-intensive (WI) courses at Temple University. Writing intensive course numbers end in 96, 97 and 98.
College Requirements

Students receive a Bachelor of Science in Education degree with a recommendation for Pennsylvania teacher certification upon the successful completion of their program requirements with a minimum cumulative GPA of 3.0 or must meet the Pennsylvania Department of Education’s Bureau of School Leadership and Teacher Quality GPA Qualifying Praxis Score. All students seeking to graduate with the recommendation for certification must also meet the requirements for Candidacy.

The required total minimum credit hours for the Middle Grades Education concentration in Social Studies is 124. These credit hours are satisfied by taking courses in four categories:

1. University General Education requirements (General Education)
2. Education courses
3. Teacher Education Certification Courses (i.e. methods and student teaching)
4. Concentration courses

Suggested Academic Plan

B.S.ED. in Middle Grades Education: Social Studies Concentration

Requirements for New Students starting in the 2015-2016 Academic Year

To best prepare students in this major for the Praxis II exams, we strongly encourage taking the suggested GenEds listed.

(Certain courses require that a student secure clearances as per the College of Education policy; students should check the current list of courses that require clearances found on the College of Education Blackboard Undergraduate Community.)

Year 1

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1011 General Biology I</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course (Global/World Society)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902 Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1021 College Algebra</td>
<td>4</td>
</tr>
</tbody>
</table>

Term Credit Hours: 15

<table>
<thead>
<tr>
<th>Spring</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 1021 Introduction to General Physics I</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course (Race &amp; Diversity)</td>
<td>3</td>
</tr>
<tr>
<td>IH 0851 or 0951 Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1022 Precalculus</td>
<td>4</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3</td>
</tr>
<tr>
<td>GUS 2002 Space and Place</td>
<td></td>
</tr>
<tr>
<td>GUS 2014 Urban Geography</td>
<td></td>
</tr>
</tbody>
</table>

Term Credit Hours: 17

Year 2

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IH 0852 or 0952 Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1015 Introduction to Numbers Figures</td>
<td>4</td>
</tr>
<tr>
<td>EDUC 2103 Socio-cultural Foundations of Education in the United States</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course (U.S. Society)</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3</td>
</tr>
<tr>
<td>HIST 1001 History of Philadelphia</td>
<td></td>
</tr>
<tr>
<td>HIST 2103 African American History to 1865</td>
<td></td>
</tr>
<tr>
<td>HIST 3101 Colonial America</td>
<td></td>
</tr>
</tbody>
</table>

Term Credit Hours: 16

<table>
<thead>
<tr>
<th>Spring</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 2109 Adolescent Development for Educators</td>
<td>3</td>
</tr>
<tr>
<td>SPED 2231 Introduction to Inclusive Education</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 1012 General Biology II</td>
<td></td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
</tr>
<tr>
<td>------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>PHYS 1022</td>
<td>Introduction to General Physics II</td>
</tr>
<tr>
<td>HIST 1101</td>
<td>U.S. History to 1877</td>
</tr>
<tr>
<td>HIST 1102</td>
<td>U.S. History since 1877</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
</tr>
<tr>
<td>ENG 2301</td>
<td>Survey of American Literature I</td>
</tr>
<tr>
<td>ENG 2302</td>
<td>Survey of American Literature II</td>
</tr>
<tr>
<td>ENG 2402</td>
<td>African-American Literature II</td>
</tr>
<tr>
<td>Term Credit Hours</td>
<td></td>
</tr>
</tbody>
</table>

**Year 3**

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GenEd Breadth Course (Arts)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>MGRE 3109</td>
<td>Cognitive Development in the Content Areas³</td>
<td>3</td>
</tr>
<tr>
<td>MGRE 3111</td>
<td>Applications of Learning Theory to Middle Grades Education³</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>HIST 1702</td>
<td>World History Modern</td>
<td></td>
</tr>
<tr>
<td>HIST 2304</td>
<td>20th Century Europe: A Continent in Crisis</td>
<td></td>
</tr>
<tr>
<td>HIST 2511</td>
<td>Introduction to African History</td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ECON 1001</td>
<td>Introduction to the Economy</td>
<td></td>
</tr>
<tr>
<td>ECON 1103</td>
<td>Global Economics Issues</td>
<td></td>
</tr>
<tr>
<td>Term Credit Hours</td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

**Spring**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGRE 3145</td>
<td>Teaching and Learning Math in the Middle Grades⁴</td>
<td>3</td>
</tr>
<tr>
<td>MGRE 4108</td>
<td>Teaching and Learning Science in the Middle Grades</td>
<td></td>
</tr>
<tr>
<td>SPED 4109</td>
<td>Educating Students with Disabilities in Inclusive Settings</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>HIST 2104</td>
<td>African American History 1865-Present</td>
<td></td>
</tr>
<tr>
<td>HIST 2111</td>
<td>Recent American History</td>
<td></td>
</tr>
<tr>
<td>HIST 2216</td>
<td>U.S. Civil War</td>
<td></td>
</tr>
<tr>
<td>HIST 2217</td>
<td>Vietnam War</td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>POLS 1301</td>
<td>International Politics</td>
<td></td>
</tr>
<tr>
<td>POLS 1101</td>
<td>The American Political System</td>
<td></td>
</tr>
<tr>
<td>Term Credit Hours</td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

**Year 4**

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGRE 3196</td>
<td>Teaching and Learning Literacy in the Middle Grades [WI]</td>
<td>3</td>
</tr>
<tr>
<td>MGRE 3296</td>
<td>Cultures, Communities, and Families [WI]</td>
<td>3</td>
</tr>
<tr>
<td>SPED 3187</td>
<td>Integrated Literacy and Special Education Practicum</td>
<td></td>
</tr>
<tr>
<td>EDUC 2306</td>
<td>Assessment and Evaluation</td>
<td></td>
</tr>
<tr>
<td>ENES 3338</td>
<td>Foundations of Language Teaching: Teaching English Language Learners in Grades 4 to 12⁷</td>
<td>3</td>
</tr>
<tr>
<td>Term Credit Hours</td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

**Spring**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGRE 4888</td>
<td>Student Teaching in the Middle Grades</td>
<td>9</td>
</tr>
<tr>
<td>MGRE 4801</td>
<td>Senior Seminar and Performance Assessment in Middle Grades Education</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 4111</td>
<td>Classroom and Conflict Management in Grades 4 through 12</td>
<td>3</td>
</tr>
<tr>
<td>Term Credit Hours</td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

Total Credit Hours: 124

---

1. These two courses constitute the waiver for the GenEd Science category when the GPA requirement is met.
2. Suggested GenEd Global/World Society courses: ANTH 0867, GUS 0867 or SOC 0867.
Course must be successfully completed to be eligible for Candidacy approval.

These four courses constitute the waiver for the GenEd Quantitative Literacy category when the GPA requirement is met.

Suggested GenEd Race & Diversity courses: AAS 0829, ANTH 0829, GUS 0829, HIST 0829, POLS 0829, SOC 0829 or SOC 0929.

Suggested GenEd U.S. Society courses: AMST 0848, ANTH 0848, GUS 0848, HIST 0848 or SOC 0848.

These three courses constitute the waiver for the GenEd Human Behavior category when the GPA requirement is met.

**Minor in Education**

The 18-credit Minor in Education is designed for Temple University undergraduate students who have either a professional or personal interest in education, urban schools, or children but are majoring in another discipline. The minor in Education provides undergraduate students with broad, foundational knowledge about the state of education, adolescent development, and community and school relationships. Students whose research interests are content-based, such as political science, history, and geography and urban studies, but have connections to education will benefit from exposure to schools through field placements and education theory. This minor is also ideal for students who plan to enter occupations in fields such as policy, counseling, child psychology, which have connections to education. Finally, this minor is an opportunity for students to investigate careers in education. Through coursework and field experience students will be interacting with education majors and working in schools, thus providing them with a sample of some of the work that pre-service teachers do. This carefully designed sequence of courses includes field experiences such as tutoring, observations in after school programs, and work in community centers to support in-class learning.

**Requirements**

This minor consists of 18 credits. Students must take the following six courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 2103</td>
<td>Socio-cultural Foundations of Education in the United States</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 2109</td>
<td>Adolescent Development for Educators</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 2224</td>
<td>Service Learning</td>
<td>3</td>
</tr>
<tr>
<td>ECED 4106</td>
<td>The Learning Community: Family and Community Relationships</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 4441</td>
<td>Discourse Practices in Diverse Communities</td>
<td>3</td>
</tr>
<tr>
<td>URBE 4496</td>
<td>Understanding Urban Communities</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credit Hours**

18

**Secondary Education**

Shimada Resource Center (http://education.temple.edu/services)
College of Education
150 Ritter Annex
1301 Cecil B. Moore Ave.
Philadelphia, PA 19122
215-204-8011 (phone)
215-204-4383 (fax)

The Secondary Education program offers specializations that prepare students to earn an Instructional I Certificate that will authorize them to teach in one of the following content areas:

**Specializations offering grades 7-12 certification**

- English
- Mathematics
- Sciences
- Social Studies

**Specialization offering K-12 certification**

- World Languages
  - French
  - German
  - Italian
  - Latin
  - Spanish

Students in Secondary Education must complete course work in both education and in their content areas.
(Science and mathematics certifications are also available in the TUteach (p. 1162) program, a joint program offered through the College of Science and Technology and the College of Education.)

For specific details on each specialization, including suggested four-year academic plans, click on one the following links: English (p. 446), Mathematics (p. 448), Social Studies (p. 457), World Languages (p. 459), Science (p. 451)

GPA requirements:

- In order to maintain good standing in Secondary Education, students must maintain a 3.0 cumulative grade point average and a 2.0 grade point average in the course work in their content areas.

Programs

- Secondary Education/English Education (p. 446)
- Secondary Education/Mathematics Education (p. 448)
- Secondary Education/Science Education (p. 451)
- Secondary Education/Social Studies Education (p. 457)
- Secondary Education/World Languages Education (p. 459)

Secondary Education/English Education

Academic Content Area - English

Students seeking certification in Secondary Education: English must complete the requirements for both the major in Secondary Education: English AND for the English major as specified by the English Department. (For more information on the English department's major requirements, refer to the College of Liberal Art's English major (p. 822).)

In order to assure that students gain the content knowledge specified by the Pennsylvania Department of Education, we strongly recommend students to choose English electives that include the following areas: Linguistics, Shakespeare, and African American literature. Coursework in these areas prepare students for the state-mandated Praxis II examination (http://www.ets.org/praxis).

Summary of Requirements

University Requirements

All students are required to complete the university's General Education (GenEd (p. 143)) curriculum.

All students (including transfer students) must take a minimum of two writing-intensive (WI) courses at Temple University. Writing intensive course numbers end in 96, 97 and 98.

College Requirements

Students receive a Bachelor of Science in Education degree by meeting the following minimum College requirements:

- Completion of program requirements as detailed on the academic plan.
- Earn a "C-" or above in all required Education Courses.
- Earn a "C-" or above in all required University General Education Courses.
- Students in Secondary Education must maintain a 3.0 cumulative GPA and a 2.0 GPA in their content area courses.

For additional college and certification requirements, refer to the College Requirements page (p. 399).

Major Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 1255</td>
<td>Inclusive Education for a Diverse Society</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 2103</td>
<td>Socio-cultural Foundations of Education in the United States</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 2109</td>
<td>Adolescent Development for Educators</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 2296</td>
<td>Effective Teaching: Theory and Practice</td>
<td>3</td>
</tr>
<tr>
<td>SPED 2231</td>
<td>Introduction to Inclusive Education</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 2255</td>
<td>Effective Use of Instructional Technology in Classrooms</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 2306</td>
<td>Assessment and Evaluation</td>
<td>3</td>
</tr>
<tr>
<td>ENES 3338</td>
<td>Foundations of Language Teaching: Teaching English Language Learners in Grades 4 to 12</td>
<td>3</td>
</tr>
<tr>
<td>SECE 3796</td>
<td>Differentiated Literacy Instruction in the Disciplines, 7-12</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 4111</td>
<td>Classroom and Conflict Management in Grades 4 through 12</td>
<td>3</td>
</tr>
</tbody>
</table>
### Program Requirements for Secondary Education / English Education

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENES 4366</td>
<td>Teaching Literature and Reading 7-12</td>
<td>3</td>
</tr>
<tr>
<td>ENES 4371</td>
<td>Teaching Oral and Written Communication: 7-12</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 4389</td>
<td>Field Experience</td>
<td>1</td>
</tr>
<tr>
<td>EDUC 4389</td>
<td>Field Experience</td>
<td>1</td>
</tr>
</tbody>
</table>

**Total Credit Hours**: 8

### Suggested Academic Plan

**B.S.ED. in Secondary Education / English Education**

#### Requirements for New Students starting in the 2015-2016 Academic Year

**Year 1**

**Fall**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 17

**Spring**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GEN 2097</td>
<td>Introduction to English Studies [WI]</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>MATH 1021</td>
<td>College Algebra</td>
<td></td>
</tr>
<tr>
<td>EDUC 1017</td>
<td>Algebra and Algebraic Thinking for Educators</td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>EDUC 0815</td>
<td>Language in Society [GB]</td>
<td></td>
</tr>
<tr>
<td>CSCD 1108</td>
<td>Introduction to Linguistics</td>
<td></td>
</tr>
<tr>
<td>ANTH 2507</td>
<td>Fundamentals of Linguistic Anthropology</td>
<td></td>
</tr>
<tr>
<td>ENG 2821</td>
<td>Introduction to Linguistics</td>
<td></td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 16

**Year 2**

**Fall**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 2103</td>
<td>Socio-cultural Foundations of Education in the United States</td>
<td>3</td>
</tr>
<tr>
<td>SPED 2231</td>
<td>Introduction to Inclusive Education¹²</td>
<td>3</td>
</tr>
<tr>
<td>ENG 2201</td>
<td>Survey of English Literature: Beginnings to 1660</td>
<td>3</td>
</tr>
<tr>
<td>2000-level English Elective³</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 15

**Spring**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 2109</td>
<td>Adolescent Development for Educators²</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 4111</td>
<td>Classroom and Conflict Management in Grades 4 through 12</td>
<td>3</td>
</tr>
<tr>
<td>ENG 2202</td>
<td>Survey of English Literature: 1660-1900</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 16

¹ Course required for candidacy.
### GenEd Breadth Course

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Year 3</strong></td>
</tr>
<tr>
<td><strong>Fall</strong></td>
</tr>
<tr>
<td>EDUC 1255</td>
</tr>
<tr>
<td>ENES 4366</td>
</tr>
<tr>
<td>EDUC 4389</td>
</tr>
<tr>
<td>ENG 2301</td>
</tr>
<tr>
<td>2000-level English Elective&lt;sup&gt;3&lt;/sup&gt;</td>
</tr>
<tr>
<td>3000-level English Elective&lt;sup&gt;3&lt;/sup&gt;</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
</tr>
<tr>
<td><strong>15</strong></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
</tr>
<tr>
<td>EDUC 2296</td>
</tr>
<tr>
<td>ENES 3338</td>
</tr>
<tr>
<td>ENES 4371</td>
</tr>
<tr>
<td>EDUC 4389</td>
</tr>
<tr>
<td>ENG 2302</td>
</tr>
<tr>
<td>3000-level English Elective&lt;sup&gt;3&lt;/sup&gt;</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
</tr>
<tr>
<td><strong>16</strong></td>
</tr>
<tr>
<td><strong>Year 4</strong></td>
</tr>
<tr>
<td><strong>Fall</strong></td>
</tr>
<tr>
<td>SECE 3796</td>
</tr>
<tr>
<td>2000-level English Elective&lt;sup&gt;3&lt;/sup&gt;</td>
</tr>
<tr>
<td>3000-level English Elective&lt;sup&gt;3&lt;/sup&gt;</td>
</tr>
<tr>
<td>ENG 4x96, 4x97, 4x98 (WI course)</td>
</tr>
<tr>
<td>EDUC 2255</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
</tr>
<tr>
<td><strong>15</strong></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
</tr>
<tr>
<td>EDUC 2306</td>
</tr>
<tr>
<td>SECE 4688</td>
</tr>
<tr>
<td>SECE 4801</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
</tr>
<tr>
<td><strong>15</strong></td>
</tr>
<tr>
<td><strong>Total Credit Hours:</strong></td>
</tr>
<tr>
<td><strong>125</strong></td>
</tr>
</tbody>
</table>

1 Indicates courses and experiences enhanced with special education competencies.
2 These 3 courses constitute the waiver for the GenEd Human Behavior category when the GPA requirement is met.
3 In order to assure that students gain the content knowledge specified by the Pennsylvania Department of Education, we strongly urge students to choose English electives that include the following areas: Linguistics, Shakespeare, and African American literature. Without coursework in these areas, students risk failing the state-mandated Praxis II examination.

### Secondary Education/Mathematics Education

Students seeking certification in Secondary Education: Mathematics must complete the requirements for both the major in Secondary Education: Mathematics AND for the Mathematics (B.A.) major as specified by the College of Science and Technology. The eight semester plan that appears in the Academic Plan tab is inclusive of all requirements for both the Secondary Education: Mathematics major housed in the College of Education AND for the Mathematics B.A. housed in the College of Science and Technology (CST). Students entering this major must declare the second major of Mathematics through CST.

### Summary of Requirements

#### University Requirements

All students are required to complete the university’s General Education (GenEd (p. 143)) curriculum.
All students (including transfer students) must take a minimum of two writing-intensive (WI) courses at Temple University. Writing intensive course numbers end in 96, 97 and 98.

**College Requirements**

Students receive a Bachelor of Science in Education degree by meeting the following minimum College requirements:

- Completion of program requirements as detailed on the academic plan.
- Earn a "C-" or above in all required Education Courses.
- Earn a "C-" or above in all required University General Education Courses.
- Earn minimum grades required by CST in all Mathematics courses.
- Students in Secondary Education must maintain a 3.0 cumulative GPA and a 2.0 GPA in their content area courses.

For additional college and certification requirements, refer to the College Requirements page (p. 399).

**Major Requirements**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 1255</td>
<td>Inclusive Education for a Diverse Society</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 2103</td>
<td>Socio-cultural Foundations of Education in the United States</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 2109</td>
<td>Adolescent Development for Educators</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 2296</td>
<td>Effective Teaching: Theory and Practice</td>
<td>3</td>
</tr>
<tr>
<td>SPED 2231</td>
<td>Introduction to Inclusive Education</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 2255</td>
<td>Effective Use of Instructional Technology in Classrooms</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 2306</td>
<td>Assessment and Evaluation</td>
<td>3</td>
</tr>
<tr>
<td>ENES 3338</td>
<td>Foundations of Language Teaching: Teaching English Language Learners in Grades 4 to 12</td>
<td>3</td>
</tr>
<tr>
<td>SECE 3796</td>
<td>Differentiated Literacy Instruction in the Disciplines, 7-12</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 4111</td>
<td>Classroom and Conflict Management in Grades 4 through 12</td>
<td>3</td>
</tr>
<tr>
<td>SECE 4801</td>
<td>Senior Seminar and Performance Assessment in Secondary Education</td>
<td>3</td>
</tr>
<tr>
<td>SECE 4688</td>
<td>Student Teaching in Secondary Education</td>
<td>9</td>
</tr>
</tbody>
</table>

**Total Credit Hours**

42

1 Course required for candidacy.

**Program Requirements for Secondary Education / Mathematics Education**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAES 3145</td>
<td>Teaching &amp; Learning Mathematics in the Middle Grades</td>
<td>3</td>
</tr>
<tr>
<td>MAES 4146</td>
<td>Teaching and Learning Mathematics in High School</td>
<td>3</td>
</tr>
<tr>
<td>MAES 4371</td>
<td>History of Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 4389</td>
<td>Field Experience</td>
<td>1</td>
</tr>
<tr>
<td>EDUC 4389</td>
<td>Field Experience</td>
<td>1</td>
</tr>
</tbody>
</table>

**Total Credit Hours**

11

**Academic Content Area for Mathematics**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 1038</td>
<td>Calculus I with Lab</td>
<td></td>
</tr>
<tr>
<td>&amp; MATH 1039</td>
<td>and Lab for Calculus I with Lab</td>
<td></td>
</tr>
<tr>
<td>MATH 1042</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 2043</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>MATH 2101</td>
<td>Linear Algebra</td>
<td>3</td>
</tr>
<tr>
<td>or MATH 2103</td>
<td>Linear Algebra with Computer Lab</td>
<td></td>
</tr>
<tr>
<td>MATH 2111</td>
<td>Basic Concepts of Math</td>
<td>3</td>
</tr>
<tr>
<td>MATH 3003</td>
<td>Theory of Numbers</td>
<td>3</td>
</tr>
<tr>
<td>MATH 3031</td>
<td>Probability Theory I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 3032</td>
<td>Mathematical Statistics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 3061</td>
<td>Modern Geometry I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 3096</td>
<td>Introduction to Modern Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MATH 3137</td>
<td>Real &amp; Complex Analysis I</td>
<td>3</td>
</tr>
<tr>
<td>Course</td>
<td>Title</td>
<td>Credit</td>
</tr>
<tr>
<td>-----------</td>
<td>--------------------------------------------</td>
<td>--------</td>
</tr>
<tr>
<td>MATH 3138</td>
<td>Real &amp; Complex Analysis II</td>
<td>3</td>
</tr>
<tr>
<td>MATH 4096</td>
<td>Senior Problem Solving</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1062</td>
<td>Elementary Classical Physics II</td>
<td>4</td>
</tr>
</tbody>
</table>

Select one of the following courses to fulfill the computer programming requirement:

- CIS 1053 Programming in Matlab
- CIS 1057 Computer Programming in C
- CIS 1068 Program Design and Abstraction

**Total Credit Hours**

54

**Suggested Academic Plan**

**B.S.ED. in Secondary Education / Mathematics Education**

**Requirements for New Students starting in the 2015-2016 Academic Year**

Certain courses require that a student secure clearances as per the College of Education policy; students should check the current list of courses that require clearances found on the College of Education Blackboard Undergraduate Community.

### Year 1

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]¹</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>EDUC 2103</td>
<td>Socio-cultural Foundations of Education in the United States</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:¹,²</td>
<td></td>
<td>4-5</td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
<td></td>
</tr>
<tr>
<td>MATH 1038</td>
<td>Calculus I with Lab</td>
<td></td>
</tr>
<tr>
<td>&amp; MATH 1039</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Term Credit Hours**

17

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]¹</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3-4</td>
</tr>
<tr>
<td>EDUC 2255</td>
<td>Effective Use of Instructional Technology in Classrooms</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1042</td>
<td>Calculus II¹</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I</td>
<td>4</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

17

### Year 2

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>MATH 2111</td>
<td>Basic Concepts of Math</td>
<td>3</td>
</tr>
<tr>
<td>MATH 2043</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1062</td>
<td>Elementary Classical Physics II</td>
<td>4</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

17

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPED 2231</td>
<td>Introduction to Inclusive Education¹,²</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 2109</td>
<td>Adolescent Development for Educators¹,²</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 4111</td>
<td>Classroom and Conflict Management in Grades 4 through 12</td>
<td>3</td>
</tr>
<tr>
<td>MATH 3031</td>
<td>Probability Theory I</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>3-4</td>
</tr>
<tr>
<td>MATH 2101</td>
<td>Linear Algebra</td>
<td></td>
</tr>
<tr>
<td>MATH 2103</td>
<td>Linear Algebra with Computer Lab</td>
<td></td>
</tr>
</tbody>
</table>

**Term Credit Hours**

15
### Year 3
#### Fall
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAES 4371</td>
<td>History of Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 2296</td>
<td>Effective Teaching: Theory and Practice [WI]</td>
<td>3</td>
</tr>
<tr>
<td>MATH 3003</td>
<td>Theory of Numbers</td>
<td>3</td>
</tr>
<tr>
<td>MATH 3137</td>
<td>Real Complex Analysis I</td>
<td>3</td>
</tr>
<tr>
<td><strong>Select one of the following:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS 1053</td>
<td>Programming in Matlab</td>
<td>4</td>
</tr>
<tr>
<td>CIS 1057</td>
<td>Computer Programming in C</td>
<td></td>
</tr>
<tr>
<td>CIS 1068</td>
<td>Program Design and Abstraction</td>
<td></td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 16

#### Spring
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 1255</td>
<td>Inclusive Education for a Diverse Society</td>
<td>3</td>
</tr>
<tr>
<td>MAES 3145</td>
<td>Teaching Learning Mathematics in the Middle Grades</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 4389</td>
<td>Field Experience</td>
<td>1</td>
</tr>
<tr>
<td>MATH 3032</td>
<td>Mathematical Statistics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 3138</td>
<td>Real Complex Analysis II</td>
<td>3</td>
</tr>
<tr>
<td>MATH 3096</td>
<td>Introduction to Modern Algebra [WI]</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 16

#### Year 4
#### Fall
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENES 3338</td>
<td>Foundations of Language Teaching: Teaching English Language Learners in Grades 4 to 12</td>
<td>3</td>
</tr>
<tr>
<td>MAES 4146</td>
<td>Teaching and Learning Mathematics in High School</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 4389</td>
<td>Field Experience</td>
<td>1</td>
</tr>
<tr>
<td>SECE 3796</td>
<td>Differentiated Literacy Instruction in the Disciplines, 7-12 [WI]</td>
<td>3</td>
</tr>
<tr>
<td>MATH 3061</td>
<td>Modern Geometry I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 4096</td>
<td>Senior Problem Solving [WI]</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 16

#### Spring
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SECE 4688</td>
<td>Student Teaching in Secondary Education</td>
<td>9</td>
</tr>
<tr>
<td>SECE 4801</td>
<td>Senior Seminar and Performance Assessment in Secondary Education</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 2306</td>
<td>Assessment and Evaluation</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 15

**Total Credit Hours:** 129

---

1. Course must be successfully completed to be eligible for Candidacy approval.
2. These 3 courses constitute the waiver for the GenEd Human Behavior category when the GPA requirement is met.

### Secondary Education/Science Education

**Students seeking certification in Secondary Education Science: Biology** do not complete the requirements for both the major in Secondary Education: Science and for the content major as specified by the College of Science and Technology. The Secondary Education Science: Biology program requirements as delineated by the College of Education’s program meets Pennsylvania Department of Education criteria for competencies within the major; all students who successfully complete this program are eligible for certification. **Students wishing to complete the Biology major in addition to the Secondary Education Science: Biology major** must take additional course work to do so and must meet with College of Science and Technology (CST) advising office in their first semester at Temple to declare the second major.

**Students seeking certification in Secondary Education Science: Chemistry** complete the requirements for both the major in Secondary Education: Science and for the content major as specified by the College of Science and Technology. All students in this program must meet with College of Science and Technology (CST) advising office in their first semester at Temple to declare the second major.

**Students seeking certification in Secondary Education Science: Physics** complete the requirements for both the major in Secondary Education: Science and for the content major as specified by the College of Science and Technology. All students in this program must meet with College of Science and Technology (CST) advising office in their first semester at Temple to declare the second major.
## Summary of Requirements

### University Requirements
All students are required to complete the university's General Education (GenEd p. 143) curriculum.

All students (including transfer students) must take a minimum of two writing-intensive (WI) courses at Temple University. Writing intensive course numbers end in 96, 97 and 98.

### College Requirements
Students receive a Bachelor of Science in Education degree by meeting the following minimum College requirements:

- Completion of program requirements as detailed on the academic plan.
- Earn a "C-" or above in all required Education Courses.
- Earn a "C-" or above in all required University General Education Courses.
- Earn minimum grades required by CST in all science courses.
- Students in Secondary Education must maintain a 3.0 cumulative GPA and a 2.0 GPA in their content area courses.

For additional college and certification requirements, refer to the College Requirements page (p. 399).

### Major Requirements

#### EDUC 1255
Inclusive Education for a Diverse Society
3

#### EDUC 2103
Socio-cultural Foundations of Education in the United States
3

#### EDUC 2109
Adolescent Development for Educators
3

#### EDUC 2296
Effective Teaching: Theory and Practice
3

#### SPED 2231
Introduction to Inclusive Education
3

#### EDUC 2255
Effective Use of Instructional Technology in Classrooms
3

#### EDUC 2306
Assessment and Evaluation
3

#### ENES 3338
Foundations of Language Teaching: Teaching English Language Learners in Grades 4 to 12
3

#### SECE 3796
Differential Literacy Instruction in the Disciplines, 7-12
3

#### EDUC 4111
Classroom and Conflict Management in Grades 4 through 12
3

#### SECE 4688
Senior Seminar and Performance Assessment in Secondary Education
3

#### SECE 4801
Student Teaching in Secondary Education
9

**Total Credit Hours**
42

1 Course required for candidacy.

### Program Requirements for Secondary Education / Science Education

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCES 3146</td>
<td>The Teaching of Science in Secondary Schools</td>
<td>3</td>
</tr>
<tr>
<td>SCES 4146</td>
<td>Teaching Science in Secondary Schools II</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 4389</td>
<td>Field Experience</td>
<td>1</td>
</tr>
<tr>
<td>EDUC 4389</td>
<td>Field Experience</td>
<td>1</td>
</tr>
</tbody>
</table>

### Suggested Academic Plans

#### B.S.ED. in Secondary Education / Science Education

#### Requirements for New Students starting in the 2015-2016 Academic Year
Certain courses require that a student secure clearances as per the College of Education policy; students should check the current list of courses that require clearances found on the College of Education Blackboard Undergraduate Community.

#### B.S.ED. in Secondary Education / Science Education: Biology

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]¹</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
</tr>
<tr>
<td>MATH 1041 or 1038 and 1039</td>
<td>Calculus ¹</td>
</tr>
<tr>
<td>Year</td>
<td>Fall</td>
</tr>
<tr>
<td>----------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>Year 1</td>
<td>CHEM 1031 General Chemistry I</td>
</tr>
<tr>
<td></td>
<td>CHEM 1033 General Chemistry Laboratory I</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
</tr>
<tr>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Spring</strong></td>
</tr>
<tr>
<td></td>
<td>IH 0851 or 0951 Mosaic: Humanities Seminar I [GY]</td>
</tr>
<tr>
<td></td>
<td>MATH 1042 Calculus II³</td>
</tr>
<tr>
<td></td>
<td>EDUC 2103 Socio-cultural Foundations of Education in the United States¹</td>
</tr>
<tr>
<td></td>
<td>CHEM 1032 General Chemistry II</td>
</tr>
<tr>
<td></td>
<td>CHEM 1034 General Chemistry Laboratory II</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
</tr>
<tr>
<td></td>
<td>17</td>
</tr>
<tr>
<td>Year 2</td>
<td>IH 0852 or 0952 Mosaic: Humanities Seminar II [GZ]</td>
</tr>
<tr>
<td></td>
<td>BIOL 1111 Introduction to Biology II²</td>
</tr>
<tr>
<td></td>
<td>CHEM 2201 Organic Chemistry I</td>
</tr>
<tr>
<td></td>
<td>CHEM 2203 Organic Chemistry Laboratory I</td>
</tr>
<tr>
<td></td>
<td>PHYS 2021 General Physics I</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
</tr>
<tr>
<td></td>
<td>17</td>
</tr>
<tr>
<td>Year 3</td>
<td>GenEd Breadth Course</td>
</tr>
<tr>
<td></td>
<td>PHYS 2022 General Physics II</td>
</tr>
<tr>
<td></td>
<td>EDUC 1255 Inclusive Education for a Diverse Society</td>
</tr>
<tr>
<td></td>
<td>EDUC 2296 Effective Teaching: Theory and Practice [WI]</td>
</tr>
<tr>
<td></td>
<td>ENES 3338 Foundations of Language Teaching: Teaching English Language Learners in Grades 4 to 12³</td>
</tr>
<tr>
<td></td>
<td><strong>Spring</strong></td>
</tr>
<tr>
<td></td>
<td>BIOL 2296 Genetics [WI]</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
</tr>
<tr>
<td></td>
<td>BIOL 2227 Principles of Ecology</td>
</tr>
<tr>
<td></td>
<td>SCES 3146 The Teaching of Science in Secondary Schools</td>
</tr>
<tr>
<td></td>
<td>EDUC 4389 Field Experience</td>
</tr>
<tr>
<td></td>
<td>EDUC 2255 Effective Use of Instructional Technology in Classrooms</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
</tr>
<tr>
<td></td>
<td>17</td>
</tr>
<tr>
<td>Year 4</td>
<td>SECE 3796 Differentiated Literacy Instruction in the Disciplines, 7-12 [WI]</td>
</tr>
<tr>
<td></td>
<td>BIOL 3096 Cell Structure and Function [WI]</td>
</tr>
<tr>
<td></td>
<td>Biology Elective 2200 or higher</td>
</tr>
<tr>
<td></td>
<td>SCES 4146 Teaching Science in Secondary Schools II</td>
</tr>
<tr>
<td></td>
<td>EDUC 4389 Field Experience</td>
</tr>
<tr>
<td></td>
<td>EDUC 2306 Assessment and Evaluation</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
</tr>
<tr>
<td></td>
<td>17</td>
</tr>
</tbody>
</table>
### Spring

**SECE 4688**  
Student Teaching in Secondary Education  
9

**SECE 4801**  
Senior Seminar and Performance Assessment in Secondary Education  
3

**Term Credit Hours**  
12

**Total Credit Hours:**  
126

1. Course must be successfully completed to be eligible for Candidacy approval.
2. These courses constitute the waiver for the GenEd Science category when the GPA requirement is met.
3. These 3 courses constitute the waiver for the GenEd Human Behavior category when the GPA requirement is met.

### B.S.E.D. in Secondary Education / Science Education: Chemistry

#### Year 1

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]¹</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
</tr>
<tr>
<td>MATH 1041 or 1038 and 1039</td>
<td>Calculus I¹</td>
</tr>
<tr>
<td>CHEM 1031</td>
<td>General Chemistry I²</td>
</tr>
<tr>
<td>CHEM 1033</td>
<td>General Chemistry Laboratory I²</td>
</tr>
</tbody>
</table>

**Term Credit Hours**  
15

<table>
<thead>
<tr>
<th>Spring</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]¹</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDUC 2103</td>
<td>Socio-cultural Foundations of Education in the United States¹</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1042</td>
<td>Calculus II¹</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1032</td>
<td>General Chemistry II²</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1034</td>
<td>General Chemistry Laboratory II²</td>
<td>1</td>
</tr>
</tbody>
</table>

**Term Credit Hours**  
17

#### Year 2

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
</tr>
<tr>
<td>MATH 2043</td>
<td>Calculus III</td>
</tr>
<tr>
<td>CHEM 2201</td>
<td>Organic Chemistry I</td>
</tr>
<tr>
<td>CHEM 2203</td>
<td>Organic Chemistry Laboratory I</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
</tr>
<tr>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I</td>
</tr>
<tr>
<td>PHYS 2021</td>
<td>General Physics I</td>
</tr>
</tbody>
</table>

**Term Credit Hours**  
15

<table>
<thead>
<tr>
<th>Spring</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 2109</td>
<td>Adolescent Development for Educators¹,³</td>
<td>3</td>
</tr>
<tr>
<td>SPED 2231</td>
<td>Introduction to Inclusive Education¹,³</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 4111</td>
<td>Classroom and Conflict Management in Grades 4 through 12</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 2202</td>
<td>Organic Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 2204</td>
<td>Organic Chemistry Laboratory II</td>
<td>1</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYS 1062</td>
<td>Elementary Classical Physics II</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 2022</td>
<td>General Physics II</td>
<td></td>
</tr>
</tbody>
</table>

**Term Credit Hours**  
17

#### Year 3

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 3103</td>
<td>Techniques of Chemical Measurement I</td>
</tr>
<tr>
<td>CHEM 3105</td>
<td>Introduction to Chemical Research Techniques</td>
</tr>
<tr>
<td>CHEM 3301</td>
<td>Physical Chemistry Lecture I</td>
</tr>
</tbody>
</table>
**Schools, Colleges, and Divisions**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 2296</td>
<td>Effective Teaching: Theory and Practice [WI]</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 1255</td>
<td>Inclusive Education for a Diverse Society</td>
<td>3</td>
</tr>
<tr>
<td>ENES 3338</td>
<td>Foundations of Language Teaching: Teaching English Language Learners in Grades 4 to 12</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>CHEM 3302</td>
<td>Physical Chemistry Lecture II</td>
<td>3</td>
</tr>
<tr>
<td>SCES 3146</td>
<td>The Teaching of Science in Secondary Schools</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 4389</td>
<td>Field Experience</td>
<td>1</td>
</tr>
<tr>
<td>EDUC 2255</td>
<td>Effective Use of Instructional Technology in Classrooms</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td><strong>Year 4</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SECE 3796</td>
<td>Differentiated Literacy Instruction in the Disciplines, 7-12 [WI]</td>
<td>3</td>
</tr>
<tr>
<td>SCES 4146</td>
<td>Teaching Science in Secondary Schools II</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 4389</td>
<td>Field Experience</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 4196</td>
<td>Techniques of Chemical Measurement II [WI]</td>
<td>5</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>CHEM 3397</td>
<td>Physical Chemistry Laboratory I [WI]</td>
<td></td>
</tr>
<tr>
<td>CHEM 3398</td>
<td>Physical Chemistry Laboratory II [WI]</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>14</strong></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SECE 4688</td>
<td>Student Teaching in Secondary Education</td>
<td>9</td>
</tr>
<tr>
<td>SECE 4801</td>
<td>Senior Seminar and Performance Assessment in Secondary Education</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 2306</td>
<td>Assessment and Evaluation</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td><strong>Total Credit Hours:</strong></td>
<td></td>
<td><strong>125</strong></td>
</tr>
</tbody>
</table>

1 Course must be successfully completed to be eligible for Candidacy approval.
2 These courses constitute the waiver for the GenEd Science category when the GPA requirement is met.
3 These 3 courses constitute the waiver for the GenEd Human Behavior category when the GPA requirement is met.

**B.S.E.D. in Secondary Education / Science Education: Physics**

<table>
<thead>
<tr>
<th>Year 1</th>
<th></th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>MATH 1041 or 1038 and 1039</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I</td>
<td></td>
</tr>
<tr>
<td>PHYS 2021</td>
<td>General Physics I</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1042</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>EDUC 2103</td>
<td>Socio-cultural Foundations of Education in the United States</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1062</td>
<td>Elementary Classical Physics II</td>
<td></td>
</tr>
<tr>
<td>PHYS 2022</td>
<td>General Physics II</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>
### Year 2

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>Calculus III</td>
<td>3</td>
</tr>
<tr>
<td>MATH 2043</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>EDUC 2255</td>
<td>Effective Use of Instructional Technology in Classrooms</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 2296</td>
<td>Effective Teaching: Theory and Practice [WI]</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 16

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 2109</td>
<td>Adolescent Development for Educators&lt;sup&gt;1,3&lt;/sup&gt;</td>
<td>3</td>
</tr>
<tr>
<td>SPED 2231</td>
<td>Introduction to Inclusive Education&lt;sup&gt;1,3&lt;/sup&gt;</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 4111</td>
<td>Classroom and Conflict Management in Grades 4 through 12</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 2502</td>
<td>Mathematical Physics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 2796</td>
<td>Introduction to Modern Physics [WI]</td>
<td>4</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 17

### Year 3

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physics Elective</td>
<td>General Biology I</td>
<td>3</td>
</tr>
<tr>
<td>Science Sequence Part 1 - Select one of the following:</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>BIOL 1011</td>
<td>General Biology I</td>
<td></td>
</tr>
<tr>
<td>BIOL 1111</td>
<td>Introduction to Biology I</td>
<td></td>
</tr>
<tr>
<td>CHEM 1031</td>
<td>General Chemistry I</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 1033</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EES 2001</td>
<td>Physical Geology</td>
<td></td>
</tr>
<tr>
<td>PHYS 3301</td>
<td>Electricity and Magnetism</td>
<td>4</td>
</tr>
<tr>
<td>EDUC 1255</td>
<td>Inclusive Education for a Diverse Society</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>Calculus III</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 17

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 2101</td>
<td>Classical Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>Science Sequence Part 2 - Select one of the following:</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>BIOL 1012</td>
<td>General Biology II</td>
<td></td>
</tr>
<tr>
<td>BIOL 2112</td>
<td>Introduction to Biology II</td>
<td></td>
</tr>
<tr>
<td>CHEM 1032</td>
<td>General Chemistry II</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 1034</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The second geology course in sequence</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYS 4796</td>
<td>Experimental Physics [WI]</td>
<td>3</td>
</tr>
<tr>
<td>SCES 3146</td>
<td>The Teaching of Science in Secondary Schools</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 4389</td>
<td>Field Experience</td>
<td>1</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 14

### Year 4

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SECE 3796</td>
<td>Differentiated Literacy Instruction in the Disciplines, 7-12 [WI]</td>
<td>3</td>
</tr>
<tr>
<td>Physics Elective</td>
<td>Calculus III</td>
<td>3</td>
</tr>
<tr>
<td>Physics Elective</td>
<td>Calculus III</td>
<td>3</td>
</tr>
<tr>
<td>SCES 4146</td>
<td>Teaching Science in Secondary Schools II</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 4389</td>
<td>Field Experience</td>
<td>1</td>
</tr>
<tr>
<td>ENES 3338</td>
<td>Foundations of Language Teaching: Teaching English Language Learners in Grades 4 to 12&lt;sup&gt;3&lt;/sup&gt;</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 16

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SECE 4688</td>
<td>Student Teaching in Secondary Education</td>
<td>9</td>
</tr>
<tr>
<td>SECE 4801</td>
<td>Senior Seminar and Performance Assessment in Secondary Education</td>
<td>3</td>
</tr>
</tbody>
</table>
Students seeking certification in Secondary Education: Social Studies must complete the requirements for both the major in Secondary Education: Social Studies AND for the content major1 as specified by the College of Liberal Arts.

1 Students may choose any of the following second majors (content areas): History, Political Science, Economics, Sociology or Geography and Urban Studies.

Summary of Requirements

University Requirements

All students are required to complete the university’s General Education (GenEd (p. 143)) curriculum.

All students (including transfer students) must take a minimum of two writing-intensive (WI) courses at Temple University. Writing intensive course numbers end in 96, 97 and 98.

College Requirements

Students receive a Bachelor of Science in Education degree by meeting the following minimum College requirements:

• Completion of program requirements as detailed on the academic plan.
• Earn a "C-" or above in all required Education Courses.
• Earn a "C-" or above in all required University General Education Courses.
• Students in Secondary Education must maintain a 3.0 cumulative GPA and a 2.0 GPA in their content area courses.

For additional college and certification requirements, refer to the College Requirements page (p. 399).

Major Requirements

EDUC 1255 Inclusive Education for a Diverse Society 3
EDUC 2103 Socio-cultural Foundations of Education in the United States 1 3
EDUC 2109 Adolescent Development for Educators 1 3
EDUC 2296 Effective Teaching: Theory and Practice 3
SPED 2231 Introduction to Inclusive Education 1 3
EDUC 2255 Effective Use of Instructional Technology in Classrooms 3
EDUC 2306 Assessment and Evaluation 3
ENES 3338 Foundations of Language Teaching: Teaching English Language Learners in Grades 4 to 12 3
SECE 3796 Differentiated Literacy Instruction in the Disciplines, 7-12 3
EDUC 4111 Classroom and Conflict Management in Grades 4 through 12 3
SECE 4801 Senior Seminar and Performance Assessment in Secondary Education 3
SECE 4688 Student Teaching in Secondary Education 9

Total Credit Hours 42

1 Course required for candidacy.

Program Requirements for Secondary Education / Social Studies Education

SSES 3278 Methods and Materials in Secondary Social Studies 3
SSES 4278 Teaching for Understanding in Secondary Social Studies 3
EDUC 4389 Field Experience 1
EDUC 4389  Field Experience  1

Total Credit Hours  8

**Academic Content Areas - History, Political Science, Economics, Geography, Sociology and Urban Studies**

Content (second major) courses should be chosen in accordance with major requirements outlined by the College of Liberal Arts' relevant Department; requirements can be found in this Undergraduate Bulletin.

**Suggested Academic Plan**

**B.S.Ed. in Secondary Education / Social Studies Education**

**Requirements for New Students starting in the 2015-2016 Academic Year**

<table>
<thead>
<tr>
<th>Year 1</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>HIST 0800-1099 level²</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>14</strong></td>
<td></td>
</tr>
<tr>
<td>Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>EDUC 2103</td>
<td>Socio-cultural Foundations of Education in the United States</td>
<td>3</td>
</tr>
<tr>
<td>HIST 1100-1899 level²</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>MATH 1021</td>
<td>College Algebra</td>
<td></td>
</tr>
<tr>
<td>EDUC 1017</td>
<td>Algebra and Algebraic Thinking for Educators</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>16</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>SPED 2231</td>
<td>Introduction to Inclusive Education³</td>
<td>3</td>
</tr>
<tr>
<td>HIST 0800-4999 level²</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>HIST 2000-level²</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15</strong></td>
<td></td>
</tr>
<tr>
<td>Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 1255</td>
<td>Inclusive Education for a Diverse Society⁴</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 2109</td>
<td>Adolescent Development for Educators³</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 4111</td>
<td>Classroom and Conflict Management in Grades 4 through 12</td>
<td>3</td>
</tr>
<tr>
<td>HIST 2000-level²</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENES 3338</td>
<td>Foundations of Language Teaching: Teaching English Language Learners in Grades 4 to 12³</td>
<td>3</td>
</tr>
<tr>
<td>SSES 3278</td>
<td>Methods and Materials in Secondary Social Studies (Fall only)⁴</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 4389</td>
<td>Field Experience⁵</td>
<td>1</td>
</tr>
<tr>
<td>HIST 2000-level²</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>HIST 3000-level²</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>HIST 3x96/97/98 (WI)²</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>16</strong></td>
<td></td>
</tr>
<tr>
<td>Term</td>
<td>Course Title</td>
<td>Credits</td>
</tr>
<tr>
<td>------------</td>
<td>------------------------------------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>Spring</td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>EDUC 2296 Effective Teaching: Theory and Practice [WI]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>SSSES 4278 Teaching for Understanding in Secondary Social Studies</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>EDUC 4389 Field Experience</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>HIST 3000-level(^2)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>HIST 3000-level(^2)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td>Year 4</td>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SECE 3796 Differentiated Literacy Instruction in the Disciplines, 7-12 [WI](^4)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3-4</td>
</tr>
<tr>
<td></td>
<td>HIST 0800-4999 level(^2)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>HIST 4x96/97/98 (History Capstone) (WI)(^2)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>EDUC 2255 Effective Use of Instructional Technology in Classrooms(^4)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SECE 4688 Student Teaching in Secondary Education(^4)</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>SECE 4801 Senior Seminar and Performance Assessment in Secondary Education(^4)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>EDUC 2306 Assessment and Evaluation</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Total Credit Hours:</strong></td>
<td><strong>122</strong></td>
</tr>
</tbody>
</table>

1. Students opting for any content area (second major) other than History should consult a College of Education Advisor for specific requirements.
2. History (HIST) courses should be chosen in accordance with requirements outlined by the College of Liberal Arts (CLA) History department; students must complete courses at different levels and within geographical areas specified by the History department. Specific requirements can be found in CLA’s section of this Bulletin.
3. These 3 courses constitute the waiver for the GenEd Human Behavior category when the GPA requirement is met.
4. Indicates courses and experiences enhanced with special education competencies.

### Secondary Education/World Languages Education

In the state of Pennsylvania, certification in a world language is a K-12 certificate. World Language certification is offered in French, German, Italian, Latin, and Spanish.

Students seeking certification in Secondary Education, World Languages **must** complete the requirements for **both** the major in Secondary Education, World Languages **AND** for the language major as specified by the College of Liberal Arts (CLA); specific requirements for the language can be found in the CLA programs section of this Bulletin.

### Studying Abroad

Secondary Education World Language majors are encouraged to study overseas, when possible, in relevant foreign language speaking areas through Temple or external study abroad programs. Temple offers semester and year-long programs at Temple campuses in Rome and Oviedo, Spain, as well as exchange options at the University of Puerto Rico and Universities of Hamburg and Tübingen in Germany. Temple offers various summer language programs in Rome, Germany, Spain, and France. The Latin American Studies Semester program is an immersion experience available at Temple’s Main Campus to all Spanish majors during spring semesters. Students interested in study abroad should consult with the office of Education Abroad and Overseas Campuses (http://studyabroad.temple.edu) and College of Education Academic Advising to explore program options and develop a study abroad academic plan in advance.

### Summary of Requirements

#### University Requirements

All students are required to complete the university’s General Education (GenEd (p. 143)) curriculum.

All students (including transfer students) must take a minimum of two writing-intensive (WI) courses at Temple University. Writing intensive course numbers end in 96, 97 and 98.
College Requirements

Students receive a Bachelor of Science in Education degree by meeting the following minimum College requirements:

- Completion of program requirements as detailed on the academic plan.
- Earn a "C-" or above in all required Education Courses.
- Earn a "C-" or above in all required University General Education Courses.
- Students in Secondary Education must maintain a 3.0 cumulative GPA and a 2.0 GPA in their content area courses.

For additional college and certification requirements, refer to the College Requirements page (p. 399).

Major Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 1255</td>
<td>Inclusive Education for a Diverse Society</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 2103</td>
<td>Socio-cultural Foundations of Education in the United States</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 2109</td>
<td>Adolescent Development for Educators</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 2296</td>
<td>Effective Teaching: Theory and Practice</td>
<td>3</td>
</tr>
<tr>
<td>SPED 2231</td>
<td>Introduction to Inclusive Education</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 2255</td>
<td>Effective Use of Instructional Technology in Classrooms</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 2306</td>
<td>Assessment and Evaluation</td>
<td>3</td>
</tr>
<tr>
<td>ENES 3338</td>
<td>Foundations of Language Teaching: Teaching English Language Learners in Grades 4 to 12</td>
<td>3</td>
</tr>
<tr>
<td>SECE 3796</td>
<td>Differentiated Literacy Instruction in the Disciplines, 7-12</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 4111</td>
<td>Classroom and Conflict Management in Grades 4 through 12</td>
<td>3</td>
</tr>
<tr>
<td>SECE 4801</td>
<td>Senior Seminar and Performance Assessment in Secondary Education</td>
<td>3</td>
</tr>
<tr>
<td>SECE 4688</td>
<td>Student Teaching in Secondary Education</td>
<td>9</td>
</tr>
</tbody>
</table>

Total Credit Hours: 42

1 Course required for candidacy.

Program Requirements for Secondary Education /World Languages Education

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLED 5429</td>
<td>Curriculum and Methods in Foreign Languages</td>
<td>3</td>
</tr>
<tr>
<td>FLED 5431</td>
<td>Innovations in Foreign Language Education</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 4389</td>
<td>Field Experience</td>
<td>1</td>
</tr>
<tr>
<td>EDUC 4389</td>
<td>Field Experience</td>
<td>1</td>
</tr>
</tbody>
</table>

Total Credit Hours: 8

Academic Content Area - World Languages

Language courses should be chosen in accordance with major requirements outlined by the relevant department in the College of Liberal Arts.

Total Semester Hours for Certification in One Foreign Language: 122-124

Optional Certificate in English as a Second Language (ESL): It is recommended that certification in English as a Second Language (ESL or ESOL) or in an additional foreign language be pursued in order to enhance career opportunities. Courses may be taken during summer sessions to avoid heavy course loads during the academic year. Total Semester Hours for Certification in One Foreign Language and ESL: 131-133

Suggested Academic Plan

B.S.ED. in Secondary Education / World Languages Education

Requirements for New Students starting in the 2015-2016 Academic Year

(Certain courses require that a student secure clearances as per the College of Education policy; students should check the current list of courses that require clearances found on the College of Education Blackboard Undergraduate Community.)

Year 1

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Term Credit Hours</td>
<td>14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------</td>
<td>----</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDUC 2103</td>
<td>Socio-cultural Foundations of Education in the United States$^1$</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Foreign Language</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select one of the following:$^1$</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDUC 1017</td>
<td>Algebra and Algebraic Thinking for Educators</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 1021</td>
<td>College Algebra</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>16</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Year 2</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]$^1$</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3-4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPED 2231</td>
<td>Introduction to Inclusive Education$^{1,2}$</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Foreign Language</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>EDUC 1255</td>
<td>Inclusive Education for a Diverse Society</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>EDUC 2109</td>
<td>Adolescent Development for Educators$^{1,2}$</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>EDUC 2296</td>
<td>Effective Teaching: Theory and Practice [WI]</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Foreign Language</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Year 3</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENES 3338</td>
<td>Foundations of Language Teaching: Teaching English Language Learners in Grades 4 to 12$^2$</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Foreign Language</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign Language</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDUC 2255</td>
<td>Effective Use of Instructional Technology in Classrooms$^3$</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>FLED 5429</td>
<td>Curriculum and Methods in Foreign Languages</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>EDUC 4389</td>
<td>Field Experience$^3$</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Foreign Language</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign Language</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>16</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Year 4</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SECE 3796</td>
<td>Differentiated Literacy Instruction in the Disciplines, 7-12 [WI]$^3$</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>EDUC 4111</td>
<td>Classroom and Conflict Management in Grades 4 through 12</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>FLED 5431</td>
<td>Innovations in Foreign Language Education</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>EDUC 4389</td>
<td>Field Experience$^3$</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Foreign Language</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign Language</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>16</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Course</td>
<td>Title</td>
<td>Credits</td>
<td></td>
</tr>
<tr>
<td>----------</td>
<td>------------------------------------------------------------</td>
<td>---------</td>
<td></td>
</tr>
<tr>
<td>SECE 4688</td>
<td>Student Teaching in Secondary Education&lt;sup&gt;3&lt;/sup&gt;</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>SECE 4801</td>
<td>Senior Seminar and Performance Assessment in Secondary Education&lt;sup&gt;3&lt;/sup&gt;</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>EDUC 2306</td>
<td>Assessment and Evaluation</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Term Credit Hours**  
15

**Total Credit Hours:**  
122

1. Course must be successfully completed to be eligible for Candidacy approval.
2. These 3 courses constitute the waiver for the GenEd Human Behavior category when the GPA requirement is met.
3. Indicates courses and experiences enhanced with special education competencies.
College of Engineering

Keya Sadeghipour, Ph.D., Dean
Engineering Building, Room 331
1947 N. 12th Street
Philadelphia, PA 19122
215-204-7800
http://engineering.temple.edu/

Accreditation


ABET is a non-profit and non-governmental accrediting agency for academic programs in the disciplines of applied science, computing, engineering, and engineering technology. ABET is a recognized accreditor in the United States by the Council for Higher Education Accreditation.

Introduced in the Fall of 2013, the Bioengineering program will seek accreditation as soon as it is possible. Being introduced in the Fall of 2015, the Environmental Engineering program will seek accreditation as soon as it is possible.

Mission

The mission of the College of Engineering (COE) is to provide students with a high-quality, innovative, and globally-competitive learning experience in engineering, engineering technology, and the applied sciences. Engineering graduates are to be educated professionals with the technical, problem-solving, and communication skills required to succeed in the workplace and society.

The college is mindful of its obligation to be an environment for the creation of knowledge, and it encourages basic and cross-disciplinary applied research by faculty and students. We place great value on scholarship, practice, and service aimed at improving the quality of life and the economic viability of our society. This value system is reflected in how we assess faculty for promotion and tenure and how we grade student work.

We strive to pursue these objectives in a learning environment that celebrates ethnic and gender diversity, respects experience, and encourages problem solving through teamwork.

The college offers undergraduate curricula in engineering and engineering technology. Our engineering programs, leading to the Bachelor of Science in Engineering degree, prepare students for positions in engineering that require a broad preparation in mathematics and the engineering sciences at the entry level. They are recommended for those who expect to become registered professional engineers, pursue an advanced degree, or become involved in conceptual design, planning, research, and development in industry. The programs in engineering technology, which lead to the Bachelor of Science in Engineering Technology degree, educate students for careers as engineering technologists. They participate as members of the engineering team, translating concepts into functioning systems and supervising subsequent implementation by technicians and craftsmen.

Graduates of the COE find employment in manufacturing, construction management, sales engineering, inspection and quality control, production engineering and management, research and development, purchasing, technical field services, application engineering, computer systems and software manufacturing, and research or production involving computers. Following on-the-job experience, they can qualify for positions of a supervisory and managerial nature. Others may qualify as registered professional engineers.

Day and evening courses are offered at the Main Campus (p. 119) and at the Ambler Campus (p. 105). All programs can be completed at the Main Campus.

Admission

Admission to the university does not guarantee admission to particular programs in the College of Engineering. Because programs in the college have varying admissions requirements, students should contact the Office of Undergraduate Studies, Room 349, for further information (215-204-2998).

Honors Program

For current information on the College Honors Program, contact Dr. Vallorie Peridier, Coordinator, by phone (215-204-7143) or e-mail (vallorie.peridier@temple.edu).

Cooperative Education & Internship

Full-time matriculated College of Engineering students who have a GPA of 2.5 or greater and who have completed at least 30 semester hours (at least 12 at Temple) toward the baccalaureate degree may apply for paid cooperative work experience (full-time) during spring or fall semesters. Students work at least 35 hours per week and are considered full-time students at Temple University. It can take additional time to complete the degree when participating in this program, but at least one semester of relevant work experience is gained. College of Engineering students may register and receive
technical elective credits for their work experience with the Co-Op courses (ENGR 2181, ENGR 3181). These programs are managed by the Assistant Director of Industrial/External Relations and Co-Op Programs in the College of Engineering, Dean's Office, phone: 215-204-2537.

Students may also receive relevant work experience through internships, which are normally available during the summer terms. Because internships are offered over the summer, they allow students to finish in the traditional four years and still gain some on-the-job experience.

**Honor Societies, Awards, & Student Associations**

**Professional Societies & Organizations**

The following professional societies and organizations are located within the College of Engineering:

- American Concrete Institute (ACI)
- American Society of Civil Engineering (ASCE)
- American Society of Heating, Refrigeration, and Air Conditioning Engineering (ASHRAE)
- American Society of Mechanical Engineers (ASME)
- Biomedical Engineering Society (BMES)
- Construction Management Student Organization (CMSO)
- Engineers Without Borders (EWB)
- Institute of Electrical & Electronics Engineers (IEEE)
- Minority Engineering Students Association (MESA)
- National Society of Black Engineers (NSBE)
- National Society of Hispanic Engineers (SHPE)
- National Society of Professional Engineers (NSPE)
- Society of Automotive Engineers (SAE)
- Society of Manufacturing Engineers (SME)
- Society of Women Engineers (SWE)
- Temple University Amateur Radio Club (TUARC)
- ETA KAPPA NU (Electrical Engineering Honor Society)
- PI TAU SIGMA (Mechanical Engineering Honor Society)

**Program Information**

**Engineering**

The programs in Civil Engineering, Electrical Engineering and Mechanical Engineering are accredited by the Engineering Accreditation Commission (EAC) of ABET, http://www.abet.org.

All engineering programs lead to a Bachelor of Science degree in the following fields of study:

- Bioengineering (B.S. BioE.)
- Civil Engineering (B.S.C.E.)
- Electrical Engineering (B.S.E.E.)
- Engineering (B.S.E.)
- Environmental Engineering (B.S. Env.E.)
- Mechanical Engineering (B.S.M.E.)

These degree programs also offer concentrations in the following areas:

- Environmental Engineering in B.S.C.E.
- Computer Engineering in B.S.E.E.
- Bioelectrical in B.S.E.E.
- Biomechanics in B.S.M.E.

The program in Bioengineering will seek accreditation as soon as it is possible. Likewise the new program in Engineering will seek accreditation.

**Engineering Technology**

Engineering Technology programs are accredited by the Engineering Technology Accreditation Commission (ETAC) of ABET, http://www.abet.org.

These programs lead to a Bachelor of Science in Engineering Technology (B.S.E.T.) degree.
Two Engineering Technology programs are offered in the following areas:

- Construction Management Technology
- Engineering Technology

**Student Contact Information**

Office of Undergraduate Studies (Room 349)
College of Engineering
1947 N. 12th Street
Philadelphia, PA 19122
215-204-7800

**Academic Policies & Regulations**

Please see the full listing of university-wide Academic Policies (p. 81). The university policies and regulations generally apply to all undergraduate students and provide a framework within which schools and colleges may specify further conditions or variations appropriate to students in their courses or programs. Students are responsible for complying with all university-wide academic policies that apply to their individual academic status.

**Co-requisites and Prerequisites**

Students may be de-enrolled from courses for which they do not meet prerequisites and co-requisites. (Please see the Prerequisites and Co-requisites (p. 99) policy for more information.) Students are responsible for reviewing and abiding by all course prerequisites and co-requisites in the Course Catalog (http://www.temple.edu/apply/common/catcheck.asp). The requirements are designed to assure that students are appropriately prepared to be successful in their courses. Prerequisites provide an efficient manner for students to register for the next course in a sequence for which they are prepared. Students who appropriately satisfy prerequisites are permitted to register for a first and second attempt. Completion of a prerequisite does not permit a student to enroll in the third attempt of a repeated course. Students may attempt a course for the third time only if they have received permission from the College, which is not guaranteed and may require additional coursework (See the Repeating a Course Policy below).

**Dean's List**

Each fall and spring semester, those undergraduates who have met the credit hour and academic criteria for their school or college are placed on the Dean's List. See the Dean's List (p. 92) policy for specific GPA and credit-hour requirements.

**Fly in 4**

Fly in 4 is a partnership between incoming freshmen and the university. It limits the number of hours per week that students have to work for pay and guarantees that students can graduate in four years, potentially saving them thousands of dollars in debt. For more information on this program, see Undergraduate Admissions (http://admissions.temple.edu/cost-and-aid/fly-in-4).

**Graduation Procedures**

All College of Engineering students are required to complete a graduation review with an advisor in the Office of Undergraduate Studies prior to or at the start of their senior year. Students should schedule a review once they have completed 90 semester hours. The graduation review involves a detailing of the courses and credits completed and those that remain to be completed for graduation. Once the student and academic advisor complete the graduation plan (check sheet), the Office of Undergraduate Studies will forward the graduation check sheet to the student's department for the faculty advisor's approval. Final approval and clearance for graduation will be determined by the Director of Undergraduate Studies.

Students are expected to be active participants in the review and have equal responsibility for assuring the accuracy and completeness of the review.

Early in the semester in which students will complete their degree requirements, they must apply online via Self-Service Banner (SSB). For application deadlines, see the University's Undergraduate Graduation Procedures (p. 95).

**Permission to Take Courses at Another Institution**

Students in the College of Engineering who wish to take courses at another institution must petition the Office of Undergraduate Studies for approval prior to enrolling in such a course. Petition forms are available in the Office of Undergraduate Studies, College of Engineering, Room 349. The student is responsible for obtaining a course description from the other institution and attaching it to the petition form. The student takes the petition to the corresponding Temple department for faculty review and then submits the petition to the Office of Undergraduate Studies for final approval.

Courses taken without prior approval will not be transferable toward the Temple degree. In addition, students must have completed the prerequisites and have completed or be completing any listed co-requisites of both the Temple equivalent course and course at the host institution.

Please see the University policy on Permission to Complete a Course at Another Institution after Matriculation (p. 98) for more information.
Plagiarism and Academic Dishonesty

Plagiarism and academic dishonesty are prohibited by the College of Engineering. The development of independent thought and a respect for the thoughts of others is essential to intellectual growth. The prohibition of plagiarism and cheating is intended to foster this independence and respect. See the policy on Plagiarism (p. 99) in this Bulletin.

The penalty for plagiarism or cheating as a first offense is normally an F in the course in which the offense is committed. In such cases, the instructor can either write a report or complete the Settlement of a Charge of Academic Dishonesty form and send it to the Office of Undergraduate Studies. The Office of Undergraduate Studies will forward to the Office of Student Conduct and Community Standards. The Office of Student Conduct and Community Standards generally adjudicates all cases and student appeals.

Repeating a Course

Students may attempt a course two times without restriction. Students in the College of Engineering are encouraged to meet with an advisor prior to attempting a course for the second time. A third attempt of any course is not guaranteed and requires permission of the student's home college. Petitions for a third attempt may require additional coursework, remediation, and/or academic/personal planning. Please refer to the University policy on Repeating a Course (p. 99) for further information.

College Graduation Requirements

Anticipation of Graduation

All College of Engineering (COE) students who intend to graduate in May, August, or January must have a graduation review at the completion of 90 credits. At the beginning of the final semester, the student must complete a graduation application. To earn the baccalaureate degree in any curriculum of the COE, a student must submit a graduation plan (check sheet), consisting of all required courses in the chosen curriculum, which has been approved by the student's academic advisor, chairperson, and Director of Undergraduate Studies. Required courses are indicated in curriculum checklists available from the student's respective department of instruction.

College Requirements for all Majors

Engineering Program

- 31 minimum credits in Math and Science
- 25 minimum credits in University General Education
- 60-67 credits in major (varies with major), minimum 2.0 GPA in the major
- 124 minimum credits total

Engineering Technology (CMT & ET) programs

- 24 minimum credits in Math and Science
- 25 minimum credits in University General Education
- 50-60 credits in major (varies with major), minimum 2.0 GPA in the major
- 124 minimum credits total

Notes:

1. The total number of credit hours at graduation may be greater for some students based on initial placement exams, transfer evaluations, individual curricular choices, and academic progress.
2. Students must fulfill the necessary prerequisites for any given course or course sequence. See the Prerequisite and Co-requisite Policy (p. 99) in the university-wide Academic Policies section in this Bulletin.
3. The engineering programs are structured to prepare students for the professional practice of engineering and/or graduate study. The curricula emphasize a rigorous treatment of the mathematical and scientific approaches to the solution of engineering problems.
4. The final two years of study stress the synthesis of unique solutions rooted in the fundamental principles mastered during the first two years. These final years culminate in a design project.

Program Performance

A minimum cumulative GPA of 2.0 is required for graduation. Students majoring in engineering must attain a minimum GPA of 2.0 in their major courses in order to graduate. Students majoring in engineering technology and construction management technology must have a minimum GPA of 2.0 in their major courses.
Independent Research

Independent student work on a laboratory investigation or design project must be approved by the chairperson of the respective department and the assigned faculty supervisor. Work is graded on research methodology, research results, and a report. Only seniors with a minimum GPA of 3.0 may apply for independent research. Approved projects must be completed in one academic year.

Independent Study

A student is permitted to take no more than two independent study courses. Permission is granted only if a student needs the course to complete his/her studies. They can be taken only in the junior and senior years. The content of the independent study work must cover the material in one of the courses listed in the curriculum. Students must complete an independent study form in their department prior to registration for the independent study.

Transfer Credit

Transfer credit to the COE can be granted only from an accredited institution of higher learning. Co-op education, credit for life experience, and advanced placement credits are not transferable from other institutions. Transfer credits are not granted after a student has matriculated into a degree program. In only exceptional circumstances may students take courses at other institutions and have transfer credits awarded. The dean must approve permission for such arrangements in advance. Senior Design Projects or Capstone courses are not transferable to the college.

Courses Inapplicable to Graduation

Semester hours earned in MATH 0701 or MATH 0702, lower-level military science (ROTC), and RCC-enhanced courses are not credited toward the minimum semester hours required for graduation.

Students will not be awarded duplicate credit for courses that are repeated in transfer or at Temple.

Non-Traditional Credits

A maximum of 12 semester hours of credit will be allowed by the COE in cooperative education, relevant work experience, approved ROTC courses, and Advanced Placement or CLEP examinations. No other non-traditional credit will be granted.

Credit for Life Experience

Degree seeking students may be granted academic credits for work experience if it is judged to be an adequate substitute for all or part of particular courses required of the student. Experience must be related to a specific course in the curriculum offered by the college. Work experience must be acquired before entering Temple University. Credit will only be granted after completion of 30 semester hours of coursework. Application forms are available in the Office of Undergraduate Studies (Engineering Building, Room 349).

Academic Advising

Shawn Fagan
Director of Undergraduate Studies
Engineering Building, Room 350
215-204-8825
sfagan@temple.edu

Advising Centers for the Major in the College of Engineering

Civil and Environmental Engineering Department
Engineering Building, Room 513
215-204-7814
creed@temple.edu

Electrical and Computer Engineering Department
Engineering Building, Room 711
215-204-7597
eegrad@temple.edu

Mechanical Engineering Department
Engineering Building, Room 610
215-204-7808
vross@temple.edu

Bioengineering Department
Engineering Building, Room 813
215-204-3038
ruth.ochia@temple.edu
All students in the College of Engineering (COE) have the flexibility to meet with any of the academic advisors in the Office of Undergraduate Studies once they have officially matriculated in the College of Engineering. The student's academic advisor will confirm that the courses selected yield credits toward a degree and that the requirements of Temple University, COE, and the academic department are being met. Reference should be made to this Bulletin and to DARS in planning programs.

Academic advisors attempt to avoid errors when advising students about their program requirements, but schools and colleges cannot assume liability for errors in advising. Therefore, students must assume primary responsibility for knowing the requirements for their degrees and for acquiring current information about their academic status.

Faculty

Bechara E. Abboud, Associate Professor, Department of Civil and Environmental Engineering, College of Engineering; Ph.D., Drexel University.

Berk Ayranci, Instructor (Teaching/Instructional), Department of Civil and Environmental Engineering, College of Engineering; M.S.M.E., Temple University.

Li Bai, Associate Professor, Department of Electrical and Computer Engineering, College of Engineering; Ph.D., Drexel University.

George Baran, Professor, Department of Mechanical Engineering, College of Engineering; Ph.D., University of Michigan.

Leonard K. Bernstein, Instructor (Teaching/Instructional), Department of Civil and Environmental Engineering, College of Engineering; M.S., University of Pennsylvania.

Saroj K. Biswas, Professor, Department of Electrical and Computer Engineering, College of Engineering; Ph.D., University of Ottawa.

Robert M. Brooks, Associate Professor, Department of Civil and Environmental Engineering, College of Engineering; Ph.D., Indian Institute of Technology.

David S. Brookstein, Professor, Department of Mechanical Engineering, College of Engineering; Sc.D., Massachusetts Institute of Technology.

Shih-Jiun Chen, Professor, Department of Mechanical Engineering, College of Engineering; Ph.D., Drexel University.

Harsh Deep Chopra, Professor, Department of Mechanical Engineering, College of Engineering; Ph.D., University of Maryland College Park.

Joseph Thomas Coe Jr., Assistant Professor, Department of Civil and Environmental Engineering, College of Engineering; Ph.D., University of California Los Angeles.

Richard S. Cohen, Professor, Department of Mechanical Engineering, College of Engineering; Ph.D., Princeton University.

Kurosh Darvish, Associate Professor, Department of Mechanical Engineering, College of Engineering; Ph.D., University of Virginia.

Zdenka J. Delalic, Associate Professor, Department of Electrical and Computer Engineering, College of Engineering; Ph.D., University of Pennsylvania.

Dmitriy A. Dikin, Associate Professor (Research), Department of Mechanical Engineering, College of Engineering; Ph.D., National Academy of Sciences of Ukraine, Institute for Low Temperature Physics and Engineering.

Oleksandr Dilogyan, Assistant Professor (Teaching/Instructional), Department of Mechanical Engineering, College of Engineering; Ph.D., Donetsk National Technical University.

Ahmed Faheem, Assistant Professor, Department of Civil and Environmental Engineering, College of Engineering; Ph.D., University of Wisconsin.

Omar Z. Fisher, Assistant Professor, Department of Bioengineering, College of Engineering; Ph.D., University of Texas at Austin.

Bojana Gligorijevic, Assistant Professor, Department of Bioengineering, College of Engineering; Ph.D., Georgetown University.

Yah-el Har-el, Assistant Professor (Research), Department of Bioengineering, College of Engineering; Ph.D., Johns Hopkins University.

John J. Helferty, Associate Professor, Department of Electrical and Computer Engineering, College of Engineering; Ph.D., Drexel University.

Robert Hughes, Assistant Professor, Department of Mechanical Engineering, College of Engineering; Ph.D., McMaster University.

Parsaoran Hutapea, Associate Professor, Department of Mechanical Engineering, College of Engineering; Ph.D., North Carolina State University.

Mohammad F. Kiani, Professor, Department of Mechanical Engineering, College of Engineering; Ph.D., Louisiana Tech University.

Sanghun Kim, Assistant Professor (Teaching/Instructional), Department of Civil and Environmental Engineering, College of Engineering; Ph.D., Syracuse University.
Peter Lelkes, Professor, Department of Bioengineering, College of Engineering; Ph.D., RWTH Aachen University.

Michel Lemay, Professor, Department of Bioengineering, College of Engineering; Ph.D., Case Western Reserve University.

Haijun Liu, Assistant Professor, Department of Mechanical Engineering, College of Engineering; Ph.D., University of Maryland College Park.

Muruganandham Manickavachagam, Assistant Professor (Research), Department of Civil and Environmental Engineering, College of Engineering; Ph.D., Annamalai University.

Erica R. McKenzie, Assistant Professor, Department of Civil and Environmental Engineering, College of Engineering; Ph.D., University of California at Davis.

William C. Miller, Associate Professor (Teaching/Instructional), Department of Civil and Environmental Engineering, College of Engineering; Ph.D., University of Pennsylvania.

Svetlana Neretina, Assistant Professor, Department of Mechanical Engineering, College of Engineering; Ph.D., McMaster University.

Iyad Obeid, Associate Professor, Department of Electrical and Computer Engineering, College of Engineering; Ph.D., Duke University.

Ralph Oyini Mbouna, Assistant Professor (Teaching/Instructional), Department of Electrical and Computer Engineering, College of Engineering; Ph.D., Temple University.

Chetan A. Patil, Assistant Professor (Research), Department of Bioengineering, College of Engineering; Ph.D., Vanderbilt University.

Vallorie J. Peridier, Associate Professor, Department of Mechanical Engineering, College of Engineering; Ph.D., Lehigh University.

Joseph Picone, Professor, Department of Electrical and Computer Engineering, College of Engineering; Ph.D., Illinois Institute of Technology.

Shriram Pillapakkam, Associate Professor (Teaching/Instructional), Department of Mechanical Engineering, College of Engineering; Ph.D., New Jersey Institute of Technology.

Nancy Pleshko, Professor, Department of Bioengineering, College of Engineering; Ph.D., Rutgers University.

Songgang Qiu, Professor, Department of Mechanical Engineering, College of Engineering; Ph.D., University of Minnesota.

David Reiser, Assistant Professor (Teaching/Instructional), Department of Mechanical Engineering, College of Engineering.

Fei Ren, Assistant Professor, Department of Mechanical Engineering, College of Engineering; Ph.D., Michigan State University.

Shenqiang Ren, Associate Professor, Department of Mechanical Engineering, College of Engineering; Ph.D., University of Maryland College Park.

Steven M. Ridenour, Professor Emeritus, Department of Mechanical Engineering, College of Engineering; Ph.D., University of Miami.

Robert J. Ryan, Associate Professor (Teaching/Instructional), Department of Civil and Environmental Engineering, College of Engineering; Ph.D., Drexel University.

Keyanoush Sadeghipour, Professor, Department of Mechanical Engineering, College of Engineering; Ph.D., University of Manchester Institute of Science and Technology.

Sergio E. Serrano, Professor, Department of Civil and Environmental Engineering, College of Engineering; Ph.D., University of Waterloo.

Dennis A. Silage, Professor, Department of Electrical and Computer Engineering, College of Engineering; Ph.D., University of Pennsylvania.

Andrew Spence, Associate Professor, Department of Bioengineering, College of Engineering; Ph.D., Cornell University.

Won Hyuk Suh, Assistant Professor, Department of Bioengineering, College of Engineering; Ph.D., University of Illinois at Urbana-Champaign.

Thomas E. Sullivan, Professor, Department of Electrical and Computer Engineering, College of Engineering; Ph.D., Pennsylvania State University.

Rominder Suri, Professor, Department of Civil and Environmental Engineering, College of Engineering; Ph.D., Michigan Technological University.

Rouzbeh Tehrani, Assistant Professor (Teaching/Instructional), Department of Civil and Environmental Engineering, College of Engineering; Ph.D., Temple University.

Philip D. Udo-Inyang, Associate Professor, Department of Civil and Environmental Engineering, College of Engineering; Ph.D., University of Missouri-Columbia.
Felix F. Udoeyo, Assistant Professor (Teaching/Instructional), Department of Civil and Environmental Engineering, College of Engineering; Ph.D., Abubakar Tafawa Balewa University.

Dmitri Vainchtein, Assistant Professor, Department of Mechanical Engineering, College of Engineering; Ph.D., University of Illinois at Urbana-Champaign.

Benoit Van Aken, Assistant Professor, Department of Civil and Environmental Engineering, College of Engineering; Ph.D., Catholic University of Louvain.

Evelyn Walters, Assistant Professor (Teaching/Instructional), Department of Civil and Environmental Engineering, College of Engineering; Ph.D., Technische Universität München.

Wenhai Wang, Assistant Professor (Research), Department of Mechanical Engineering, College of Engineering.

Chang-Hee Won, Associate Professor, Department of Electrical and Computer Engineering, College of Engineering; Ph.D., University of Notre Dame.

Jie Yin, Assistant Professor, Department of Mechanical Engineering, College of Engineering; Ph.D., Columbia University.

Hui Yu, Assistant Professor (Research), Department of Civil and Environmental Engineering, College of Engineering.

Huichun Judy Zhang, Assistant Professor, Department of Civil and Environmental Engineering, College of Engineering; Ph.D., Georgia Institute of Technology.

Yimin Daniel Zhang, Associate Professor, Department of Electrical and Computer Engineering, College of Engineering; Ph.D., University of Tsukuba.

Ying Julie Zhu, Associate Professor, Department of Electrical and Computer Engineering, College of Engineering; Ph.D., Princeton University.

Bioengineering

Peter Lelkes, Ph.D., Chair
Room 811, Engineering Building
215-204-3307
prielkes@temple.edu

Ruth Ochia, Ph.D., Undergraduate Coordinator
Room 813, Engineering Building
215-204-3038
ruth.ochia@temple.edu

http://engineering.temple.edu/bioengineering

Goals, Objectives & Design Integration

The Bioengineering program will be able to integrate engineering science, rigorous mathematical tools and a quantitative approach to the life sciences and apply this spectrum of knowledge in an interdisciplinary fashion to provide solutions to basic and applied biological and medical problems.

This goal will be accomplished by offering to the students an integrated set of courses aimed at providing a thorough introduction to the complex and interdisciplinary field of Bioengineering:

• Teach engineering science, analysis, and design in the context of quantitative approaches to solving life science and medicine-related problems.

• Integrate interdisciplinary aspects of biology, physiology, and engineering within courses and design projects.

• Emphasize the interdisciplinary nature of Bioengineering, in terms of problem solving, design, within the framework of interdisciplinary teams focusing on the dialogue between "biology-inspired engineering" and "biology as a specific arm of applied engineering principles."

• Immerse students in key life science and medical principles, while focusing on understanding cell/molecular-level events through quantitative analysis and modeling.

• Provide an exceptional learning environment with significant instruction by Bioengineering faculty and researchers in collaboration with experts from other fields, especially the Health Science Campus.

In this curriculum, incoming freshmen will first and foremost be trained as solid Temple engineers, focusing on applying engineering science, design, and analysis to real life problems specifically in the areas of biology and medicine. This firm engineering foundation will be further enhanced with newly developed Bioengineering courses in specific pathways, such as:

• Biomaterials: A focus on the design, development, and uses of biomaterials in biology and medicine. It also explores the host-biomaterial interface and interactions.

• Bioimaging: A focus on design, development, and uses of imaging modalities and techniques in biology.
• **Bioinstrumentation**: A focus on the design, development, and use of instruments used to record, process, and/or control biological functions.
• **Biomechanics**: A focus on the interaction between forces and motions in tissues, organisms, and biomedical materials.
• **Tissue Engineering**: A focus on building functional tissues using cells and scaffolds and repairing diseased tissues and organs at the cellular and molecular level.
• **Neuroengineering**: A focus on using engineering to understand and interact with neural tissues.
• **Pre-med**: A broad-based Bioengineering curriculum which fulfills current pre-med course requirements.

Hands-on engineering experience will be gained through intense laboratory coursework and by solving real-life biomedical problems.

### Summary of Requirements

#### University Requirements

All new students are required to complete the university's General Education (GenEd (p. 143)) curriculum.

All Temple students must take a minimum of two writing-intensive courses for a total of at least six credits. The writing-intensive course credits are counted as part of the major; they are not General Education (GenEd) or elective credits. The writing-intensive courses must be completed at Temple University and students may not transfer in credits to satisfy this requirement. The specific writing-intensive courses required for this major are:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 2196</td>
<td>Technical Communication</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 4196</td>
<td>Senior Design Project I</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 4296</td>
<td>Senior Design Project II</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Department and Major Requirements

**Foundation Science & Math Courses in Engineering**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1042</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 2043</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>MATH 3041</td>
<td>Differential Equations I</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1111</td>
<td>Introduction to Biology I</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 1012</td>
<td>General Biology II</td>
<td></td>
</tr>
<tr>
<td>BIOL 2112</td>
<td>Introduction to Biology II</td>
<td></td>
</tr>
<tr>
<td>BIOL 1911</td>
<td>Honors Introduction to Biology I</td>
<td></td>
</tr>
<tr>
<td>BIOL 2912</td>
<td>Honors Introduction to Biology II</td>
<td></td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1031</td>
<td>General Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1035</td>
<td>Chemistry for Engineers</td>
<td></td>
</tr>
<tr>
<td>CHEM 1951</td>
<td>Honors General Chemical Science I</td>
<td></td>
</tr>
<tr>
<td>CHEM 1033</td>
<td>General Chemistry Laboratory I</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1062</td>
<td>Elementary Classical Physics II</td>
<td>4</td>
</tr>
</tbody>
</table>

#### Required General Education Courses

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 0802</td>
<td>Analytical Reading and Writing</td>
<td></td>
</tr>
<tr>
<td>ENGR 0812</td>
<td>Analytical Reading and Writing: ESL</td>
<td></td>
</tr>
<tr>
<td>ENGR 0902</td>
<td>Honors Literature/Reading/Writing</td>
<td></td>
</tr>
<tr>
<td>IH 0851</td>
<td>Mosaic: Humanities Seminar I</td>
<td>3</td>
</tr>
<tr>
<td>or IH 0951</td>
<td>Honors Mosaic: Humanities Seminar I</td>
<td></td>
</tr>
<tr>
<td>IH 0852</td>
<td>Mosaic: Humanities Seminar II</td>
<td>3</td>
</tr>
<tr>
<td>or IH 0952</td>
<td>Honors Mosaic: Humanities Seminar II</td>
<td></td>
</tr>
<tr>
<td>GenEd 08xx or 09xx (Human Behavior)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd 08xx or 09xx (Race and Diversity)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd 08xx or 09xx (Global/World Society)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd 08xx or 09xx (U.S. Society)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd 08xx or 09xx (Arts)</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>
### Required Engineering Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 1101</td>
<td>Introduction to Engineering &amp; Engineering Technology</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3571</td>
<td>Classical and Statistical Thermodynamics</td>
<td>3</td>
</tr>
<tr>
<td>BIOE 2001</td>
<td>Frontiers in Bioengineering</td>
<td>2</td>
</tr>
<tr>
<td>BIOE 2101</td>
<td>Engineering Principles of Physiological Systems</td>
<td>3</td>
</tr>
<tr>
<td>BIOE 3001</td>
<td>Research Design and Methods in Bioengineering</td>
<td>2</td>
</tr>
<tr>
<td>BIOE 3101</td>
<td>BioE Lab #1 - Bioelectrical Engineering</td>
<td>3</td>
</tr>
<tr>
<td>BIOE 3102</td>
<td>BioE Lab #2 - Biomaterials</td>
<td>3</td>
</tr>
<tr>
<td>BIOE 4101</td>
<td>BioE Lab #3 - Biomechanics</td>
<td>3</td>
</tr>
<tr>
<td>BIOE 3201</td>
<td>Biomedical Instrumentation</td>
<td>2</td>
</tr>
<tr>
<td>BIOE Elective #1</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>BIOE Elective #2</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>BIOE Elective #3</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Capstone Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ENGR 2196</td>
<td>Technical Communication (WI)</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3033</td>
<td>Entrepreneurial Engineering</td>
<td>3</td>
</tr>
<tr>
<td>or BIOE 4311</td>
<td>The Entrepreneurial Engineering Bioengineer</td>
<td></td>
</tr>
<tr>
<td>ENGR 4169</td>
<td>Engineering Seminar</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 4196</td>
<td>Senior Design Project I (WI)</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 4296</td>
<td>Senior Design Project II (WI)</td>
<td>3</td>
</tr>
</tbody>
</table>

### Technical Electives
- Technical Elective #1: 3 credits
- Technical Elective #2: 4 credits
- Technical Elective #3: 4 credits
- Technical Elective #4: 4 credits

### Free Electives
- Free Elective #1: 3 credits
- Free Elective #2: 3 credits

### Total Credit Hours
124

---

### Suggested Academic Plan

**Bachelor of Science in Bioengineering**

**Requirements for New Students starting in the 2015-2016 Academic Year**

**Year 1**

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Select one of the following:</td>
<td></td>
</tr>
<tr>
<td>CHEM 1031</td>
<td>General Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1035</td>
<td>Chemistry for Engineers</td>
<td></td>
</tr>
<tr>
<td>CHEM 1951</td>
<td>Honors General Chemical Science I</td>
<td></td>
</tr>
<tr>
<td>CHEM 1033</td>
<td>General Chemistry Laboratory I</td>
<td>1</td>
</tr>
<tr>
<td>ENG 0810, 0812, or 0912</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 1101</td>
<td>Introduction to Engineering Engineering Technology</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**
15

**Spring**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1042</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>Technical Elective #1</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I</td>
<td>4</td>
</tr>
<tr>
<td>IH 0810 or 0910</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>BIOE 2001</td>
<td>Frontiers in Bioengineering</td>
<td>2</td>
</tr>
</tbody>
</table>

**Term Credit Hours**
16
<table>
<thead>
<tr>
<th>Year 2</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 2043</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1062</td>
<td>Elementary Classical Physics II</td>
<td>4</td>
</tr>
<tr>
<td>Technical Elective #2</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>ENGR 2196</td>
<td>Technical Communication [WI]</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 3041</td>
<td>Differential Equations I</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3571</td>
<td>Classical and Statistical Thermodynamics</td>
<td>3</td>
</tr>
<tr>
<td>BIOE 2101</td>
<td>Engineering Principles of Physiological Systems</td>
<td>3</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>BIOL 1111</td>
<td>Introduction to Biology I</td>
<td></td>
</tr>
<tr>
<td>BIOL 1012</td>
<td>General Biology II</td>
<td></td>
</tr>
<tr>
<td>BIOL 2112</td>
<td>Introduction to Biology II</td>
<td></td>
</tr>
<tr>
<td>BIOL 1911</td>
<td>Honors Introduction to Biology I</td>
<td></td>
</tr>
<tr>
<td>BIOL 2912</td>
<td>Honors Introduction to Biology II</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>16</td>
</tr>
<tr>
<td><strong>Year 3</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOE 3001</td>
<td>Research Design and Methods in Bioengineering</td>
<td>2</td>
</tr>
<tr>
<td>BIOE 3101</td>
<td>BioE Lab #1 - Bioelectrical Engineering</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOE 3201</td>
<td>Biomedical Instrumentation</td>
<td>2</td>
</tr>
<tr>
<td>BIOE Elective #1</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Free Elective #1</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>16</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOE 3102</td>
<td>BioE Lab #2 - Biomaterials</td>
<td>3</td>
</tr>
<tr>
<td>BIOE Elective #2</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGR 4169</td>
<td>Engineering Seminar</td>
<td>1</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>2-3</td>
</tr>
<tr>
<td>ENGR 3033</td>
<td>Entrepreneurial Engineering</td>
<td></td>
</tr>
<tr>
<td>BIOE 4311</td>
<td>The Entrepreneurial Bioengineer</td>
<td></td>
</tr>
<tr>
<td>Technical Elective #3</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>17</td>
</tr>
<tr>
<td><strong>Year 4</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOE 4101</td>
<td>BioE Lab #3 - Biomechanics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 4196</td>
<td>Senior Design Project I [WI]</td>
<td>1</td>
</tr>
<tr>
<td>Capstone Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>13</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGR 4296</td>
<td>Senior Design Project II [WI]</td>
<td>3</td>
</tr>
<tr>
<td>BIOE Elective #3</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Free Elective #2</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>
## Technical Electives

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISC 1053</td>
<td>Programming in Matlab</td>
<td>4</td>
</tr>
<tr>
<td>CISC 1057</td>
<td>Computer Programming in C</td>
<td>4</td>
</tr>
<tr>
<td>ECE 2112</td>
<td>Electrical Devices &amp; Systems I</td>
<td>4</td>
</tr>
<tr>
<td>&amp; ECE 2113</td>
<td>and Electrical Devices &amp; Systems I Lab</td>
<td></td>
</tr>
<tr>
<td>ECE 2312</td>
<td>Electrical Engineering Science I</td>
<td>4</td>
</tr>
<tr>
<td>&amp; ECE 2313</td>
<td>and Electrical Engineering Science I Lab</td>
<td></td>
</tr>
<tr>
<td>ECE 2322</td>
<td>Electrical Engineering Science II</td>
<td>4</td>
</tr>
<tr>
<td>&amp; ECE 2323</td>
<td>and Electrical Engineering Science II Lab</td>
<td></td>
</tr>
<tr>
<td>ECE 3412</td>
<td>Classical Control Systems</td>
<td>4</td>
</tr>
<tr>
<td>&amp; ECE 3413</td>
<td>and Classical Control Laboratory</td>
<td></td>
</tr>
<tr>
<td>CHEM 1032</td>
<td>General Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 1034</td>
<td>and General Chemistry Laboratory II</td>
<td></td>
</tr>
<tr>
<td>CHEM 2201</td>
<td>Organic Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 2203</td>
<td>and Organic Chemistry Laboratory I</td>
<td></td>
</tr>
<tr>
<td>CHEM 2202</td>
<td>Organic Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 2204</td>
<td>and Organic Chemistry Laboratory II</td>
<td></td>
</tr>
<tr>
<td>CHEM 4503</td>
<td>Introduction to Polymer Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 1111</td>
<td>Introduction to Biology I</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 2112</td>
<td>Introduction to Biology II</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 3096</td>
<td>Cell Structure and Function</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 1117</td>
<td>Engineering Graphics</td>
<td>2</td>
</tr>
<tr>
<td>ENGR 2011</td>
<td>Engineering Analysis &amp; Applications</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3117</td>
<td>Computer-Aided Design (CAD)</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3201</td>
<td>Material Science for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3334</td>
<td>Mechanical Systems</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3553</td>
<td>Mechanics of Fluids</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 3301</td>
<td>Physical Chemistry Lecture I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 4401</td>
<td>Biochemistry I</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 3352</td>
<td>Systems Neuroscience</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 3356</td>
<td>Organization and Development of the Nervous System</td>
<td>3</td>
</tr>
<tr>
<td>ENGT 4278</td>
<td>Cardiac Devices</td>
<td>3</td>
</tr>
</tbody>
</table>

## Bioengineering Electives

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOE 1301</td>
<td>Principles of Macromolecular Science</td>
<td>3</td>
</tr>
<tr>
<td>BIOE 2301</td>
<td>Quantitative Pathophysiology</td>
<td>3</td>
</tr>
<tr>
<td>BIOE 2302</td>
<td>Cellular and Molecular Biology for Bioengineers</td>
<td>3</td>
</tr>
<tr>
<td>BIOE 2312</td>
<td>Mechanics for Bioengineering I</td>
<td>4</td>
</tr>
<tr>
<td>BIOE 3301</td>
<td>Biomedical Signals and Systems</td>
<td>3</td>
</tr>
<tr>
<td>BIOE 3302</td>
<td>Drug Delivery</td>
<td>3</td>
</tr>
<tr>
<td>BIOE 3303</td>
<td>Biotransport Phenomena</td>
<td>3</td>
</tr>
<tr>
<td>BIOE 3312</td>
<td>Mechanics for Bioengineering II</td>
<td>4</td>
</tr>
<tr>
<td>BIOE 3511</td>
<td>Interactions of Biomaterials with Living Tissues</td>
<td>3</td>
</tr>
<tr>
<td>BIOE 3719</td>
<td>Introduction to Bioengineering</td>
<td>3</td>
</tr>
<tr>
<td>BIOE 3725</td>
<td>Cell Biology for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>BIOE 4301</td>
<td>Bioengineering Seminar</td>
<td>1</td>
</tr>
<tr>
<td>BIOE 4501</td>
<td>Regenerative Engineering</td>
<td>3</td>
</tr>
<tr>
<td>BIOE 4741</td>
<td>Biomaterials for Engineers</td>
<td>3</td>
</tr>
</tbody>
</table>

## Capstone Electives

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOE 4411</td>
<td>Capstone Elective: Biomaterials</td>
<td>3</td>
</tr>
</tbody>
</table>
BIOE 4431  Capstone Elective: Neuroengineering  3
BIOE 4421  Capstone Elective: Bionanotechnology  3
BIOE 4441  Capstone Elective: Biomechanics  3
BIOE 4451  Capstone Elective: Biomedical Imaging  3
BIOE 4461  Capstone Elective: Principles of Tissue and Regenerative Engineering  3

Civil & Environmental Engineering
Rominder Suri, Ph.D., P.E., Chair
Room 514, Engineering Building
215-204-2378
rominder.suri@temple.edu

Benoit Van Aken, Ph.D., Undergraduate Coordinator
Room 521, Engineering Building
215-204-7087
bvanaken@temple.edu

http://engineering.temple.edu/department/civil-environmental-engineering

The Civil Engineering Program is accredited by the Engineering Accreditation Commission (EAC) of ABET, http://www.abet.org.

Goals, Objectives & Design Integration
Graduates will be employed in industries, academia or state and federal government agencies or enter into or complete graduate or professional degree programs. Graduates will use modern engineering techniques, skills, and tools to identify, formulate, and solve civil engineering problems; or design structures or systems considering functionality, safety and cost effectiveness; or evaluate the impact of civil engineering solutions in a global, societal, and environmental context consistent with the principles of sustainable development. Graduates will engage in the professional practice in civil engineering or closely related fields. Graduates will demonstrate an understanding of ethical, societal, and professional responsibility; engage in life-long learning opportunities; and demonstrate effective communication and interpersonal skills within multidisciplinary teams.

Programs
• Bachelor of Science in Civil Engineering (p. 475)
• Bachelor of Science in Civil Engineering - Environmental Engineering Concentration (p. 479)
• Bachelor of Science in Civil Engineering - Environmental Engineering Concentration with Co-op (p. 482)
• Bachelor of Science in Civil Engineering with Co-op (p. 486)
• Bachelor of Science in Environmental Engineering (p. 489)
• Minor in Environmental Engineering (p. 492)

Bachelor of Science in Civil Engineering
Goals, Objectives & Design Integration
Civil Engineering professionals plan, design, construct, and operate facilities which are essential to the quality of modern life. The Civil Engineering curriculum is based upon providing a fully-integrated design experience by beginning with introductory courses in the study of engineering history and economics, then progressing through a broad coverage of the primary areas of practice within Civil Engineering (surveying, structures, geotechnical engineering, construction engineering, water resources, transportation, and environmental engineering), and finishing with a year-long capstone Civil Engineering senior design project. The goal of the Civil Engineering program is to prepare students to pursue graduate education in their specific areas of interest, to pass the Fundamental of Engineering and Professional Engineer exams in the areas of practice within Civil Engineering, and become involved in design, project planning and research.

Summary of Requirements
University Requirements
All new students are required to complete the university’s General Education (GenEd (p. 143)) curriculum.

All Temple students must take a minimum of two writing-intensive courses for a total of at least six credits. The writing-intensive course credits are counted as part of the major; they are not General Education (GenEd) or elective credits. The writing-intensive courses must be completed at Temple University and students may not transfer in credits to satisfy this requirement. The specific writing-intensive courses required for this major are:

ENGR 2196  Technical Communication  3
ENGR 4196  Senior Design Project I  1
ENGR 4296  Senior Design Project II  3

**Department Requirements**

**Foundation Science & Math Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1042</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 2043</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>MATH 3041</td>
<td>Differential Equations I</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1062</td>
<td>Elementary Classical Physics II</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1035</td>
<td>Chemistry for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1033</td>
<td>General Chemistry Laboratory I</td>
<td>1</td>
</tr>
</tbody>
</table>

**Required General Education Courses**

Select one of the following:  4

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 0802</td>
<td>Analytical Reading and Writing</td>
</tr>
<tr>
<td>ENG 0812</td>
<td>Analytical Reading and Writing: ESL</td>
</tr>
<tr>
<td>ENG 0902</td>
<td>Honors Literature/Reading/Writing</td>
</tr>
<tr>
<td>IH 0851</td>
<td>Mosaic: Humanities Seminar I</td>
</tr>
<tr>
<td>or IH 0951</td>
<td>Honors Mosaic: Humanities Seminar I</td>
</tr>
<tr>
<td>IH 0852</td>
<td>Mosaic: Humanities Seminar II</td>
</tr>
<tr>
<td>or IH 0952</td>
<td>Honors Mosaic: Humanities Seminar II</td>
</tr>
</tbody>
</table>

GenEd 08xx or 09xx (U.S. Society)  3
GenEd 08xx or 09xx (Global/World Society)  3
GenEd 08xx or 09xx (Human Behavior)  3
GenEd 08xx or 09xx (The Arts)  3
GenEd 08xx or 09xx (Race and Diversity)  3

**Required Civil Engineering Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEE 1105</td>
<td>Surveying</td>
<td>2</td>
</tr>
<tr>
<td>CEE 2011</td>
<td>Civil Engineering Materials</td>
<td>2</td>
</tr>
<tr>
<td>CEE 3048</td>
<td>Probability, Statistics &amp; Stochastic Methods</td>
<td>3</td>
</tr>
<tr>
<td>CEE 3211</td>
<td>Transportation Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CEE 3311</td>
<td>Construction Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CEE 3331</td>
<td>Soil Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>CEE 3332</td>
<td>Soil Mechanics Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>CEE 3411</td>
<td>Structural Analysis</td>
<td>3</td>
</tr>
<tr>
<td>CEE 3412</td>
<td>Structural Analysis Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>CEE 3441</td>
<td>Steel &amp; Concrete Design</td>
<td>4</td>
</tr>
<tr>
<td>CEE 3711</td>
<td>Environmental Engineering</td>
<td>3</td>
</tr>
</tbody>
</table>

CEE Approved Technical Electives  6

**Additional Science Requirement**

Select one of the following:  3-4

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEE 2711</td>
<td>Environmental Chemistry &amp; Microbiology</td>
</tr>
<tr>
<td>EES 1001</td>
<td>Introductory Geology</td>
</tr>
<tr>
<td>EES 2001</td>
<td>Physical Geology</td>
</tr>
</tbody>
</table>

**Required Non Civil Engineering Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 2112</td>
<td>Electrical Devices &amp; Systems I</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 1101</td>
<td>Introduction to Engineering &amp; Engineering Technology</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 1117</td>
<td>Engineering Graphics</td>
<td>2</td>
</tr>
<tr>
<td>ENGR 2196</td>
<td>Technical Communication (WI)</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 2331</td>
<td>Engineering Statics 1</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 2332</td>
<td>Engineering Dynamics 1</td>
<td>3</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>ENGR 2333</td>
<td>Mechanics of Solids (^1)</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3201</td>
<td>Material Science for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3553</td>
<td>Mechanics of Fluids (^1)</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3571</td>
<td>Classical and Statistical Thermodynamics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 4169</td>
<td>Engineering Seminar</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 4196</td>
<td>Senior Design Project I (WI) (^2)</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 4296</td>
<td>Senior Design Project II (WI) (^2)</td>
<td>3</td>
</tr>
<tr>
<td>MEE 3506</td>
<td>Fluids and Energy Laboratory</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total Credit Hours</strong></td>
<td></td>
<td><strong>124-125</strong></td>
</tr>
</tbody>
</table>

\(^1\) Course must be passed with a C- or better.

\(^2\) Senior Design topic must be approved by the chair of the Department of Civil & Environmental Engineering.

---

**Suggested Academic Plan**

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

**Bachelor of Science in Civil Engineering (B.S.C.E.)**

**Requirements for New Students starting in the 2015-2016 Academic Year**

**Year 1**

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 1101</td>
<td>Introduction to Engineering Engineering Technology</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1035</td>
<td>Chemistry for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1033</td>
<td>General Chemistry Laboratory I</td>
<td>1</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

|           | **15** |

**Spring**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1042</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 1117</td>
<td>Engineering Graphics</td>
<td>2</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>CEE 1105</td>
<td>Surveying</td>
<td>2</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

|           | **15** |

**Year 2**

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 2043</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1062</td>
<td>Elementary Classical Physics II</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 2331</td>
<td>Engineering Statics</td>
<td>3</td>
</tr>
<tr>
<td>CEE 2011</td>
<td>Civil Engineering Materials</td>
<td>2</td>
</tr>
<tr>
<td>ENGR 2196</td>
<td>Technical Communication [WI]</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

|           | **16** |

**Spring**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 2332</td>
<td>Engineering Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 2333</td>
<td>Mechanics of Solids</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3571</td>
<td>Classical and Statistical Thermodynamics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 3041</td>
<td>Differential Equations I</td>
<td>3</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

|           | **15** |

**Year 3**

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 3553</td>
<td>Mechanics of Fluids</td>
<td>3</td>
</tr>
<tr>
<td>CEE 3331</td>
<td>Soil Mechanics</td>
<td>3</td>
</tr>
</tbody>
</table>

---
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEE 3332</td>
<td>Soil Mechanics Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>CEE 3411</td>
<td>Structural Analysis</td>
<td>3</td>
</tr>
<tr>
<td>CEE 3412</td>
<td>Structural Analysis Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 3201</td>
<td>Material Science for Engineers</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

**Spring**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 4169</td>
<td>Engineering Seminar</td>
<td>1</td>
</tr>
<tr>
<td>CEE 3048</td>
<td>Probability, Statistics Stochastic Methods</td>
<td>3</td>
</tr>
<tr>
<td>CEE 3211</td>
<td>Transportation Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CEE 3441</td>
<td>Steel Concrete Design</td>
<td>4</td>
</tr>
<tr>
<td>MEE 3506</td>
<td>Fluids and Energy Laboratory</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Select one of the following:</td>
<td></td>
</tr>
<tr>
<td>CEE 2711</td>
<td>Environmental Chemistry Microbiology</td>
<td>3-4</td>
</tr>
<tr>
<td>EES 1001</td>
<td>Introductory Geology</td>
<td></td>
</tr>
<tr>
<td>EES 2001</td>
<td>Physical Geology</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>15-16</strong></td>
</tr>
</tbody>
</table>

**Year 4**

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 4196</td>
<td>Senior Design Project I [WI]</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Approved Civil Engineering Technical Elective</td>
<td></td>
</tr>
<tr>
<td>CEE 3711</td>
<td>Environmental Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CEE 3311</td>
<td>Construction Engineering</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

**Spring**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 4296</td>
<td>Senior Design Project II [WI]</td>
<td>3</td>
</tr>
<tr>
<td>ECE 2112</td>
<td>Electrical Devices Systems I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Approved Civil Engineering Technical Elective</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

**Total Credit Hours:**

124-125

**Approved Civil Engineering Technical Electives**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEE 3334</td>
<td>Structural Design of Pavements</td>
<td>3</td>
</tr>
<tr>
<td>CEE 3611</td>
<td>Hydraulic Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CEE 4211</td>
<td>Bridge Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CEE 4221</td>
<td>Intelligent Transportation Systems</td>
<td>3</td>
</tr>
<tr>
<td>CEE 4231</td>
<td>Airport Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CEE 4244</td>
<td>Introduction to Geosynthetics</td>
<td>3</td>
</tr>
<tr>
<td>CEE 4301</td>
<td>Construction Administration</td>
<td>3</td>
</tr>
<tr>
<td>CEE 4302</td>
<td>Engineering Project Management</td>
<td>3</td>
</tr>
<tr>
<td>CEE 4303</td>
<td>Construction Financial Management</td>
<td>3</td>
</tr>
<tr>
<td>CEE 4312</td>
<td>Construction Equipment Management</td>
<td>3</td>
</tr>
<tr>
<td>CEE 4421</td>
<td>Structural Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>CEE 4431</td>
<td>Behavior and Design of Steel Structures</td>
<td>3</td>
</tr>
<tr>
<td>CEE 4432</td>
<td>Behavior and Design of Reinforced Concrete Structures</td>
<td>3</td>
</tr>
<tr>
<td>CEE 4433</td>
<td>Behavior and Design of Masonry Structures</td>
<td>3</td>
</tr>
<tr>
<td>CEE 4445</td>
<td>Earthquake Engineering and Seismic Design</td>
<td>3</td>
</tr>
<tr>
<td>CEE 4531</td>
<td>Life Cycle Assessment and Carbon Footprinting</td>
<td>3</td>
</tr>
</tbody>
</table>
Bachelor of Science in Civil Engineering - Environmental Engineering Concentration

Goals, Objectives & Design Integration
The objective of the Concentration in Environmental Engineering within the Civil Engineering program at Temple University is to provide students with the skills needed to understand environmental problems and to design environmental systems to reduce and/or mitigate pollution. Environmental Engineering is a hybrid of Civil Engineering and Chemical Engineering, and it is thus natural for a civil engineer to broaden his/her knowledge in Environmental Engineering. Students in this concentration would be in a program that satisfies ABET accreditation for civil engineers, but they are more equipped to pass the Fundamental of Engineering and the Professional Engineer exams in the Environmental Engineering Category.

Summary of Requirements

University Requirements
All new students are required to complete the university's General Education (GenEd (p. 143)) curriculum.
All Temple students must take a minimum of two writing-intensive courses for a total of at least six credits. The writing-intensive course credits are counted as part of the major; they are not General Education (GenEd) or elective credits. The writing-intensive courses must be completed at Temple University and students may not transfer in credits to satisfy this requirement. The specific writing-intensive courses required for this major are:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 2196</td>
<td>Technical Communication</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 4196</td>
<td>Senior Design Project I</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 4296</td>
<td>Senior Design Project II</td>
<td>3</td>
</tr>
</tbody>
</table>

Department Requirements

Foundation Science & Math Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1042</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 2043</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>MATH 3041</td>
<td>Differential Equations I</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1062</td>
<td>Elementary Classical Physics II</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1035</td>
<td>Chemistry for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1033</td>
<td>General Chemistry Laboratory I</td>
<td>1</td>
</tr>
</tbody>
</table>

Required General Education Courses
Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 0802</td>
<td>Analytical Reading and Writing</td>
<td>4</td>
</tr>
<tr>
<td>ENG 0812</td>
<td>Analytical Reading and Writing: ESL</td>
<td></td>
</tr>
<tr>
<td>ENG 0902</td>
<td>Honors Literature/Reading/ Writing</td>
<td></td>
</tr>
<tr>
<td>IH 0851</td>
<td>Mosaic: Humanities Seminar I</td>
<td>3</td>
</tr>
<tr>
<td>or IH 0951</td>
<td>Honors Mosaic: Humanities Seminar I</td>
<td></td>
</tr>
<tr>
<td>IH 0852</td>
<td>Mosaic: Humanities Seminar II</td>
<td>3</td>
</tr>
<tr>
<td>or IH 0952</td>
<td>Honors Mosaic: Humanities Seminar II</td>
<td></td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credit Hours</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>GenEd 08xx or 09xx (U.S. Society)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd 08xx or 09xx (Global/World Society)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd 08xx or 09xx (Human Behavior)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd 08xx or 09xx (The Arts)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd 08xx or 09xx (Race and Diversity)</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Required Engineering Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEE 1105</td>
<td>Surveying</td>
<td>2</td>
</tr>
<tr>
<td>CEE 2011</td>
<td>Civil Engineering Materials</td>
<td>2</td>
</tr>
<tr>
<td>CEE 2711</td>
<td>Environmental Chemistry &amp; Microbiology</td>
<td>3</td>
</tr>
<tr>
<td>CEE 3048</td>
<td>Probability, Statistics &amp; Stochastic Methods</td>
<td>3</td>
</tr>
<tr>
<td>CEE 3311</td>
<td>Construction Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CEE 3331</td>
<td>Soil Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>CEE 3332</td>
<td>Soil Mechanics Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>CEE 3711</td>
<td>Environmental Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CEE 4631</td>
<td>Environmental Hydrology</td>
<td>3</td>
</tr>
<tr>
<td>CEE 4711</td>
<td>Air Pollution Control System</td>
<td>3</td>
</tr>
<tr>
<td>CEE 4721</td>
<td>Water and Wastewater Systems Design</td>
<td>3</td>
</tr>
</tbody>
</table>

**Approved Civil Engineering Technical Electives**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free Elective</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECE 2112</td>
<td>Electrical Devices &amp; Systems I</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 1101</td>
<td>Introduction to Engineering &amp; Engineering Technology</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 1117</td>
<td>Engineering Graphics</td>
<td>2</td>
</tr>
<tr>
<td>ENGR 2196</td>
<td>Technical Communication (WI)</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 2331</td>
<td>Engineering Statics 1</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 2332</td>
<td>Engineering Dynamics 1</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 2333</td>
<td>Mechanics of Solids 1</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3001</td>
<td>Engineering Economics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3553</td>
<td>Mechanics of Fluids 1</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3571</td>
<td>Classical and Statistical Thermodynamics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 4169</td>
<td>Engineering Seminar</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 4196</td>
<td>Senior Design Project I (WI)</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 4296</td>
<td>Senior Design Project II (WI)</td>
<td>3</td>
</tr>
<tr>
<td>MEE 3506</td>
<td>Fluids and Energy Laboratory</td>
<td>1</td>
</tr>
</tbody>
</table>

**Total Credit Hours**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>124</td>
</tr>
</tbody>
</table>

1. Courses must be passed with a C- or better.
2. Senior Design topic must be approved by the chair of the Department of Civil & Environmental Engineering.

**Suggested Academic Plan**

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

**Bachelor of Science in Civil Engineering (B.S.C.E.): Environmental Engineering Concentration**

**Requirements for New Students starting in the 2015-2016 Academic Year**

**Year 1**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>ENGR 1101</td>
<td>Introduction to Engineering Engineering Technology</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MATH 1041</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>CHEM 1035</td>
<td>Chemistry for Engineers</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CHEM 1033</td>
<td>General Chemistry Laboratory I</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

**Spring**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 2</td>
<td>Fall</td>
<td>Term Credit Hours</td>
</tr>
<tr>
<td>--------</td>
<td>------</td>
<td>-------------------</td>
</tr>
<tr>
<td></td>
<td>MATH 2043</td>
<td>Calculus III</td>
</tr>
<tr>
<td></td>
<td>PHYS 1062</td>
<td>Elementary Classical Physics II</td>
</tr>
<tr>
<td></td>
<td>ENGR 2331</td>
<td>Engineering Statics</td>
</tr>
<tr>
<td></td>
<td>CEE 2011</td>
<td>Civil Engineering Materials</td>
</tr>
<tr>
<td></td>
<td>CEE 2711</td>
<td>Environmental Chemistry Microbiology</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Term Credit Hours</strong></td>
</tr>
<tr>
<td></td>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ENGR 2332</td>
<td>Engineering Dynamics</td>
</tr>
<tr>
<td></td>
<td>ENGR 2333</td>
<td>Mechanics of Solids</td>
</tr>
<tr>
<td></td>
<td>ENGR 3571</td>
<td>Classical and Statistical Thermodynamics</td>
</tr>
<tr>
<td></td>
<td>MATH 3041</td>
<td>Differential Equations I</td>
</tr>
<tr>
<td></td>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
</tr>
<tr>
<td>Year 3</td>
<td>Fall</td>
<td>Term Credit Hours</td>
</tr>
<tr>
<td></td>
<td>ENGR 3553</td>
<td>Mechanics of Fluids</td>
</tr>
<tr>
<td></td>
<td>CEE 3331</td>
<td>Soil Mechanics</td>
</tr>
<tr>
<td></td>
<td>CEE 3332</td>
<td>Soil Mechanics Laboratory</td>
</tr>
<tr>
<td></td>
<td>ENGR 2196</td>
<td>Technical Communication [WI]</td>
</tr>
<tr>
<td></td>
<td>CEE 3711</td>
<td>Environmental Engineering</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Term Credit Hours</strong></td>
</tr>
<tr>
<td></td>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ENGR 4169</td>
<td>Engineering Seminar</td>
</tr>
<tr>
<td></td>
<td>CEE 3048</td>
<td>Probability, Statistics Stochastic Methods</td>
</tr>
<tr>
<td></td>
<td>CEE 3311</td>
<td>Construction Engineering</td>
</tr>
<tr>
<td></td>
<td>MEE 3506</td>
<td>Fluids and Energy Laboratory</td>
</tr>
<tr>
<td></td>
<td>ENGR 3001</td>
<td>Engineering Economics</td>
</tr>
<tr>
<td></td>
<td>Free Elective</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
</tr>
<tr>
<td>Year 4</td>
<td>Fall</td>
<td>Term Credit Hours</td>
</tr>
<tr>
<td></td>
<td>ENGR 4196</td>
<td>Senior Design Project I [WI]</td>
</tr>
<tr>
<td></td>
<td>CEE 4631</td>
<td>Environmental Hydrology</td>
</tr>
<tr>
<td></td>
<td>CEE 4711</td>
<td>Air Pollution Control System</td>
</tr>
<tr>
<td></td>
<td>Approved Civil Engineering Technical Elective</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Term Credit Hours</strong></td>
</tr>
<tr>
<td></td>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ENGR 4296</td>
<td>Senior Design Project II [WI]</td>
</tr>
<tr>
<td></td>
<td>ECE 2112</td>
<td>Electrical Devices Systems I</td>
</tr>
<tr>
<td></td>
<td>CEE 4721</td>
<td>Water and Wastewater Systems Design</td>
</tr>
</tbody>
</table>
Approved Civil Engineering Technical Elective 3
GenEd Breadth Course 3

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Credit Hours:</td>
<td>124</td>
</tr>
</tbody>
</table>

**Approved Civil Engineering Technical Electives**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEE 3211</td>
<td>Transportation Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CEE 3411</td>
<td>Structural Analysis</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CEE 3412</td>
<td>and Structural Analysis Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>CEE 3441</td>
<td>Steel &amp; Concrete Design</td>
<td>4</td>
</tr>
<tr>
<td>CEE 3611</td>
<td>Hydraulic Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CEE 4221</td>
<td>Intelligent Transportation Systems</td>
<td>3</td>
</tr>
<tr>
<td>CEE 4244</td>
<td>Introduction to Geosynthetics</td>
<td>3</td>
</tr>
<tr>
<td>CEE 4301</td>
<td>Construction Administration</td>
<td>3</td>
</tr>
<tr>
<td>CEE 4302</td>
<td>Engineering Project Management</td>
<td>3</td>
</tr>
<tr>
<td>CEE 4303</td>
<td>Construction Financial Management</td>
<td>3</td>
</tr>
<tr>
<td>CEE 4312</td>
<td>Construction Equipment Management</td>
<td>3</td>
</tr>
<tr>
<td>CEE 4321</td>
<td>Geotechnical Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CEE 4531</td>
<td>Life Cycle Assessment and Carbon Footprinting</td>
<td>3</td>
</tr>
<tr>
<td>CEE 4622</td>
<td>Fate Pollutants in Subsurface Environments</td>
<td>3</td>
</tr>
<tr>
<td>CEE 4623</td>
<td>Contaminant Dynamics in Urban Streams</td>
<td>3</td>
</tr>
<tr>
<td>CEE 4641</td>
<td>Urban Streams and Stormwater Management</td>
<td>3</td>
</tr>
<tr>
<td>CEE 4731</td>
<td>Solid &amp; Hazardous Waste Management</td>
<td>3</td>
</tr>
<tr>
<td>CEE 4762</td>
<td>Environmental Organic Chemistry</td>
<td>3</td>
</tr>
</tbody>
</table>

**Bachelor of Science in Civil Engineering - Environmental Engineering Concentration with Co-op**

**Cooperative Education Program**

A Cooperative Education (Co-Op) is an optional program available at the College of Engineering where you have the opportunity to gain professional work experience before graduation. It is designed to give you the chance to apply the knowledge learned in the classroom to real life problems. You will be exposed to the latest technology and new ideas at a work site helping you understand your field of work more extensively. During the Co-Op, you will make valuable connections with professionals in your field. A cooperative education can enhance and strengthen you academically, professionally and personally.

**Summary of Requirements**

**University Requirements**

All new students are required to complete the university's General Education (GenEd (p. 143)) curriculum.

All Temple students must take a minimum of two writing-intensive courses for a total of at least six credits. The writing-intensive course credits are counted as part of the major; they are not General Education (GenEd) or elective credits. The writing-intensive courses must be completed at Temple University and students may not transfer in credits to satisfy this requirement. The specific writing-intensive courses required for this major are:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 2196</td>
<td>Technical Communication</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 4196</td>
<td>Senior Design Project I</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 4296</td>
<td>Senior Design Project II</td>
<td>3</td>
</tr>
</tbody>
</table>

**Department Requirements**

**Foundation Science & Math Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1042</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 2043</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>MATH 3041</td>
<td>Differential Equations I</td>
<td>3</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1062</td>
<td>Elementary Classical Physics II</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1035</td>
<td>Chemistry for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1033</td>
<td>General Chemistry Laboratory I</td>
<td>1</td>
</tr>
</tbody>
</table>

**Required General Education Courses**

Select one of the following: 4

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 0802</td>
<td>Analytical Reading and Writing</td>
<td></td>
</tr>
<tr>
<td>ENG 0812</td>
<td>Analytical Reading and Writing: ESL</td>
<td></td>
</tr>
<tr>
<td>ENG 0902</td>
<td>Honors Literature/Reading/Writing</td>
<td></td>
</tr>
<tr>
<td>IH 0851</td>
<td>Mosaic: Humanities Seminar I</td>
<td>3</td>
</tr>
<tr>
<td>or IH 0951</td>
<td>Honors Mosaic: Humanities Seminar I</td>
<td></td>
</tr>
<tr>
<td>IH 0852</td>
<td>Mosaic: Humanities Seminar II</td>
<td>3</td>
</tr>
<tr>
<td>or IH 0952</td>
<td>Honors Mosaic: Humanities Seminar II</td>
<td></td>
</tr>
<tr>
<td>GenEd 08xx</td>
<td>U.S. Society</td>
<td>3</td>
</tr>
<tr>
<td>or 09xx</td>
<td>Global/World Society</td>
<td></td>
</tr>
<tr>
<td>GenEd 08xx</td>
<td>Human Behavior</td>
<td>3</td>
</tr>
<tr>
<td>or 09xx</td>
<td>The Arts</td>
<td></td>
</tr>
<tr>
<td>GenEd 08xx</td>
<td>Race and Diversity</td>
<td>3</td>
</tr>
<tr>
<td>or 09xx</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Required Engineering Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEE 1105</td>
<td>Surveying</td>
<td>2</td>
</tr>
<tr>
<td>CEE 2011</td>
<td>Civil Engineering Materials</td>
<td>2</td>
</tr>
<tr>
<td>CEE 2711</td>
<td>Environmental Chemistry &amp; Microbiology</td>
<td>3</td>
</tr>
<tr>
<td>CEE 3048</td>
<td>Probability, Statistics &amp; Stochastic Methods</td>
<td>3</td>
</tr>
<tr>
<td>CEE 3311</td>
<td>Construction Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CEE 3331</td>
<td>Soil Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>CEE 3332</td>
<td>Soil Mechanics Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>CEE 3711</td>
<td>Environmental Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CEE 4631</td>
<td>Environmental Hydrology</td>
<td>3</td>
</tr>
<tr>
<td>CEE 4711</td>
<td>Air Pollution Control System</td>
<td>3</td>
</tr>
<tr>
<td>CEE 4721</td>
<td>Water and Wastewater Systems Design</td>
<td>3</td>
</tr>
</tbody>
</table>

**Approved Civil Engineering Technical Electives** 6

**Free Elective** 2

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 2112</td>
<td>Electrical Devices &amp; Systems I</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 1101</td>
<td>Introduction to Engineering &amp; Engineering Technology</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 1117</td>
<td>Engineering Graphics</td>
<td>2</td>
</tr>
<tr>
<td>ENGR 2196</td>
<td>Technical Communication (WI)</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 2331</td>
<td>Engineering Statics 1</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 2332</td>
<td>Engineering Dynamics 1</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 2333</td>
<td>Mechanics of Solids 1</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3001</td>
<td>Engineering Economics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3553</td>
<td>Mechanics of Fluids 1</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3571</td>
<td>Classical and Statistical Thermodynamics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 4169</td>
<td>Engineering Seminar</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 4196</td>
<td>Senior Design Project I (WI) 2</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 4296</td>
<td>Senior Design Project II (WI) 2</td>
<td>3</td>
</tr>
<tr>
<td>MEE 3506</td>
<td>Fluids and Energy Laboratory</td>
<td>1</td>
</tr>
</tbody>
</table>

**Cooperative Education**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 2181</td>
<td>Co-Op Work Experience I</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3181</td>
<td>Co-Op Work Experience II</td>
<td>3</td>
</tr>
</tbody>
</table>

Courses must be passed with a C- or better.
Senior Design topic must be approved by the chair of the Department of Civil & Environmental Engineering.

**Suggested Academic Plan**

Below is the five-year academic plan for the Co-Op program leading to the Bachelor of Science in Civil Engineering with a concentration in Environmental Engineering. The minimum requirement for graduation is 130 semester hours.

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

**Bachelor of Science in Civil Engineering: Environmental Engineering Concentration with Cooperative Education**

**Requirements for New Students starting in the 2015-2016 Academic Year**

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 1101</td>
<td>Introduction to Engineering Engineering Technology</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1035</td>
<td>Chemistry for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1033</td>
<td>General Chemistry Laboratory I</td>
<td>1</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

15

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Spring</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1042</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 1117</td>
<td>Engineering Graphics</td>
<td>2</td>
</tr>
<tr>
<td>CEE 1105</td>
<td>Surveying</td>
<td>2</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

15

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 2043</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1062</td>
<td>Elementary Classical Physics II</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 2331</td>
<td>Engineering Statics</td>
<td>3</td>
</tr>
<tr>
<td>CEE 2011</td>
<td>Civil Engineering Materials</td>
<td>2</td>
</tr>
<tr>
<td>CEE 2711</td>
<td>Environmental Chemistry Microbiology</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

16

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Spring</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 2332</td>
<td>Engineering Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 2333</td>
<td>Mechanics of Solids</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3571</td>
<td>Classical and Statistical Thermodynamics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 3041</td>
<td>Differential Equations I</td>
<td>3</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

15

<table>
<thead>
<tr>
<th>Year 3</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 3553</td>
<td>Mechanics of Fluids</td>
<td>3</td>
</tr>
<tr>
<td>CEE 3331</td>
<td>Soil Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>CEE 3332</td>
<td>Soil Mechanics Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>CEE 3711</td>
<td>Environmental Engineering</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 2196</td>
<td>Technical Communication [WI]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

16

<table>
<thead>
<tr>
<th>Year 3</th>
<th>Spring</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 4169</td>
<td>Engineering Seminar</td>
<td>1</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>CEE 3048</td>
<td>Probability, Statistics Stochastic Methods</td>
<td>3</td>
</tr>
<tr>
<td>CEE 3311</td>
<td>Construction Engineering</td>
<td>3</td>
</tr>
<tr>
<td>MEE 3506</td>
<td>Fluids and Energy Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 3001</td>
<td>Engineering Economics</td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 3048</td>
<td>Probability, Statistics Stochastic Methods</td>
<td>3</td>
</tr>
<tr>
<td>CEE 3311</td>
<td>Construction Engineering</td>
<td>3</td>
</tr>
<tr>
<td>MEE 3506</td>
<td>Fluids and Energy Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 3001</td>
<td>Engineering Economics</td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

<table>
<thead>
<tr>
<th>Year 4</th>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>16</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 2181</td>
<td>Co-Op Work Experience I</td>
<td>3</td>
</tr>
</tbody>
</table>

**Spring**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 3181</td>
<td>Co-Op Work Experience II</td>
<td>3</td>
</tr>
</tbody>
</table>

**Year 5**

<table>
<thead>
<tr>
<th>Year 5</th>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>16</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 4196</td>
<td>Senior Design Project I [WI]</td>
<td>1</td>
</tr>
<tr>
<td>CEE 4631</td>
<td>Environmental Hydrology</td>
<td>3</td>
</tr>
<tr>
<td>CEE 4711</td>
<td>Air Pollution Control System</td>
<td>3</td>
</tr>
<tr>
<td>Approved Civil Engineering Technical Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 4296</td>
<td>Senior Design Project II [WI]</td>
<td>3</td>
</tr>
<tr>
<td>ECE 2112</td>
<td>Electrical Devices Systems I</td>
<td>3</td>
</tr>
<tr>
<td>CEE 4721</td>
<td>Water and Wastewater Systems Design</td>
<td>3</td>
</tr>
<tr>
<td>Approved Civil Engineering Technical Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Spring**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 4196</td>
<td>Senior Design Project I [WI]</td>
<td>1</td>
</tr>
<tr>
<td>CEE 4631</td>
<td>Environmental Hydrology</td>
<td>3</td>
</tr>
<tr>
<td>CEE 4711</td>
<td>Air Pollution Control System</td>
<td>3</td>
</tr>
<tr>
<td>Approved Civil Engineering Technical Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credit Hours:** 130

**Approved Civil Engineering Technical Electives**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEE 3211</td>
<td>Transportation Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CEE 3411</td>
<td>Structural Analysis</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CEE 3412</td>
<td>and Structural Analysis Laboratory</td>
<td></td>
</tr>
<tr>
<td>CEE 3441</td>
<td>Steel &amp; Concrete Design</td>
<td>4</td>
</tr>
<tr>
<td>CEE 3611</td>
<td>Hydraulic Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CEE 4221</td>
<td>Intelligent Transportation Systems</td>
<td>3</td>
</tr>
<tr>
<td>CEE 4244</td>
<td>Introduction to Geosynthetics</td>
<td>3</td>
</tr>
<tr>
<td>CEE 4301</td>
<td>Construction Administration</td>
<td>3</td>
</tr>
<tr>
<td>CEE 4302</td>
<td>Engineering Project Management</td>
<td>3</td>
</tr>
<tr>
<td>CEE 4303</td>
<td>Construction Financial Management</td>
<td>3</td>
</tr>
<tr>
<td>CEE 4312</td>
<td>Construction Equipment Management</td>
<td>3</td>
</tr>
<tr>
<td>CEE 4321</td>
<td>Geotechnical Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CEE 4531</td>
<td>Life Cycle Assessment and Carbon Footprinting</td>
<td>3</td>
</tr>
<tr>
<td>CEE 4622</td>
<td>Fate Pollutants in Subsurface Environments</td>
<td>3</td>
</tr>
<tr>
<td>CEE 4623</td>
<td>Contaminant Dynamics in Urban Streams</td>
<td>3</td>
</tr>
<tr>
<td>CEE 4641</td>
<td>Urban Streams and Stormwater Management</td>
<td>3</td>
</tr>
<tr>
<td>CEE 4731</td>
<td>Solid &amp; Hazardous Waste Management</td>
<td>3</td>
</tr>
<tr>
<td>CEE 4762</td>
<td>Environmental Organic Chemistry</td>
<td>3</td>
</tr>
</tbody>
</table>
## Bachelor of Science in Civil Engineering with Co-op

### Cooperative Education Program

A Cooperative Education (Co-Op) is an optional program available at the College of Engineering where you have the opportunity to gain professional work experience before graduation. It is designed to give you the chance to apply the knowledge learned in the classroom to real-life problems. You will be exposed to the latest technology and new ideas at a work site helping you understand your field of work more extensively. During the Co-Op, you will make valuable connections with professionals in your field. A cooperative education can enhance and strengthen you academically, professionally and personally.

### Summary of Requirements

#### University Requirements

All new students are required to complete the university’s General Education (GenEd (p. 143)) curriculum.

All Temple students must take a minimum of two writing-intensive courses for a total of at least six credits. The writing-intensive course credits are counted as part of the major; they are not General Education (GenEd) or elective credits. The writing-intensive courses must be completed at Temple University and students may not transfer in credits to satisfy this requirement. The specific writing-intensive courses required for this major are:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 2196</td>
<td>Technical Communication</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 4196</td>
<td>Senior Design Project I</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 4296</td>
<td>Senior Design Project II</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Department Requirements

**Foundation Science & Math Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1042</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 2043</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>MATH 3041</td>
<td>Differential Equations I</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1062</td>
<td>Elementary Classical Physics II</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1035</td>
<td>Chemistry for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1033</td>
<td>General Chemistry Laboratory I</td>
<td>1</td>
</tr>
</tbody>
</table>

**Required General Education Courses**

Select one of the following: 4

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 0802</td>
<td>Analytical Reading and Writing</td>
<td></td>
</tr>
<tr>
<td>ENG 0812</td>
<td>Analytical Reading and Writing: ESL</td>
<td></td>
</tr>
<tr>
<td>ENG 0902</td>
<td>Honors Literature/Reading/Writing</td>
<td></td>
</tr>
<tr>
<td>IH 0851</td>
<td>Mosaic: Humanities Seminar I</td>
<td>3</td>
</tr>
<tr>
<td>or IH 0951</td>
<td>Honors Mosaic: Humanities Seminar I</td>
<td></td>
</tr>
<tr>
<td>IH 0852</td>
<td>Mosaic: Humanities Seminar II</td>
<td>3</td>
</tr>
<tr>
<td>or IH 0952</td>
<td>Honors Mosaic: Humanities Seminar II</td>
<td></td>
</tr>
<tr>
<td>GenEd 08xx or 09xx (U.S. Society)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd 08xx or 09xx (Global/World Society)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd 08xx or 09xx (Human Behavior)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd 08xx or 09xx (The Arts)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd 08xx or 09xx (Race and Diversity)</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Required Civil Engineering Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEE 1105</td>
<td>Surveying</td>
<td>2</td>
</tr>
<tr>
<td>CEE 2011</td>
<td>Civil Engineering Materials</td>
<td>2</td>
</tr>
<tr>
<td>CEE 3048</td>
<td>Probability, Statistics &amp; Stochastic Methods</td>
<td>3</td>
</tr>
<tr>
<td>CEE 3211</td>
<td>Transportation Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CEE 3311</td>
<td>Construction Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CEE 3331</td>
<td>Soil Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>CEE 3332</td>
<td>Soil Mechanics Laboratory</td>
<td>1</td>
</tr>
</tbody>
</table>
CEE 3411 Structural Analysis 3
CEE 3412 Structural Analysis Laboratory 1
CEE 3441 Steel & Concrete Design 4
CEE 3711 Environmental Engineering 3
CEE Approved Technical Electives 6

Additional Science Requirement
Select one of the following: 3-4
CEE 2711 Environmental Chemistry & Microbiology
EES 1001 Introductory Geology
EES 2001 Physical Geology

Required Non Civil Engineering Courses
ECE 2112 Electrical Devices & Systems I 3
ENGR 1101 Introduction to Engineering & Engineering Technology 3
ENGR 1117 Engineering Graphics 2
ENGR 2196 Technical Communication (WI) 3
ENGR 2331 Engineering Statics 1 3
ENGR 2332 Engineering Dynamics 1 3
ENGR 2333 Mechanics of Solids 1 3
ENGR 3201 Material Science for Engineers 3
ENGR 3553 Mechanics of Fluids 1 3
ENGR 3571 Classical and Statistical Thermodynamics 3
ENGR 4169 Engineering Seminar 1
ENGR 4196 Senior Design Project I (WI) 2 1
ENGR 4296 Senior Design Project II (WI) 2 3
MEE 3506 Fluids and Energy Laboratory 1

Cooperative Education
ENGR 2181 Co-Op Work Experience I 3
ENGR 3181 Co-Op Work Experience II 3

Total Credit Hours 130-131

1 Course must be passed with a C- or better.
2 Senior Design topic must be approved by the chair of the Department of Civil & Environmental Engineering.

Suggested Academic Plan

Below is the five-year academic plan for the Co-Op program leading to the Bachelor of Science in Civil Engineering. The minimum requirement for graduation is 130 semester hours.

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Science in Civil Engineering with Cooperative Education
Requirements for New Students starting in the 2015-2016 Academic Year

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td></td>
</tr>
<tr>
<td>ENGR 1101</td>
<td>Introduction to Engineering Engineering Technology</td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
</tr>
<tr>
<td>CHEM 1035</td>
<td>Chemistry for Engineers</td>
</tr>
<tr>
<td>CHEM 1033</td>
<td>General Chemistry Laboratory I</td>
</tr>
<tr>
<td>ENGR 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td>MATH 1042</td>
<td>Calculus II</td>
</tr>
<tr>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I</td>
</tr>
<tr>
<td>ENGR 1117</td>
<td>Engineering Graphics</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Name</td>
</tr>
<tr>
<td>------------</td>
<td>-------------------------------------------------</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
</tr>
<tr>
<td>CEE 1105</td>
<td>Surveying</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
</tr>
<tr>
<td><strong>Year 2</strong></td>
<td></td>
</tr>
<tr>
<td>Fall</td>
<td></td>
</tr>
<tr>
<td>MATH 2043</td>
<td>Calculus III</td>
</tr>
<tr>
<td>PHYS 1062</td>
<td>Elementary Classical Physics II</td>
</tr>
<tr>
<td>ENGR 2331</td>
<td>Engineering Statics</td>
</tr>
<tr>
<td>CEE 2011</td>
<td>Civil Engineering Materials</td>
</tr>
<tr>
<td>ENGR 2196</td>
<td>Technical Communication [WI]</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
</tr>
<tr>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td>ENGR 2332</td>
<td>Engineering Dynamics</td>
</tr>
<tr>
<td>ENGR 2333</td>
<td>Mechanics of Solids</td>
</tr>
<tr>
<td>ENGR 3571</td>
<td>Classical and Statistical Thermodynamics</td>
</tr>
<tr>
<td>MATH 3041</td>
<td>Differential Equations I</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
</tr>
<tr>
<td><strong>Year 3</strong></td>
<td></td>
</tr>
<tr>
<td>Fall</td>
<td></td>
</tr>
<tr>
<td>ENGR 3553</td>
<td>Mechanics of Fluids</td>
</tr>
<tr>
<td>CEE 3331</td>
<td>Soil Mechanics</td>
</tr>
<tr>
<td>CEE 3332</td>
<td>Soil Mechanics Laboratory</td>
</tr>
<tr>
<td>CEE 3411</td>
<td>Structural Analysis</td>
</tr>
<tr>
<td>CEE 3412</td>
<td>Structural Analysis Laboratory</td>
</tr>
<tr>
<td>ENGR 3201</td>
<td>Material Science for Engineers</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
</tr>
<tr>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td>ENGR 4169</td>
<td>Engineering Seminar</td>
</tr>
<tr>
<td>CEE 3048</td>
<td>Probability, Statistics Stochastic Methods</td>
</tr>
<tr>
<td>CEE 3211</td>
<td>Transportation Engineering</td>
</tr>
<tr>
<td>CEE 3441</td>
<td>Steel Concrete Design</td>
</tr>
<tr>
<td>MEE 3506</td>
<td>Fluids and Energy Laboratory</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
</tr>
<tr>
<td>CEE 2711</td>
<td>Environmental Chemistry Microbiology</td>
</tr>
<tr>
<td>EES 1001</td>
<td>Introductory Geology</td>
</tr>
<tr>
<td>EES 2001</td>
<td>Physical Geology</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
</tr>
<tr>
<td><strong>Year 4</strong></td>
<td></td>
</tr>
<tr>
<td>Fall</td>
<td></td>
</tr>
<tr>
<td>ENGR 2181</td>
<td>Co-Op Work Experience I</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
</tr>
<tr>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td>ENGR 3181</td>
<td>Co-Op Work Experience II</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
</tr>
<tr>
<td><strong>Year 5</strong></td>
<td></td>
</tr>
<tr>
<td>Fall</td>
<td></td>
</tr>
<tr>
<td>ENGR 4196</td>
<td>Senior Design Project I [WI]</td>
</tr>
<tr>
<td>Approved Civil Engineering Technical Elective</td>
<td></td>
</tr>
<tr>
<td>CEE 3711</td>
<td>Environmental Engineering</td>
</tr>
<tr>
<td>CEE 3311</td>
<td>Construction Engineering</td>
</tr>
</tbody>
</table>
GenEd Breadth Course 3
GenEd Breadth Course 3

Term Credit Hours 16

<table>
<thead>
<tr>
<th>Spring</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 4296</td>
<td>Senior Design Project II [WI]</td>
<td>3</td>
</tr>
<tr>
<td>ECE 2112</td>
<td>Electrical Devices Systems I</td>
<td>3</td>
</tr>
<tr>
<td>Approved Civil Engineering Technical Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

Term Credit Hours 15

Total Credit Hours: 130-131

Approved Civil Engineering Technical Electives

| CEE 3334 | Structural Design of Pavements | 3 |
| CEE 3611 | Hydraulic Engineering | 3 |
| CEE 4211 | Bridge Engineering | 3 |
| CEE 4221 | Intelligent Transportation Systems | 3 |
| CEE 4231 | Airport Engineering | 3 |
| CEE 4244 | Introduction to Geosynthetics | 3 |
| CEE 4301 | Construction Administration | 3 |
| CEE 4302 | Engineering Project Management | 3 |
| CEE 4303 | Construction Financial Management | 3 |
| CEE 4312 | Construction Equipment Management | 3 |
| CEE 4321 | Geotechnical Engineering | 3 |
| CEE 4421 | Structural Dynamics | 3 |
| CEE 4431 | Behavior and Design of Steel Structures | 3 |
| CEE 4432 | Behavior and Design of Reinforced Concrete Structures | 3 |
| CEE 4433 | Behavior and Design of Masonry Structures | 3 |
| CEE 4445 | Earthquake Engineering and Seismic Design | 3 |
| CEE 4531 | Life Cycle Assessment and Carbon Footprinting | 3 |
| CEE 4623 | Contaminant Dynamics in Urban Streams | 3 |
| CEE 4631 | Environmental Hydrology | 3 |
| CEE 4641 | Urban Streams and Stormwater Management | 3 |
| CEE 4711 | Air Pollution Control System | 3 |
| CEE 4721 | Water and Wastewater Systems Design | 3 |
| CEE 4731 | Solid & Hazardous Waste Management | 3 |
| CEE 4811 | Advanced Soil Mechanics | 3 |
| CEE 4821 | Foundation Engineering | 3 |
| CEE 4822 | Earth Retaining Systems | 3 |
| CEE 4823 | Geotechnical Earthquake Engineering | 3 |
| ENGR 3001 | Engineering Economics | 3 |

Bachelor of Science in Environmental Engineering

Goals, Objectives & Design Integration

Environmental engineering professionals work at the interface of human society and the natural environment, aiming to find solutions to the world’s challenges of air, land, and water pollution and sustainability. The environmental engineering curriculum at Temple University provides a fully-integrated design experience within a multidisciplinary learning environment. Students begin their undergraduate studies with courses in advanced mathematics, chemistry, and physics, as well as engineering. As they progress, the coursework becomes more discipline specific and includes topics such as water and wastewater treatment, air pollution control, environmental hydrology, stormwater management, and others.

Through laboratory courses, students will gain hands-on experience in environmental chemistry and microbiology, as well as with the physical-chemical processes utilized in water and wastewater treatment. The program culminates with a year-long senior design project where students work in interdisciplinary teams to tackle an engineering design project. The goals of the environmental engineering program are to prepare students to pursue
an environmental engineering career in design, project planning or research, graduate education in their specific areas of interest, and to pass the required exams to obtain professional licensure.

### Summary of Requirements

#### University Requirements

All new students are required to complete the university's General Education (GenEd (p. 143)) curriculum.

All Temple students must take a minimum of two writing-intensive courses for a total of at least six credits. The writing-intensive course credits are counted as part of the major; they are not General Education (GenEd) or elective credits. The writing-intensive courses must be completed at Temple University and students may not transfer in credits to satisfy this requirement. The specific writing-intensive courses required for this major are:

- **ENGR 2196** Technical Communication 3
- **ENGR 4196** Senior Design Project I 1
- **ENGR 4296** Senior Design Project II 3

#### Department Requirements

##### Foundation Science & Math Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1042</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 2043</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>MATH 3041</td>
<td>Differential Equations I</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1062</td>
<td>Elementary Classical Physics II</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1031</td>
<td>General Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1032</td>
<td>General Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1033</td>
<td>General Chemistry Laboratory I</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 1034</td>
<td>General Chemistry Laboratory II</td>
<td>1</td>
</tr>
</tbody>
</table>

##### Required General Education Courses

Select one of the following: 4

- **ENG 0802** Analytical Reading and Writing
- **ENG 0812** Analytical Reading and Writing: ESL
- **ENG 0902** Honors Literature/Reading/Writing
- **IH 0851** Mosaic: Humanities Seminar I 3
- **IH 0852** Mosaic: Humanities Seminar II 3
- **IH 0951** Honors Mosaic: Humanities Seminar I
- **IH 0952** Honors Mosaic: Humanities Seminar II
- GenEd 08xx or 09xx (U.S. Society) 3
- GenEd 08xx or 09xx (Global/World Society) 3
- GenEd 08xx or 09xx (Human Behavior) 3
- GenEd 08xx or 09xx (The Arts) 3
- GenEd 08xx or 09xx (Race and Diversity) 3

##### Required Engineering Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEE 2000+</td>
<td>Technical Elective</td>
<td></td>
</tr>
<tr>
<td>CEE 2712</td>
<td>Introduction to Environmental Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CEE 2715</td>
<td>Principles of Sustainable Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CEE 3048</td>
<td>Probability, Statistics &amp; Stochastic Methods</td>
<td>3</td>
</tr>
<tr>
<td>CEE 3712</td>
<td>Environmental Fluids and Contaminant Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>CEE 3715</td>
<td>Microbiological Principles of Environmental Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CEE 3717</td>
<td>Chemical Principles of Environmental Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CEE 3725</td>
<td>Water Quality and Analysis Lab</td>
<td>1</td>
</tr>
<tr>
<td>CEE 3727</td>
<td>Environmental Hydrology and Stormwater Management</td>
<td>3</td>
</tr>
<tr>
<td>or CEE 4631</td>
<td>Environmental Hydrology</td>
<td></td>
</tr>
<tr>
<td>CEE 4711</td>
<td>Air Pollution Control System</td>
<td>3</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credit Hours</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>CEE 4721</td>
<td>Water and Wastewater Systems Design</td>
<td>3</td>
</tr>
<tr>
<td>CEE 4722</td>
<td>Water/Wastewater Lab</td>
<td>1</td>
</tr>
<tr>
<td>CEE 4725</td>
<td>Environmental Systems Design</td>
<td>3</td>
</tr>
<tr>
<td>CEE 4741</td>
<td>Professional Issues I</td>
<td>1</td>
</tr>
<tr>
<td>CEE 4742</td>
<td>Professional Issues II</td>
<td>1</td>
</tr>
<tr>
<td>CEE 4000+</td>
<td>Technical Elective</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 1101</td>
<td>Introduction to Engineering &amp; Engineering Technology</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 1117</td>
<td>Engineering Graphics</td>
<td>2</td>
</tr>
<tr>
<td>ENGR 2196</td>
<td>Technical Communication</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 2334</td>
<td>Engineering Statics/Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3001</td>
<td>Engineering Economics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3033</td>
<td>Entrepreneurial Engineering</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 4169</td>
<td>Engineering Seminar</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 4196</td>
<td>Senior Design Project I</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 4296</td>
<td>Senior Design Project II</td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Total Credit Hours</td>
<td></td>
<td>124</td>
</tr>
</tbody>
</table>

**Suggested Academic Plan**

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

**Bachelor of Science in Environmental Engineering (B.S.ENVE.)**

**Requirements for New Students starting in the 2015-2016 Academic Year**

**Year 1**

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 1101</td>
<td>Introduction to Engineering &amp; Engineering Technology</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1031</td>
<td>General Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1033</td>
<td>General Chemistry Laboratory I</td>
<td>1</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

15

**Spring**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1042</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1032</td>
<td>General Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1034</td>
<td>General Chemistry Laboratory II</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I</td>
<td>4</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

17

**Year 2**

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 2334</td>
<td>Engineering Statics/Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 1062</td>
<td>Elementary Classical Physics II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 2043</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>CEE 2712</td>
<td>Introduction to Environmental Engineering</td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

17

**Spring**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 2196</td>
<td>Technical Communication [WI]</td>
<td>3</td>
</tr>
<tr>
<td>MATH 3041</td>
<td>Differential Equations I</td>
<td>3</td>
</tr>
<tr>
<td>CEE 2715</td>
<td>Principles of Sustainable Engineering</td>
<td>3</td>
</tr>
<tr>
<td>Course</td>
<td>Title</td>
<td>Credits</td>
</tr>
<tr>
<td>--------</td>
<td>----------------------------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>CEE 000+ Technical Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
</tbody>
</table>
| **Term Credit Hours** | **15** |}

### Year 3

<table>
<thead>
<tr>
<th>Term</th>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>CEE 3712</td>
<td>Environmental Fluids and Contaminant Dynamics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CEE 3715</td>
<td>Microbiological Principles of Environmental Engineering</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CEE 3725</td>
<td>Water Quality and Analysis Lab</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>CEE 3717</td>
<td>Chemical Principles of Environmental Engineering</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CEE/ENGR Technical Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>
| **Term Credit Hours** | **16** |}

### Year 4

<table>
<thead>
<tr>
<th>Term</th>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>CEE 4725</td>
<td>Environmental Systems Design</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CEE 4741</td>
<td>Professional Issues I</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>ENGR 4196</td>
<td>Senior Design Project I [WI]</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>CEE 4711</td>
<td>Air Pollution Control System</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>
| **Term Credit Hours** | **14** |}

### Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 3033</td>
<td>Engineering Economics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 4296</td>
<td>Senior Design Project II [WI]</td>
<td>3</td>
</tr>
<tr>
<td>CEE 4742</td>
<td>Professional Issues II</td>
<td>1</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CEE 4000+ Technical Elective</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>
| **Term Credit Hours** | **13** |}

**Total Credit Hours:** 124

---

**Minor in Environmental Engineering**

Room 514, Engineering Building  
1947 North 12th Street  
Philadelphia, PA 19122  
215-204-7814

The Department of Civil and Environmental Engineering (CEE) offers a five-course (15 s.h.) undergraduate Minor in Environmental Engineering. Undergraduates from the Physical Sciences, Mathematics, and Engineering are eligible to participate in this program.

The purpose of the Minor is to allow students from a wide range of undergraduate majors to obtain an introductory background in sustainability, pollution prevention, environmental modeling, and pollution control technologies most appropriate to their interests and major field. The Minor in Environmental Engineering will add considerably to students’ major program skills and make them more valuable to employers. Mathematics and Science majors will...
gain an understanding of engineering problem-solving processes and standard pollution control technologies. Engineering majors will understand the environmental effects of technologies in their major field and how to manage those effects. After the student completes the requirements for the minor, the minor will be recorded on the student’s official university transcript upon graduation.

**Declaration of Environmental Engineering Minor**

Students who are interested in pursuing an Environmental Engineering minor should speak to their advisor in the school or college in which they are pursuing their degree. Students should formally declare the Environmental Engineering minor upon completing no more than 6 credits toward the minor. There is no penalty if the minor is not completed. For more information and to declare the minor, please contact the Department of Civil and Environmental Engineering.

**Requirements**

Students pursuing the Minor in Environmental Engineering must meet the following requirements:

- A minimum of C- in each course
- An overall GPA of 2.0 for courses in the Environmental Engineering minor

**Required Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEE 2711</td>
<td>Environmental Chemistry &amp; Microbiology (Prerequisites: CHEM 1031 or CHEM 1035, and CHEM 1033)</td>
<td>3</td>
</tr>
<tr>
<td>CEE 3711</td>
<td>Environmental Engineering (Prerequisites: CHEM 1031 or CHEM 1035, and MATH 1042 or MATH 1942)</td>
<td>3</td>
</tr>
</tbody>
</table>

Select a minimum of three electives from the following: 1

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEE 4631</td>
<td>Environmental Hydrology</td>
</tr>
<tr>
<td>CEE 4711</td>
<td>Air Pollution Control System</td>
</tr>
<tr>
<td>CEE 4721</td>
<td>Water and Wastewater Systems Design</td>
</tr>
<tr>
<td>CEE 4731</td>
<td>Solid &amp; Hazardous Waste Management</td>
</tr>
</tbody>
</table>

**Total Credit Hours**

15

1 May be taken after completion of the two required courses

Students are required to complete prerequisite courses (shown in parentheses above) as indicated for the two required courses. These prerequisite courses do not count toward the minimum of 15 semester hours.

The Department of Civil and Environmental Engineering maintains an approved list of elective courses.

**Construction Management Technology**

Rominder Suri, Ph.D., P.E., Chair
Room 514, Engineering Building
215-204-2378
rominder.suri@temple.edu

Philip Udo-Inyang, Ph.D., P.E., Program Coordinator
Room 520, Engineering Building
215-204-7831
udoinyan@temple.edu

http://engineering.temple.edu/additional-programs/construction-management-technology

**Programs**

- Bachelor of Science in Engineering Technology in Construction Management Technology (p. 494)
- Bachelor of Science in Engineering Technology in Construction Management Technology with Co-op (p. 497)
Bachelor of Science in Engineering Technology in Construction Management Technology

Program Goals & Objectives

The baccalaureate curriculum in Construction Management Technology (CMT) prepares a student for a practitioner’s role in industry, government or institution in the area of construction management.

Graduates are qualified for jobs as construction field supervisors, estimators, expediters, construction cost analysts, schedulers, plan examiners for government agencies that control construction, and in safety. Graduates can communicate effectively and have the necessary teamwork and leadership skills to work and participate effectively in a team environment. Also, graduates will have professional growth and life-long learning skills that engineering technologists need to succeed in both the workplace and the society in general.

Day and evening courses are available; however, most technical courses are offered in the evening only. While the day program requires a minimum of four years, a completed evening program may extend up to eight years or more.


Summary of Requirements

University Requirements

All new students are required to complete the university's General Education (GenEd (p. 143)) curriculum.

All Temple students must take a minimum of two writing-intensive courses for a total of at least six credits. The writing-intensive course credits are counted as part of the major; they are not General Education (GenEd) or elective credits. The writing-intensive courses must be completed at Temple University and students may not transfer in credits to satisfy this requirement. The specific writing-intensive courses required for this major are:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMT 3396</td>
<td>Environmental and Safety Aspects of Construction</td>
<td>2</td>
</tr>
<tr>
<td>CMT 4396</td>
<td>Capstone in Construction</td>
<td>3</td>
</tr>
<tr>
<td>ENG 2696</td>
<td>Technical Writing</td>
<td>3</td>
</tr>
</tbody>
</table>

College and Major Requirements

Foundation Science & Math Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1022</td>
<td>Precalculus</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1031</td>
<td>Differential and Integral Calculus</td>
<td>4</td>
</tr>
<tr>
<td>STAT 2103</td>
<td>Statistical Business Analytics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1021</td>
<td>Introduction to General Physics I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1022</td>
<td>Introduction to General Physics II</td>
<td>4</td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1031 &amp; CHEM 1033</td>
<td>General Chemistry I and General Chemistry Laboratory I</td>
<td>4</td>
</tr>
<tr>
<td>EES 1001</td>
<td>Introductory Geology</td>
<td></td>
</tr>
<tr>
<td>EES 2001</td>
<td>Physical Geology</td>
<td></td>
</tr>
</tbody>
</table>

Required General Education Courses

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 0802</td>
<td>Analytical Reading and Writing</td>
<td>4</td>
</tr>
<tr>
<td>ENG 0812</td>
<td>Analytical Reading and Writing: ESL</td>
<td></td>
</tr>
<tr>
<td>ENG 0902</td>
<td>Honors Literature/Reading/Writing</td>
<td></td>
</tr>
<tr>
<td>IH 0851</td>
<td>Mosaic: Humanities Seminar I</td>
<td>3</td>
</tr>
<tr>
<td>or IH 0951</td>
<td>Honors Mosaic: Humanities Seminar I</td>
<td></td>
</tr>
<tr>
<td>IH 0852</td>
<td>Mosaic: Humanities Seminar II</td>
<td>3</td>
</tr>
<tr>
<td>or IH 0952</td>
<td>Honors Mosaic: Humanities Seminar II</td>
<td></td>
</tr>
<tr>
<td>GenEd 08xx or 09xx (U.S. Society)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd 08xx or 09xx (Global/World Society)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd 08xx or 09xx (Human Behavior)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd 08xx or 09xx (The Arts)</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>
### GenEd 08xx or 09xx (Race and Diversity)
3

### Required Engineering Courses for CMT

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMT 2124</td>
<td>Construction Methods and Materials</td>
<td>3</td>
</tr>
<tr>
<td>CMT 2125</td>
<td>Construction Contracts and Specifications</td>
<td>3</td>
</tr>
<tr>
<td>CMT 2271</td>
<td>Building Systems</td>
<td>3</td>
</tr>
<tr>
<td>CMT 3121</td>
<td>Construction Estimating</td>
<td>3</td>
</tr>
<tr>
<td>CMT 3123</td>
<td>Construction Estimating Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>CMT 3145</td>
<td>Structural Analysis</td>
<td>3</td>
</tr>
<tr>
<td>CMT 3322</td>
<td>Construction Planning and Scheduling</td>
<td>3</td>
</tr>
<tr>
<td>CMT 3333</td>
<td>Soils Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>CMT 3351</td>
<td>Applied Hydraulics</td>
<td>3</td>
</tr>
<tr>
<td>CMT 3396</td>
<td>Environmental and Safety Aspects of Construction</td>
<td>2</td>
</tr>
<tr>
<td>CMT 4335</td>
<td>Steel and Wood Structures</td>
<td>3</td>
</tr>
<tr>
<td>CMT 4336</td>
<td>Concrete and Masonry Design</td>
<td>3</td>
</tr>
<tr>
<td>CMT 4355</td>
<td>Transportation Systems Management</td>
<td>3</td>
</tr>
<tr>
<td>CMT 4396</td>
<td>Capstone in Construction</td>
<td>3</td>
</tr>
</tbody>
</table>

### Civil Engineering

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEE 1105</td>
<td>Surveying</td>
<td>2</td>
</tr>
<tr>
<td>CEE 2011</td>
<td>Civil Engineering Materials</td>
<td>2</td>
</tr>
</tbody>
</table>

### Engineering

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 1101</td>
<td>Introduction to Engineering &amp; Engineering Technology</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 1117</td>
<td>Engineering Graphics</td>
<td>2</td>
</tr>
<tr>
<td>ENGR 2331</td>
<td>Engineering Statics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 2333</td>
<td>Mechanics of Solids</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following:
3
- ENGR 3001  Engineering Economics
- FIN 3101   Financial Management

### Economics and Technical Writing

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 1101</td>
<td>Macroeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>or ECON 1102</td>
<td>Microeconomic Principles</td>
<td></td>
</tr>
<tr>
<td>ENG 2696</td>
<td>Technical Writing</td>
<td>3</td>
</tr>
</tbody>
</table>

### Engineering Technology

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGT 4119</td>
<td>Professional Seminar</td>
<td>1</td>
</tr>
</tbody>
</table>

### Electives

- Special Electives 2
- Free Elective

**Total Credit Hours**

124

1 Students must complete all published prerequisites prior to enrolling in this course
2 Must be approved prior to registration (see list below for suggested courses)

### Approved Specialty Electives

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 2101</td>
<td>Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 2102</td>
<td>Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1101</td>
<td>Macroeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>or ECON 1102</td>
<td>Microeconomic Principles</td>
<td></td>
</tr>
<tr>
<td>HRM 1101</td>
<td>Leadership and Organizational Management</td>
<td>3</td>
</tr>
<tr>
<td>MSOM 3101</td>
<td>Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 2101</td>
<td>Marketing Management</td>
<td>3</td>
</tr>
<tr>
<td>FIN 3101</td>
<td>Financial Management</td>
<td>3</td>
</tr>
<tr>
<td>or CMT 4373</td>
<td>Construction Financial Management</td>
<td></td>
</tr>
<tr>
<td>RMI 2101</td>
<td>Introduction to Risk Management</td>
<td>3</td>
</tr>
</tbody>
</table>
Suggested Academic Plan

Please note that this is a *suggested* academic plan. Depending on your situation, your academic plan may look different.

**Bachelor of Science in Engineering Technology in Construction Management Technology**

**Requirements for New Students starting in the 2015-2016 Academic Year**

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ENGR 1101</td>
<td>Introduction to Engineering Engineering Technology</td>
</tr>
<tr>
<td></td>
<td>MATH 1022</td>
<td>Precalculus</td>
</tr>
<tr>
<td></td>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>Term Credit Hours</td>
<td></td>
<td>17</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CMT 2124</td>
<td>Construction Methods and Materials</td>
</tr>
<tr>
<td></td>
<td>ENGR 2331</td>
<td>Engineering Statics</td>
</tr>
<tr>
<td></td>
<td>PHYS 1022</td>
<td>Introduction to General Physics II</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
</tr>
<tr>
<td>Term Credit Hours</td>
<td></td>
<td>16</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CMT 3121</td>
<td>Construction Estimating</td>
</tr>
<tr>
<td></td>
<td>CMT 3123</td>
<td>Construction Estimating Laboratory</td>
</tr>
<tr>
<td></td>
<td>CMT 3333</td>
<td>Soils Mechanics</td>
</tr>
<tr>
<td></td>
<td>CMT 3396</td>
<td>Environmental and Safety Aspects of Construction [WI]</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>CHEM 1031</td>
<td>General Chemistry I</td>
</tr>
<tr>
<td>&amp; CHEM 1033</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EES 1001</td>
<td>Introductory Geology</td>
</tr>
<tr>
<td></td>
<td>EES 2001</td>
<td>Physical Geology</td>
</tr>
</tbody>
</table>
Select one of the following:  
- ECON 1101: Macroeconomic Principles  
- ECON 1102: Microeconomic Principles

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>16</th>
</tr>
</thead>
</table>

**Spring**
- CMT 3322: Construction Planning and Scheduling  
- CMT 3145: Structural Analysis  
- CMT 3351: Applied Hydraulics  
- ENG 2696: Technical Writing [WI]

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
</table>

**Year 4**

**Fall**
- CMT 4336: Concrete and Masonry Design  
- CMT 4355: Transportation Systems Management  
- ENGT 4119: Professional Seminar  
- GenEd Breadth Course  
- Approved Specialty Elective  
- Select one of the following:  
  - ENGR 3001: Engineering Economics  
  - FIN 3101: Financial Management

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>16</th>
</tr>
</thead>
</table>

**Spring**
- CMT 4335: Steel and Wood Structures  
- CMT 4396: Capstone in Construction [WI]  
- Free Elective  
- Approved Specialty Elective  
- GenEd Breadth Course

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>14</th>
</tr>
</thead>
</table>

**Total Credit Hours:**  
- 124

**Bachelor of Science in Engineering Technology in Construction Management Technology with Co-op**

**Program Goals & Objectives**

The baccalaureate curriculum in Construction Management Technology (CMT) prepares a student for a practitioner’s role in industry, government or institution in the area of construction management.

Graduates are qualified for jobs as construction field supervisors, estimators, expediters, construction cost analysts, schedulers, plan examiners for government agencies that control construction, and in safety. Graduates can communicate effectively and have the necessary teamwork and leadership skills to work and participate effectively in a team environment. Also, graduates will have professional growth and life-long learning skills that engineering technologists need to succeed in both the workplace and the society in general.

Day and evening courses are available; however, most technical courses are offered in the evening only. While the day program requires a minimum of four years, a completed evening program may extend up to eight years or more.


**Cooperative Education Program**

A Cooperative Education (Co-Op) is an optional program available at the College of Engineering where you have the opportunity to gain professional work experience before graduation. It is designed to give you the chance to apply the knowledge learned in the classroom to real life problems. You will be exposed to the latest technology and new ideas at a worksite helping you understand your field of work more extensively. During the Co-op, you will
make valuable connections with professionals in your field. A cooperative education can enhance and strengthen you academically, professionally and personally.

### Summary of Requirements

#### University Requirements
All new students are required to complete the university's General Education (GenEd (p. 143)) curriculum.

All Temple students must take a minimum of two writing-intensive courses for a total of at least six credits. The writing-intensive course credits are counted as part of the major; they are not General Education (GenEd) or elective credits. The writing-intensive courses must be completed at Temple University and students may not transfer in credits to satisfy this requirement. The specific writing-intensive courses required for this major are:

- CMT 3396 Environmental and Safety Aspects of Construction 2
- CMT 4396 Capstone in Construction 3
- ENG 2696 Technical Writing 3

#### College and Major Requirements

##### Foundation Science & Math Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1022</td>
<td>Precalculus</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1031</td>
<td>Differential and Integral Calculus</td>
<td>4</td>
</tr>
<tr>
<td>STAT 2103</td>
<td>Statistical Business Analytics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1021</td>
<td>Introduction to General Physics I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1022</td>
<td>Introduction to General Physics II</td>
<td>4</td>
</tr>
</tbody>
</table>

Select one of the following:

- CHEM 1031 General Chemistry I 4
- CHEM 1033 General Chemistry Laboratory I 4
- EES 1001 Introductory Geology 4
- EES 2001 Physical Geology 4

##### Required General Education Courses

Select one of the following:

- ENG 0802 Analytical Reading and Writing 4
- ENG 0812 Analytical Reading and Writing: ESL 4
- ENG 0902 Honors Literature/Reading/Write 4
- IH 0851 Mosaic: Humanities Seminar I 3
- or IH 0951 Honors Mosaic: Humanities Seminar I 3
- IH 0852 Mosaic: Humanities Seminar II 3
- or IH 0952 Honors Mosaic: Humanities Seminar II 3
- GenEd 08xx or 09xx (U.S. Society) 3
- GenEd 08xx or 09xx (Global/World Society) 3
- GenEd 08xx or 09xx (Human Behavior) 3
- GenEd 08xx or 09xx (The Arts) 3
- GenEd 08xx or 09xx (Race and Diversity) 3

##### Required Engineering Courses for CMT

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMT 2124</td>
<td>Construction Methods and Materials</td>
<td>3</td>
</tr>
<tr>
<td>CMT 2125</td>
<td>Construction Contracts and Specifications</td>
<td>3</td>
</tr>
<tr>
<td>CMT 2271</td>
<td>Building Systems</td>
<td>3</td>
</tr>
<tr>
<td>CMT 3121</td>
<td>Construction Estimating</td>
<td>3</td>
</tr>
<tr>
<td>CMT 3123</td>
<td>Construction Estimating Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>CMT 3145</td>
<td>Structural Analysis</td>
<td>3</td>
</tr>
<tr>
<td>CMT 3322</td>
<td>Construction Planning and Scheduling</td>
<td>3</td>
</tr>
<tr>
<td>CMT 3333</td>
<td>Soils Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>CMT 3351</td>
<td>Applied Hydraulics</td>
<td>3</td>
</tr>
<tr>
<td>CMT 3396</td>
<td>Environmental and Safety Aspects of Construction (WI)</td>
<td>2</td>
</tr>
<tr>
<td>CMT 4335</td>
<td>Steel and Wood Structures</td>
<td>3</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>CMT 4336</td>
<td>Concrete and Masonry Design</td>
<td>3</td>
</tr>
<tr>
<td>CMT 4355</td>
<td>Transportation Systems Management</td>
<td>3</td>
</tr>
<tr>
<td>CMT 4396</td>
<td>Capstone in Construction (WI)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Civil Engineering**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEE 1105</td>
<td>Surveying</td>
<td>2</td>
</tr>
<tr>
<td>CEE 2011</td>
<td>Civil Engineering Materials</td>
<td>2</td>
</tr>
</tbody>
</table>

**Engineering**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 1101</td>
<td>Introduction to Engineering &amp; Engineering Technology</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 1117</td>
<td>Engineering Graphics</td>
<td>2</td>
</tr>
<tr>
<td>ENGR 2331</td>
<td>Engineering Statics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 2333</td>
<td>Mechanics of Solids</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 3001</td>
<td>Engineering Economics</td>
<td>3</td>
</tr>
<tr>
<td>FIN 3101</td>
<td>Financial Management 1</td>
<td>3</td>
</tr>
</tbody>
</table>

**Economics and Technical Writing**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 1101</td>
<td>Macroeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>or ECON 1102</td>
<td>Microeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>ENG 2696</td>
<td>Technical Writing (WI)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Engineering Technology**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGT 4119</td>
<td>Professional Seminar</td>
<td>1</td>
</tr>
</tbody>
</table>

**Electives**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special Electives ²</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>Free Elective</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

**Cooperative Education**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 2181</td>
<td>Co-Op Work Experience I</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3181</td>
<td>Co-Op Work Experience II</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credit Hours**

130

¹ Students must complete all published prerequisites prior to enrolling in this course.
² Must be approved prior to registration (see list below for suggested courses).

### Approved Specialty Electives

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 2101</td>
<td>Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 2102</td>
<td>Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1101</td>
<td>Macroeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>or ECON 1102</td>
<td>Microeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>HRM 1101</td>
<td>Leadership and Organizational Management</td>
<td>3</td>
</tr>
<tr>
<td>MSOM 3101</td>
<td>Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 2101</td>
<td>Marketing Management</td>
<td>3</td>
</tr>
<tr>
<td>FIN 3101</td>
<td>Financial Management</td>
<td>3</td>
</tr>
<tr>
<td>or CMT 4373</td>
<td>Construction Financial Management</td>
<td>3</td>
</tr>
<tr>
<td>RMI 2101</td>
<td>Introduction to Risk Management</td>
<td>3</td>
</tr>
<tr>
<td>ENGT 2521</td>
<td>Applied Fluid Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>ENGT 3323</td>
<td>Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>ENGT 3396</td>
<td>Materials Technology</td>
<td>3</td>
</tr>
<tr>
<td>ENGT 3532</td>
<td>Thermodynamics</td>
<td>3</td>
</tr>
</tbody>
</table>

Other Civil Engineering/Engineering/Engineering Technology courses

### Suggested Academic Plan

Below is a suggested five-year plan for the Co-Op program leading to the Bachelor of Science in Engineering Technology in Construction Management Technology. The minimum requirement for graduation is 130 semester hours.
Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

**Bachelor of Science in Engineering Technology in Construction Management Technology with Cooperative Education**

**Requirements for New Students starting in the 2015-2016 Academic Year**

### Year 1

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1022 Precalculus</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 1101 Introduction to Engineering Engineering Technology</td>
<td>3</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902 Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 1117 Engineering Graphics</td>
<td>2</td>
</tr>
<tr>
<td>MATH 1031 Differential and Integral Calculus</td>
<td>4</td>
</tr>
<tr>
<td>CEE 1105 Surveying</td>
<td>2</td>
</tr>
<tr>
<td>IH 0851 or 0951 Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 1021 Introduction to General Physics I</td>
<td>4</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

### Year 2

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMT 2124 Construction Methods and Materials</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 2331 Engineering Statics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 1022 Introduction to General Physics II</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>IH 0852 or 0952 Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMT 2125 Construction Contracts and Specifications</td>
<td>3</td>
</tr>
<tr>
<td>CMT 2271 Building Systems</td>
<td>3</td>
</tr>
<tr>
<td>CEE 2011 Civil Engineering Materials</td>
<td>2</td>
</tr>
<tr>
<td>ENGR 2333 Mechanics of Solids</td>
<td>3</td>
</tr>
<tr>
<td>STAT 2103 Statistical Business Analytics</td>
<td>4</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

### Year 3

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMT 3121 Construction Estimating</td>
<td>3</td>
</tr>
<tr>
<td>CMT 3123 Construction Estimating Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>CMT 3333 Soils Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>CMT 3396 Environmental and Safety Aspects of Construction [WI]</td>
<td>2</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1031 General Chemistry I</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 1033</td>
<td></td>
</tr>
<tr>
<td>EES 1001 Introductory Geology</td>
<td></td>
</tr>
<tr>
<td>EES 2001 Physical Geology</td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1101 Macroeconomic Principles</td>
<td></td>
</tr>
<tr>
<td>ECON 1102 Microeconomic Principles</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMT 3322 Construction Planning and Scheduling</td>
<td>3</td>
</tr>
</tbody>
</table>
CMT 3145  Structural Analysis  3
CMT 3351  Applied Hydraulics  3
ENG 2696  Technical Writing [WI]  3
Approved Specialty Elective  3

Term Credit Hours  15

Year 4

Fall
ENGR 2181  Co-Op Work Experience I  3

Term Credit Hours  3

Spring
ENGR 3181  Co-Op Work Experience II  3

Term Credit Hours  3

Year 5

Fall
ENGT 4119  Professional Seminar  1
CMT 4336  Concrete and Masonry Design  3
CMT 4355  Transportation Systems Management  3
GenEd Breadth Course  3
Approved Specialty Elective  3
Select one of the following:
  ENGR 3001  Engineering Economics  3
  FIN 3101  Financial Management  3

Term Credit Hours  16

Spring
CMT 4335  Steel and Wood Structures  3
CMT 4396  Capstone in Construction [WI]  3
Free Elective  2
Approved Specialty Elective  3
GenEd Breadth Course  3

Term Credit Hours  14

Total Credit Hours:  130

## Electrical Engineering

Li Bai, Ph.D, Chair
Room 712, Engineering Building
215-204-6616
lbai@temple.edu

Ralph Oyini Mbouna, Ph.D, Undergraduate Coordinator
Room 727a, Engineering Building
215-204-8737
oyin@temple.edu

http://engineering.temple.edu/department/electrical-computer-engineering


## Program Goals, Objectives & Design Integration

The objective of the Electrical Engineering program is to prepare students for careers as practicing engineers in areas such as digital systems, embedded processor applications, digital communications, control systems, sensor networks, biomedical signal processing, microelectronics, computer security, and power networks. These careers are in applications, development, research, and design of electric and electronic systems and devices. Electrical Engineers are involved in the design and development of telecommunications networks, cellular telephones, computer and other microprocessor-based devices, consumer electronics, control systems for space vehicles and robots, and in many aspects of the power and automotive industries.
The Department offers a concentration in Computer Engineering. The objective of the computer engineering concentration is to prepare students for a career in the area of Computer Engineering as it relates to the design of integrated software/hardware systems with both high- and low-level computer systems programming and applications to electrical systems. Computer engineers are responsible for the design, implementation, and application of computers and digital systems. The field covers hardware, software, and the interaction between them. The Computer Engineering concentration integrates courses on computer science fundamentals from the Department of Computer and Information Sciences of Temple University into the curriculum.

The Department also offers a concentration in Bioelectrical Engineering. The objective of the Bioelectrical Engineering concentration is to prepare students for careers in the emerging areas of biomedical signal and image processing, assistive devices for the impaired, and bioelectronics. The Bioelectrical Engineering concentration utilizes courses in Biology, and Mammalian Anatomy and Physiology from the Department of Kinesiology at Temple University as part of the curriculum.

The Electrical Engineering degree program is accredited by ABET. The curriculum features required courses in Mathematics, Chemistry, Physics, General Education, and the fundamentals of Electrical and Computer Engineering. The ABET minimum requirement for graduation is 124 semester hours, and students must satisfy the minimum requirement in each category as shown below. “Approved Elective” courses include elective electrical engineering courses, and a selection of math, science, engineering, and computer science courses as approved by the Department Chair. Students should consult the department chair or their academic advisor for any questions concerning the credit distribution.

Cooperative Education Program

A Cooperative Education (Co-op) is an optional program available at the College of Engineering where you have the opportunity to gain professional work experience before graduation. It is designed to give you the chance to apply the knowledge learned in the classroom to real life problems. You will be exposed to the latest technology and new ideas at a worksite helping you understand your field of work more extensively. During the Co-op, you will make valuable connections with professionals in your field. A cooperative education can enhance and strengthen you academically, professionally and personally.

Additional Courses in Electrical & Computer Engineering

With the approval of the Department Chair, students could take selected courses from another concentration area within the department, which are counted as approved electives. The following courses also serve as approved electives for all students.

ECE 4312 Microelectronics II 3
ECE 4322 VLSI Systems Design 3
ECE 4412 Modern Control Theory 3
ECE 4422 Digital Control Systems 3
ECE 4732 Electromechanical Energy Systems 3
ECE 4712 Modern Power Engineering and Electronics 3
ECE 3722 Electromagnetic Wave Propagation 3
ECE 4542 Telecommunications Engineering 3
ENGR 4116 Spacecraft Systems Engineering 3
ENGR 3033 Entrepreneurial Engineering 3
ENGR xx81 Co-op Experience 1-3
ENGR xx85 Internship Experience 1-3

Programs

• Bachelor of Science in Electrical Engineering (p. 502)
• Bachelor of Science in Electrical Engineering - Bioelectrical Engineering Concentration (p. 506)
• Bachelor of Science in Electrical Engineering - Bioelectrical Engineering Concentration with Co-op (p. 510)
• Bachelor of Science in Electrical Engineering - Computer Engineering Concentration (p. 514)
• Bachelor of Science in Electrical Engineering - Computer Engineering Concentration with Co-op (p. 518)
• Bachelor of Science in Electrical Engineering with Co-op (p. 522)

Bachelor of Science in Electrical Engineering

The objective of the Electrical Engineering program is to prepare students for careers as practicing engineers in areas such as digital systems, embedded processor applications, digital communications, control systems, sensor networks, biomedical signal processing, microelectronics, computer security, and power networks. These careers are in applications, development, research, and design of electric and electronic systems and devices. Electrical Engineers are involved in the design and development of telecommunications networks, cellular telephones, computer and other
microprocessor-based devices, consumer electronics, control systems for space vehicles and robots, and in many aspects of the power and automotive industries.

**Summary of Degree Requirements**

**University Requirements**

All new students are required to complete the university's General Education (GenEd) curriculum. Transfer students are advised by the Department Chair with regard to their transfer credit for courses in their major taken elsewhere. Students should contact the Department Chair for an appointment and advisement.

All Temple students must take a minimum of two writing-intensive courses for a total of at least six credits. The writing-intensive course credits are counted as part of the major; they are not General Education (GenEd) or elective credits. The writing-intensive courses must be completed at Temple University and students may not transfer in credits to satisfy this requirement. The specific writing-intensive courses required for this major are:

- ENGR 2196 Technical Communication 3
- ENGR 4196 Senior Design Project I 1
- ENGR 4296 Senior Design Project II 3

**College Requirements**

The degree of Bachelor of Science in Electrical Engineering may be conferred upon satisfactory completion of a minimum of 124 semester hours of credit with a minimum GPA of 2.0 overall and in the major. Students must also score a minimum grade of C- in each of the following courses before they can take other junior and senior level courses:

- ECE 2332 Principles of Electric Circuits 4
- ECE 2612 Digital Circuit Design 3
- ECE 3512 Signals: Continuous and Discrete 4

The following table shows the minimum credit hour requirement in various areas for the Electrical Engineering degree program:

<table>
<thead>
<tr>
<th>Curriculum</th>
<th>Courses/labs (Typical)</th>
<th>Credits (Minimum)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematics</td>
<td>6</td>
<td>21</td>
</tr>
<tr>
<td>Basic Sciences</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>General Education</td>
<td>8</td>
<td>25</td>
</tr>
<tr>
<td>Engineering</td>
<td>20</td>
<td>63</td>
</tr>
<tr>
<td>Free Elective</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td><strong>Minimum requirement</strong></td>
<td><strong>124 credits</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Program Requirements**

**Foundation Science & Mathematics Courses**

- MATH 1041 Calculus I 4
- MATH 1042 Calculus II 4
- MATH 2043 Calculus III 4
- MATH 3041 Differential Equations I 3
- ECE 3522 Stochastic Processes in Signals and Systems 3
- ENGR 2011 Engineering Analysis & Applications 3
- PHYS 1061 Elementary Classical Physics I 4
- PHYS 1062 Elementary Classical Physics II 4
- CHEM 1035 Chemistry for Engineers 3
- CHEM 1033 General Chemistry Laboratory I 1

**Required General Education Courses**

Select one of the following:

- ENG 0802 Analytical Reading and Writing 4
- ENG 0812 Analytical Reading and Writing: ESL
- ENG 0902 Honors Literature/Reading/Writing
- IH 0851 Mosaic: Humanities Seminar I 3
- or IH 0951 Honors Mosaic: Humanities Seminar I
IH 0852  Mosaic: Humanities Seminar II  3
or IH 0952  Honors Mosaic: Humanities Seminar II  3
GenEd 08xx or 09xx (U.S. Society)  3
GenEd 08xx or 09xx (Global/World Society)  3
GenEd 08xx or 09xx (Human Behavior)  3
GenEd 08xx or 09xx (The Arts)  3
GenEd 08xx or 09xx (Race and Diversity)  3

**Required Courses: Electrical Engineering**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 2332</td>
<td>Principles of Electric Circuits</td>
<td>4</td>
</tr>
<tr>
<td>ECE 2333</td>
<td>Principles of Electric Circuits Lab</td>
<td>1</td>
</tr>
<tr>
<td>ECE 2612</td>
<td>Digital Circuit Design</td>
<td>3</td>
</tr>
<tr>
<td>ECE 2613</td>
<td>Digital Circuit Design Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ECE 3512</td>
<td>Signals: Continuous and Discrete</td>
<td>4</td>
</tr>
<tr>
<td>ECE 3712</td>
<td>Introduction to Electromagnetic Fields and Waves</td>
<td>3</td>
</tr>
<tr>
<td>ECE 3612</td>
<td>Processor Systems</td>
<td>3</td>
</tr>
<tr>
<td>ECE 3613</td>
<td>Processor Systems Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ECE 3312</td>
<td>Microelectronics I</td>
<td>3</td>
</tr>
<tr>
<td>ECE 3313</td>
<td>Microelectronics I Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ECE 3412</td>
<td>Classical Control Systems</td>
<td>3</td>
</tr>
<tr>
<td>ECE 3413</td>
<td>Classical Control Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ECE 4512</td>
<td>Digital Communication Systems</td>
<td>3</td>
</tr>
<tr>
<td>ECE 4513</td>
<td>Digital Communication Systems Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 1101</td>
<td>Introduction to Engineering &amp; Engineering Technology</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 2196</td>
<td>Technical Communication (WI)</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3334</td>
<td>Mechanical Systems</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 4169</td>
<td>Engineering Seminar</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 4196</td>
<td>Senior Design Project I (WI)</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 4296</td>
<td>Senior Design Project II (WI)</td>
<td>3</td>
</tr>
<tr>
<td>CIS 1057</td>
<td>Computer Programming in C</td>
<td>4</td>
</tr>
</tbody>
</table>

**Electives**

Engineering or Electrical Engineering Technical Electives - may use a combination of 3 credit and/or 4 credit courses for a minimum of 13 credits: 13

Free Elective 3

**Total Credit Hours** 124

**Suggested Academic Plan**

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

**Bachelor of Science in Electrical Engineering**

**Requirements for New Students starting in the 2015-2016 Academic Year**

**Year 1**

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1035</td>
<td>Chemistry for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1033</td>
<td>General Chemistry Laboratory I</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 1101</td>
<td>Introduction to Engineering Engineering Technology (Prerequisite: Engineering admission)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
</tbody>
</table>

**Term Credit Hours** 15

**Spring**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1042</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I</td>
<td>4</td>
</tr>
<tr>
<td>CIS 1057</td>
<td>Computer Programming in C</td>
<td>4</td>
</tr>
<tr>
<td>Year 2</td>
<td>Term Credit Hours</td>
<td>15</td>
</tr>
<tr>
<td>--------</td>
<td>-------------------</td>
<td>----</td>
</tr>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 2043</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1062</td>
<td>Elementary Classical Physics II</td>
<td>4</td>
</tr>
<tr>
<td>ECE 2332</td>
<td>Principles of Electric Circuits (students must also register for the 0 credit recitation course linked to ECE 2332)</td>
<td>4</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3</th>
<th>Term Credit Hours</th>
<th>17</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECE 3512</td>
<td>Signals: Continuous and Discrete</td>
<td>4</td>
</tr>
<tr>
<td>ECE 3612</td>
<td>Processor Systems</td>
<td>3</td>
</tr>
<tr>
<td>ECE 3613</td>
<td>Processor Systems Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ECE 3712</td>
<td>Introduction to Electromagnetic Fields and Waves</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3334</td>
<td>Mechanical Systems</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 2196</td>
<td>Technical Communication [WI]</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 4</th>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGR 4196</td>
<td>Senior Design Project I [WI]</td>
<td>1</td>
</tr>
<tr>
<td>ECE 4512</td>
<td>Digital Communication Systems</td>
<td>3</td>
</tr>
<tr>
<td>ECE 4513</td>
<td>Digital Communication Systems Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>Electrical Engineering Technical Elective(^2,3)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Electrical Engineering Technical Elective(^2,3)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 4</th>
<th>Term Credit Hours</th>
<th>14</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGR 4296</td>
<td>Senior Design Project II [WI]</td>
<td>3</td>
</tr>
<tr>
<td>Electrical Engineering Technical Elective(^2,3)</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Electrical Engineering Technical Elective(^2,3)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>
Free Elective

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Credit Hours:</td>
<td>124</td>
</tr>
</tbody>
</table>

1. CIS 1057 is a required course for all ECE students. If you completed ENGR 1117 before declaring an ECE major, you must take CIS 1057 in your third semester. ENGR 1117 will be counted as a free elective. See your advisor for more information.

2. Students must complete at least complete 13 credits of Electrical Engineering Technical Electives.

3. Students may satisfy no more than one Electrical Engineering Technical Elective with 3 credits of Independent Study, Independent Research or Co-Op coursework. Students must be granted prior approval from the department.

Electives

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 3622</td>
<td>Embedded System Design</td>
<td>3</td>
</tr>
<tr>
<td>ECE 3623</td>
<td>Embedded System Design Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ECE 3722</td>
<td>Electromagnetic Wave Propagation</td>
<td>3</td>
</tr>
<tr>
<td>ECE 3723</td>
<td>Electromagnetic Wave Propagation Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ECE 3732</td>
<td>Electromechanical Energy Systems</td>
<td>3</td>
</tr>
<tr>
<td>ECE 3822</td>
<td>Software Tools for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>ECE 4312</td>
<td>Microelectronics II</td>
<td>3</td>
</tr>
<tr>
<td>ECE 4322</td>
<td>VLSI Systems Design</td>
<td>3</td>
</tr>
<tr>
<td>ECE 4412</td>
<td>Modern Control Theory</td>
<td>3</td>
</tr>
<tr>
<td>ECE 4422</td>
<td>Digital Control Systems</td>
<td>3</td>
</tr>
<tr>
<td>ECE 4522</td>
<td>Digital Signal Processing</td>
<td>3</td>
</tr>
<tr>
<td>ECE 4532</td>
<td>Data and Computer Communication</td>
<td>3</td>
</tr>
<tr>
<td>ECE 4542</td>
<td>Telecommunications Engineering</td>
<td>3</td>
</tr>
<tr>
<td>ECE 4612</td>
<td>Advanced Processor Systems</td>
<td>3</td>
</tr>
<tr>
<td>ECE 4712</td>
<td>Modern Power Engineering and Electronics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3033</td>
<td>Entrepreneurial Engineering</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 4116</td>
<td>Spacecraft Systems Engineering</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 2181</td>
<td>Co-Op Work Experience I</td>
<td>3</td>
</tr>
<tr>
<td>or ENGR 3181</td>
<td>Co-Op Work Experience II</td>
<td></td>
</tr>
<tr>
<td>ECE 3082</td>
<td>Independent Study in Electrical Engineering</td>
<td>3</td>
</tr>
<tr>
<td>ECE 3091</td>
<td>Independent Research in Electrical Engineering</td>
<td>3</td>
</tr>
</tbody>
</table>

Bachelor of Science in Electrical Engineering - Bioelectrical Engineering Concentration

The objective of the Bioelectrical Engineering concentration is to prepare students for careers in the emerging areas of biomedical signal and image processing, assistive devices for the impaired, and bioelectronics. The Bioelectrical Engineering concentration utilizes courses in Biology, and Mammalian Anatomy and Physiology from the Department of Kinesiology at Temple University as part of the curriculum.

Summary of Degree Requirements

University Requirements

All new students are required to complete the university's General Education (GenEd (p. 143)) curriculum. Transfer students are advised by the Department Chair with regard to their transfer credit for courses in their major taken elsewhere. Students should contact the Department Chair for an appointment and advisement.

All Temple students must take a minimum of two writing-intensive courses for a total of at least six credits. The writing-intensive course credits are counted as part of the major; they are not General Education (GenEd) or elective credits. The writing-intensive courses must be completed at Temple University and students may not transfer in credits to satisfy this requirement. The specific writing-intensive courses required for this major are:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 2196</td>
<td>Technical Communication</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 4196</td>
<td>Senior Design Project I</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 4296</td>
<td>Senior Design Project II</td>
<td>3</td>
</tr>
</tbody>
</table>
College Requirements

The degree of Bachelor of Science in Electrical Engineering with a concentration in Bioelectrical Engineering may be conferred upon satisfactory completion of a minimum of 124 semester hours of credit with a minimum GPA of 2.0 overall and in the major. Students must also score a minimum grade of C- in each of the following courses before they can take other junior and senior level courses:

ECE 2332  Principles of Electric Circuits  4
ECE 2612  Digital Circuit Design  3
ECE 3512  Signals: Continuous and Discrete  4

The following table shows the minimum credit hour requirement in various areas for the Electrical Engineering degree program with a concentration in Bioelectrical Engineering:

<table>
<thead>
<tr>
<th>Curriculum</th>
<th>Courses/labs (Typical)</th>
<th>Credits (Minimum)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematics</td>
<td>6</td>
<td>21</td>
</tr>
<tr>
<td>Basic Sciences and Biology</td>
<td>6</td>
<td>16</td>
</tr>
<tr>
<td>General Education</td>
<td>8</td>
<td>25</td>
</tr>
<tr>
<td>Engineering</td>
<td>18</td>
<td>59</td>
</tr>
<tr>
<td>Free Elective</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td><strong>Minimum requirement</strong></td>
<td></td>
<td><strong>124 credits</strong></td>
</tr>
</tbody>
</table>

Program Requirements

Foundation Science & Math Courses

MATH 1041  Calculus I  4
MATH 1042  Calculus II  4
MATH 2043  Calculus III  4
MATH 3041  Differential Equations I  3
ECE 3522  Stochastic Processes in Signals and Systems  3
ENGR 2011  Engineering Analysis & Applications  3
PHYS 1061  Elementary Classical Physics I  4
PHYS 1062  Elementary Classical Physics II  4
CHEM 1035  Chemistry for Engineers  3
CHEM 1033  General Chemistry Laboratory I  1
BIOL 1011  General Biology I  4

Required General Education Courses

Select one of the following:

ENG 0802  Analytical Reading and Writing  4
ENG 0812  Analytical Reading and Writing: ESL  4
ENG 0902  Honors Literature/Reading/Writing  4
IH 0851  Mosaic: Humanities Seminar I  3
or IH 0951  Honors Mosaic: Humanities Seminar I  3
IH 0852  Mosaic: Humanities Seminar II  3
or IH 0952  Honors Mosaic: Humanities Seminar II  3
GenEd 08xx or 09xx (U.S. Society)  3
GenEd 08xx or 09xx (Global/World Society)  3
GenEd 08xx or 09xx (Human Behavior)  3
GenEd 08xx or 09xx (The Arts)  3
GenEd 08xx or 09xx (Race and Diversity)  3

Required Courses: Bioelectrical Engineering Concentration

ECE 2332  Principles of Electric Circuits  4
ECE 2333  Principles of Electric Circuits Lab  1
ECE 2612  Digital Circuit Design  3
ECE 2613  Digital Circuit Design Laboratory  1
ECE 3512  Signals: Continuous and Discrete  4
ECE 3712  Introduction to Electromagnetic Fields and Waves  3
Suggested Academic Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Science in Electrical Engineering: Bioelectrical Engineering Concentration

Requirements for New Students starting in the 2015-2016 Academic Year

**Year 1**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1041       Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1035       Chemistry for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1033       General Chemistry Laboratory I</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 1101       Introduction to Engineering Engineering Technology (Prerequisite: Engineering admission)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902 Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1042       Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1061       Elementary Classical Physics I</td>
<td>4</td>
</tr>
<tr>
<td>CIS 1057        Computer Programming in C</td>
<td>4</td>
</tr>
<tr>
<td>BIO 1011        General Biology I</td>
<td>4</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>16</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
</tr>
<tr>
<td>MATH 2043       Calculus III</td>
</tr>
<tr>
<td>PHYS 1062       Elementary Classical Physics II</td>
</tr>
<tr>
<td>ECE 2332       Principles of Electric Circuits</td>
</tr>
<tr>
<td>IH 0851 or 0951 Mosaic: Humanities Seminar I [GY]</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 3041       Differential Equations I</td>
</tr>
<tr>
<td>ECE 2333       Principles of Electric Circuits Lab</td>
</tr>
<tr>
<td>ECE 2612       Digital Circuit Design</td>
</tr>
<tr>
<td>ECE 2613       Digital Circuit Design Laboratory</td>
</tr>
<tr>
<td>ENGR 2011      Engineering Analysis Applications</td>
</tr>
<tr>
<td>ENGR 2196      Technical Communication [WI]</td>
</tr>
</tbody>
</table>
### Year 3

#### Fall
- **ECE 3512** [IH 0852 or 0952](#) Mosaic: Humanities Seminar II [GZ] 3
- **ECE 3612** Processor Systems 3
- **ECE 3613** Processor Systems Laboratory 1
- **ECE 3712** Introduction to Electromagnetic Fields and Waves 3
- **KINS 1223** Human Anatomy and Physiology I 4

#### Term Credit Hours
17

#### Spring
- **ECE 3412** Classical Control Systems 3
- **ECE 3413** Classical Control Laboratory 1
- **ECE 3522** Stochastic Processes in Signals and Systems 3
- **KINS 1224** Human Anatomy and Physiology II 4
- **GenEd Breadth Course** 3
- **ENGR 4169** Engineering Seminar 1

#### Term Credit Hours
15

### Year 4

#### Fall
- **ENGR 4196** Senior Design Project I [WI] 1
- **ECE 4522** Digital Signal Processing 3
- **Electrical Engineering/Biology Technical Elective** 3
- **GenEd Breadth Course** 3
- **GenEd Breadth Course** 3
- **Free Elective** 3

#### Term Credit Hours
15

#### Spring
- **ENGR 4296** Senior Design Project II [WI] 3
- **Electrical Engineering Technical Elective** 3
- **Electrical Engineering Technical Elective** 3
- **GenEd Breadth Course** 3
- **GenEd Breadth Course** 3

#### Term Credit Hours
16

### Total Credit Hours:
124

---

1. **CIS 1057** is a required course for all ECE students. If you completed **ENGR 1117** before declaring an ECE major, you must take **CIS 1057** in your third semester. **ENGR 1117** will be counted as a free elective. See your advisor for more information.

2. Students may satisfy no more than one Electrical Engineering Elective with 3 credits of Independent Study, Independent Research or Co-Op coursework. Students must be granted prior approval from the department.

### Electives

- **ECE 3312** Microelectronics I
- **ECE 3313** Microelectronics I Laboratory
- **ECE 3622** Embedded System Design
- **ECE 3623** Embedded System Design Laboratory
- **ECE 3722** Electromagnetic Wave Propagation
- **ECE 3723** Electromagnetic Wave Propagation Laboratory
- **ECE 3732** Electromechanical Energy Systems
- **ECE 3822** Software Tools for Engineers
- **ECE 4312** Microelectronics II
- **ECE 4322** VLSI Systems Design
- **ECE 4412** Modern Control Theory
ECE 4542  Telecommunications Engineering  3
ECE 4422  Digital Control Systems  3
ECE 4512  Digital Communication Systems  3
ECE 4513  Digital Communication Systems Laboratory  1
ECE 4612  Advanced Processor Systems  3
ECE 4712  Modern Power Engineering and Electronics  3
ENGR 2181  Co-Op Work Experience I  3
or ENGR 3181  Co-Op Work Experience II
ENGR 3033  Entrepreneurial Engineering  3
ENGR 4116  Spacecraft Systems Engineering  3
ECE 3082  Independent Study in Electrical Engineering  3
ECE 3091  Independent Research in Electrical Engineering  3

Bachelor of Science in Electrical Engineering - Bioelectrical Engineering Concentration with Co-op

Cooperative Education Program
A Cooperative Education (Co-Op) is an optional program available at the College of Engineering where you have the opportunity to gain professional work experience before graduation. It is designed to give you the chance to apply the knowledge learned in the classroom to real life problems. You will be exposed to the latest technology and new ideas at a worksite helping you understand your field of work more extensively. During the Co-Op, you will make valuable connections with professionals in your field. A cooperative education can enhance and strengthen you academically, professionally and personally.

Summary of Degree Requirements

University Requirements
All new students are required to complete the university's General Education (GenEd (p. 143)) curriculum. Transfer students are advised by the Department Chair with regard to their transfer credit for courses in their major taken elsewhere. Students should contact the Department Chair for an appointment and advisement.

All Temple students must take a minimum of two writing-intensive courses for a total of at least six credits. The writing-intensive course credits are counted as part of the major; they are not General Education (GenEd) or elective credits. The writing-intensive courses must be completed at Temple University and students may not transfer in credits to satisfy this requirement. The specific writing-intensive courses required for this major are:

ENGR 2196  Technical Communication  3
ENGR 4196  Senior Design Project I  1
ENGR 4296  Senior Design Project II  3

College Requirements
The degree of Bachelor of Science in Electrical Engineering with a concentration in Bioelectrical Engineering and the optional Cooperative Education program may be conferred upon satisfactory completion of a minimum of 130 semester hours of credit with a minimum GPA of 2.0 overall and in the major. Students must also score a minimum grade of C- in each of the following courses before they can take other junior and senior level courses:

ECE 2332  Principles of Electric Circuits  4
ECE 2612  Digital Circuit Design  3
ECE 3512  Signals: Continuous and Discrete  4

The following table shows the minimum credit hour requirement in various areas for the Electrical Engineering degree program with a concentration in Bioelectrical Engineering:

<table>
<thead>
<tr>
<th>Curriculum</th>
<th>Courses/labs (Typical)</th>
<th>Credits (Minimum)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematics</td>
<td>6</td>
<td>21</td>
</tr>
<tr>
<td>Basic Sciences and Biology</td>
<td>6</td>
<td>16</td>
</tr>
<tr>
<td>General Education</td>
<td>8</td>
<td>25</td>
</tr>
<tr>
<td>Engineering</td>
<td>20</td>
<td>65</td>
</tr>
<tr>
<td>Free Elective</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>
Minimum requirement 130 credits

Program Requirements

Foundation Science & Math Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1042</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 2043</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>MATH 3041</td>
<td>Differential Equations I</td>
<td>3</td>
</tr>
<tr>
<td>ECE 3522</td>
<td>Stochastic Processes in Signals and Systems</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 2011</td>
<td>Engineering Analysis &amp; Applications</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1062</td>
<td>Elementary Classical Physics II</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1035</td>
<td>Chemistry for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1033</td>
<td>General Chemistry Laboratory I</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 1011</td>
<td>General Biology I</td>
<td>4</td>
</tr>
</tbody>
</table>

Required General Education Courses

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEN 0802</td>
<td>Analytical Reading and Writing</td>
<td>4</td>
</tr>
<tr>
<td>ENG 0812</td>
<td>Analytical Reading and Writing: ESL</td>
<td></td>
</tr>
<tr>
<td>ENG 0902</td>
<td>Honors Literature/Reading/Writing</td>
<td></td>
</tr>
<tr>
<td>IH 0851</td>
<td>Mosaic: Humanities Seminar I</td>
<td>3</td>
</tr>
<tr>
<td>or IH 0951</td>
<td>Honors Mosaic: Humanities Seminar I</td>
<td></td>
</tr>
<tr>
<td>IH 0852</td>
<td>Mosaic: Humanities Seminar II</td>
<td>3</td>
</tr>
<tr>
<td>or IH 0952</td>
<td>Honors Mosaic: Humanities Seminar II</td>
<td></td>
</tr>
<tr>
<td>GenEd 08xx or 09xx (U.S. Society)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd 08xx or 09xx (Global/World Society)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd 08xx or 09xx (Human Behavior)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd 08xx or 09xx (The Arts)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd 08xx or 09xx (Race and Diversity)</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

Required Courses: Bioelectrical Engineering Concentration

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 2332</td>
<td>Principles of Electric Circuits</td>
<td>4</td>
</tr>
<tr>
<td>ECE 2333</td>
<td>Principles of Electric Circuits Lab</td>
<td>1</td>
</tr>
<tr>
<td>ECE 2612</td>
<td>Digital Circuit Design</td>
<td>3</td>
</tr>
<tr>
<td>ECE 2613</td>
<td>Digital Circuit Design Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ECE 3512</td>
<td>Signals: Continuous and Discrete</td>
<td>4</td>
</tr>
<tr>
<td>ECE 3712</td>
<td>Introduction to Electromagnetic Fields and Waves</td>
<td>3</td>
</tr>
<tr>
<td>ECE 3612</td>
<td>Processor Systems</td>
<td>3</td>
</tr>
<tr>
<td>ECE 3613</td>
<td>Processor Systems Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ECE 3412</td>
<td>Classical Control Systems</td>
<td>3</td>
</tr>
<tr>
<td>ECE 3413</td>
<td>Classical Control Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ECE 4522</td>
<td>Digital Signal Processing</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 1101</td>
<td>Introduction to Engineering &amp; Engineering Technology</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 2196</td>
<td>Technical Communication (WI)</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 4169</td>
<td>Engineering Seminar</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 4196</td>
<td>Senior Design Project I (WI)</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 4296</td>
<td>Senior Design Project II (WI)</td>
<td>3</td>
</tr>
<tr>
<td>KINS 1223</td>
<td>Human Anatomy and Physiology I</td>
<td>4</td>
</tr>
<tr>
<td>KINS 1224</td>
<td>Human Anatomy and Physiology II</td>
<td>4</td>
</tr>
<tr>
<td>CIS 1057</td>
<td>Computer Programming in C</td>
<td>4</td>
</tr>
</tbody>
</table>

Electives

Electrical Engineering or Biology Electives - may use a combination of 3 credit and/or 4 credit courses for a minimum of 9 credits 9

Free Elective 3
Cooperative Education

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 2181</td>
<td>Co-Op Work Experience I</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3181</td>
<td>Co-Op Work Experience II</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credit Hours 130

Suggested Academic Plan

Below is a suggested five-year plan for the Co-Op program leading to the Bachelor of Science in Electrical Engineering with a concentration in Bioelectrical Engineering. The minimum requirement for graduation is 130 semester hours.

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Science in Electrical Engineering: Bioelectrical Engineering Concentration with Cooperative Education

Requirements for New Students starting in the 2015-2016 Academic Year

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MATH 1041</td>
<td>Calculus I</td>
</tr>
<tr>
<td></td>
<td>CHEM 1035</td>
<td>Chemistry for Engineers</td>
</tr>
<tr>
<td></td>
<td>CHEM 1033</td>
<td>General Chemistry Laboratory I</td>
</tr>
<tr>
<td></td>
<td>ENGR 1101</td>
<td>Introduction to Engineering Engineering Technology (Prerequisite: Engineering admission)</td>
</tr>
<tr>
<td></td>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
</tr>
<tr>
<td></td>
<td>Term Credit Hours</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MATH 1042</td>
<td>Calculus II</td>
</tr>
<tr>
<td></td>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I</td>
</tr>
<tr>
<td></td>
<td>CIS 1057</td>
<td>Computer Programming in C</td>
</tr>
<tr>
<td></td>
<td>BIOL 1011</td>
<td>General Biology I</td>
</tr>
<tr>
<td></td>
<td>Term Credit Hours</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MATH 2043</td>
<td>Calculus III</td>
</tr>
<tr>
<td></td>
<td>PHYS 1062</td>
<td>Elementary Classical Physics II</td>
</tr>
<tr>
<td></td>
<td>ECE 2332</td>
<td>Principles of Electric Circuits</td>
</tr>
<tr>
<td></td>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
</tr>
<tr>
<td></td>
<td>Term Credit Hours</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MATH 3041</td>
<td>Differential Equations I</td>
</tr>
<tr>
<td></td>
<td>ECE 2333</td>
<td>Principles of Electric Circuits Lab</td>
</tr>
<tr>
<td></td>
<td>ECE 2612</td>
<td>Digital Circuit Design</td>
</tr>
<tr>
<td></td>
<td>ECE 2613</td>
<td>Digital Circuit Design Laboratory</td>
</tr>
<tr>
<td></td>
<td>ENGR 2011</td>
<td>Engineering Analysis Applications</td>
</tr>
<tr>
<td></td>
<td>ENGR 2196</td>
<td>Technical Communication [WI]</td>
</tr>
<tr>
<td></td>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
</tr>
<tr>
<td></td>
<td>Term Credit Hours</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ECE 3512</td>
<td>Signals: Continuous and Discrete</td>
</tr>
<tr>
<td></td>
<td>ECE 3612</td>
<td>Processor Systems</td>
</tr>
<tr>
<td></td>
<td>ECE 3613</td>
<td>Processor Systems Laboratory</td>
</tr>
<tr>
<td></td>
<td>ECE 3712</td>
<td>Introduction to Electromagnetic Fields and Waves</td>
</tr>
<tr>
<td></td>
<td>KINS 1223</td>
<td>Human Anatomy and Physiology I</td>
</tr>
<tr>
<td></td>
<td>Term Credit Hours</td>
<td></td>
</tr>
</tbody>
</table>
### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 3412</td>
<td>Classical Control Systems</td>
<td>3</td>
</tr>
<tr>
<td>ECE 3413</td>
<td>Classical Control Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ECE 3522</td>
<td>Stochastic Processes in Signals and Systems</td>
<td>3</td>
</tr>
<tr>
<td>KINS 1224</td>
<td>Human Anatomy and Physiology II</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ENGR 4169</td>
<td>Engineering Seminar</td>
<td>1</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 15

### Year 4

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 2181</td>
<td>Co-Op Work Experience I</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 3

### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 3181</td>
<td>Co-Op Work Experience II</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 3

### Year 5

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 4196</td>
<td>Senior Design Project I [WI]</td>
<td>1</td>
</tr>
<tr>
<td>ECE 4522</td>
<td>Digital Signal Processing</td>
<td>3</td>
</tr>
<tr>
<td>Electrical Engineering/Biology Technical Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Free elective</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 16

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 4296</td>
<td>Senior Design Project II [WI]</td>
<td>3</td>
</tr>
<tr>
<td>Electrical Engineering Technical Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Electrical Engineering Technical Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 3

**Total Credit Hours**: 130

---

1. CIS 1057 is a required course for all ECE students. If you completed ENGR 1117 before declaring an ECE major, you must take CIS 1057 in your third semester. ENGR 1117 will be counted as a free elective. See your advisor for more information.

2. Students may satisfy no more than one Electrical Engineering Technical Elective with 3 credits of Independent Study or Independent Research coursework. Students must be granted prior approval from the department.

### Electives

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 3312</td>
<td>Microelectronics I</td>
<td>3</td>
</tr>
<tr>
<td>ECE 3313</td>
<td>Microelectronics I Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ECE 3622</td>
<td>Embedded System Design</td>
<td>3</td>
</tr>
<tr>
<td>ECE 3623</td>
<td>Embedded System Design Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ECE 3722</td>
<td>Electromagnetic Wave Propagation</td>
<td>3</td>
</tr>
<tr>
<td>ECE 3723</td>
<td>Electromagnetic Wave Propagation Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ECE 3732</td>
<td>Electromechanical Energy Systems</td>
<td>3</td>
</tr>
<tr>
<td>ECE 3822</td>
<td>Software Tools for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>ECE 4312</td>
<td>Microelectronics II</td>
<td>3</td>
</tr>
<tr>
<td>ECE 4322</td>
<td>VLSI Systems Design</td>
<td>3</td>
</tr>
<tr>
<td>ECE 4412</td>
<td>Modern Control Theory</td>
<td>3</td>
</tr>
<tr>
<td>ECE 4542</td>
<td>Telecommunications Engineering</td>
<td>3</td>
</tr>
<tr>
<td>ECE 4422</td>
<td>Digital Control Systems</td>
<td>3</td>
</tr>
<tr>
<td>ECE 4512</td>
<td>Digital Communication Systems</td>
<td>3</td>
</tr>
</tbody>
</table>
Bachelor of Science in Electrical Engineering - Computer Engineering Concentration

The objective of the computer engineering concentration is to prepare students for a career in the area of Computer Engineering as it relates to the design of integrated software/hardware systems with both high- and low-level computer systems programming and applications to electrical systems. Computer engineers are responsible for the design, implementation, and application of computers and digital systems. The field covers hardware, software, and the interaction between them. The Computer Engineering concentration integrates courses on computer science fundamentals from the Department of Computer and Information Sciences of Temple University into the curriculum.

Summary of Degree Requirements

University Requirements

All new students are required to complete the university's General Education (GenEd (p. 143)) curriculum. Transfer students are advised by the Department Chair with regard to their transfer credit for courses in their major taken elsewhere. Students should contact the Department Chair for an appointment and advisement.

All Temple students must take a minimum of two writing-intensive courses for a total of at least six credits. The writing-intensive course credits are counted as part of the major; they are not General Education (GenEd) or elective credits. The writing-intensive courses must be completed at Temple University and students may not transfer in credits to satisfy this requirement. The specific writing-intensive courses required for this major are:

ENGR 2196 Technical Communication 3
ENGR 4196 Senior Design Project I 1
ENGR 4296 Senior Design Project II 3

College Requirements

The degree of Bachelor of Science in Electrical Engineering with a concentration in Computer Engineering may be conferred upon satisfactory completion of a minimum of 124 semester hours of credit with a minimum GPA of 2.0 overall and in the major. Students must also score a minimum grade of C- in each of the following courses before they can take other junior and senior level courses:

ECE 2332 Principles of Electric Circuits 4
ECE 2612 Digital Circuit Design 3
ECE 3512 Signals: Continuous and Discrete 4

The following table shows the minimum credit hour requirement in various areas for the Electrical Engineering degree program with a concentration in Computer Engineering:

<table>
<thead>
<tr>
<th>Curriculum</th>
<th>Courses/labs (Typical)</th>
<th>Credits (Minimum)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematics</td>
<td>6</td>
<td>21</td>
</tr>
<tr>
<td>Basic Sciences</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>General Education</td>
<td>8</td>
<td>25</td>
</tr>
<tr>
<td>Engineering and Computer Science</td>
<td>20</td>
<td>64</td>
</tr>
<tr>
<td>Free Elective</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td><strong>Minimum requirement</strong></td>
<td></td>
<td><strong>124 credits</strong></td>
</tr>
</tbody>
</table>

Program Requirements

Foundation Science & Mathematics Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1042</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 2043</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>MATH 3041</td>
<td>Differential Equations I</td>
<td>3</td>
</tr>
<tr>
<td>ECE 3522</td>
<td>Stochastic Processes in Signals and Systems</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 2111</td>
<td>Engineering Analysis &amp; Applications</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1062</td>
<td>Elementary Classical Physics II</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1035</td>
<td>Chemistry for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1033</td>
<td>General Chemistry Laboratory I</td>
<td>1</td>
</tr>
</tbody>
</table>

**Required General Education Courses**

Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 0802</td>
<td>Analytical Reading and Writing</td>
</tr>
<tr>
<td>ENG 0812</td>
<td>Analytical Reading and Writing: ESL</td>
</tr>
<tr>
<td>ENG 0902</td>
<td>Honors Literature/Reading/Writing</td>
</tr>
<tr>
<td>IH 0851</td>
<td>Mosaic: Humanities Seminar I</td>
</tr>
<tr>
<td>or IH 0951</td>
<td>Honors Mosaic: Humanities Seminar I</td>
</tr>
<tr>
<td>IH 0852</td>
<td>Mosaic: Humanities Seminar II</td>
</tr>
<tr>
<td>or IH 0952</td>
<td>Honors Mosaic: Humanities Seminar II</td>
</tr>
<tr>
<td>GenEd 08xx</td>
<td>U.S. Society</td>
</tr>
<tr>
<td>or GenEd 08xx</td>
<td>Global/World Society</td>
</tr>
<tr>
<td>GenEd 08xx</td>
<td>Human Behavior</td>
</tr>
<tr>
<td>or GenEd 08xx</td>
<td>(The Arts)</td>
</tr>
<tr>
<td>GenEd 08xx</td>
<td>Race and Diversity</td>
</tr>
</tbody>
</table>

**Required Courses: Computer Engineering Concentration**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 2332</td>
<td>Principles of Electric Circuits</td>
<td>4</td>
</tr>
<tr>
<td>ECE 2333</td>
<td>Principles of Electric Circuits Lab</td>
<td>1</td>
</tr>
<tr>
<td>ECE 2612</td>
<td>Digital Circuit Design</td>
<td>3</td>
</tr>
<tr>
<td>ECE 2613</td>
<td>Digital Circuit Design Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ECE 3512</td>
<td>Signals: Continuous and Discrete</td>
<td>4</td>
</tr>
<tr>
<td>ECE 3612</td>
<td>Processor Systems</td>
<td>3</td>
</tr>
<tr>
<td>ECE 3613</td>
<td>Processor Systems Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ECE 3622</td>
<td>Embedded System Design</td>
<td>3</td>
</tr>
<tr>
<td>ECE 3623</td>
<td>Embedded System Design Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ECE 4512</td>
<td>Digital Communication Systems</td>
<td>3</td>
</tr>
<tr>
<td>ECE 4513</td>
<td>Digital Communication Systems Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ECE 4612</td>
<td>Advanced Processor Systems</td>
<td>3</td>
</tr>
<tr>
<td>ECE 4532</td>
<td>Data and Computer Communication</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 1101</td>
<td>Introduction to Engineering &amp; Engineering Technology</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 2196</td>
<td>Technical Communication (WI)</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 4169</td>
<td>Engineering Seminar</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 4196</td>
<td>Senior Design Project I (WI)</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 4296</td>
<td>Senior Design Project II (WI)</td>
<td>3</td>
</tr>
<tr>
<td>CIS 1166</td>
<td>Mathematical Concepts in Computing I</td>
<td>4</td>
</tr>
<tr>
<td>CIS 1068</td>
<td>Program Design and Abstraction</td>
<td>4</td>
</tr>
<tr>
<td>CIS 2168</td>
<td>Data Structures</td>
<td>4</td>
</tr>
<tr>
<td>CIS 1057</td>
<td>Computer Programming in C</td>
<td>4</td>
</tr>
</tbody>
</table>

**Electives**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Electrical Engineering or Computer &amp; Information Science Technical Electives</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Free Elective</td>
<td>2</td>
</tr>
</tbody>
</table>

**Total Credit Hours**

124

**Suggested Academic Plan**

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.
# Bachelor of Science in Electrical Engineering: Computer Engineering Concentration

## Requirements for New Students starting in the 2015-2016 Academic Year

### Year 1

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1035</td>
<td>Chemistry for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1033</td>
<td>General Chemistry Laboratory I</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 1101</td>
<td>Introduction to Engineering Engineering Technology (Prerequisite: Engineering admission)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
</tbody>
</table>

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1042</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I</td>
<td>4</td>
</tr>
<tr>
<td>CIS 1057</td>
<td>Computer Programming in C¹</td>
<td>4</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
</tbody>
</table>

### Year 2

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 2043</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1062</td>
<td>Elementary Classical Physics II</td>
<td>4</td>
</tr>
<tr>
<td>ECE 2332</td>
<td>Principles of Electric Circuits</td>
<td>4</td>
</tr>
<tr>
<td>CIS 1166</td>
<td>Mathematical Concepts in Computing I</td>
<td>4</td>
</tr>
</tbody>
</table>

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 3041</td>
<td>Differential Equations I</td>
<td>3</td>
</tr>
<tr>
<td>ECE 2333</td>
<td>Principles of Electric Circuits Lab</td>
<td>1</td>
</tr>
<tr>
<td>ECE 2612</td>
<td>Digital Circuit Design</td>
<td>3</td>
</tr>
<tr>
<td>ECE 2613</td>
<td>Digital Circuit Design Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 2011</td>
<td>Engineering Analysis Applications</td>
<td>3</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
</tbody>
</table>

### Year 3

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 3512</td>
<td>Signals: Continuous and Discrete</td>
<td>4</td>
</tr>
<tr>
<td>ECE 3612</td>
<td>Processor Systems</td>
<td>3</td>
</tr>
<tr>
<td>ECE 3613</td>
<td>Processor Systems Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 2196</td>
<td>Technical Communication [WI]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>2</td>
</tr>
</tbody>
</table>

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 3622</td>
<td>Embedded System Design</td>
<td>3</td>
</tr>
<tr>
<td>ECE 3623</td>
<td>Embedded System Design Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ECE 3522</td>
<td>Stochastic Processes in Signals and Systems</td>
<td>3</td>
</tr>
<tr>
<td>CIS 1068</td>
<td>Program Design and Abstraction</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 4169</td>
<td>Engineering Seminar</td>
<td>1</td>
</tr>
<tr>
<td>Electrical Engineering Technical Elective²</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

### Year 4

#### Fall
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 4196</td>
<td>Senior Design Project I [WI]</td>
<td>1</td>
</tr>
<tr>
<td>ECE 4512</td>
<td>Digital Communication Systems</td>
<td>3</td>
</tr>
<tr>
<td>ECE 4513</td>
<td>Digital Communication Systems Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ECE 4612</td>
<td>Advanced Processor Systems</td>
<td>3</td>
</tr>
<tr>
<td>CIS 2168</td>
<td>Data Structures</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

**Spring**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 4296</td>
<td>Senior Design Project II [WI]</td>
<td>3</td>
</tr>
<tr>
<td>ECE 4532</td>
<td>Data and Computer Communication</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

**Total Credit Hours:** 15

---

1. CIS 1057 is a required course for all ECE students. If you completed ENGR 1117 before declaring an ECE major, you must take CIS 1057 in your third semester. ENGR 1117 will be counted as a free elective. See your advisor for more information.

2. Students may satisfy no more than one Electrical Engineering/CIS Technical Elective with 3 credits of Independent Study, Independent Research or Co-Op coursework. Students must be granted prior approval from the department.

**Electives**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 3312</td>
<td>Microelectronics I</td>
<td>3</td>
</tr>
<tr>
<td>ECE 3313</td>
<td>Microelectronics I Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ECE 3412</td>
<td>Classical Control Systems</td>
<td>3</td>
</tr>
<tr>
<td>ECE 3413</td>
<td>Classical Control Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ECE 3622</td>
<td>Embedded System Design</td>
<td>3</td>
</tr>
<tr>
<td>ECE 3623</td>
<td>Embedded System Design Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ECE 3712</td>
<td>Introduction to Electromagnetic Fields and Waves</td>
<td>3</td>
</tr>
<tr>
<td>ECE 3722</td>
<td>Electromagnetic Wave Propagation</td>
<td>3</td>
</tr>
<tr>
<td>ECE 3723</td>
<td>Electromagnetic Wave Propagation Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ECE 3732</td>
<td>Electromechanical Energy Systems</td>
<td>3</td>
</tr>
<tr>
<td>ECE 3822</td>
<td>Software Tools for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>ECE 4322</td>
<td>VLSI Systems Design</td>
<td>3</td>
</tr>
<tr>
<td>ECE 4522</td>
<td>Digital Signal Processing</td>
<td>3</td>
</tr>
<tr>
<td>ECE 4542</td>
<td>Telecommunications Engineering</td>
<td>3</td>
</tr>
<tr>
<td>ECE 4712</td>
<td>Modern Power Engineering and Electronics</td>
<td>3</td>
</tr>
<tr>
<td>ECE 4312</td>
<td>Microelectronics II</td>
<td>3</td>
</tr>
<tr>
<td>ECE 4412</td>
<td>Modern Control Theory</td>
<td>3</td>
</tr>
<tr>
<td>ECE 4422</td>
<td>Digital Control Systems</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3033</td>
<td>Entrepreneurial Engineering</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 4116</td>
<td>Spacecraft Systems Engineering</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 2181</td>
<td>Co-Op Work Experience I</td>
<td>3</td>
</tr>
<tr>
<td>or ENGR 3181</td>
<td>Co-Op Work Experience II</td>
<td>3</td>
</tr>
<tr>
<td>ECE 3082</td>
<td>Independent Study in Electrical Engineering</td>
<td>3</td>
</tr>
<tr>
<td>ECE 3091</td>
<td>Independent Research in Electrical Engineering</td>
<td>3</td>
</tr>
</tbody>
</table>

CIS: Approved Electives
Bachelor of Science in Electrical Engineering - Computer Engineering Concentration with Co-op

Cooperative Education Program

A Cooperative Education (Co-Op) is an optional program available at the College of Engineering where you have the opportunity to gain professional work experience before graduation. It is designed to give you the chance to apply the knowledge learned in the classroom to real life problems. You will be exposed to the latest technology and new ideas at a worksite helping you understand your field of work more extensively. During the Co-Op, you will make valuable connections with professionals in your field. A cooperative education can enhance and strengthen you academically, professionally and personally.

Summary of Degree Requirements

University Requirements

All new students are required to complete the university's General Education (GenEd) curriculum. Transfer students are advised by the Department Chair with regard to their transfer credit for courses in their major taken elsewhere. Students should contact the Department Chair for an appointment and advisement.

All Temple students must take a minimum of two writing-intensive courses for a total of at least six credits. The writing-intensive course credits are counted as part of the major; they are not General Education (GenEd) or elective credits. The writing-intensive courses must be completed at Temple University and students may not transfer in credits to satisfy this requirement. The specific writing-intensive courses required for this major are:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 2196</td>
<td>Technical Communication</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 4196</td>
<td>Senior Design Project I</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 4296</td>
<td>Senior Design Project II</td>
<td>3</td>
</tr>
</tbody>
</table>

College Requirements

The degree of Bachelor of Science in Electrical Engineering with a concentration in Computer Engineering and the optional Cooperative Education Program may be conferred upon satisfactory completion of a minimum of 130 semester hours of credit with a minimum GPA of 2.0 overall and in the major. Students must also score a minimum grade of C- in each of the following courses before they can take other junior and senior level courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 2332</td>
<td>Principles of Electric Circuits</td>
<td>4</td>
</tr>
<tr>
<td>ECE 2612</td>
<td>Digital Circuit Design</td>
<td>3</td>
</tr>
<tr>
<td>ECE 3512</td>
<td>Signals: Continuous and Discrete</td>
<td>4</td>
</tr>
</tbody>
</table>

The following table shows the minimum credit hour requirement in various areas for the Electrical Engineering degree program with a concentration in Computer Engineering:

<table>
<thead>
<tr>
<th>Curriculum</th>
<th>Courses/labs (Typical)</th>
<th>Credits (Minimum)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematics</td>
<td>6</td>
<td>21</td>
</tr>
<tr>
<td>Basic Sciences</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>General Education</td>
<td>8</td>
<td>25</td>
</tr>
<tr>
<td>Engineering and Computer Science</td>
<td>21</td>
<td>70</td>
</tr>
<tr>
<td>Free Elective</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td><strong>Minimum requirement</strong></td>
<td><strong>130 credits</strong></td>
<td></td>
</tr>
</tbody>
</table>

Program Requirements

Foundation Science & Mathematics Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1042</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 2043</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>MATH 3041</td>
<td>Differential Equations I</td>
<td>3</td>
</tr>
<tr>
<td>ECE 3522</td>
<td>Stochastic Processes in Signals and Systems</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 2011</td>
<td>Engineering Analysis &amp; Applications</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1062</td>
<td>Elementary Classical Physics II</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1035</td>
<td>Chemistry for Engineers</td>
<td>3</td>
</tr>
</tbody>
</table>
### Required General Education Courses

Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 0802</td>
<td>Analytical Reading and Writing</td>
<td>4</td>
</tr>
<tr>
<td>ENG 0812</td>
<td>Analytical Reading and Writing: ESL</td>
<td></td>
</tr>
<tr>
<td>IH 0851</td>
<td>Mosaic: Humanities Seminar I</td>
<td>3</td>
</tr>
<tr>
<td>or IH 0951</td>
<td>Honors Mosaic: Humanities Seminar I</td>
<td></td>
</tr>
<tr>
<td>IH 0852</td>
<td>Mosaic: Humanities Seminar II</td>
<td>3</td>
</tr>
<tr>
<td>or IH 0952</td>
<td>Honors Mosaic: Humanities Seminar II</td>
<td></td>
</tr>
<tr>
<td>GenEd 08xx or 09xx (U.S. Society)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd 08xx or 09xx (Global/World Society)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd 08xx or 09xx (Human Behavior)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd 08xx or 09xx (The Arts)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd 08xx or 09xx (Race and Diversity)</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

### Required Courses: Computer Engineering Concentration

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 2332</td>
<td>Principles of Electric Circuits</td>
<td>4</td>
</tr>
<tr>
<td>ECE 2333</td>
<td>Principles of Electric Circuits Lab</td>
<td>1</td>
</tr>
<tr>
<td>ECE 2612</td>
<td>Digital Circuit Design</td>
<td>3</td>
</tr>
<tr>
<td>ECE 2613</td>
<td>Digital Circuit Design Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ECE 3512</td>
<td>Signals: Continuous and Discrete</td>
<td>4</td>
</tr>
<tr>
<td>ECE 3612</td>
<td>Processor Systems</td>
<td>3</td>
</tr>
<tr>
<td>ECE 3613</td>
<td>Processor Systems Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ECE 3622</td>
<td>Embedded System Design</td>
<td>3</td>
</tr>
<tr>
<td>ECE 3623</td>
<td>Embedded System Design Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ECE 4512</td>
<td>Digital Communication Systems</td>
<td>3</td>
</tr>
<tr>
<td>ECE 4513</td>
<td>Digital Communication Systems Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ECE 4612</td>
<td>Advanced Processor Systems</td>
<td>3</td>
</tr>
<tr>
<td>ECE 4532</td>
<td>Data and Computer Communication</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 1101</td>
<td>Introduction to Engineering &amp; Engineering Technology</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 2196</td>
<td>Technical Communication (WI)</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 4169</td>
<td>Engineering Seminar</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 4196</td>
<td>Senior Design Project I (WI)</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 4296</td>
<td>Senior Design Project II (WI)</td>
<td>3</td>
</tr>
<tr>
<td>CIS 1166</td>
<td>Mathematical Concepts in Computing I</td>
<td>4</td>
</tr>
<tr>
<td>CIS 1068</td>
<td>Program Design and Abstraction</td>
<td>4</td>
</tr>
<tr>
<td>CIS 2168</td>
<td>Data Structures</td>
<td>4</td>
</tr>
<tr>
<td>CIS 1057</td>
<td>Computer Programming in C</td>
<td>4</td>
</tr>
</tbody>
</table>

### Electives

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 2181</td>
<td>Co-Op Work Experience I</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3181</td>
<td>Co-Op Work Experience II</td>
<td>3</td>
</tr>
</tbody>
</table>

### Total Credit Hours

130

### Suggested Academic Plan

Below is a suggested five-year plan for the Co-Op program leading to the Bachelor of Science in Electrical Engineering with a concentration in Computer Engineering. The minimum requirement for graduation is 130 semester hours.

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.
Bachelor of Science in Electrical Engineering: Computer Engineering Concentration with Cooperative Education

Requirements for New Students starting in the 2015-2016 Academic Year

<table>
<thead>
<tr>
<th>Year 1</th>
<th></th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1035</td>
<td>Chemistry for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1033</td>
<td>General Chemistry Laboratory I</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 1101</td>
<td>Introduction to Engineering Engineering Technology (prerequisite: Engineering admission)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 1042</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I</td>
<td>4</td>
</tr>
<tr>
<td>CIS 1057</td>
<td>Computer Programming in C (^1)</td>
<td>4</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th></th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 2043</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1062</td>
<td>Elementary Classical Physics II</td>
<td>4</td>
</tr>
<tr>
<td>ECE 2332</td>
<td>Principles of Electric Circuits</td>
<td>4</td>
</tr>
<tr>
<td>CIS 1166</td>
<td>Mathematical Concepts in Computing I</td>
<td>4</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>16</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 3041</td>
<td>Differential Equations I</td>
<td>3</td>
</tr>
<tr>
<td>ECE 2333</td>
<td>Principles of Electric Circuits Lab</td>
<td>1</td>
</tr>
<tr>
<td>ECE 2612</td>
<td>Digital Circuit Design</td>
<td>3</td>
</tr>
<tr>
<td>ECE 2613</td>
<td>Digital Circuit Design Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 2011</td>
<td>Engineering Analysis Applications</td>
<td>3</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>17</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3</th>
<th></th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECE 3512</td>
<td>Signals: Continuous and Discrete</td>
<td>4</td>
</tr>
<tr>
<td>ECE 3612</td>
<td>Processor Systems</td>
<td>3</td>
</tr>
<tr>
<td>ECE 3613</td>
<td>Processor Systems Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 2196</td>
<td>Technical Communication [WI]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>16</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECE 3622</td>
<td>Embedded System Design</td>
<td>3</td>
</tr>
<tr>
<td>ECE 3623</td>
<td>Embedded System Design Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ECE 3522</td>
<td>Stochastic Processes in Signals and Systems</td>
<td>3</td>
</tr>
<tr>
<td>CIS 1068</td>
<td>Program Design and Abstraction</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 4169</td>
<td>Engineering Seminar</td>
<td>1</td>
</tr>
<tr>
<td>Electrical Engineering Technical Elective (^2)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>
### Year 4

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 2181</td>
<td>Co-Op Work Experience I</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 3

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 3181</td>
<td>Co-Op Work Experience II</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 3

### Year 5

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 4196</td>
<td>Senior Design Project I [WI]</td>
<td>1</td>
</tr>
<tr>
<td>ECE 4512</td>
<td>Digital Communication Systems</td>
<td>3</td>
</tr>
<tr>
<td>ECE 4513</td>
<td>Digital Communication Systems Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ECE 4612</td>
<td>Advanced Processor Systems</td>
<td>3</td>
</tr>
<tr>
<td>CIS 2168</td>
<td>Data Structures</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 15

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 4296</td>
<td>Senior Design Project II [WI]</td>
<td>3</td>
</tr>
<tr>
<td>ECE 4532</td>
<td>Data and Computer Communication</td>
<td>3</td>
</tr>
<tr>
<td>Electrical Engineering/Computer &amp; Information Science Technical Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 15

**Total Credit Hours:** 130

---

1. CIS 1057 is a required course for all ECE students. If you completed ENGR 1117 before declaring an ECE major, you must take CIS 1057 in your third semester. ENGR 1117 will be counted as a free elective. See your advisor for more information.

2. Students may satisfy no more than one Electrical Engineering Technical Elective with 3 credits of Independent Study or Independent Research coursework. Students must be granted prior approval from the department.

### Electives

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 3312</td>
<td>Microelectronics I</td>
<td>3</td>
</tr>
<tr>
<td>ECE 3313</td>
<td>Microelectronics I Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ECE 3412</td>
<td>Classical Control Systems</td>
<td>3</td>
</tr>
<tr>
<td>ECE 3413</td>
<td>Classical Control Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ECE 3622</td>
<td>Embedded System Design</td>
<td>3</td>
</tr>
<tr>
<td>ECE 3623</td>
<td>Embedded System Design Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ECE 3712</td>
<td>Introduction to Electromagnetic Fields and Waves</td>
<td>3</td>
</tr>
<tr>
<td>ECE 3722</td>
<td>Electromagnetic Wave Propagation</td>
<td>3</td>
</tr>
<tr>
<td>ECE 3723</td>
<td>Electromagnetic Wave Propagation Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ECE 3732</td>
<td>Electromechanical Energy Systems</td>
<td>3</td>
</tr>
<tr>
<td>ECE 3822</td>
<td>Software Tools for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>ECE 4322</td>
<td>VLSI Systems Design</td>
<td>3</td>
</tr>
<tr>
<td>ECE 4522</td>
<td>Digital Signal Processing</td>
<td>3</td>
</tr>
<tr>
<td>ECE 4542</td>
<td>Telecommunications Engineering</td>
<td>3</td>
</tr>
<tr>
<td>ECE 4712</td>
<td>Modern Power Engineering and Electronics</td>
<td>3</td>
</tr>
<tr>
<td>ECE 4312</td>
<td>Microelectronics II</td>
<td>3</td>
</tr>
<tr>
<td>ECE 4412</td>
<td>Modern Control Theory</td>
<td>3</td>
</tr>
<tr>
<td>ECE 4422</td>
<td>Digital Control Systems</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3033</td>
<td>Entrepreneurial Engineering</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 4116</td>
<td>Spacecraft Systems Engineering</td>
<td>3</td>
</tr>
<tr>
<td>ECE 3082</td>
<td>Independent Study in Electrical Engineering</td>
<td>3</td>
</tr>
<tr>
<td>ECE 3091</td>
<td>Independent Research in Electrical Engineering</td>
<td>3</td>
</tr>
</tbody>
</table>
Computer & Information Science: Approved Electives

**Bachelor of Science in Electrical Engineering with Co-op**

**Cooperative Education Program**

A Cooperative Education (Co-Op) is an optional program available at the College of Engineering where you have the opportunity to gain professional work experience before graduation. It is designed to give you the chance to apply the knowledge learned in the classroom to real-life problems. You will be exposed to the latest technology and new ideas at a worksite helping you understand your field of work more extensively. During the Co-Op, you will make valuable connections with professionals in your field. A cooperative education can enhance and strengthen you academically, professionally and personally.

**Summary of Degree Requirements**

**University Requirements**

All new students are required to complete the university’s General Education (GenEd) curriculum. Transfer students are advised by the Department Chair with regard to their transfer credit for courses in their major taken elsewhere. Students should contact the Department Chair for an appointment and advisement.

All Temple students must take a minimum of two writing-intensive courses for a total of at least six credits. The writing-intensive course credits are counted as part of the major; they are not General Education (GenEd) or elective credits. The writing-intensive courses must be completed at Temple University and students may not transfer in credits to satisfy this requirement. The specific writing-intensive courses required for this major are:

- ENGR 2196 Technical Communication 3
- ENGR 4196 Senior Design Project I 1
- ENGR 4296 Senior Design Project II 3

**College Requirements**

The degree of Bachelor of Science in Electrical Engineering with the optional Cooperative Education Program may be conferred upon satisfactory completion of a minimum of 130 semester hours of credit with a minimum GPA of 2.0 overall and in the major. Students must also score a minimum grade of C- in each of the following courses before they can take other junior and senior level courses:

- ECE 2332 Principles of Electric Circuits 4
- ECE 2612 Digital Circuit Design 3
- ECE 3512 Signals: Continuous and Discrete 4

The following table shows the minimum credit hour requirement in various areas for the Electrical Engineering degree program:

<table>
<thead>
<tr>
<th>Curriculum</th>
<th>Courses/labs (Typical)</th>
<th>Credits (Minimum)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematics</td>
<td>6</td>
<td>21</td>
</tr>
<tr>
<td>Basic Sciences</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>General Education</td>
<td>8</td>
<td>25</td>
</tr>
<tr>
<td>Engineering</td>
<td>21</td>
<td>69</td>
</tr>
<tr>
<td>Free Elective</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td><strong>Minimum requirement</strong></td>
<td></td>
<td><strong>130 credits</strong></td>
</tr>
</tbody>
</table>

**Program Requirements**

**Foundation Science & Mathematics Courses**

- MATH 1041 Calculus I 4
- MATH 1042 Calculus II 4
- MATH 2043 Calculus III 4
- MATH 3041 Differential Equations I 3
- ECE 3522 Stochastic Processes in Signals and Systems 3
- ENGR 2011 Engineering Analysis & Applications 3
- PHYS 1061 Elementary Classical Physics I 4
- PHYS 1062 Elementary Classical Physics II 4
- CHEM 1035 Chemistry for Engineers 3
- CHEM 1033 General Chemistry Laboratory I 1
Required General Education Courses

Select one of the following:  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 0802</td>
<td>Analytical Reading and Writing</td>
<td>4</td>
</tr>
<tr>
<td>ENG 0812</td>
<td>Analytical Reading and Writing: ESL</td>
<td></td>
</tr>
<tr>
<td>ENG 0902</td>
<td>Honors Literature/Reading/Writing</td>
<td></td>
</tr>
<tr>
<td>IH 0851</td>
<td>Mosaic: Humanities Seminar I</td>
<td>3</td>
</tr>
<tr>
<td>or IH 0951</td>
<td>Honors Mosaic: Humanities Seminar I</td>
<td></td>
</tr>
<tr>
<td>IH 0852</td>
<td>Mosaic: Humanities Seminar II</td>
<td>3</td>
</tr>
<tr>
<td>or IH 0952</td>
<td>Honors Mosaic: Humanities Seminar II</td>
<td></td>
</tr>
<tr>
<td>GenEd 08xx</td>
<td>U.S. Society</td>
<td>3</td>
</tr>
<tr>
<td>or 09xx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GenEd 08xx</td>
<td>Global/World Society</td>
<td>3</td>
</tr>
<tr>
<td>or 09xx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GenEd 08xx</td>
<td>Human Behavior</td>
<td>3</td>
</tr>
<tr>
<td>or 09xx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GenEd 08xx</td>
<td>Race and Diversity</td>
<td>3</td>
</tr>
<tr>
<td>or 09xx</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Required Courses: Electrical Engineering

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 2612</td>
<td>Digital Circuit Design</td>
<td>3</td>
</tr>
<tr>
<td>ECE 2332</td>
<td>Principles of Electric Circuits</td>
<td>4</td>
</tr>
<tr>
<td>ECE 2333</td>
<td>Principles of Electric Circuits Lab</td>
<td>1</td>
</tr>
<tr>
<td>ECE 2613</td>
<td>Digital Circuit Design Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ECE 3512</td>
<td>Signals: Continuous and Discrete</td>
<td>4</td>
</tr>
<tr>
<td>ECE 3712</td>
<td>Introduction to Electromagnetic Fields and Waves</td>
<td>3</td>
</tr>
<tr>
<td>ECE 3612</td>
<td>Processor Systems</td>
<td>3</td>
</tr>
<tr>
<td>ECE 3613</td>
<td>Processor Systems Laboratory</td>
<td>3</td>
</tr>
<tr>
<td>ECE 3312</td>
<td>Microelectronics I</td>
<td>3</td>
</tr>
<tr>
<td>ECE 3313</td>
<td>Microelectronics I Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ECE 3412</td>
<td>Classical Control Systems</td>
<td>3</td>
</tr>
<tr>
<td>ECE 3413</td>
<td>Classical Control Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ECE 4512</td>
<td>Digital Communication Systems</td>
<td>3</td>
</tr>
<tr>
<td>ECE 4513</td>
<td>Digital Communication Systems Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 1101</td>
<td>Introduction to Engineering &amp; Engineering Technology</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 2196</td>
<td>Technical Communication (WI)</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3334</td>
<td>Mechanical Systems</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 4169</td>
<td>Engineering Seminar</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 4196</td>
<td>Senior Design Project I (WI)</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 4296</td>
<td>Senior Design Project II (WI)</td>
<td>3</td>
</tr>
<tr>
<td>CIS 1057</td>
<td>Computer Programming in C</td>
<td>4</td>
</tr>
</tbody>
</table>

Electives

Electrical Engineering or Engineering Electives - may use a combination of 3 credit and/or 4 credit courses for a minimum of 13 credits | 13 |

Free Elective | 3 |

Cooperative Education

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 2181</td>
<td>Co-Op Work Experience I</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3181</td>
<td>Co-Op Work Experience II</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credit Hours | 130 |

Suggested Academic Plan

Below is a suggested five-year plan for the Co-Op program leading to the Bachelor of Science in Electrical Engineering. The minimum requirement for graduation is 130 semester hours.

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.
# Bachelor of Science in Electrical Engineering with Cooperative Experience

## Requirements for New Students starting in the 2015-2016 Academic Year

### Year 1

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
</tr>
<tr>
<td>CHEM 1035</td>
<td>Chemistry for Engineers</td>
</tr>
<tr>
<td>CHEM 1033</td>
<td>General Chemistry Laboratory I</td>
</tr>
<tr>
<td>ENGR 1101</td>
<td>Introduction to Engineering Engineering Technology (prerequisite: Engineering admission)</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>4</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

<table>
<thead>
<tr>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
</tr>
</tbody>
</table>

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1042</td>
<td>Calculus II</td>
</tr>
<tr>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I</td>
</tr>
<tr>
<td>CIS 1057</td>
<td>Computer Programming in C¹</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

<table>
<thead>
<tr>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
</tr>
</tbody>
</table>

### Year 2

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 2043</td>
<td>Calculus III</td>
</tr>
<tr>
<td>PHYS 1062</td>
<td>Elementary Classical Physics II</td>
</tr>
<tr>
<td>ECE 2332</td>
<td>Principles of Electric Circuits</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

<table>
<thead>
<tr>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
</tr>
</tbody>
</table>

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 3041</td>
<td>Differential Equations I</td>
</tr>
<tr>
<td>ECE 2333</td>
<td>Principles of Electric Circuits Lab</td>
</tr>
<tr>
<td>ECE 2612</td>
<td>Digital Circuit Design</td>
</tr>
<tr>
<td>ECE 2613</td>
<td>Digital Circuit Design Laboratory</td>
</tr>
<tr>
<td>ENGR 2011</td>
<td>Engineering Analysis Applications</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

<table>
<thead>
<tr>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
</tr>
</tbody>
</table>

### Year 3

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 3512</td>
<td>Signals: Continuous and Discrete</td>
</tr>
<tr>
<td>ECE 3612</td>
<td>Processor Systems</td>
</tr>
<tr>
<td>ECE 3613</td>
<td>Processor Systems Laboratory</td>
</tr>
<tr>
<td>ECE 3712</td>
<td>Introduction to Electromagnetic Fields and Waves</td>
</tr>
<tr>
<td>ENGR 3334</td>
<td>Mechanical Systems</td>
</tr>
<tr>
<td>ENGR 2196</td>
<td>Technical Communication [WI]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

<table>
<thead>
<tr>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
</tr>
</tbody>
</table>

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 3412</td>
<td>Classical Control Systems</td>
</tr>
<tr>
<td>ECE 3413</td>
<td>Classical Control Laboratory</td>
</tr>
<tr>
<td>ECE 3522</td>
<td>Stochastic Processes in Signals and Systems</td>
</tr>
<tr>
<td>ECE 3312</td>
<td>Microelectronics I</td>
</tr>
<tr>
<td>ECE 3313</td>
<td>Microelectronics I Laboratory</td>
</tr>
<tr>
<td>ENGR 4169</td>
<td>Engineering Seminar</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>1</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

<table>
<thead>
<tr>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
</tr>
</tbody>
</table>
### Year 4

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 2181</td>
<td>Co-Op Work Experience I</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 3

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 3181</td>
<td>Co-Op Work Experience II</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 3

### Year 5

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 4196</td>
<td>Senior Design Project I [WI]</td>
<td>1</td>
</tr>
<tr>
<td>ECE 4512</td>
<td>Digital Communication Systems</td>
<td>3</td>
</tr>
<tr>
<td>ECE 4513</td>
<td>Digital Communication Systems Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>Electrical Engineering Technical Elective&lt;sup&gt;2&lt;/sup&gt;</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Electrical Engineering Technical Elective&lt;sup&gt;2&lt;/sup&gt;</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 14

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 4296</td>
<td>Senior Design Project II [WI]</td>
<td>3</td>
</tr>
<tr>
<td>Electrical Engineering Technical Elective&lt;sup&gt;2&lt;/sup&gt;</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Electrical Engineering Technical Elective&lt;sup&gt;2&lt;/sup&gt;</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 16

**Total Credit Hours:** 130

---

1. CIS 1057 is a required course for all ECE students. If you completed ENGR 1117 before declaring an ECE major, you must take CIS 1057 in your third semester. ENGR 1117 will be counted as a free elective. See your advisor for more information.

2. Students may satisfy no more than one Electrical Engineering Technical Elective with 3 credits of Independent Study or Independent Research coursework. Students must be granted prior approval from the department.

### Electives

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 3622</td>
<td>Embedded System Design</td>
<td>3</td>
</tr>
<tr>
<td>ECE 3623</td>
<td>Embedded System Design Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ECE 3722</td>
<td>Electromagnetic Wave Propagation</td>
<td>3</td>
</tr>
<tr>
<td>ECE 3723</td>
<td>Electromagnetic Wave Propagation Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ECE 3732</td>
<td>Electromechanical Energy Systems</td>
<td>3</td>
</tr>
<tr>
<td>ECE 3822</td>
<td>Software Tools for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>ECE 4312</td>
<td>Microelectronics II</td>
<td>3</td>
</tr>
<tr>
<td>ECE 4322</td>
<td>VLSI Systems Design</td>
<td>3</td>
</tr>
<tr>
<td>ECE 4412</td>
<td>Modern Control Theory</td>
<td>3</td>
</tr>
<tr>
<td>ECE 4422</td>
<td>Digital Control Systems</td>
<td>3</td>
</tr>
<tr>
<td>ECE 4522</td>
<td>Digital Signal Processing</td>
<td>3</td>
</tr>
<tr>
<td>ECE 4532</td>
<td>Data and Computer Communication</td>
<td>3</td>
</tr>
<tr>
<td>ECE 4542</td>
<td>Telecommunications Engineering</td>
<td>3</td>
</tr>
<tr>
<td>ECE 4612</td>
<td>Advanced Processor Systems</td>
<td>3</td>
</tr>
<tr>
<td>ECE 4712</td>
<td>Modern Power Engineering and Electronics</td>
<td></td>
</tr>
<tr>
<td>ENGR 3033</td>
<td>Entrepreneurial Engineering</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 4116</td>
<td>Spacecraft Systems Engineering</td>
<td>3</td>
</tr>
<tr>
<td>ECE 3082</td>
<td>Independent Study in Electrical Engineering</td>
<td>3</td>
</tr>
<tr>
<td>ECE 3091</td>
<td>Independent Research in Electrical Engineering</td>
<td>3</td>
</tr>
</tbody>
</table>
Engineering

Dennis Silage, Program Coordinator
Room 706, Engineering Building
215-204-6761
dennis.silage@temple.edu
http://engineering.temple.edu/dept-geng-general-engineering

Engineering Program

Goals, Objectives & Design Integration

The mission of the General Engineering Program at Temple University is to provide an excellent educational experience for its students. This experience includes an emphasis on the technical, communication, teamwork and life-long learning skills that graduate engineers need to succeed, in both the workplace and society in general. The General Engineering Program is structured to prepare the graduate for the practice of engineering and graduate school or professional programs in business, law and medicine. The curriculum emphasizes a rigorous treatment of the mathematical and scientific approach to the solution of engineering problems. The program has design across the curriculum and is capped with an integrated design experience in the form of a senior project.

The General Engineering Program shall produce graduates who:

• have the theoretical and practical ability to research, analyze, design and evaluate engineering systems for modern practice and/or graduate and professional programs;
• can communicate effectively in oral, written and electronic media and have the necessary teamwork and leadership skills to work and participate effectively in a team environment; and
• are committed to life-long learning and continuous improvement and who can contribute to the economic, technical, social and educational development of the Commonwealth of Pennsylvania, the country and the world.

The Bachelor of Science in Engineering may be conferred upon a student upon the satisfactory completion of a minimum of 124 semester hours of credit.

Summary of Requirements

University Requirements

All new students are required to complete the university's General Education (GenEd) curriculum.

All Temple students must take a minimum of two writing-intensive courses for a total of at least six credits. The writing-intensive course credits are counted as part of the major; they are not General Education (GenEd) or elective credits. The writing-intensive courses must be completed at Temple University and students may not transfer in credits to satisfy this requirement. The specific writing-intensive courses required for this major are:

- ENGR 2196 Technical Communication 3
- ENGR 4196 Senior Design Project I 1
- ENGR 4296 Senior Design Project II 3

Department and Major Requirements

Foundation Science & Math Courses

- MATH 1041 Calculus I 4
- MATH 1042 Calculus II 4
- MATH 2043 Calculus III 4
- MATH 3041 Differential Equations I 3

Select one of the following: 6-7

- ENGR 2011 & ECE 3522 Engineering Analysis & Applications and Stochastic Processes in Signals and Systems
- STAT 2103 & ENGR 2011 Statistical Business Analytics and Engineering Analysis & Applications

- PHYS 1061 Elementary Classical Physics I 4
- PHYS 1062 Elementary Classical Physics II 4
- CHEM 1035 Chemistry for Engineers 3
- CHEM 1033 General Chemistry Laboratory I 1

Required General Education Courses
Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 0802</td>
<td>Analytical Reading and Writing</td>
<td>4</td>
</tr>
<tr>
<td>ENG 0812</td>
<td>Analytical Reading and Writing: ESL</td>
<td></td>
</tr>
<tr>
<td>ENG 0902</td>
<td>Honors Literature/Reading/Writing</td>
<td></td>
</tr>
<tr>
<td>IH 0851</td>
<td>Mosaic: Humanities Seminar I</td>
<td>3</td>
</tr>
<tr>
<td>or IH 0951</td>
<td>Honors Mosaic: Humanities Seminar I</td>
<td></td>
</tr>
<tr>
<td>IH 0852</td>
<td>Mosaic: Humanities Seminar II</td>
<td>3</td>
</tr>
<tr>
<td>or IH 0952</td>
<td>Honors Mosaic: Humanities Seminar II</td>
<td></td>
</tr>
</tbody>
</table>

GenEd 08xx or 09xx (U.S. Society) 3
GenEd 08xx or 09xx (Global/World Society) 3
GenEd 08xx or 09xx (Human Behavior) 3
GenEd 08xx or 09xx (The Arts) 3
GenEd 08xx or 09xx (Race and Diversity) 3

### Required Engineering Courses (common)

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 2196</td>
<td>Technical Communication (WI)</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 4169</td>
<td>Engineering Seminar</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 4196</td>
<td>Senior Design Project I (WI)</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 4296</td>
<td>Senior Design Project II (WI)</td>
<td>3</td>
</tr>
</tbody>
</table>

### Study Plan

Study Plan courses (total credits vary by plan; minimum 45 hours) 45

### Business Electives

Select two of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 2101</td>
<td>Financial Accounting</td>
<td></td>
</tr>
<tr>
<td>HRM 1101</td>
<td>Leadership and Organizational Management</td>
<td></td>
</tr>
<tr>
<td>MKTG 2101</td>
<td>Marketing Management</td>
<td></td>
</tr>
<tr>
<td>ECON 1101</td>
<td>Macroeconomic Principles</td>
<td></td>
</tr>
<tr>
<td>ECON 1102</td>
<td>Microeconomic Principles</td>
<td></td>
</tr>
</tbody>
</table>

### Additional Electives

Engineering/Science Technical Elective 4
Free Elective 3

Total Credit Hours 124-125

1 Senior Design topic must be approved by the Program Coordinator.

### Study Plan Course Lists

#### Engineering Fundamentals Study Plan

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 1101</td>
<td>Introduction to Engineering &amp; Engineering Technology</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 1117</td>
<td>Engineering Graphics</td>
<td>2</td>
</tr>
<tr>
<td>ECE 2112</td>
<td>Electrical Devices &amp; Systems I</td>
<td>3</td>
</tr>
<tr>
<td>ECE 2113</td>
<td>Electrical Devices &amp; Systems I Lab</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 2331</td>
<td>Engineering Statics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 2332</td>
<td>Engineering Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 2333</td>
<td>Mechanics of Solids</td>
<td>3</td>
</tr>
<tr>
<td>MEE 2305</td>
<td>Measurements &amp; Dynamics Laboratory</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3001</td>
<td>Engineering Economics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3201</td>
<td>Material Science for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>MEE 3305</td>
<td>Materials Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 3553</td>
<td>Mechanics of Fluids</td>
<td>3</td>
</tr>
<tr>
<td>MEE 3506</td>
<td>Fluids and Energy Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 3571</td>
<td>Classical and Statistical Thermodynamics</td>
<td>3</td>
</tr>
</tbody>
</table>

Engineering Technical Elective 1 3
Engineering Technical Elective 2 3
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 1101</td>
<td>Introduction to Engineering &amp; Engineering Technology</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 1117</td>
<td>Engineering Graphics</td>
<td>2</td>
</tr>
<tr>
<td>ENGR 2331</td>
<td>Engineering Statics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 2332</td>
<td>Engineering Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 2333</td>
<td>Mechanics of Solids</td>
<td>3</td>
</tr>
<tr>
<td>MEE 3301</td>
<td>Machine Theory and Design</td>
<td>3</td>
</tr>
<tr>
<td>ECE 2112</td>
<td>Electrical Devices &amp; Systems I</td>
<td>3</td>
</tr>
<tr>
<td>ECE 2113</td>
<td>Electrical Devices &amp; Systems I Lab</td>
<td>1</td>
</tr>
<tr>
<td>ECE 2612</td>
<td>Digital Circuit Design</td>
<td>3</td>
</tr>
<tr>
<td>ECE 2613</td>
<td>Digital Circuit Design Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ECE 3612</td>
<td>Processor Systems</td>
<td>3</td>
</tr>
<tr>
<td>ECE 3613</td>
<td>Processor Systems Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ECE 3712</td>
<td>Introduction to Electromagnetic Fields and Waves</td>
<td>3</td>
</tr>
<tr>
<td>ECE 3732</td>
<td>Electromechanical Energy Systems</td>
<td>3</td>
</tr>
<tr>
<td>CIS 1057</td>
<td>Computer Programming in C</td>
<td>4</td>
</tr>
<tr>
<td>Engineering Technical Elective 1</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Engineering Technical Elective 2</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Engineering Technical Elective 3</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Engineering Technical Elective 4</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credit Hours</strong></td>
<td></td>
<td><strong>45</strong></td>
</tr>
</tbody>
</table>

**Electromechanical Study Plan**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 1101</td>
<td>Introduction to Engineering &amp; Engineering Technology</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 1117</td>
<td>Engineering Graphics</td>
<td>2</td>
</tr>
<tr>
<td>ENGR 2331</td>
<td>Engineering Statics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 2332</td>
<td>Engineering Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>MEE 3301</td>
<td>Machine Theory and Design</td>
<td>3</td>
</tr>
<tr>
<td>ECE 2112</td>
<td>Electrical Devices &amp; Systems I</td>
<td>3</td>
</tr>
<tr>
<td>ECE 2113</td>
<td>Electrical Devices &amp; Systems I Lab</td>
<td>1</td>
</tr>
<tr>
<td>ECE 2612</td>
<td>Digital Circuit Design</td>
<td>3</td>
</tr>
<tr>
<td>ECE 2613</td>
<td>Digital Circuit Design Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ECE 3612</td>
<td>Processor Systems</td>
<td>3</td>
</tr>
<tr>
<td>ECE 3613</td>
<td>Processor Systems Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ECE 3712</td>
<td>Introduction to Electromagnetic Fields and Waves</td>
<td>3</td>
</tr>
<tr>
<td>CIS 1057</td>
<td>Computer Programming in C</td>
<td>4</td>
</tr>
<tr>
<td>Engineering Technical Elective 1</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Engineering Technical Elective 2</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credit Hours</strong></td>
<td></td>
<td><strong>45</strong></td>
</tr>
</tbody>
</table>

**Electro-optical Study Plan**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 1101</td>
<td>Introduction to Engineering &amp; Engineering Technology</td>
<td>3</td>
</tr>
<tr>
<td>ECE 2112</td>
<td>Electrical Devices &amp; Systems I</td>
<td>3</td>
</tr>
<tr>
<td>ECE 2113</td>
<td>Electrical Devices &amp; Systems I Lab</td>
<td>1</td>
</tr>
<tr>
<td>ECE 2612</td>
<td>Digital Circuit Design</td>
<td>3</td>
</tr>
<tr>
<td>ECE 2613</td>
<td>Digital Circuit Design Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ECE 3512</td>
<td>Signals: Continuous and Discrete</td>
<td>4</td>
</tr>
<tr>
<td>ECE 3712</td>
<td>Introduction to Electromagnetic Fields and Waves</td>
<td>3</td>
</tr>
<tr>
<td>ECE 3722</td>
<td>Electromagnetic Wave Propagation</td>
<td>3</td>
</tr>
</tbody>
</table>
### Hardware and Software Study Plan

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 1101</td>
<td>Introduction to Engineering &amp; Engineering Technology</td>
<td>3</td>
</tr>
<tr>
<td>ECE 2112</td>
<td>Electrical Devices &amp; Systems I</td>
<td>3</td>
</tr>
<tr>
<td>ECE 2113</td>
<td>Electrical Devices &amp; Systems I Lab</td>
<td>1</td>
</tr>
<tr>
<td>ECE 2612</td>
<td>Digital Circuit Design</td>
<td>3</td>
</tr>
<tr>
<td>ECE 2613</td>
<td>Digital Circuit Design Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ECE 3612</td>
<td>Processor Systems</td>
<td>3</td>
</tr>
<tr>
<td>ECE 3613</td>
<td>Processor Systems Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ECE 3622</td>
<td>Embedded System Design</td>
<td>3</td>
</tr>
<tr>
<td>ECE 3623</td>
<td>Embedded System Design Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ECE 4532</td>
<td>Data and Computer Communication</td>
<td>3</td>
</tr>
<tr>
<td>ECE 4612</td>
<td>Advanced Processor Systems</td>
<td>3</td>
</tr>
<tr>
<td>CIS 1057</td>
<td>Computer Programming in C</td>
<td>4</td>
</tr>
<tr>
<td>CIS 1068</td>
<td>Program Design and Abstraction</td>
<td>4</td>
</tr>
<tr>
<td>CIS 2168</td>
<td>Data Structures</td>
<td>4</td>
</tr>
<tr>
<td>CIS 3207</td>
<td>Introduction to Systems Programming and Operating Systems</td>
<td>4</td>
</tr>
<tr>
<td>Engineering Technical Elective 1</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Engineering Technical Elective 2</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

### Total Credit Hours

47

### Suggested Academic Plans

#### Bachelor of Science in Engineering (B.S.E.) - Full Time (Day) Engineering Fundamental Basic Study Plan

#### Requirements for New Students starting in the 2015-2016 Academic Year

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 1101</td>
<td>Introduction to Engineering Engineering Technology</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1035</td>
<td>Chemistry for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1033</td>
<td>General Chemistry Laboratory I</td>
<td>1</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
</tbody>
</table>

#### Term Credit Hours

15

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Spring</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1042</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 1117</td>
<td>Engineering Graphics</td>
<td>2</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Term Credit Hours

16
<table>
<thead>
<tr>
<th>Year 2</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 2043</td>
<td>Calculus III</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>PHYS 1062</td>
<td>Elementary Classical Physics II</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>ENGR 2331</td>
<td>Engineering Statics</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ENGR 2011</td>
<td>Engineering Analysis Applications</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td></td>
<td><strong>17</strong></td>
</tr>
<tr>
<td>Spring</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 3041</td>
<td>Differential Equations I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ECE 2112</td>
<td>Electrical Devices Systems I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ECE 2113</td>
<td>Electrical Devices Systems I Lab</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>ENGR 2332</td>
<td>Engineering Dynamics</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ENGR 2333</td>
<td>Mechanics of Solids</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MEE 2305</td>
<td>Measurements Dynamics Laboratory</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td></td>
<td><strong>14</strong></td>
</tr>
<tr>
<td>Year 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGR 3201</td>
<td>Material Science for Engineers</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ENGR 3571</td>
<td>Classical and Statistical Thermodynamics</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>STAT 2103</td>
<td>Statistical Business Analytics</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>MEE 3305</td>
<td>Materials Laboratory</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Business Elective</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td></td>
<td><strong>17</strong></td>
</tr>
<tr>
<td>Spring</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGR 3553</td>
<td>Mechanics of Fluids</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MEE 3506</td>
<td>Fluids and Energy Laboratory</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>ENGR 2196</td>
<td>Technical Communication [WI]</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ENGR 4169</td>
<td>Engineering Seminar</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Engineering Technical Elective 1</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td></td>
<td><strong>14</strong></td>
</tr>
<tr>
<td>Year 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGR 3001</td>
<td>Engineering Economics</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ENGR 4196</td>
<td>Senior Design Project I [WI]</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Engineering Technical Elective 2</td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Engineering Technical Elective 3</td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td>Spring</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGR 4296</td>
<td>Senior Design Project II [WI]</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Business Elective</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Engineering Technical Elective 4</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td><strong>Total Credit Hours:</strong></td>
<td></td>
<td></td>
<td><strong>124</strong></td>
</tr>
</tbody>
</table>
# Bachelor of Science in Engineering (B.S.E.) - Part-Time (Night) Engineering Fundamentals

## Basic Study Plan

### Requirements for New Students starting in the 2015-2016 Academic Year

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ENGR 1101</td>
<td>Introduction to Engineering Engineering Technology</td>
</tr>
<tr>
<td></td>
<td>MATH 1041</td>
<td>Calculus I</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MATH 1042</td>
<td>Calculus II</td>
</tr>
<tr>
<td></td>
<td>ENGR 1117</td>
<td>Engineering Graphics</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Summer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td></td>
</tr>
<tr>
<td>Year 2</td>
<td>Fall</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MATH 2043</td>
<td>Calculus III</td>
</tr>
<tr>
<td></td>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MATH 3041</td>
<td>Differential Equations I</td>
</tr>
<tr>
<td></td>
<td>PHYS 1062</td>
<td>Elementary Classical Physics II</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Summer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>STAT 2103</td>
<td>Statistical Business Analytics</td>
</tr>
<tr>
<td></td>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td></td>
</tr>
<tr>
<td>Year 3</td>
<td>Fall</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ENGR 2331</td>
<td>Engineering Statics</td>
</tr>
<tr>
<td></td>
<td>CHEM 1035</td>
<td>Chemistry for Engineers</td>
</tr>
<tr>
<td></td>
<td>CHEM 1033</td>
<td>General Chemistry Laboratory I</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ENGR 2333</td>
<td>Mechanics of Solids</td>
</tr>
<tr>
<td></td>
<td>ENGR 2011</td>
<td>Engineering Analysis Applications</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Summer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td></td>
</tr>
<tr>
<td>Year 4</td>
<td>Fall</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ENGR 3001</td>
<td>Engineering Economics</td>
</tr>
<tr>
<td></td>
<td>ENGR 3201</td>
<td>Material Science for Engineers</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ENGR 2332</td>
<td>Engineering Dynamics</td>
</tr>
</tbody>
</table>
ENGR 3571  Classical and Statistical Thermodynamics  3

**Term Credit Hours**  6

**Summer**
MEE 2305  Measurements Dynamics Laboratory  1
MEE 3305  Materials Laboratory  1
GenEd Breadth Course  3

**Term Credit Hours**  5

**Year 5**
**Fall**
ECE 2112  Electrical Devices Systems I  3
ECE 2113  Electrical Devices Systems I Lab  1
Free Elective  3

**Term Credit Hours**  7

**Spring**
ENGR 3553  Mechanics of Fluids  3
Engineering Technical Elective 1  3

**Term Credit Hours**  6

**Summer**
MEE 3506  Fluids and Energy Laboratory  1
ENGR 2196  Technical Communication [WI]  3

**Term Credit Hours**  4

**Year 6**
**Fall**
ENGR 4169  Engineering Seminar  1
GenEd Breadth Course  3
Free Elective  1

**Term Credit Hours**  5

**Spring**
ENGR 4196  Senior Design Project I [WI]  1
Engineering Technical Elective 2  4

**Term Credit Hours**  5

**Summer**
GenEd Breadth Course  3
Engineering Elective 3  4

**Term Credit Hours**  7

**Year 7**
**Fall**
ENGR 4296  Senior Design Project II [WI]  3
Business Elective  3

**Term Credit Hours**  6

**Spring**
Engineering Elective 4  3
Business Elective  3

**Term Credit Hours**  6

**Total Credit Hours:**  124

**Engineering (Undeclared)**
Shawn Fagan, Program Coordinator
Room 350, Engineering Building
215-204-7800
The College of Engineering has added an undeclared engineering program for those students interested in engineering but undecided on a particular field of study. Courses in this program have been determined for the first year only, since it is assumed that students will choose a curriculum following their first year of study.

Summary of Requirements

University Requirements

All new students are required to complete the university's General Education (GenEd (p. 143)) curriculum.

Suggested First-Year Courses for the Undeclared Engineering Program

Foundation for Undeclared Engineering Majors

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1042</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1035</td>
<td>Chemistry for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1033</td>
<td>General Chemistry Laboratory I</td>
<td>1</td>
</tr>
</tbody>
</table>

Select one of the following: 4

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 0802</td>
<td>Analytical Reading and Writing</td>
</tr>
<tr>
<td>ENG 0812</td>
<td>Analytical Reading and Writing: ESL</td>
</tr>
<tr>
<td>ENG 0902</td>
<td>Honors Literature/Reading/Writing</td>
</tr>
</tbody>
</table>

GenEd Requirements 6

Required First Year Engineering Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 1101</td>
<td>Introduction to Engineering &amp; Engineering Technology</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following: 2-4

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 1117</td>
<td>Engineering Graphics (Mechanical)</td>
</tr>
<tr>
<td>CEE 1105</td>
<td>Surveying (Civil)</td>
</tr>
<tr>
<td>CIS 1057</td>
<td>Computer Programming in C (Electrical)</td>
</tr>
</tbody>
</table>

Engineering Technology

Berk Ayranci, Program Coordinator
Room 529A, Engineering Building
215-204-7514
berk.ayranci@temple.edu

http://engineering.temple.edu/department/engineering-technology

Programs

- Bachelor of Science in Engineering Technology (p. 533)
- Bachelor of Science in Engineering Technology with Co-op (p. 536)

Bachelor of Science in Engineering Technology

Program Objectives

This program is offered on the Main Campus. Students may complete most of the required coursework at night on the main campus. The curriculum in Engineering Technology provides a broad base of technological skills extending across the traditional fields of engineering technology with a concentration designed by the student and program coordinator to meet personal and career objectives. A plan of study can be developed with a focused track such as construction, energy, general engineering, or computer.

The Engineering Technology Program is accredited by the Engineering Technology Accreditation Commission (ETAC) of ABET, http://www.abet.org.

Summary of Requirements

University Requirements

All new students are required to complete the university’s General Education (GenEd (p. 143)) curriculum.
All Temple students must take a minimum of two writing-intensive courses for a total of at least six credits. The writing-intensive course credits are counted as part of the major; they are not General Education (GenEd) or elective credits. The writing-intensive courses must be completed at Temple University and students may not transfer in credits to satisfy this requirement. The specific writing-intensive courses required for this major are:

- ENG 2696  Technical Writing  3
- ENGT 3396  Materials Technology  3
- ENGT 4196  Capstone Project  3

### College and Major Requirements

#### Foundation Science & Math Courses in Engineering Technology

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1022</td>
<td>Precalculus</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1042</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>STAT 2103</td>
<td>Statistical Business Analytics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1021</td>
<td>Introduction to General Physics I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1022</td>
<td>Introduction to General Physics II</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1031</td>
<td>General Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1033</td>
<td>General Chemistry Laboratory I</td>
<td>1</td>
</tr>
</tbody>
</table>

#### Required General Education Courses

Select one of the following:

- ENG 0802  Analytical Reading and Writing
- ENG 0812  Analytical Reading and Writing: ESL
- ENG 0902  Honors Literature/Reading/Writing
- IH 0851  Mosaic: Humanities Seminar I  3
  or IH 0951  Honors Mosaic: Humanities Seminar I
- IH 0852  Mosaic: Humanities Seminar II  3
  or IH 0952  Honors Mosaic: Humanities Seminar II

- GenEd 08xx or 09xx (U.S. Society)  3
- GenEd 08xx or 09xx (Global/World Society)  3
- GenEd 08xx or 09xx (Human Behavior)  3
- GenEd 08xx or 09xx (Arts)  3
- GenEd 08xx or 09xx (Race and Diversity)  3

#### Required Economics, Technical Writing, and Communication Courses for Engineering Technology

- ECON 1101  Macroeconomic Principles  3
  or ECON 1102  Microeconomic Principles
- ENG 2696  Technical Writing  3
- STRC 1111  Public Speaking  3

#### Required Engineering Courses for Engineering Technology

- ECE 2112  Electrical Devices & Systems I  3
- ECE 2113  Electrical Devices & Systems I Lab  1
- ENGR 1101  Introduction to Engineering & Engineering Technology  3
- ENGR 1117  Engineering Graphics  2
- ENGR 2331  Engineering Statics  3
- ENGR 2333  Mechanics of Solids  3
- ENGR 3001  Engineering Economics  3
- ENGT 2521  Applied Fluid Mechanics  3
  or ENGT 3532  Thermodynamics
- ENGT 3396  Materials Technology (WI)  3
- ENGT 4119  Professional Seminar  1
- ENGT 4196  Capstone Project  3

Select one of the following Approved Science Electives:

- CHEM 1032  General Chemistry II
  & CHEM 1034  and General Chemistry Laboratory II  4
ENST 2002  Physical Geography
Technical Electives (must include 3 labs)  24
Free Electives  6
Total Credit Hours  124

Suggested Academic Plan
Bachelor of Science in Engineering Technology
Requirements for New Students starting in the 2015-2016 Academic Year

Year 1
Fall  Credit Hours
MATH 1022  Precalculus  4
CHEM 1031  General Chemistry I  3
CHEM 1033  General Chemistry Laboratory I  1
ENGR 1101  Introduction to Engineering Engineering Technology  3
ENG 0802, 0812, or 0902  Analytical Reading and Writing [GW]  4

Term Credit Hours  15

Spring
MATH 1041  Calculus I  4
ENGR 1117  Engineering Graphics  2
IH 0851 or 0951  Mosaic: Humanities Seminar I [GY]  3
GenEd Breadth Course  3
Approved Free Elective  3

Term Credit Hours  15

Year 2
Fall
MATH 1042  Calculus II  4
PHYS 1021  Introduction to General Physics I  4
STRC 1111  Public Speaking  3
IH 0852 or 0952  Mosaic: Humanities Seminar II [GZ]  3
GenEd Breadth Course  3

Term Credit Hours  17

Spring
PHYS 1022  Introduction to General Physics II  4
ENGR 2331  Engineering Statics  3
Approved Technical Elective  3

Select one of the following:
ECON 1101  Macroeconomic Principles  3
ECON 1102  Microeconomic Principles  3

Select one of the following Approved Science Electives:  4
CHEM 1032  General Chemistry II
& CHEM 1034
ENST 2002  Physical Geography

Term Credit Hours  17

Year 3
Fall
Approved Technical Elective  3
STAT 2103  Statistical Business Analytics  4
ENGR 2333  Mechanics of Solids  3
ENGR 3001  Engineering Economics  3
GenEd Breadth Course  3

Term Credit Hours  16
**Spring**
ENGT 3396 Materials Technology [WI] 3
Select one of the following:
- ENGT 2521 Applied Fluid Mechanics 3
- ENGT 3532 Thermodynamics
ENGT 4119 Professional Seminar 1
Approved Technical Elective 3
GenEd Breadth Course 3
Approved Free Elective 3
**Term Credit Hours** 16

**Year 4**
**Fall**
ECE 2112 Electrical Devices Systems I 3
ECE 2113 Electrical Devices Systems I Lab 1
ENG 2696 Technical Writing [WI] 3
Approved Lab Elective 1
Approved Lab Elective 1
Approved Technical Elective 3
GenEd Breadth Course 3
**Term Credit Hours** 15

**Spring**
ENGT 4196 Capstone Project [WI] 3
Approved Technical Elective 3
Approved Technical Elective 3
Approved Technical Elective 3
Approved Lab Elective 1
**Term Credit Hours** 13

**Total Credit Hours:** 124

**Bachelor of Science in Engineering Technology with Co-op**

**Program Objectives**
This program is offered on the Main Campus. Students may complete most of the required coursework at night on the main campus. The curriculum in Engineering Technology provides a broad base of technological skills extending across the traditional fields of engineering technology with a concentration designed by the student and program coordinator to meet personal and career objectives. A plan of study can be developed with a focused track such as construction, computer, general engineering, or energy.

The Engineering Technology Program is accredited by the Engineering Technology Accreditation Commission (ETAC) of ABET, http://www.abet.org.

**Cooperative Education Program**
A Cooperative Education (Co-Op) is an optional program available at the College of Engineering where you have the opportunity to gain professional work experience before graduation. It is designed to give you the chance to apply the knowledge learned in the classroom to real life problems. You will be exposed to the latest technology and new ideas at a worksite helping you understand your field of work more extensively. During the Co-Op, you will make valuable connections with professionals in your field. A cooperative education can enhance and strengthen you academically, professionally and personally.

**Summary of Requirements**

**University Requirements**
All new students are required to complete the university's General Education (GenEd (p. 143)) curriculum.

All Temple students must take a minimum of two writing-intensive courses for a total of at least six credits. The writing-intensive course credits are counted as part of the major; they are not General Education (GenEd) or elective credits. The writing-intensive courses must be completed at Temple University and students may not transfer in credits to satisfy this requirement. The specific writing-intensive courses required for this major are:
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 2696</td>
<td>Technical Writing</td>
<td>3</td>
</tr>
<tr>
<td>ENGT 3396</td>
<td>Materials Technology</td>
<td>3</td>
</tr>
<tr>
<td>ENGT 4196</td>
<td>Capstone Project</td>
<td>3</td>
</tr>
</tbody>
</table>

**College and Major Requirements**

**Foundation Science & Math Courses in Engineering Technology**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1022</td>
<td>Precalculus</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1042</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>STAT 2103</td>
<td>Statistical Business Analytics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1021</td>
<td>Introduction to General Physics I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1022</td>
<td>Introduction to General Physics II</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1031</td>
<td>General Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1033</td>
<td>General Chemistry Laboratory I</td>
<td>1</td>
</tr>
</tbody>
</table>

**Required General Education Courses**

Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 0802</td>
<td>Analytical Reading and Writing</td>
<td>4</td>
</tr>
<tr>
<td>ENG 0812</td>
<td>Analytical Reading and Writing: ESL</td>
<td></td>
</tr>
<tr>
<td>ENG 0902</td>
<td>Honors Literature/Reading/Writing</td>
<td></td>
</tr>
<tr>
<td>IH 0851</td>
<td>Mosaic: Humanities Seminar I</td>
<td>3</td>
</tr>
<tr>
<td>IH 0951</td>
<td>Honors Mosaic: Humanities Seminar I</td>
<td></td>
</tr>
<tr>
<td>IH 0852</td>
<td>Mosaic: Humanities Seminar II</td>
<td>3</td>
</tr>
<tr>
<td>IH 0952</td>
<td>Honors Mosaic: Humanities Seminar II</td>
<td></td>
</tr>
</tbody>
</table>

- GenEd 08xx or 09xx (U.S. Society) 3
- GenEd 08xx or 09xx (Global/World Society) 3
- GenEd 08xx or 09xx (Human Behavior) 3
- GenEd 08xx or 09xx (Arts) 3
- GenEd 08xx or 09xx (Race and Diversity) 3

**Required Economics, Technical Writing, and Communication Courses for Engineering Technology**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 1101</td>
<td>Macroeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>or ECON 1102</td>
<td>Microeconomic Principles</td>
<td></td>
</tr>
<tr>
<td>ENG 2696</td>
<td>Technical Writing (WI)</td>
<td>3</td>
</tr>
<tr>
<td>STRC 1111</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
</tbody>
</table>

**Required Engineering Courses for Engineering Technology**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 2112</td>
<td>Electrical Devices &amp; Systems I</td>
<td>3</td>
</tr>
<tr>
<td>ECE 2113</td>
<td>Electrical Devices &amp; Systems I Lab</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 1101</td>
<td>Introduction to Engineering &amp; Engineering Technology</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 1117</td>
<td>Engineering Graphics</td>
<td>2</td>
</tr>
<tr>
<td>ENGR 2331</td>
<td>Engineering Statics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 2333</td>
<td>Mechanics of Solids</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3001</td>
<td>Engineering Economics</td>
<td>3</td>
</tr>
<tr>
<td>ENGT 2521</td>
<td>Applied Fluid Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>or ENGT 3532</td>
<td>Thermodynamics</td>
<td></td>
</tr>
<tr>
<td>ENGT 3396</td>
<td>Materials Technology (WI)</td>
<td>3</td>
</tr>
<tr>
<td>ENGT 4119</td>
<td>Professional Seminar</td>
<td>1</td>
</tr>
<tr>
<td>ENGT 4196</td>
<td>Capstone Project</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following Approved Science Electives:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1032</td>
<td>General Chemistry II</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 1034</td>
<td>General Chemistry Laboratory II</td>
<td></td>
</tr>
<tr>
<td>ENST 2002</td>
<td>Physical Geography</td>
<td></td>
</tr>
</tbody>
</table>

Technical Electives (must include 3 labs) 24

Free Electives 6
Cooperative Education

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 2181</td>
<td>Co-Op Work Experience I</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3181</td>
<td>Co-Op Work Experience II</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credit Hours:** 130

**Suggested Academic Plan**

Below is a suggested five-year plan for the Co-Op program leading to the Bachelor of Science in Engineering Technology. The minimum requirement for graduation is 130 semester hours.

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

**Bachelor of Science in Engineering Technology with Cooperative Education**

**Requirements for New Students starting in the 2015-2016 Academic Year**

**Year 1**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1022</td>
<td>Precalculus</td>
</tr>
<tr>
<td>CHEM 1031</td>
<td>General Chemistry I</td>
</tr>
<tr>
<td>CHEM 1033</td>
<td>General Chemistry Laboratory I</td>
</tr>
<tr>
<td>ENGR 1101</td>
<td>Introduction to Engineering Engineering Technology</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 15

<table>
<thead>
<tr>
<th>Spring</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
</tr>
<tr>
<td>ENGR 1117</td>
<td>Engineering Graphics</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>Approved Free Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 15

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>Credit Hours</td>
</tr>
<tr>
<td>MATH 1042</td>
<td>Calculus II</td>
</tr>
<tr>
<td>PHYS 1021</td>
<td>Introduction to General Physics I</td>
</tr>
<tr>
<td>STRC 1111</td>
<td>Public Speaking</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 17

<table>
<thead>
<tr>
<th>Spring</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 1022</td>
<td>Introduction to General Physics II</td>
</tr>
<tr>
<td>ENGR 2331</td>
<td>Engineering Statics</td>
</tr>
<tr>
<td>Approved Technical Elective</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1101</td>
<td>Macroeconomic Principles</td>
</tr>
<tr>
<td>ECON 1102</td>
<td>Microeconomic Principles</td>
</tr>
<tr>
<td>Select one of the following Approved Science Electives:</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1032</td>
<td>General Chemistry II</td>
</tr>
<tr>
<td>&amp; CHEM 1034</td>
<td></td>
</tr>
<tr>
<td>ENST 2002</td>
<td>Physical Geography</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 17

<table>
<thead>
<tr>
<th>Year 3</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>Credit Hours</td>
</tr>
<tr>
<td>Approved Technical Elective</td>
<td>3</td>
</tr>
<tr>
<td>STAT 2103</td>
<td>Statistical Business Analytics</td>
</tr>
</tbody>
</table>

**Total Credit Hours:** 130
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 2333</td>
<td>Mechanics of Solids</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3001</td>
<td>Engineering Economics</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>ENGT 3396</td>
<td>Materials Technology [WI]</td>
<td>3</td>
</tr>
<tr>
<td>ENGT 4119</td>
<td>Professional Seminar</td>
<td>1</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGT 2521</td>
<td>Applied Fluid Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>ENGT 3532</td>
<td>Thermodynamics</td>
<td></td>
</tr>
<tr>
<td>Approved Technical Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Approved Free Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Year 4</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>ENGR 2181</td>
<td>Co-Op Work Experience I</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>3</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>ENGR 3181</td>
<td>Co-Op Work Experience II</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>3</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Year 5</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>ECE 2112</td>
<td>Electrical Devices Systems I</td>
<td>3</td>
</tr>
<tr>
<td>ECE 2113</td>
<td>Electrical Devices Systems I Lab</td>
<td>1</td>
</tr>
<tr>
<td>ENG 2696</td>
<td>Technical Writing [WI]</td>
<td>3</td>
</tr>
<tr>
<td>Approved Lab Elective</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Approved Lab Elective</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Approved Technical Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>ENGT 4196</td>
<td>Capstone Project [WI]</td>
<td>3</td>
</tr>
<tr>
<td>Approved Technical Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Approved Technical Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Approved Technical Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Approved Lab Elective</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>13</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Total Credit Hours:</strong></td>
<td><strong>130</strong></td>
</tr>
</tbody>
</table>

**Mechanical Engineering**

Harsh Deep Chopra, Ph.D., Chair  
Room 612, Engineering Building  
215-204-6394  
chopra@temple.edu  

Vallorie Peridier, Ph.D., Undergraduate Coordinator  
Room 607A, Engineering Building  
215-204-7143  
peridier@temple.edu  

http://engineering.temple.edu/department/mechanical-engineering

**Program Goals, Objectives & Design Integration**

The mission of the Mechanical Engineering Department is to provide an excellent educational experience for the students in its programs. This experience includes an emphasis on the technical, communication, and teamwork skills that graduate engineers need to succeed, in both the workplace and society in general. In order to achieve these goals, the department places great importance on teaching, research, scholarship, engineering practice, and service to the university community and the Engineering profession. The mechanical engineering program is structured to prepare the graduate for the professional practice of engineering and/or graduate school. The curriculum emphasizes a rigorous treatment of the mathematical and scientific approach to the solution of engineering problems. It provides a coherent set of courses in energy conversion and structures/motion in mechanical systems. The program has design across the curriculum and is capped with an integrated design experience in the form of a senior project.

Most technical courses in the program are offered during the day only.

**Programs**

- Bachelor of Science in Mechanical Engineering (p. 540)
- Bachelor of Science in Mechanical Engineering - Biomechanics Concentration (p. 543)
- Bachelor of Science in Mechanical Engineering - Biomechanics Concentration with Co-op (p. 546)
- Bachelor of Science in Mechanical Engineering with Co-op (p. 549)

**Bachelor of Science in Mechanical Engineering**

**Summary of Requirements**

**University Requirements**

All new students are required to complete the university's General Education (GenEd (p. 143)) curriculum.

All Temple students must take a minimum of two writing-intensive courses for a total of at least six credits. The writing-intensive course credits are counted as part of the major; they are not General Education (GenEd) or elective credits. The writing-intensive courses must be completed at Temple University and students may not transfer in credits to satisfy this requirement. The specific writing-intensive courses required for this major are:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 2196</td>
<td>Technical Communication</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 4196</td>
<td>Senior Design Project I</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 4296</td>
<td>Senior Design Project II</td>
<td>3</td>
</tr>
</tbody>
</table>

**Department Requirements**

**Foundation Science & Math Courses for Mechanical Engineering**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1042</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 2043</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>MATH 3041</td>
<td>Differential Equations I</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1062</td>
<td>Elementary Classical Physics II</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1035</td>
<td>Chemistry for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1033</td>
<td>General Chemistry Laboratory I</td>
<td>1</td>
</tr>
</tbody>
</table>

**Required General Education Courses**

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 4196</td>
<td>Technical Communication</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 4296</td>
<td>Senior Design Project I</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 4296</td>
<td>Senior Design Project II</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GenEd 08xx or 09xx (U.S. Society)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd 08xx or 09xx (Global/World Society)</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>
GenEd 08xx or 09xx (Human Behavior) 3
GenEd 08xx or 09xx (The Arts) 3
GenEd 08xx or 09xx (Race and Diversity) 3

**Required Engineering Courses for Mechanical Engineering**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEE 2011</td>
<td>Linear Systems</td>
<td>3</td>
</tr>
<tr>
<td>MEE 2305</td>
<td>Measurements &amp; Dynamics Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>MEE 3301</td>
<td>Machine Theory and Design</td>
<td>3</td>
</tr>
<tr>
<td>MEE 3305</td>
<td>Materials Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>MEE 3421</td>
<td>Dynamic Systems</td>
<td>3</td>
</tr>
<tr>
<td>MEE 3506</td>
<td>Fluids and Energy Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>MEE 4572</td>
<td>Heat and Mass Transfer</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following: 4

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEE 4422 &amp; MEE 4405</td>
<td>Mechanical Vibrations and Vibrations and Controls Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>MEE 4571 &amp; MEE 4506</td>
<td>Advanced Thermodynamics and Combustion and Energy Conversion Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ECE 2112</td>
<td>Electrical Devices &amp; Systems I</td>
<td>3</td>
</tr>
<tr>
<td>ECE 2113</td>
<td>Electrical Devices &amp; Systems I Lab</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 1101</td>
<td>Introduction to Engineering &amp; Engineering Technology</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 1117</td>
<td>Engineering Graphics</td>
<td>2</td>
</tr>
<tr>
<td>ENGR 2196</td>
<td>Technical Communication</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 2331</td>
<td>Engineering Statics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 2332</td>
<td>Engineering Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 2333</td>
<td>Mechanics of Solids</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3001</td>
<td>Engineering Economics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3117</td>
<td>Computer-Aided Design (CAD)</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3201</td>
<td>Material Science for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3553</td>
<td>Mechanics of Fluids</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3571</td>
<td>Classical and Statistical Thermodynamics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 4169</td>
<td>Engineering Seminar</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 4196</td>
<td>Senior Design Project I (WI)</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 4296</td>
<td>Senior Design Project II (WI)</td>
<td>3</td>
</tr>
</tbody>
</table>

Free Elective (minimum of 2 hours) 2

**Mechanical Engineering Technical Electives** 9

**Total Credit Hours** 124

---

1 Students in the Bachelor of Science in Mechanical Engineering Program must take either of the following sequences of courses (excludes Biomechanics concentration):
   - MEE 4422 (technical elective; offered every Fall semester) and MEE 4405 (lab elective)
   - MEE 4571 (technical elective; offered every Spring semester) and MEE 4506 (lab elective).

2 ENGR 3033 is highly recommended as the free elective. ENGR 3033 is offered every semester.

---

**Suggested Academic Plan**

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

**Bachelor of Science in Mechanical Engineering**

**Requirements for New Students starting in the 2015-2016 Academic Year**

**Year 1**

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1035</td>
<td>Chemistry for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1033</td>
<td>General Chemistry Laboratory I</td>
<td>1</td>
</tr>
<tr>
<td>Course</td>
<td>Title</td>
<td>Credits</td>
</tr>
<tr>
<td>------------------------</td>
<td>-----------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>ENGR 1101</td>
<td>Introduction to Engineering Engineering Technology</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 0801 or 0901, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

### Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 1117</td>
<td>Engineering Graphics</td>
<td>2</td>
</tr>
<tr>
<td>MATH 1042</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

### Year 2

#### Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 2043</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1062</td>
<td>Elementary Classical Physics II</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 2331</td>
<td>Engineering Statics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 2196</td>
<td>Technical Communication [WI]</td>
<td>3</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

### Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 3041</td>
<td>Differential Equations I</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3571</td>
<td>Classical and Statistical Thermodynamics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 2333</td>
<td>Mechanics of Solids</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 2332</td>
<td>Engineering Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>MEE 2305</td>
<td>Measurements Dynamics Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

### Year 3

#### Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 2112</td>
<td>Electrical Devices Systems I</td>
<td>3</td>
</tr>
<tr>
<td>ECE 2113</td>
<td>Electrical Devices Systems I Lab</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 3553</td>
<td>Mechanics of Fluids</td>
<td>3</td>
</tr>
<tr>
<td>MEE 3506</td>
<td>Fluids and Energy Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>MEE 2011</td>
<td>Linear Systems</td>
<td>3</td>
</tr>
<tr>
<td>MEE 3301</td>
<td>Machine Theory and Design</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>14</strong></td>
</tr>
</tbody>
</table>

### Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEE 3421</td>
<td>Dynamic Systems</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3201</td>
<td>Material Science for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>MEE 3305</td>
<td>Materials Laboratory</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3117</td>
<td>Computer-Aided Design (CAD)</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 4169</td>
<td>Engineering Seminar</td>
<td>1</td>
</tr>
<tr>
<td>Mechanical Engineering Technical Elective #1</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

### Year 4

#### Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 3001</td>
<td>Engineering Economics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 4196</td>
<td>Senior Design Project I [WI]</td>
<td>1</td>
</tr>
<tr>
<td>MEE 4572</td>
<td>Heat and Mass Transfer</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:¹</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>MEE 4422</td>
<td>Mechanical Vibrations</td>
<td></td>
</tr>
<tr>
<td>&amp; MEE 4405</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>
OR Mechanical Engineering Technical Elective #2
GenEd Breadth Course

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
</tr>
</tbody>
</table>

**Spring**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 4296</td>
<td>Senior Design Project II [WI]</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:¹</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>MEE 4571</td>
<td>Advanced Thermodynamics and Combustion</td>
<td></td>
</tr>
<tr>
<td>&amp; MEE 4506</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OR Mechanical Engineering Technical Elective #3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MEE Technical Elective #4</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Free Elective²</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

**Total Credit Hours:**

124

¹ Either MEE 4422 & MEE 4405 (in Fall) OR MEE 4571 & MEE 4506 (in Spring) are required in the Mechanical Engineering Program. When the choice is made, one credit of free elective replaces the lab in the other term.

² ENGR 3033 is highly recommended as the free elective. ENGR 3033 is offered every semester.

**Bachelor of Science in Mechanical Engineering - Biomechanics Concentration**

**Summary of Requirements**

**University Requirements**

All new students are required to complete the university's General Education (GenEd (p. 143)) curriculum.

All Temple students must take a minimum of two writing-intensive courses for a total of at least six credits. The writing-intensive course credits are counted as part of the major; they are not General Education (GenEd) or elective credits. The writing-intensive courses must be completed at Temple University and students may not transfer in credits to satisfy this requirement. The specific writing-intensive courses required for this major are:

ENGR 2196 Technical Communication 3
ENGR 4196 Senior Design Project I 1
ENGR 4296 Senior Design Project II 3

**Department Requirements**

Students are required to complete a minimum of 124 credit hours for the optional Concentration in Biomechanics within the Bachelor of Science in Mechanical Engineering program.

**Foundation Science & Math Courses for Mechanical Engineering**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1042</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 2043</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>MATH 3041</td>
<td>Differential Equations I</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1062</td>
<td>Elementary Classical Physics II</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1035</td>
<td>Chemistry for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1033</td>
<td>General Chemistry Laboratory I</td>
<td>1</td>
</tr>
</tbody>
</table>

**Required General Education Courses**

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 0802</td>
<td>Analytical Reading and Writing</td>
<td>4</td>
</tr>
<tr>
<td>ENG 0812</td>
<td>Analytical Reading and Writing: ESL</td>
<td></td>
</tr>
<tr>
<td>ENG 0902</td>
<td>Honors Literature/Reading/Writing</td>
<td></td>
</tr>
<tr>
<td>IH 0851</td>
<td>Mosaic: Humanities Seminar I</td>
<td>3</td>
</tr>
<tr>
<td>or IH 0951</td>
<td>Honors Mosaic: Humanities Seminar I</td>
<td></td>
</tr>
</tbody>
</table>
IH 0852 Mosaic: Humanities Seminar II 3  
or IH 0952 Honors Mosaic: Humanities Seminar II 3  
GenEd 08xx or 09xx (U.S. Society) 3  
GenEd 08xx or 09xx (Global/World Society) 3  
GenEd 08xx or 09xx (Human Behavior) 3  
GenEd 08xx or 09xx (The Arts) 3  
GenEd 08xx or 09xx (Race and Diversity) 3  

**Required Engineering Courses for Mechanical Engineering**

- MEE 2011 Linear Systems 3  
- MEE 2305 Measurements & Dynamics Laboratory 1  
- MEE 3301 Machine Theory and Design 3  
- MEE 3305 Materials Laboratory 1  
- MEE 3421 Dynamic Systems 3  
- MEE 3506 Fluids and Energy Laboratory 1  
- MEE 4572 Heat and Mass Transfer 3  
- ECE 2112 Electrical Devices & Systems I 3  
- ECE 2113 Electrical Devices & Systems I Lab 1  
- ENGR 1101 Introduction to Engineering & Engineering Technology 3  
- ENGR 1117 Engineering Graphics 2  
- ENGR 2196 Technical Communication 3  
- ENGR 2331 Engineering Statics 3  
- ENGR 2332 Engineering Dynamics 3  
- ENGR 2333 Mechanics of Solids 3  
- ENGR 3001 Engineering Economics 3  
- ENGR 3117 Computer-Aided Design (CAD) 3  
- ENGR 3201 Material Science for Engineers 3  
- ENGR 3553 Mechanics of Fluids 3  
- ENGR 3571 Classical and Statistical Thermodynamics 3  
- ENGR 4169 Engineering Seminar 1  
- ENGR 4196 Senior Design Project I (WI) 1  
- ENGR 4296 Senior Design Project II (WI) 3  

Free Elective 1 3  

**Required Courses for the Biomechanics Concentration**

- BIOE 3719 Introduction to Bioengineering 3  
- BIOE 3725 Cell Biology for Engineers 3  
- BIOL 3334 Mammalian Physiology 4  

Select one of the following: 3  

- BIOE 4741 Biomaterials for Engineers  
- MEE 4731 Cardiovascular Fluid Dynamics  

**Total Credit Hours** 124  

1 ENGR 3033 is highly recommended as the free elective. ENGR 3033 is offered every semester.  

**Suggested Academic Plan**

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.  

**Bachelor of Science in Mechanical Engineering: Biomechanics Concentration**

**Requirements for New Students starting in the 2015-2016 Academic Year**

**Year 1**

**Fall**  

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1035</td>
<td>Chemistry for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>CHEM 1033</td>
<td>General Chemistry Laboratory I</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 1101</td>
<td>Introduction to Engineering Engineering Technology</td>
<td>3</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td>Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGR 1117</td>
<td>Engineering Graphics</td>
<td>2</td>
</tr>
<tr>
<td>MATH 1042</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td>Year 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 2043</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1062</td>
<td>Elementary Classical Physics II</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 2331</td>
<td>Engineering Statics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 2196</td>
<td>Technical Communication [WI]</td>
<td>3</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>17</strong></td>
</tr>
<tr>
<td>Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 3041</td>
<td>Differential Equations I</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 2332</td>
<td>Engineering Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>MEE 2305</td>
<td>Measurements Dynamics Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 2333</td>
<td>Mechanics of Solids</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3571</td>
<td>Classical and Statistical Thermodynamics</td>
<td>3</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td>Year 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECE 2112</td>
<td>Electrical Devices Systems I</td>
<td>3</td>
</tr>
<tr>
<td>ECE 2113</td>
<td>Electrical Devices Systems I Lab</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 3553</td>
<td>Mechanics of Fluids</td>
<td>3</td>
</tr>
<tr>
<td>MEE 3506</td>
<td>Fluids and Energy Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>MEE 3301</td>
<td>Machine Theory and Design</td>
<td>3</td>
</tr>
<tr>
<td>MEE 2011</td>
<td>Linear Systems</td>
<td>3</td>
</tr>
<tr>
<td>BIOE 3719</td>
<td>Introduction to Bioengineering</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>17</strong></td>
</tr>
<tr>
<td>Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MEE 3421</td>
<td>Dynamic Systems</td>
<td>3</td>
</tr>
<tr>
<td>MEE 3305</td>
<td>Materials Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 3201</td>
<td>Material Science for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3117</td>
<td>Computer-Aided Design (CAD)</td>
<td>3</td>
</tr>
<tr>
<td>BIOE 3725</td>
<td>Cell Biology for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 4169</td>
<td>Engineering Seminar</td>
<td>1</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>17</strong></td>
</tr>
<tr>
<td>Year 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGR 3001</td>
<td>Engineering Economics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 4196</td>
<td>Senior Design Project I [WI]</td>
<td>1</td>
</tr>
<tr>
<td>MEE 4572</td>
<td>Heat and Mass Transfer</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 3334</td>
<td>Mammalian Physiology</td>
<td>4</td>
</tr>
</tbody>
</table>
**GenEd Breadth Course**

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
</tr>
</tbody>
</table>

**Spring**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 4296</td>
<td>Senior Design Project II [WI]</td>
</tr>
</tbody>
</table>

**GenEd Breadth Course**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 4296</td>
<td>Senior Design Project II [WI]</td>
</tr>
</tbody>
</table>

**Free Elective**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOE 4741</td>
<td>Biomaterials for Engineers</td>
</tr>
<tr>
<td>MEE 4731</td>
<td>Cardiovascular Fluid Dynamics</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

| 3            |

**Total Credit Hours**

| 124          |

1. ENGR 3033 is highly recommended as the free elective. ENGR 3033 is offered every semester.

**Bachelor of Science in Mechanical Engineering - Biomechanics Concentration with Co-op**

**Cooperative Education Program**

A Cooperative Education (Co-Op) is an optional program available at the College of Engineering where you have the opportunity to gain professional work experience before graduation. It is designed to give you the chance to apply the knowledge learned in the classroom to real life problems. You will be exposed to the latest technology and new ideas at a worksite helping you understand your field of work more extensively. During the Co-Op, you will make valuable connections with professionals in your field. A cooperative education can enhance and strengthen you academically, professionally and personally.

**Summary of Requirements**

**University Requirements**

All new students are required to complete the university’s General Education (GenEd (p. 143)) curriculum.

All Temple students must take a minimum of two writing-intensive courses for a total of at least six credits. The writing-intensive course credits are counted as part of the major; they are not General Education (GenEd) or elective credits. The writing-intensive courses must be completed at Temple University and students may not transfer in credits to satisfy this requirement. The specific writing-intensive courses required for this major are:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 2196</td>
<td>Technical Communication</td>
</tr>
<tr>
<td>ENGR 4196</td>
<td>Senior Design Project I</td>
</tr>
<tr>
<td>ENGR 4296</td>
<td>Senior Design Project II</td>
</tr>
</tbody>
</table>

**Department Requirements**

Students are required to complete a minimum of 130 credit hours for the Cooperative Education program within the Bachelor of Science in Mechanical Engineering with a concentration in Biomechanics.

**Foundation Science & Math Courses for Mechanical Engineering**

<table>
<thead>
<tr>
<th>Math Code</th>
<th>Math Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
</tr>
<tr>
<td>MATH 1042</td>
<td>Calculus II</td>
</tr>
<tr>
<td>MATH 2043</td>
<td>Calculus III</td>
</tr>
<tr>
<td>MATH 3041</td>
<td>Differential Equations I</td>
</tr>
<tr>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I</td>
</tr>
<tr>
<td>PHYS 1062</td>
<td>Elementary Classical Physics II</td>
</tr>
<tr>
<td>CHEM 1035</td>
<td>Chemistry for Engineers</td>
</tr>
<tr>
<td>CHEM 1033</td>
<td>General Chemistry Laboratory I</td>
</tr>
</tbody>
</table>

**Required General Education Courses**

Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 0802</td>
<td>Analytical Reading and Writing</td>
</tr>
<tr>
<td>ENG 0812</td>
<td>Analytical Reading and Writing: ESL</td>
</tr>
<tr>
<td>ENG 0902</td>
<td>Honors Literature/Reading/Writing</td>
</tr>
</tbody>
</table>
### Required Courses for the Mechanical Engineering

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEE 2011</td>
<td>Linear Systems</td>
<td>3</td>
</tr>
<tr>
<td>MEE 2305</td>
<td>Measurements &amp; Dynamics Laboratory</td>
<td>3</td>
</tr>
<tr>
<td>MEE 3301</td>
<td>Machine Theory and Design</td>
<td>3</td>
</tr>
<tr>
<td>MEE 3305</td>
<td>Materials Laboratory</td>
<td>3</td>
</tr>
<tr>
<td>MEE 3421</td>
<td>Dynamic Systems</td>
<td>3</td>
</tr>
<tr>
<td>MEE 3506</td>
<td>Fluids and Energy Laboratory</td>
<td>3</td>
</tr>
<tr>
<td>MEE 4572</td>
<td>Heat and Mass Transfer</td>
<td>3</td>
</tr>
<tr>
<td>ECE 2112</td>
<td>Electrical Devices &amp; Systems I</td>
<td>3</td>
</tr>
<tr>
<td>ECE 2113</td>
<td>Electrical Devices &amp; Systems I Lab</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 1101</td>
<td>Introduction to Engineering &amp; Engineering Technology</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 1117</td>
<td>Engineering Graphics</td>
<td>2</td>
</tr>
<tr>
<td>ENGR 2196</td>
<td>Technical Communication</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 2331</td>
<td>Engineering Statics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 2332</td>
<td>Engineering Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 2333</td>
<td>Mechanics of Solids</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3001</td>
<td>Engineering Economics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3117</td>
<td>Computer-Aided Design (CAD)</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3201</td>
<td>Material Science for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3553</td>
<td>Mechanics of Fluids</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3571</td>
<td>Classical and Statistical Thermodynamics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 4169</td>
<td>Engineering Seminar</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 4196</td>
<td>Senior Design Project I (WI)</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 4296</td>
<td>Senior Design Project II (WI)</td>
<td>3</td>
</tr>
</tbody>
</table>

Free Elective

### Required Courses for the Biomechanics Concentration

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOE 3719</td>
<td>Introduction to Bioengineering</td>
<td>3</td>
</tr>
<tr>
<td>BIOE 3725</td>
<td>Cell Biology for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 3334</td>
<td>Mammalian Physiology</td>
<td>4</td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOE 4741</td>
<td>Biomaterials for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>MEE 4731</td>
<td>Cardiovascular Fluid Dynamics</td>
<td>3</td>
</tr>
</tbody>
</table>

### Cooperative Education

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 2181</td>
<td>Co-Op Work Experience I</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3181</td>
<td>Co-Op Work Experience II</td>
<td>3</td>
</tr>
</tbody>
</table>

### Total Credit Hours

130

---

1 ENGR 3033 is highly recommended as the free elective. ENGR 3033 is offered every semester.

**Suggested Academic Plan**

Below is the five-year academic plan for the Co-Op program leading to the Bachelor of Science in Mechanical Engineering with a concentration in Biomechanics. The minimum requirement for graduation is 130 semester hours.
Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

**Bachelor of Science in Mechanical Engineering: Biomechanics Concentration with Cooperative Education**

**Requirements for New Students starting in the 2015-2016 Academic Year**

<table>
<thead>
<tr>
<th>Year 1</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1035</td>
<td>Chemistry for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1033</td>
<td>General Chemistry Laboratory I</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 1101</td>
<td>Introduction to Engineering Engineering Technology</td>
<td>3</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGR 1117</td>
<td>Engineering Graphics</td>
<td>2</td>
</tr>
<tr>
<td>MATH 1042</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>16</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 2043</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1062</td>
<td>Elementary Classical Physics II</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 2331</td>
<td>Engineering Statics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 2196</td>
<td>Technical Communication [WI]</td>
<td>3</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>17</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 3041</td>
<td>Differential Equations I</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3571</td>
<td>Classical and Statistical Thermodynamics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 2333</td>
<td>Mechanics of Solids</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 2332</td>
<td>Engineering Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>MEE 2305</td>
<td>Measurements Dynamics Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>16</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECE 2112</td>
<td>Electrical Devices Systems I</td>
<td>3</td>
</tr>
<tr>
<td>ECE 2113</td>
<td>Electrical Devices Systems I Lab</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 3553</td>
<td>Mechanics of Fluids</td>
<td>3</td>
</tr>
<tr>
<td>MEE 3506</td>
<td>Fluids and Energy Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>MEE 3301</td>
<td>Machine Theory and Design</td>
<td>3</td>
</tr>
<tr>
<td>MEE 2011</td>
<td>Linear Systems</td>
<td>3</td>
</tr>
<tr>
<td>BIOE 3719</td>
<td>Introduction to Bioengineering</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>17</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MEE 3421</td>
<td>Dynamic Systems</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3201</td>
<td>Material Science for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>MEE 3305</td>
<td>Materials Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 3117</td>
<td>Computer-Aided Design (CAD)</td>
<td>3</td>
</tr>
<tr>
<td>BIOE 3725</td>
<td>Cell Biology for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
</tr>
<tr>
<td>-------------</td>
<td>---------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>ENGR 4169</td>
<td>Engineering Seminar</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>14</strong></td>
</tr>
<tr>
<td><strong>Year 4</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGR 2181</td>
<td>Co-Op Work Experience I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>3</strong></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGR 3181</td>
<td>Co-Op Work Experience II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>3</strong></td>
</tr>
<tr>
<td><strong>Year 5</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGR 3001</td>
<td>Engineering Economics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 4196</td>
<td>Senior Design Project I [WI]</td>
<td>1</td>
</tr>
<tr>
<td>MEE 4572</td>
<td>Heat and Mass Transfer</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 3334</td>
<td>Mammalian Physiology</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>14</strong></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGR 4296</td>
<td>Senior Design Project II [WI]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Free Elective¹</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOE 4741</td>
<td>Biomaterials for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>MEE 4731</td>
<td>Cardiovascular Fluid Dynamics</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td><strong>Total Credit Hours:</strong></td>
<td></td>
<td><strong>130</strong></td>
</tr>
</tbody>
</table>

¹ ENGR 3033 is highly recommended as the free elective. ENGR 3033 is offered every semester.

**Bachelor of Science in Mechanical Engineering with Co-op**

**Cooperative Education Program**

A Cooperative Education (Co-Op) is an optional program available at the College of Engineering where you have the opportunity to gain professional work experience before graduation. It is designed to give you the chance to apply the knowledge learned in the classroom to real life problems. You will be exposed to the latest technology and new ideas at a worksite helping you understand your field of work more extensively. During the Co-Op, you will make valuable connections with professionals in your field. A cooperative education can enhance and strengthen you academically, professionally and personally.

**Summary of Requirements**

**University Requirements**

All new students are required to complete the university's General Education (GenEd (p. 143)) curriculum.

All Temple students must take a minimum of two writing-intensive courses for a total of at least six credits. The writing-intensive course credits are counted as part of the major; they are not General Education (GenEd) or elective credits. The writing-intensive courses must be completed at Temple University and students may not transfer in credits to satisfy this requirement. The specific writing-intensive courses required for this major are:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 2196</td>
<td>Technical Communication</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 4196</td>
<td>Senior Design Project I</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 4296</td>
<td>Senior Design Project II</td>
<td>3</td>
</tr>
</tbody>
</table>

**Department Requirements**

**Foundation Science & Math Courses for Mechanical Engineering**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>Course</td>
<td>Title</td>
<td>Units</td>
</tr>
<tr>
<td>----------</td>
<td>--------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>MATH 1042</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 2043</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>MATH 3041</td>
<td>Differential Equations I</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1062</td>
<td>Elementary Classical Physics II</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1035</td>
<td>Chemistry for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1033</td>
<td>General Chemistry Laboratory I</td>
<td>1</td>
</tr>
<tr>
<td><strong>Required General Education Courses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EngEd 08xx or 09xx (U.S. Society)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>EngEd 08xx or 09xx (Global/World Society)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>EngEd 08xx or 09xx (Human Behavior)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd 08xx or 09xx (The Arts)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd 08xx or 09xx (Race and Diversity)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Required Engineering Courses for Mechanical Engineering</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MEE 2011</td>
<td>Linear Systems</td>
<td>3</td>
</tr>
<tr>
<td>MEE 2305</td>
<td>Measurements &amp; Dynamics Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>MEE 3301</td>
<td>Machine Theory and Design</td>
<td>3</td>
</tr>
<tr>
<td>MEE 3305</td>
<td>Materials Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>MEE 3421</td>
<td>Dynamic Systems</td>
<td>3</td>
</tr>
<tr>
<td>MEE 3506</td>
<td>Fluids and Energy Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>MEE 4572</td>
<td>Heat and Mass Transfer</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MEE 4422 &amp; MEE 4405</td>
<td>Mechanical Vibrations and Vibrations and Controls Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>MEE 4571 &amp; MEE 4506</td>
<td>Advanced Thermodynamics and Combustion and Energy Conversion Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>ECE 2112</td>
<td>Electrical Devices &amp; Systems I</td>
<td>3</td>
</tr>
<tr>
<td>ECE 2113</td>
<td>Electrical Devices &amp; Systems I Lab</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 1101</td>
<td>Introduction to Engineering &amp; Engineering Technology</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 1117</td>
<td>Engineering Graphics</td>
<td>2</td>
</tr>
<tr>
<td>ENGR 2196</td>
<td>Technical Communication</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 2331</td>
<td>Engineering Statics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 2332</td>
<td>Engineering Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 2333</td>
<td>Mechanics of Solids</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3001</td>
<td>Engineering Economics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3117</td>
<td>Computer-Aided Design (CAD)</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3201</td>
<td>Material Science for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3553</td>
<td>Mechanics of Fluids</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3571</td>
<td>Classical and Statistical Thermodynamics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 4169</td>
<td>Engineering Seminar</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 4196</td>
<td>Senior Design Project I (WI)</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 4296</td>
<td>Senior Design Project II (WI)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Mechanical Engineering Technical Electives</strong></td>
<td>9</td>
<td></td>
</tr>
<tr>
<td><strong>Free Elective</strong></td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>
Cooperative Education

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 2181</td>
<td>Co-Op Work Experience I</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3181</td>
<td>Co-Op Work Experience II</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credit Hours**: 130

1. Students in the Bachelor of Science in Mechanical Engineering Program must take either of the following sequences of courses (excludes Biomechanics concentration):
   - MEE 4422 (technical elective; offered every Fall semester) and MEE 4405 (lab elective)
   - OR
   - MEE 4571 (technical elective; offered every Spring semester) and MEE 4506 (lab elective).

2. ENGR 3033 is highly recommended as the free elective. ENGR 3033 is offered every semester.

**Suggested Academic Plan**

Below is the five-year academic plan for the Co-Op program leading to the Bachelor of Science in Mechanical Engineering. The minimum requirement for graduation is 130 semester hours.

Please note that this is a *suggested* academic plan. Depending on your situation, your academic plan may look different.

**Bachelor of Science in Mechanical Engineering with Cooperative Education**

**Requirements for New Students starting in the 2015-2016 Academic Year**

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1035</td>
<td>Chemistry for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1033</td>
<td>General Chemistry Laboratory I</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 1101</td>
<td>Introduction to Engineering Engineering Technology</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

| | Spring | |
| | ENGR 1117 | Engineering Graphics | 2 |
| | MATH 1042 | Calculus II | 4 |
| | PHYS 1061 | Elementary Classical Physics I | 4 |
| | GenEd Breadth Course | GenEd Breadth Course | 3 |

| | **Term Credit Hours** | **16** |

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 2043</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1062</td>
<td>Elementary Classical Physics II</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 2331</td>
<td>Engineering Statics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 2196</td>
<td>Technical Communication [WI]</td>
<td>3</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

| | Spring | |
| | MATH 3041 | Differential Equations I | 3 |
| | ENGR 3571 | Classical and Statistical Thermodynamics | 3 |
| | ENGR 2333 | Mechanics of Solids | 3 |
| | ENGR 2332 | Engineering Dynamics | 3 |
| | MEE 2305 | Measurements Dynamics Laboratory | 1 |
| | IH 0852 or 0952 | Mosaic: Humanities Seminar II [GZ] | 3 |

| | **Term Credit Hours** | **16** |

| Year 3 | Fall | |
|--------|------||


<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 2112</td>
<td>Electrical Devices Systems I</td>
<td>3</td>
</tr>
<tr>
<td>ECE 2113</td>
<td>Electrical Devices Systems I Lab</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 3553</td>
<td>Mechanics of Fluids</td>
<td>3</td>
</tr>
<tr>
<td>MEE 3506</td>
<td>Fluids and Energy Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>MEE 2011</td>
<td>Linear Systems</td>
<td>3</td>
</tr>
<tr>
<td>MEE 3301</td>
<td>Machine Theory and Design</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 14

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEE 3421</td>
<td>Dynamic Systems</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3201</td>
<td>Material Science for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>MEE 3305</td>
<td>Materials Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 3117</td>
<td>Computer-Aided Design (CAD)</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 4169</td>
<td>Engineering Seminar</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Mechanical Engineering Technical Elective #1</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 17

**Year 4**

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 2181</td>
<td>Co-Op Work Experience I</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 3

**Spring**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 3181</td>
<td>Co-Op Work Experience II</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 3

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 3001</td>
<td>Engineering Economics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 4196</td>
<td>Senior Design Project I [WI]</td>
<td>1</td>
</tr>
<tr>
<td>MEE 4572</td>
<td>Heat and Mass Transfer</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Select one of the following:¹</td>
<td>4</td>
</tr>
<tr>
<td>MEE 4422</td>
<td>Mechanical Vibrations</td>
<td></td>
</tr>
<tr>
<td>&amp; MEE 4405</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OR Mechanical Engineering Technical Elective #2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 14

**Spring**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 4296</td>
<td>Senior Design Project II [WI]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Select one of the following:¹</td>
<td>4</td>
</tr>
<tr>
<td>MEE 4571</td>
<td>Advanced Thermodynamics and Combustion</td>
<td></td>
</tr>
<tr>
<td>&amp; MEE 4506</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OR Mechanical Engineering Technical Elective #3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanical Engineering Technical Elective #4</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Free Elective²</td>
<td></td>
<td>2</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 15

**Total Credit Hours:** 130

¹ Either MEE 4422 & MEE 4405 (in Fall) OR MEE 4571 & MEE 4506 (in Spring) are required in the Mechanical Engineering Program. When the choice is made, one credit of free elective replaces the lab in the other term.

² ENGR 3033 is highly recommended as the free elective. ENGR 3033 is offered every semester.
Fox School of Business & Management

Founded 1918

M. Moshe Porat, Dean
362 Alter Hall
1801 Liacouras Walk
215-204-7676
www.fox.temple.edu

Accreditation

Established in 1918, the Fox School of Business and Management at Temple University has a distinguished tradition of preparing business leaders, professionals and entrepreneurs for successful careers. Today, it is the largest, most comprehensive business school in the greater Philadelphia region, and among the largest in the world with 6,500 students, 175 full-time faculty and more than 59,000 alumni. Accredited by AACSB International — Association to Advance Collegiate Schools of Business — the Fox School offers BBA, MBA, Executive MBA, International MBA, Online MBA, MBA/MS, MS and PhD programs on campuses throughout the region and around the world.

Vision

With nearly a hundred years of history behind us, our vision is to be a top public urban business school in the country, and among the leading business schools in the world.

Values

We transform lives by creating and sharing knowledge, while instilling values that prepare leaders for tomorrow’s world. Our vision and values guide our teaching, research and school management.

• Excellence: We value excellence in teaching, research, and school management.
• Creativity: We value innovation and creative thinking.
• An entrepreneurial culture: We value effective decision-making and entrepreneurial implementation of ideas.
• Ethical behavior and respect for others: We value ethical practice and respect for diverse perspectives.
• Community Engagement: We value building partnerships with all stakeholders and the community we serve.

Mission Statement

Transform lives through education. Russell Conwell’s mission was to provide a gateway to opportunity for talented and determined students, including those with lesser financial means. We build on this mission, making sure our students acquire the skills they will need in the global marketplace.

We are committed to the following:

• Providing quality, student-centered business education.
• Engaging in relevant research and advanced doctoral training and expanding the frontiers of knowledge and business education.
• Extending our education, research and outreach efforts to be responsive to the driving forces of our economy including globalization, sustainability, ethics, entrepreneurship, innovation, and technology.
• Integrating leading-edge information technology into teaching, learning, research, and school management necessary for managing in an increasingly competitive, dynamic, global economy.
• Providing the best professional development and career management opportunities for our students, faculty, and staff with special efforts to facilitate development of ethical values, social networking skills, and leadership.
• Linking, through our curriculum, research and outreach to the dominant and growth industries in our region: financial services, healthcare, pharmaceuticals/biotechnology, information technology, and tourism.
• Engaging our diverse stakeholders to improve our school and serve our community.

Learning Goals and Assurance of Learning

The four main learning goals for the Bachelor of Business Administration Program seek to assure students will:

• Understand critical business concepts.
• Apply critical thinking to business problems.
• Demonstrate effective oral and written communication.
• Understand the ethical, legal, and social responsibilities of individuals and organizations.
Specific learning objectives include:

- **Understand critical business concepts**
  - Apply a core body of discipline-specific knowledge to business situations.
  - Recognize the competitive and operational role of organizational information systems.
  - Apply quantitative analysis and interpretation to business problems.

- **Apply critical thinking to business problems**
  - Interpret an enterprise-wide case study and recommend solutions.
  - Use cross-disciplinary knowledge to identify problems and their causes, generate alternative solutions, and arrive at reasoned conclusions.
  - Use information technology to analyze and implement business decisions.

- **Demonstrate effective oral and written communication**
  - Formulate reasoned arguments orally.
  - Formulate reasoned arguments in written communication.
  - Apply team-work and communication skills to present and support conclusions.

- **Understand the ethical, legal, and social responsibilities of individuals and organizations.**
  - Understand ethical issues.
  - Assess the impact of managers and employees as agents, including the impact of their decisions on the organization, its stockholders, its employees, its customers and the community-at-large.
  - Apply stakeholder analysis to social and business issues and consider and evaluate possible conflicts of interests.


**Special Facilities & Programs**

**Center for Student Professional Development (CSPD)**

The Center for Student Professional Development (CSPD) is an active partner in your collegiate experience at the Fox School of Business. Besides academic preparation, professional development is important to your preparation for life after graduation. Consequently, the Fox School has integrated a unique professional development component into both the undergraduate and graduate curricula.

Rather than simply focus on the traditional career elements such as resume development and interview strategies, etc., CSPD strives to differentiate you by taking a multi-faceted approach with a focus on personal development, career/industry awareness and impression management. This strategy in combination with job search coaching will truly make a difference in terms of your marketability.

CSPD services/resources:

- One-on-one coaching sessions
- Group workshops
- On-line career resources
- Job postings/resume referrals
- Web-based career management system – FoxNet
- On-campus recruiting
- Industry (Mock) interviews
- Executive speaker series
- Networking events with employers/alumni
- Annual Leadership Retreats
- BA2101 – Professional Development Strategies course (BBA)

As mentioned, CSPD is your partner in this process. This means YOU need to take an active role in your professional/career development. The time and energy you invest in your job and internship search will be reflected in the career opportunities available to you.
You have already invested in your future by pursuing a business degree from the Fox School. However, a degree alone will not land you that ideal job. Take the next step and make your investment pay off by taking advantage of the resources CSPD has to offer and start creating your “dream job” strategy from day one!

Internship Programs
The Center for Student Professional Development and Student Professional Organizations work in partnership with employers to connect students with a wide variety of internship positions, both full and part-time. For more information on internship opportunities, please contact the student professional organization for your major or the Center for Student Professional Development at 215-204-2371.

Honors Program
The Fox School of Business and Management offers a stimulating Honors Program for students who demonstrate exceptional ability and achievement in their studies. High school students with SAT scores of at least 1420 (Math and Critical Reading/Writing average) or an ACT (Composite) of 32 and rank in the top 10% of their class are automatically reviewed for admission at the time of application to the University. Continuing/transfer students with at least a 3.70 grade point average are encouraged to apply. All students must first apply and be accepted to the University Honors Program. The program consists of a ten-course academic component and completion of a yearly leadership component and students earn an Honors Certificate upon completion of the program. More information is available at Fox Honors (http://www.fox.temple.edu/cms_academics/honors).

Students admitted to the Fox Honors Program may apply to join the Alter Research Scholars program prior to the start of their junior year. Alter Research Scholars work with faculty mentors on research projects in their chosen field. The research culminates in a senior thesis that students present during the spring of their senior year. Special scholarships are available for the two-year Alter Research Scholars program.

Students who enter the Fox Honors Program are encouraged to join the Business Honors Student Association, as well as the student organization in their major. For more information about the Fox Honors Program and the Alter Research Scholars Program, please contact Dr. Jonathan Scott, Academic Director, Fox Honors Program, Alter Hall LL30 or Charles Allen, Administrative Director, 215-204-4101, or visit the web site (http://www.fox.temple.edu/cms_academics/honors).

Pre-Business Program
The Pre-Business program is a first-time freshman year program operated by the Fox School of Business and Management and the School of Tourism and Hospitality Management (STHM). The program is designed to prepare students to successfully transition to the academic rigors of an undergraduate business degree program.

Pre-Business students will take several foundation courses required by the Bachelors of Business Administration degree program, while gaining access to quality resources and services to help them effectively navigate their first year at Temple. The Pre-Business program leverages a network of assistance programs at the university to provide students a greater opportunity for scholastic achievement.

For further information, go to the Pre-Business (p. 1214) page.

Honorary Societies, Awards, & Student Associations
Beta Gamma Sigma
The Gamma Chapter of Beta Gamma Sigma, the international honorary business society, was installed in the Fox School of Business and Management in March 1935. Membership is limited to standing-year juniors and seniors who are in the upper 10 percent of their class. The members of Beta Gamma Sigma are elected on the basis of high scholarship. Eligible students will be notified by the Dean in March and invited to attend a special induction ceremony in May. Please contact Lori Roseman at 215-204-4101 for more information.

Alpha Mu Alpha
A national marketing honorary society, established by the American Marketing Association in 1981, to recognize and reward the scholastic achievement of marketing students as well as academic excellence in the discipline and science of marketing. To be invited to join Alpha Mu Alpha, marketing majors are required to have 90+ credit hours and be in the top 15% of their class based on GPA. Inductions are made for graduating students in Spring and Fall. For more information, please contact the AMA Faculty Advisor, Mary Conran at mary.conran@temple.edu.

Beta Alpha Psi
This national honorary fraternity was established for students of accountancy, finance, and information systems. For more information, please contact the officers of Beta Alpha Psi at 215-204-8889 or view their web site (http://www.fox.temple.edu/cms_career/student-professional-organizations/beta-alpha-psi).

Financial Management Association/National Honor Society
This national honorary society strives to provide opportunities to enhance the professional development of its members. For more information, contact the FMA executive officers at 215-204-6673, or go to The Fox School | Financial Management Association (http://www.fox.temple.edu/cms_career/student-professional-organizations/financial-management-association).
Gamma Iota Sigma
This is an international Risk Management, Insurance, and Actuarial Science fraternity. The purpose of the Sigma Chapter of Gamma Iota Sigma (http://www.fox.temple.edu/cms_career/student-professional-organizations/gamma-iota-sigma) is to encourage, establish, and enhance the professionalism of students in the Risk Management, Healthcare Risk Management, and Actuarial Science programs. Contact Dr. R.B. Drennan in the Risk, Insurance, and Healthcare Management Department at 215-204-8894 or contact the GIS Officers at 215-204-9368.

Student Organizations
www.fox.temple.edu/cms_career/student-professional-organizations

As part of the student's overall professional development, all Fox students are strongly encouraged to participate in student organizations, professional associations, and academic fraternities. All major areas of concentration in the undergraduate curriculum have an associated organization. Freshmen and sophomores can utilize the organizations to find out more about the major fields of study available to them. The student organizations provide an opportunity for students to meet one another outside the classroom as well as to meet practicing professionals from industry and government. Many organizations have an array of social activities that range from fund raising and community service projects to evening gatherings.

The Fox School of Business and Management has the following student professional organizations:

- Ascend
- American Marketing Association
- Association for Information Systems
- Beta Alpha Psi
- Business Honors Student Association
- Entrepreneurial Student Association
- Financial Management Association/National Honor Society
- Gamma Iota Sigma
- International Business Association
- Institute of Management Accountants
- National Association for Black Accountants
- Net Impact
- Phi Alpha Delta Pre-Law Fraternity
- Phi Beta Lambda Business Fraternity
- Professional Sales Organization
- Temple Real Estate Organization
- Temple University Investment Association
- Temple University Supply Chain Association
- The Society for Human Resource Management
- Temple Economics Society
- Toastmasters

Please contact the College Council Officers at 215-204-6660 for more information about student organizations on the Main Campus. At the Ambler Campus, please call 267-468-8100.

Fox School of Business & Management College Council (FSBMCC)
The college council is comprised of the presidents from each of the recognized Fox student organizations, associations, and fraternities. The council's role is to assist the individual student organizations in recruiting members, obtaining funding, sponsoring activities, identifying outside speakers, and communicating with students. The college council sponsors volunteer opportunities, student organization fairs, and social events for all Fox students. The council also works closely with the dean's office and the Center for Student Professional Development to identify issues that are of concern to students and the student organizations. To contact the Main Campus college council, please call 215-204-6660. At the Ambler Campus, please call 267-468-8100.

Student Contact
Debbie Campbell
Vice Dean, Undergraduate Programs
Alter Hall 375
215-204-3919
dcampbell@temple.edu
Academic Policies & Regulations

The university policies and regulations apply to all undergraduate students and provide a framework within which schools and colleges may specify further conditions or variations appropriate to students in their courses or programs. Policies specific to FSBM are as follows:

Anticipation of Graduation

Students must submit an application for graduation using the University online graduation application in Self Service Banner prior to the Continuing Student Registration period for their final semester. The Fox School of Business and Management requires students to submit an electronic “Request for Graduation Review” prior to registration for their final semester. Current graduation information is available from the Center for Undergraduate Advising (http://www.fox.temple.edu/cms_academics/dept/advising/graduation/overview).

Courses Inapplicable to Graduation Requirements

Semester hours earned in SRAP or ELECT, Preparatory Mathematics (formerly Mathematics 0001 or 0015), and lower-division (under 3000) Military Science courses do not yield academic credit toward the minimum total of 124.

Credit is only awarded in academic subjects with a corresponding Temple department. Duplicate credit in the same course is not awarded in any case.

Co-Requisites And Prerequisites

Students may be de-enrolled from courses for which they do not meet prerequisites and co-requisites. (Please see the Prerequisites and Co-requisites (p. 99) policy for more information.) Students are responsible for reviewing and abiding by all course prerequisites and co-requisites in the Course Catalog (http://www.temple.edu/apply/common/catcheck.asp). The requirements are designed to assure that students are appropriately prepared to be successful in their courses. Prerequisites provide an efficient manner for students to register for the next course in a sequence for which they are prepared.

Dean's List

Each fall and spring semester, those undergraduates who have met the credit hour and academic criteria for their school or college are placed on the Dean's List. See the Dean's List (p. 92) policy for specific GPA and credit-hour requirements.

Probation and Dismissal

Students in the Fox School of Business and Management are bound by the university policy on Academic Standing (http://policies.temple.edu/getdoc.asp?policy_no=02.10.11).
Grade Point Average Requirement for Graduation

Fox students are required to attain a 2.0 (2.0=C) average in all of their Temple coursework and in their major in order to graduate from the Fox School of Business and Management. Some courses may have specific higher minimum grade requirements for degree applicability. Please check current course descriptions and the section pertaining to your major for this information. In addition, the Center for Undergraduate Advising provides a Major GPA calculator (http://www.fox.temple.edu/cms_academics/dept/advising/students/gpa-calculator).

Life Experience

The Fox School of Business and Management does not offer credits for life experiences. Please see Credit for Prior Learning (p. 92) under the Academic Policies section of this Bulletin for information about advanced placement or CLEP examinations.

Leave of Absence/Re-enrollment/Reinstatement

Fox students who wish to voluntarily withdraw from the university for one or two semesters (fall and/or spring) are strongly encouraged to apply for a Leave of Absence (LOA). If approved, these students remain eligible for the same requirements as when they declared their major and will have access to Temple e-mail, university library systems, and priority and self registration for the approved semester of return. By contrast, students who leave the university without any notice and without an approved LOA must apply to be re-enrolled and, if allowed to return, must follow the most recent university curricular requirements in place for the semester of their return. If no LOA was filed, before students return, they must indicate any course(s) taken since leaving Temple and provide a copy of an official transcript from each institution attended. Students who received a medical withdrawal may be asked to provide medical documentation clearing them to return to school and to schedule an interview with an advisor before a re-enrollment decision can be made. Any existing holds must be cleared prior to re-enrollment.

Leaf of Absence and Re-enrollment forms are available online (http://www.fox.temple.edu/cms_academics/dept/advising/forms). Further details can be viewed at Policy_02.10.16 (http://policies.temple.edu/getdoc.asp?policy_no=02.10.16).

Students who were dismissed for academic reasons should see the university policy on Academic Standing (http://policies.temple.edu/getdoc.asp?policy_no=02.10.11).

Repeating Courses

University policy restricts the number of times students can enroll in the same course to three times. Permission is required to register for the third attempt of the same course. Students should work closely with an academic advisor to review their options when required to repeat a course. Students who fail to complete a “College Graduation Requirement” in three attempts will be required to change their program to one outside the Fox School of Business and Management. Students who fail to complete a required major course listed in their academic program will be required to change to a different major. For more information, see Repeating a Course (p. 99) and Policy 02.10.12 (http://policies.temple.edu/getdoc.asp?policy_no=02.10.12).

Residence Requirement

A minimum of 45 of the last 60 semester hours must be completed in the Fox School of Business and Management at Temple University in order to receive a degree. In addition, a minimum of 50% of the business courses and the majority of the requirements of a major must be completed at Temple University. For more information, see the Academic Residency Requirements (p. 83).

Transfer Credits

Business courses taken at colleges or universities which are not members of The Association to Advance Collegiate Schools of Business (AACS (http://www.aacsb.edu)) will be accepted for transfer business credits only if they are equivalent to the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 1101</td>
<td>Macroeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1102</td>
<td>Microeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 2101</td>
<td>Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 2102</td>
<td>Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>RMI 2101</td>
<td>Introduction to Risk Management</td>
<td>3</td>
</tr>
<tr>
<td>LGLS 1101</td>
<td>Legal Environment of Business</td>
<td>3</td>
</tr>
<tr>
<td>LGLS 1102</td>
<td>Law of Contracts</td>
<td>3</td>
</tr>
<tr>
<td>MIS 2101</td>
<td>Information Systems in Organizations</td>
<td>3</td>
</tr>
<tr>
<td>STAT 1001</td>
<td>Quantitative Methods for Business I</td>
<td>3</td>
</tr>
<tr>
<td>STAT 1102</td>
<td>Quantitative Methods for Business II</td>
<td>3</td>
</tr>
<tr>
<td>STAT 2103</td>
<td>Statistical Business Analytics</td>
<td>4</td>
</tr>
</tbody>
</table>

MKTG 2101 and HRM 1101 (formerly Human Resource Administration) will be accepted for transfer if they were taken during the fall 1994 semester or later. HRM 2501 will be accepted for transfer if taken during the spring 2005 semester or later. Specific articulation agreements with local colleges may expand on this list. View current articulation agreements (http://www.temple.edu/vpus/transfer/agreements.htm).
Additional business credits are accepted from colleges that are members of the AACSB. It should be understood that it is possible for a student to transfer in a large number of credits which, while accepted by the university, may exceed the maximum number of elective credits applicable to the degree.

**Permission to Complete Courses at Another Institution**

Consistent with the University Policy (p. 98) students will not receive transfer credit for courses taken at another institution while they are matriculated at Temple University unless prior permission has been obtained. Completed permission forms (http://www.fox.temple.edu/cms_academics/dept/advising/forms) with supporting documentation should be submitted to the Fox School of Business and Management advising offices. Please refer to the above section on transfer credits. Students should allow approximately two weeks for processing once permission forms and documentation have been submitted. For more information, refer to Permission to Complete a Course at another Institution after Matriculation (p. 98).

**Non-Degree Seeking Student Policy**

Students not formally admitted (p. 97) to Temple University may take undergraduate courses numbered under 3000 in the Fox School of Business and Management. Undergraduate courses numbered above 3000 are open to visiting students who have completed a minimum of 60 credits, have met course prerequisites, and have written permission from their home institution. Students who have a baccalaureate degree and the prerequisites for the course desired may also enroll in advanced courses.

**College Graduation Requirements**

The degree of Bachelor of Business Administration (B.B.A.) may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 124 semester hours of credit with a minimum cumulative GPA of 2.0 overall and in the major. A minimum of 124 credit hours will be earned in the following four requirement categories:

- University General Education (GenEd) Requirements
- Fox School of Business & Management lower- and upper-division requirements
- Major requirements
- Electives

Students must follow the program requirements in effect at the time the major is declared or changed. Program requirements include both the College Graduation Requirements listed here and the courses required for the major listed in the Programs of Study. Students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of re-enrollment.

**University General Education Curriculum**

The General Education curriculum (GenEd (p. 143)) is required for all students. Note that students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of re-enrollment.

**Fox School of Business & Management Requirements**

**Lower-Division Foundation Requirements**

Note: 1000-level courses are typically taken in freshman year; 2000-level courses are typically taken in sophomore year.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 1101</td>
<td>Macroeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1102</td>
<td>Microeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>HRM 1101</td>
<td>Leadership and Organizational Management</td>
<td>3</td>
</tr>
<tr>
<td>LGLS 1101</td>
<td>Legal Environment of Business</td>
<td>3</td>
</tr>
<tr>
<td>STAT 1001</td>
<td>Quantitative Methods for Business I</td>
<td>3</td>
</tr>
<tr>
<td>STAT 1102</td>
<td>Quantitative Methods for Business II</td>
<td>3</td>
</tr>
<tr>
<td>STAT 2103</td>
<td>Statistical Business Analytics</td>
<td>4</td>
</tr>
<tr>
<td>ACCT 2101</td>
<td>Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 2102</td>
<td>Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>MIS 2101</td>
<td>Information Systems in Organizations</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 2101</td>
<td>Marketing Management</td>
<td>3</td>
</tr>
<tr>
<td>BA 2101</td>
<td>Professional Development Strategies</td>
<td>1</td>
</tr>
<tr>
<td>BA 2104</td>
<td>Excel for Business Applications</td>
<td>1</td>
</tr>
<tr>
<td>BA 2196</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>RMI 2101</td>
<td>Introduction to Risk Management</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credit Hours**

42
Higher level courses may be recommended depending on the mathematics placement score or the student's intended major. Actuarial Science majors should refer to the math courses listed under the Actuarial Science major description.

Successful completion of this course will waive the General Education Quantitative Literacy requirement.

Accounting and Entrepreneurship majors must take ACCT 2521 instead of ACCT 2102.

Note: In order to graduate, a grade of C- or better must be obtained in all FSBM lower-division requirements.

Upper-Division Foundation Requirements

Note: 3000-level courses are typically taken in the junior or senior year; 4000-level courses are taken in the senior year.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIN 3101</td>
<td>Financial Management ¹</td>
<td>3</td>
</tr>
<tr>
<td>MSOM 3101</td>
<td>Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>BA 3102</td>
<td>Business Society and Ethics</td>
<td>3</td>
</tr>
<tr>
<td>BA 3103</td>
<td>Integrative Business Applications</td>
<td>3</td>
</tr>
<tr>
<td>BA 4101</td>
<td>Global Business Policies</td>
<td>3</td>
</tr>
<tr>
<td>IB 3101</td>
<td>Fundamentals of International Business ²</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credit Hours 18

¹ Actuarial Science majors must take AS 2503 instead of FIN 3101.
² Economics majors replace IB 3101 with ECON 3563 or ECON 3564.
   Finance and Real Estate majors replace IB 3101 with FIN 3551.
   Marketing majors replace IB 3101 with MKTG 3553.
   Actuarial Science and Risk Management majors replace IB 3101 with RMI 3567.
   IB 3101 is waived for students who major in Accounting and Management Information Systems only if a second major or a minor is not completed.
   Consult your academic advisor.

Note: In order to graduate, a grade of C- or better must be obtained in all FSBM upper-division requirements for students with Fall 2015 admit dates and beyond.

Summary of Graduation Requirements

<table>
<thead>
<tr>
<th>Credits for B.B.A. Degree</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>University General Education</td>
<td>32</td>
</tr>
<tr>
<td>Lower-Division Foundation Requirements</td>
<td>42</td>
</tr>
<tr>
<td>Upper-Division Foundation Requirements</td>
<td>18</td>
</tr>
<tr>
<td>Major Requirements</td>
<td>18</td>
</tr>
<tr>
<td>Electives</td>
<td>14</td>
</tr>
<tr>
<td><strong>Total Credit Hours</strong></td>
<td><strong>124</strong></td>
</tr>
</tbody>
</table>

Major Requirements

Major requirements are determined by the effective semester of their declaration and students should declare their majors upon the completion of 60 credits in consultation with their academic advisors. Major requirements include both the College Graduation Requirements listed above and the courses required for the major listed in the Programs of Study.

Twenty-one business courses (60 s.h.) are required as part of the lower- and upper-division foundation requirements for the B.B.A. program. In addition, a minimum of six business courses must be completed in the major. In completing the courses in the major, students will become competent in understanding critical business concepts and the practice of ethical decision-making, and demonstrate both effective written and oral communication and the ability to apply critical thinking to business problems. Students who choose to pursue a dual major in business can double-count a maximum of one course toward both majors. All Fox students must take a minimum of two writing-intensive courses at Temple. One of these courses will be BA 2196; the second will be a writing-intensive course in the major.

**NOTE:** Many upper-division foundation courses and major courses have prerequisites. Some prerequisites also include minimum grade requirements. Students are required to meet all prerequisites. Prerequisites will be strictly enforced and the school reserves the right to de-enroll students from courses when prerequisites have not been met. Course descriptions, including prerequisites, are found in the Course Catalog in Self-Service Banner, accessed through the TUportal (https://tuportal4.temple.edu/cp/home/displaylogin).

Electives

**Free electives:** Students who have satisfied all of the requirements for GenEd, the Fox School Foundation, and the major will need additional credits to achieve the 124 credit minimum required for graduation. These credits may be taken in either business or non-business courses. Students
are encouraged to explore completing a minor, a certificate, or a second major for these credits. Students who choose to pursue a dual major in
business can double-count a maximum of one course toward both majors. Students who choose to pursue one or more minors may not double-count
courses already used to meet the requirements for a major or different minor.

Academic Advising

Center for Undergraduate Advising
http://www.fox.temple.edu/cms_academics/dept/advising/

The Center for Undergraduate Advising provides advising at three campuses: Main, Ambler, and Center City (TUCC).

The Main Campus office is open every weekday. The Ambler and Center City offices are open on selected days and evenings. Please see our web site
for current office hours (http://www.fox.temple.edu/cms_academics/dept/advising/contact/contact).

Our purpose is to provide quality academic advising services that empower students to make informed decisions about their education, projected
career, and personal/professional life at Temple University. Students work collaboratively with our academic advising team to develop individual plans
for academic success, interpret university policy, fully utilize campus resources, and engage in the process of reflection and decision making that will
promote their achievement.

We have two advising teams dedicated to working with students at each academic level. Freshman/Sophomore Advising (http://www.fox.temple.edu/
cms_academics/dept/advising/staff/freshmansophomore-advising) focuses on the transition to college life, major exploration within Fox, successful
completion of the lower-division foundation requirements, and retention. Junior/Senior Advising (http://www.fox.temple.edu/cms_academics/dept/
advising/staff/juniorsenior-advising) focuses on ensuring students are making satisfactory progress in their major, have completed their graduation audit
prior to their final semester, and are prepared to graduate. Junior and senior students are assigned a personal advisor based on their declared major.

As active participants in the advising process, students bear the ultimate responsibility for making educational and career decisions. Therefore, we rely
on students to be prepared with questions, research options before they come to their meeting, and to refer to their advising notes both before and after
advising meetings. Students are expected to know University Policies (p. 81) and their program requirements as defined in their Bulletin and on their
DARS (http://www.fox.temple.edu/cms_academics/dept/advising/students/dars) report.

Advisors, in turn, strive to provide knowledgeable assistance to ensure students’ accurate understanding of University and School policies, utilization
of campus resources, interpretation of curriculum requirements, and timely completion of degree requirements. Students in Fox have several ways to
meet with an academic advisor (http://www.fox.temple.edu/cms_academics/dept/advising/overview/overview), including Scheduled Appointments for
academic planning, Daily Walk-in Advising for quick questions, and Virtual Advising for students unable to come to campus during business hours.

Peer Advising

The Center for Undergraduate Advising is pleased to provide peer advising on Main Campus, comprised of undergraduate peer advisors recruited from
among the best and brightest in the Fox School of Business. Peer advisors provide the perspective of an upper-class student and are trained to assist
business students to be successful by sharing their knowledge and personal strategies for academic success. For more information, visit Peer Advising

Office of the Ombudsperson

The Fox School of Business and Management Ombudsperson assists students in Fox to resolve problems and conflicts that might arise from the
classroom, acting as mediator between faculty and students while promoting alternatives to more formal processes. The ombudsperson supports
effective communication, cooperation, equity, and civility in all academic and scholastic settings. Students who believe they have been treated unfairly
in an academic matter should first meet with the appropriate ombudsperson.

For more information, refer to grievance procedures (http://www.fox.temple.edu/cms_academics/dept/advising/students/grievance-procedures) or
contact the Center for Undergraduate Advising at foxombud@temple.edu or 215-204-7672 for further information.

Advising Directors

Julian R. White
Director, Center for Undergraduate Advising
Speakman Hall 102
215-204-4558
julian.white@temple.edu

Camille M. Fallon
Associate Director, Freshman/Sophomore Unit
Speakman Hall 104
215-204-1761
camille.fallon@temple.edu
Faculty

In addition to the faculty list below, refer to the school's faculty directory (http://www.fox.temple.edu/posts/people-category/cms-faculty) and staff directory (http://www.fox.temple.edu/posts/people-category/staff).

Joan Allatta, Assistant Professor (Teaching/Instructional), Department of Strategic Management, Fox School of Business and Management; Ph.D., University of Pennsylvania.

Andrew Allmond, Assistant Professor (Practice), Department of Marketing and Supply Chain Management, Fox School of Business and Management; M.J., Temple University.

Ronald Anderson, Professor, Department of Finance, Fox School of Business and Management; Ph.D., Texas A and M University.

Lynne M. Andersson, Associate Professor, Department of Human Resource Management, Fox School of Business and Management; Ph.D., University of North Carolina at Chapel Hill.

Paul K. Asabere, Professor, Department of Finance, Fox School of Business and Management; Ph.D., University of Illinois at Urbana-Champaign.

Hilal Atasoy, Assistant Professor (Research), Department of Accounting, Fox School of Business and Management; Ph.D., University of Illinois at Urbana-Champaign.

Craig Atwater, Instructor (Teaching/Instructional), Department of Marketing and Supply Chain Management, Fox School of Business and Management; Ph.D., Temple University.

Cynthia Axelrod, Assistant Professor (Practice), Department of Finance, Fox School of Business and Management; M.B.A., Drexel University.

Steven Balsam, Professor, Department of Accounting, Fox School of Business and Management; Ph.D., City University of New York.

Rajiv D. Banker, Professor, Department of Accounting, Fox School of Business and Management; D.B.A., Harvard University.

Sudipta Basu, Professor, Department of Accounting, Fox School of Business and Management; Ph.D., University of Rochester.

Gary J. Blau, Professor, Department of Human Resource Management, Fox School of Business and Management; Ph.D., University of Cincinnati.

Misty P. Blessley, Assistant Professor (Teaching/Instructional), Department of Marketing and Supply Chain Management, Fox School of Business and Management; Ph.D., Temple University.

Jeffrey R. Boles, Assistant Professor, Department of Legal Studies in Business, Fox School of Business and Management; Ph.D., University of California Berkeley.

Edward C. Boyer, Assistant Professor (Teaching/Instructional), Department of Finance, Fox School of Business and Management; Ph.D., Temple University.

Lawrence Brown, Professor (Research), Department of Accounting, Fox School of Business and Management; Ph.D., University of Rochester.

Dmitri Byzalov, Assistant Professor, Department of Accounting, Fox School of Business and Management; Ph.D., Harvard University.

Dwight Carey, Assistant Professor (Practice), Department of Strategic Management, Fox School of Business and Management; B.S., Farleigh Dickinson University at Madison.
Alexandra D. Carides, Assistant Professor (Teaching/Instructional), Department of Statistics, Fox School of Business and Management; Ph.D., Temple University.

Debra Casey, Assistant Professor (Teaching/Instructional), Department of Human Resource Management, Fox School of Business and Management; Ph.D., Rutgers University-New Brunswick.

Steven J. Casper, Assistant Professor (Teaching/Instructional), Department of Finance, Fox School of Business and Management; Ph.D., Temple University.

Boyoun Chae, Assistant Professor, Department of Marketing and Supply Chain Management, Fox School of Business and Management; Ph.D., University of British Columbia.

Rajeswararao S. Chaganti, Professor, Department of Strategic Management, Fox School of Business and Management; Ph.D., State University of New York.

Rajan Chandran, Professor, Department of Dean's Office, Fox School of Business and Management; Ph.D., Syracuse University.

Hua Chen, Assistant Professor, Department of Risk, Insurance and Healthcare Management, Fox School of Business and Management; Ph.D., Georgia State University.

Pallavi Chitturi, Associate Professor (Research), Department of Statistics, Fox School of Business and Management; Ph.D., University of Texas at Austin.

J. Jay Choi, Professor, Department of Finance, Fox School of Business and Management; Ph.D., New York University.

George Chressanthis, Professor (Teaching/Instructional), Department of Risk, Insurance and Healthcare Management, Fox School of Business and Management; Ph.D., Purdue University.

Teresa Gill Cirillo, Assistant Professor (Practice), Department of Marketing and Supply Chain Management, Fox School of Business and Management; M.A., Rowan University.

Shira Cohen, Assistant Professor, Department of Accounting, Fox School of Business and Management; Ph.D., Columbia University.

Mary Conran, Assistant Professor (Practice), Department of Marketing and Supply Chain Management, Fox School of Business and Management; M.B.A., Temple University.

J. David Cummins, Professor, Department of Risk, Insurance and Healthcare Management, Fox School of Business and Management; Ph.D., University of Pennsylvania.

Kathleen A. Davis, Assistant Professor (Practice), Department of Human Resource Management, Fox School of Business and Management; J.D., University of California Berkeley.

John R. Deckop, Professor, Department of Human Resource Management, Fox School of Business and Management; Ph.D., University of Minnesota.

Mercedes Delgado, Assistant Professor, Department of Strategic Management, Fox School of Business and Management; Ph.D., Universidad Complutense de Madrid.

C. Anthony Di Benedetto, Professor, Department of Marketing and Supply Chain Management, Fox School of Business and Management; Ph.D., McGill University.

Angelika Dimoka, Associate Professor, Department of Marketing and Supply Chain Management, Fox School of Business and Management; Ph.D., University of Southern California.

Yuexiao Dong, Assistant Professor, Department of Statistics, Fox School of Business and Management; Ph.D., Pennsylvania State University.

Martin J. Doyle, Assistant Professor (Practice), Department of Management Information Systems, Fox School of Business and Management; M.S., University of Phoenix.

Rob B. Drennan, Associate Professor, Department of Risk, Insurance and Healthcare Management, Fox School of Business and Management; Ph.D., University of Pennsylvania.

Leora F. Eisenstadt, Assistant Professor (Research), Department of Legal Studies in Business, Fox School of Business and Management; J.D., New York University School of Law.

Eric Eisenstein, Assistant Professor, Department of Marketing and Supply Chain Management, Fox School of Business and Management; Ph.D., University of Pennsylvania.

Elyas E. Elyasiani, Professor, Department of Finance, Fox School of Business and Management; Ph.D., Michigan State University.
Philip English, Assistant Professor (Research), Department of Finance, Fox School of Business and Management; Ph.D., University of South Carolina.

Kevin J. Fandi, Assistant Professor (Research), Department of Legal Studies in Business, Fox School of Business and Management; Ph.D., George Mason University.

Susan Feinberg, Associate Professor, Department of Strategic Management, Fox School of Business and Management; Ph.D., University of Minnesota.

Stuart H. Fine, Associate Professor (Practice), Department of Risk, Insurance and Healthcare Management, Fox School of Business and Management; Ph.D., Medical University of South Carolina.

Jennifer M. Fitzgerald, Instructor (Practice), Department of Marketing and Supply Chain Management, Fox School of Business and Management; M.B.A., Temple University.

Laurie J. Fitzpatrick, Assistant Professor (Practice), Department of Marketing and Supply Chain Management, Fox School of Business and Management; M.F.A., Temple University.

Richard Y. Flanagan, Assistant Professor (Teaching/Instructional), Department of Management Information Systems, Fox School of Business and Management; Ph.D., Temple University.

Nathan Fong, Assistant Professor, Department of Marketing and Supply Chain Management, Fox School of Business and Management; Ph.D., Massachusetts Institute of Technology.

Jane H. Frankel, Assistant Professor (Teaching/Instructional), Department of Strategic Management, Fox School of Business and Management; M.S., University of Pennsylvania.

Mary Anne Gaffney, Associate Professor, Department of Accounting, Fox School of Business and Management; Ph.D., University of Maryland.

Deanna Geddes, Associate Professor, Department of Human Resource Management, Fox School of Business and Management; Ph.D., Purdue University.

Mark E. Gershon, Professor, Department of Marketing and Supply Chain Management, Fox School of Business and Management; Ph.D., University of Arizona.

Katherine W. Gerst, Assistant Professor (Practice), Department of Marketing and Supply Chain Management, Fox School of Business and Management; M.B.A., Temple University.

Melissa Glenn-Fleming, Assistant Professor (Practice), Department of Marketing and Supply Chain Management, Fox School of Business and Management; M.A., La Salle University.

Elizabeth A. Gordon, Associate Professor, Department of Accounting, Fox School of Business and Management; Ph.D., Columbia University.

Isaac Gottlieb, Professor (Clinical), Department of Statistics, Fox School of Business and Management; Ph.D., Columbia University.

Brad Greenwood, Assistant Professor, Department of Management Information Systems, Fox School of Business and Management; Ph.D., University of Maryland College Park.

Manak C. Gupta, Professor, Department of Finance, Fox School of Business and Management; Ph.D., University of California Los Angeles.

Terry Ann Halbert, Professor, Department of Legal Studies in Business, Fox School of Business and Management; J.D., Rutgers University.

Robert D. Hamilton III, Professor, Department of Strategic Management, Fox School of Business and Management; Ph.D., Northwestern University.

Xu Han, Assistant Professor, Department of Statistics, Fox School of Business and Management; Ph.D., University of Pennsylvania.

Crystal M. Harold, Assistant Professor, Department of Human Resource Management, Fox School of Business and Management; Ph.D., George Mason University.

Roie Hauser, Assistant Professor (Research), Department of Finance, Fox School of Business and Management; Ph.D., University of Chicago.

Richard M. Heiberger, Professor Emeritus, Department of Statistics, Fox School of Business and Management; Ph.D.

Theodore L. Hill III, Associate Professor (Teaching/Instructional), Department of Strategic Management, Fox School of Business and Management; Ph.D., Temple University.

Arthur Hochner, Associate Professor, Department of Human Resource Management, Fox School of Business and Management; Ph.D., Harvard University.

Samuel D. Hodge Jr., Professor, Department of Legal Studies in Business, Fox School of Business and Management; J.D., Temple University.
Brian C. Holtz, Assistant Professor, Department of Human Resource Management, Fox School of Business and Management; Ph.D., George Mason University.

H. Donald Hopkins, Associate Professor, Department of Strategic Management, Fox School of Business and Management; Ph.D., Pennsylvania State University.

Andrea Hornett, Assistant Professor (Teaching/Instructional), Department of Marketing and Supply Chain Management, Fox School of Business and Management; Ph.D., George Washington University.

Forrest E. Huffman, Professor, Department of Finance, Fox School of Business and Management; Ph.D., University of South Carolina.

James M. Hunt, Associate Professor, Department of Marketing and Supply Chain Management, Fox School of Business and Management; Ph.D., University of Cincinnati.

James Hutchin, Associate Professor (Practice), Department of Strategic Management, Fox School of Business and Management; M.B.A., American Graduate School of International Management.

Daniel Isaacs, Assistant Professor (Teaching/Instructional), Department of Legal Studies in Business, Fox School of Business and Management; J.D., Brooklyn Law School.

Alan J. Izenman, Professor, Department of Statistics, Fox School of Business and Management; Ph.D., University of California Berkeley.

Cheng Jiang, Assistant Professor (Teaching/Instructional), Department of Finance, Fox School of Business and Management; Ph.D., University of California Riverside.

Kose John, Professor, Department of Finance, Fox School of Business and Management.

Darin Kapanjie, Assistant Professor (Teaching/Instructional), Department of Statistics, Fox School of Business and Management; Ed.D., Temple University.

Satyajit Karnik, Assistant Professor (Teaching/Instructional), Department of Finance, Fox School of Business and Management; Ph.D., University of Michigan.

Howard Keen, Assistant Professor (Teaching/Instructional), Department of Finance, Fox School of Business and Management; Ph.D., Bryn Mawr College.

Ron Kershner, Assistant Professor (Teaching/Instructional), Department of Statistics, Fox School of Business and Management; Ph.D., Cornell University.

You Jin Kim, Assistant Professor, Department of Human Resource Management, Fox School of Business and Management; Ph.D., Michigan State University.

Harold E. Klein, Associate Professor, Department of Strategic Management, Fox School of Business and Management; Ph.D., Columbia University.

Masaaki Kotabe, Professor, Department of Strategic Management, Fox School of Business and Management; Ph.D., Michigan State University.

Robert T. Krafty, Assistant Professor, Department of Statistics, Fox School of Business and Management; Ph.D., University of Pennsylvania.

A. J. Kreimer, Assistant Professor (Practice), Department of Accounting, Fox School of Business and Management; M.B.A., Temple University.

Jagannathan Krishnan, Professor, Department of Accounting, Fox School of Business and Management; Ph.D., Ohio State University.

Jayanthi Krishnan, Associate Professor, Department of Accounting, Fox School of Business and Management; Ph.D., Ohio State University.

Seok-Woo Kwon, Assistant Professor, Department of Strategic Management, Fox School of Business and Management; Ph.D., University of Southern California.

Nandini Lahiri, Assistant Professor, Department of Strategic Management, Fox School of Business and Management; Ph.D., University of Michigan.

James M. Lammendola, Assistant Professor (Practice), Department of Legal Studies in Business, Fox School of Business and Management; J.D., University of Tulsa College of Law.

Richard A. Lancioni, Professor Emeritus, Department of Marketing and Supply Chain Management, Fox School of Business and Management.

Vanessa J. Lawrence, Associate Professor, Department of Legal Studies in Business, Fox School of Business and Management; J.D., University of Pennsylvania School of Law.

Xi Li, Assistant Professor, Department of Accounting, Fox School of Business and Management; Ph.D., London Business School.
Yan Li, Assistant Professor, Department of Finance, Fox School of Business and Management; Ph.D., Cornell University.

Yuanzhi Li, Assistant Professor, Department of Finance, Fox School of Business and Management; Ph.D., New York University.

Andrea B. Lopez, Assistant Professor (Teaching/Instructional), Department of Human Resource Management, Fox School of Business and Management; Ph.D., Temple University.

Dian S. Luedtke, Assistant Professor (Practice), Department of Risk, Insurance and Healthcare Management, Fox School of Business and Management; M.A., University of Pennsylvania.

Xueming Luo, Professor, Department of Marketing and Supply Chain Management, Fox School of Business and Management; D.B.A., Louisiana Tech University.

Marco Malandra, Assistant Professor (Practice), Department of Accounting, Fox School of Business and Management; M.S., Golden Gate University.

Barbara B. Manaka, Assistant Professor (Teaching/Instructional), Department of Risk, Insurance and Healthcare Management, Fox School of Business and Management; Ph.D., Temple University.

Munir Y. Mandviwalla, Associate Professor, Department of Management Information Systems, Fox School of Business and Management; Ph.D., Claremont Graduate University.

Connie Xiangdong Mao, Associate Professor, Department of Finance, Fox School of Business and Management; Ph.D., Cornell University.

Elizabeth G. Matthew, Assistant Professor (Practice), Department of Marketing and Supply Chain Management, Fox School of Business and Management; M.A., Pennsylvania State University.

John A. McClendon, Associate Professor, Department of Human Resource Management, Fox School of Business and Management; Ph.D., University of South Carolina.

Michael McCloskey, Assistant Professor (Practice), Department of Risk, Insurance and Healthcare Management, Fox School of Business and Management; M.B.A., Drexel University.

Robert C. McNamee, Assistant Professor (Teaching/Instructional), Department of Strategic Management, Fox School of Business and Management; Ph.D., Rutgers University.

James P. Miller, Assistant Professor (Practice), Department of Marketing and Supply Chain Management, Fox School of Business and Management; Ph.D., University College Cork.

Martina Mincheva, Assistant Professor, Department of Statistics, Fox School of Business and Management; Ph.D., Princeton University.

Neha Mittal, Assistant Professor (Teaching/Instructional), Department of Marketing and Supply Chain Management, Fox School of Business and Management; Ph.D., Rutgers University.

Christopher Monos, Assistant Professor (Practice), Department of Marketing and Supply Chain Management, Fox School of Business and Management; Ph.D., Columbia University.

Christopher Moore, Instructor (Practice), Department of Risk, Insurance and Healthcare Management, Fox School of Business and Management; M.S., University of Akron.

Maureen Morrin, Professor, Department of Marketing and Supply Chain Management, Fox School of Business and Management; Ph.D., New York University.

Michael Moughan, Assistant Professor (Practice), Department of Accounting, Fox School of Business and Management; Ph.D., University of Delaware.

James C. Moustafellos, Assistant Professor (Practice), Department of Management Information Systems, Fox School of Business and Management; M.Arch., Princeton University.

Shreeram R. Mudambi, Professor, Department of Strategic Management, Fox School of Business and Management; Ph.D., Cornell University.

Susan Mudambi, Associate Professor (Research), Department of Marketing and Supply Chain Management, Fox School of Business and Management; Ph.D., University of Warwick.

Subhadeep Mukhopadhyay, Assistant Professor, Department of Statistics, Fox School of Business and Management; Ph.D., Texas A and M University.

David Nash, Assistant Professor (Practice), Department of Strategic Management, Fox School of Business and Management; M.S., University of Pennsylvania.

Lalitha Naveen, Associate Professor, Department of Finance, Fox School of Business and Management; Ph.D., Arizona State University.
Katherine Nelson, Instructor (Practice), Department of Human Resource Management, Fox School of Business and Management; M.S., Temple University.

E. Carey O'Donnell, Assistant Professor (Practice), Department of Management Information Systems, Fox School of Business and Management; B.A., Colgate University.

In-Sue Oh, Associate Professor, Department of Human Resource Management, Fox School of Business and Management; Ph.D., University of Iowa.

Bora Ozkan, Assistant Professor (Teaching/Instructional), Department of Finance, Fox School of Business and Management; Ph.D., University of New Orleans.

Min-Seok Pang, Assistant Professor, Department of Management Information Systems, Fox School of Business and Management; Ph.D., University of Michigan.

Arvind Parkhe, Professor, Department of Strategic Management, Fox School of Business and Management; Ph.D., Temple University.

Paul Pavlou, Professor, Department of Management Information Systems, Fox School of Business and Management; Ph.D., University of Southern California.

Tony Petrucci, Assistant Professor (Practice), Department of Human Resource Management, Fox School of Business and Management; Ph.D., Regent University.

M. Moshe Porat, Professor, Department of Dean's Office, Fox School of Business and Management; Ph.D., Temple University.

James D. Portwood, Professor, Department of Human Resource Management, Fox School of Business and Management; Ph.D., University of Michigan.

Robert S. Pred, Associate Professor (Teaching/Instructional), Department of Statistics, Fox School of Business and Management; Ph.D., University of Texas at Austin.

Eric G. Press, Professor, Department of Accounting, Fox School of Business and Management; Ph.D., University of Oregon.

Bruce B. Rader, Associate Professor (Teaching/Instructional), Department of Finance, Fox School of Business and Management; Ph.D., University of Houston.

Marc Ragan, Assistant Professor (Research), Department of Risk, Insurance and Healthcare Management, Fox School of Business and Management; Ph.D., University of Wisconsin-Madison.

Crystal Reeck, Assistant Professor, Department of Marketing and Supply Chain Management, Fox School of Business and Management; Ph.D., Duke University.

Laureen Regan, Associate Professor, Department of Risk, Insurance and Healthcare Management, Fox School of Business and Management; Ph.D., University of Pennsylvania.

Sheri Risler, Assistant Professor (Practice), Department of Accounting, Fox School of Business and Management; B.S., Boston University.

Michael J. Rivera, Associate Professor (Teaching/Instructional), Department of Strategic Management, Fox School of Business and Management; Ph.D., Purdue University.

Edward C. Rosenthal, Professor, Department of Marketing and Supply Chain Management, Fox School of Business and Management; Ph.D., Northwestern University.

David H. Ryan, Associate Professor, Department of Accounting, Fox School of Business and Management; Ph.D., University of South Carolina.

Oleg Rytchkov, Assistant Professor, Department of Finance, Fox School of Business and Management; Ph.D., Massachusetts Institute of Technology.

Mitrabarun Sarkar, Professor, Department of Strategic Management, Fox School of Business and Management; Ph.D., Michigan State University.

Sanat K. Sarkar, Professor, Department of Statistics, Fox School of Business and Management; Ph.D., Calcutta University.

Pavel G. Savor, Assistant Professor, Department of Finance, Fox School of Business and Management; Ph.D., Harvard University.

Stuart M. Schmidt, Professor, Department of Human Resource Management, Fox School of Business and Management; Ph.D., University of Wisconsin-Madison.

David Schuff, Associate Professor (Teaching/Instructional), Department of Management Information Systems, Fox School of Business and Management; Ph.D., Arizona State University.

Jonathan A. Scott, Professor, Department of Finance, Fox School of Business and Management; Ph.D., Purdue University.
Anthony Louis Seeton, Assistant Professor (Practice), Department of Strategic Management, Fox School of Business and Management; M.B.A., Temple University.

Andrew Stekas, Assistant Professor, Department of Risk, Insurance and Healthcare Management, Fox School of Business and Management; Ph.D., Cornell University.

Jeremy J. Shafer, Assistant Professor (Practice), Department of Management Information Systems, Fox School of Business and Management; M.S., Temple University.

Amir Shoham, Assistant Professor (Teaching/Instructional), Department of Finance, Fox School of Business and Management; Ph.D., Ben-Gurion University of the Negev.

Jagbir Singh, Professor, Department of Statistics, Fox School of Business and Management; Ph.D., Florida State University.

Indrajit Sinha, Associate Professor, Department of Marketing and Supply Chain Management, Fox School of Business and Management; Ph.D., University of Michigan.

S. J. Sklar, Assistant Professor, Department of Legal Studies in Business, Fox School of Business and Management; J.D., Temple University.

Michael F. Smith, Associate Professor, Department of Marketing and Supply Chain Management, Fox School of Business and Management; D.B.A., Indiana University.

Sheryl Winston Smith, Assistant Professor, Department of Strategic Management, Fox School of Business and Management; Ph.D., Harvard University.

Marcus J. Sobel, Associate Professor, Department of Statistics, Fox School of Business and Management; Ph.D., University of California Berkeley.

John A. Soss, Associate Professor (Teaching/Instructional), Department of Finance, Fox School of Business and Management; Ph.D., Northwestern University.

Alexander Stein, Assistant Professor (Teaching/Instructional), Department of Marketing and Supply Chain Management, Fox School of Business and Management; Ph.D., Temple University.

Cheng Yong Tang, Associate Professor, Department of Statistics, Fox School of Business and Management; Ph.D., Iowa State University.

Lucas Threinen, Assistant Professor (Research), Department of Accounting, Fox School of Business and Management; Ph.D., University of Chicago.

Michael Valenza, Associate Professor, Department of Legal Studies in Business, Fox School of Business and Management; J.D., Temple University.

Vinod Venkatraman, Assistant Professor, Department of Marketing and Supply Chain Management, Fox School of Business and Management; Ph.D., Duke University.

Krupa S. Viswanathan, Associate Professor, Department of Risk, Insurance and Healthcare Management, Fox School of Business and Management; Ph.D., University of Pennsylvania.

Sunil Wattal, Associate Professor, Department of Management Information Systems, Fox School of Business and Management; Ph.D., Carnegie Mellon University.

Ellen Weber, Assistant Professor (Practice), Department of Strategic Management, Fox School of Business and Management; B.S., University of Pennsylvania.

William W. S. Wei, Professor, Department of Statistics, Fox School of Business and Management; Ph.D., University of Wisconsin-Madison.

Howard J. Weiss, Professor, Department of Marketing and Supply Chain Management, Fox School of Business and Management; Ph.D., Northwestern University.

Mary A. Weiss, Professor, Department of Risk, Insurance and Healthcare Management, Fox School of Business and Management; Ph.D., University of Pennsylvania.

Guntram Werther, Professor (Teaching/Instructional), Department of Strategic Management, Fox School of Business and Management; Ph.D., Washington University.

Jean K. Wilcox, Assistant Professor (Practice), Department of Marketing and Supply Chain Management, Fox School of Business and Management; Ph.D., University of Chicago.

Storm Wilkins, Assistant Professor (Practice), Department of Risk, Insurance and Healthcare Management, Fox School of Business and Management; J.D., University of Pennsylvania.
Jacqueline Volkman Wise, Assistant Professor, Department of Risk, Insurance and Healthcare Management, Fox School of Business and Management; Ph.D., University of Pennsylvania.

Christian E. Wurst, Associate Professor (Teaching/Instructional), Department of Accounting, Fox School of Business and Management; Ph.D., Temple University.

Youngjin Yoo, Professor, Department of Management Information Systems, Fox School of Business and Management; Ph.D., University of Maryland.

Yuchi Zhang, Assistant Professor, Department of Marketing and Supply Chain Management, Fox School of Business and Management; Ph.D., University of Maryland College Park.

Zhigen Zhao, Assistant Professor, Department of Statistics, Fox School of Business and Management; Ph.D., Cornell University.

Jacqueline S. Zinn, Associate Professor, Department of Risk, Insurance and Healthcare Management, Fox School of Business and Management; Ph.D., University of Pennsylvania.

Rebecca Anne Zinn, Assistant Professor (Practice), Department of Marketing and Supply Chain Management, Fox School of Business and Management; M.B.A., Temple University.

M. Michael Zuckerman, Assistant Professor (Teaching/Instructional), Department of Risk, Insurance and Healthcare Management, Fox School of Business and Management; J.D., John Marshall Law School.

All Business Minors & Certificates

101 Speakman Hall
1810 N. 13th Street
Philadelphia, PA 19122
215-204-7672
http://www.fox.temple.edu/cms_academics/dept/advising/minors/

Many Temple University undergraduates are currently taking selected business courses to prepare themselves better for their careers after graduation. The Fox School of Business and Management offers a number of minor and certificate programs to facilitate this preparation. Some programs are open to all students in the university; others are restricted to a limited student population. Requirements for a minor or certificate must be completed prior to graduation and minors will be recorded on the student’s official university transcript upon graduation. Courses cannot be used to meet minor or certificate requirements if already used to meet the requirements for a major or a different minor or certificate. Please visit our minor and certificate web site (http://www.fox.temple.edu/cms_academics/dept/advising/minors) for further information.

Minors

• Accounting Minor (p. 570)
• Business Analytics Minor (p. 571)
• Business Minor (p. 572)
• Corporate Social Responsibility Minor (p. 574)
• Digital Marketing Minor (p. 574)
• Economics Minor (p. 576)
• Entertainment Law and Business Minor (p. 577)
• Entrepreneurship & Innovation Management Minor (p. 577)
• Finance Minor (p. 579)
• General Business Studies Minor (p. 579)
• Healthcare Management Minor (p. 581)
• Human Resource Minor for Legal Studies (p. 582)
• Information Technology Innovation & Entrepreneurship Minor (p. 582)
• Legal Studies Minor (p. 583)
• Legal Studies Minor for Human Resource Managers (p. 584)
• Management Information Systems Minor (p. 585)
• Marketing Minor (p. 586)
• Statistics Minor (p. 586)
• Supply Chain Management Minor (p. 587)

Certificates
• Business Basics Certificate (p. 571)
• Business Plus Certificate (p. 572)
• Certificate in Entrepreneurship & Innovation Management (p. 572)
• Certificate in Leadership (p. 573)
• Management Information Systems Certificate (p. 584)

Accounting Minor
• Open to business or non-business students.
• Understand basic business foundations, financial statements, and the accountant’s role in the management of a company.

Eight courses are prerequisites for the minor:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 1101</td>
<td>Macroeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1102</td>
<td>Microeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>HRM 1101</td>
<td>Leadership and Organizational Management</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 2101</td>
<td>Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 2102</td>
<td>Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>or ACCT 2521</td>
<td>Cost Accounting</td>
<td></td>
</tr>
<tr>
<td>MKTG 2101</td>
<td>Marketing Management</td>
<td>3</td>
</tr>
<tr>
<td>RMI 2101</td>
<td>Introduction to Risk Management</td>
<td>3</td>
</tr>
<tr>
<td>STAT 2103</td>
<td>Statistical Business Analytics</td>
<td>4</td>
</tr>
</tbody>
</table>

One of the following can be substituted for STAT 2103 if required for the student’s program:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEE 3048</td>
<td>Probability, Statistics &amp; Stochastic Methods</td>
<td></td>
</tr>
<tr>
<td>PSY 1167</td>
<td>Foundations in Statistical Methods</td>
<td></td>
</tr>
<tr>
<td>PSY 2168</td>
<td>Inferential Methods in Psychology</td>
<td></td>
</tr>
<tr>
<td>SOC 1167</td>
<td>Social Statistics</td>
<td></td>
</tr>
<tr>
<td>SOC 3201</td>
<td>Statistical Methods in Sociology</td>
<td></td>
</tr>
</tbody>
</table>

Total Credit Hours 25

• Minimum grades of C- are required in prerequisite courses and are not calculated in the minor GPA.
• Four departmental courses are required (three of these must be taken at Temple University):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 3511</td>
<td>Intermediate Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 3512</td>
<td>Intermediate Accounting II</td>
<td>3</td>
</tr>
</tbody>
</table>

Select two additional courses in Accounting: 6

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 2521</td>
<td>Cost Accounting</td>
<td>1</td>
</tr>
<tr>
<td>ACCT 3526</td>
<td>Accounting Information Systems</td>
<td></td>
</tr>
<tr>
<td>ACCT 3531</td>
<td>Federal Taxes on Income (recommended)</td>
<td></td>
</tr>
<tr>
<td>ACCT 3533</td>
<td>Advanced Accounting</td>
<td></td>
</tr>
<tr>
<td>ACCT 3596</td>
<td>Auditing (recommended)</td>
<td></td>
</tr>
</tbody>
</table>

Total Credit Hours 12
If ACCT 2521 is taken instead of ACCT 2102 for the foundation, it cannot also be used as one of the required accounting electives.

- Minimum grades of C are required in accounting courses unless otherwise specified.
- A grade point average of 2.0 in courses in the minor is required.
- Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.
- Courses for the minor must be completed prior to graduation; if completed, the minor will be recorded on the final transcript upon graduation.
- To declare or rescind this minor, visit the Fox School of Business and Management (http://www.fox.temple.edu/cms_academics/dept/advising/minors).

Interested students should discuss with their home college advisors how the courses in the minor will fit into their overall degree plan and are strongly encouraged to declare the minor early in their academic career.

### Business Analytics Minor

- Open to high-performing business students with a minimum GPA of 3.0.
- Understand how to unlock the value buried in corporate data and create new business opportunities using cutting-edge tools and techniques in predictive modeling, forecasting, association mining, cluster analysis, decision trees, unstructured “big” data, sentiment analysis, and experimental design.
- Completion of MKTG 2101, MIS 2101, and STAT 2103 with minimum grades of C are prerequisites to this minor.

**Five courses are required** (three must be taken at Temple University.) Recommended sequence is listed below:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MIS 2502</td>
<td>Data Analytics</td>
<td>3</td>
</tr>
<tr>
<td>STAT 2521</td>
<td>Data Analysis and Statistical Computing</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 3509</td>
<td>Customer Data Analytics</td>
<td>3</td>
</tr>
<tr>
<td>STAT 2523</td>
<td>Design of Experiments and Quality Control</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 3508</td>
<td>Digital Marketing</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credit Hours** 15

1  MIS majors will substitute a course chosen from: MIS 3501, MIS 3505, MIS 3536, MIS 3538, MIS 3581, MKTG 3502, MKTG 3504, MKTG 3511, STAT 2512, or STAT 2522.

- A grade point average of 2.0 in the minor is required as well as a minimum grade of C- in each course. A minimum grade of C is required in MIS 2502.
- Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.
- Courses for the minor must be completed prior to graduation; if completed, the minor will be recorded on the final transcript upon graduation.
- For more information, visit the Statistics department (http://www.fox.temple.edu/cms_academics/dept/statistics/program/undergraduate/business-analytics-minor).
- To declare or rescind this minor, visit the Fox School of Business and Management (http://www.fox.temple.edu/cms_academics/dept/advising/minors).

Interested students should discuss with their home college advisors how the courses in the minor will fit into their overall degree plan and are strongly encouraged to declare the minor early in their academic career.

### Business Basics Certificate

- Open only to non-matriculated students.
- Explore foundation courses that will apply toward B.B.A. if matriculated into this degree program.

**Five courses are required** (three of these courses must be taken at Temple University):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 0802</td>
<td>Analytical Reading and Writing ¹</td>
<td>4</td>
</tr>
<tr>
<td>HRM 1101</td>
<td>Leadership and Organizational Management</td>
<td>3</td>
</tr>
<tr>
<td>LGLS 1101</td>
<td>Legal Environment of Business</td>
<td>3</td>
</tr>
<tr>
<td>STAT 1001</td>
<td>Quantitative Methods for Business ¹</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 2101</td>
<td>Financial Accounting</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credit Hours** 16

¹  Prior to enrolling in English and Statistics, students must take a placement test and complete additional English or Math review courses as needed if indicated by placement test results.
• A minimum grade of C in each course is required.
• The certificate will be awarded upon satisfactory completion of all required courses.

Business Minor

• Open to non-business students only.
• Quantitatively oriented - provides a good foundation for non-business students to facilitate the transition into an M.B.A. program.
• Completion of MATH 1022, STAT 1001, or calculus with a minimum grade of C- is a prerequisite for some courses in this minor.
• Eight courses required (five of these must be taken at Temple University):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 1101</td>
<td>Macroeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1102</td>
<td>Microeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>HRM 1101</td>
<td>Leadership and Organizational Management</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 2101</td>
<td>Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 2102</td>
<td>Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 2101</td>
<td>Marketing Management</td>
<td>3</td>
</tr>
<tr>
<td>RMI 2101</td>
<td>Introduction to Risk Management</td>
<td>3</td>
</tr>
<tr>
<td>STAT 2103</td>
<td>Statistical Business Analytics (or STAT 2101 or MATH 1013)</td>
<td>4</td>
</tr>
</tbody>
</table>

One of the following courses can be substituted for STAT 2103 if required for the student's program:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEE 3048</td>
<td>Probability, Statistics &amp; Stochastic Methods</td>
</tr>
<tr>
<td>PSY 1167</td>
<td>Foundations in Statistical Methods</td>
</tr>
<tr>
<td>PSY 2168</td>
<td>Inferential Methods in Psychology</td>
</tr>
<tr>
<td>SOC 1167</td>
<td>Social Statistics</td>
</tr>
<tr>
<td>SOC 3201</td>
<td>Statistical Methods in Sociology</td>
</tr>
</tbody>
</table>

Total Credit Hours 25

• A grade point average of 2.0 in the minor is required as well as a minimum grade of C- in each course.
• Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.
• Courses for the minor must be completed prior to graduation; if completed, the minor will be recorded on the final transcript upon graduation.
• To declare or rescind this minor, visit the Fox School of Business and Management (http://www.fox.temple.edu/cms_academics/dept/advising/minors).

Interested students should discuss with their home college advisors how the courses in the minor will fit into their overall degree plan and are strongly encouraged to declare the minor early in their academic career.

Business Plus Certificate

• Open only to non-matriculated students.
• Explore foundation courses that will apply toward B.B.A. if matriculated into this degree program.
• Five courses required (three of these must be taken at Temple University):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 1101</td>
<td>Macroeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1102</td>
<td>Microeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 2102</td>
<td>Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 2101</td>
<td>Marketing Management</td>
<td>3</td>
</tr>
<tr>
<td>RMI 2101</td>
<td>Introduction to Risk Management</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credit Hours 15

• A minimum grade of C in each course is required.
• The certificate will be awarded upon satisfactory completion of all required courses.

Certificate in Entrepreneurship & Innovation Management

Have you ever wondered about owning your own company? Thought about freelancing in your respective field? Wondered if some technology you have been working with might be worth millions (or might help you win $100k+ in the BYOBB)? Or maybe you would just like to work in the creative, dynamic environment that is found in entrepreneurial companies. Interest in entrepreneurship across the university, from students in all departments, is at an all-time high. The downturn in the economy has left many people wondering if owning their own business may be a more viable and stable career path in these turbulent times. In addition, since start-ups are the major engine for growth and new jobs in this economy, having experience with
entrepreneurship is valuable for any individuals that will work in one of these high-growth firms. More than one team of students from non-business schools enrolled in courses in the certificate programs have won the BYOBB in the past. Owning your own business may be closer than ever before.

This certificate will be jointly issued by the Fox School of Business and Management and its partner schools and will appear on the student’s transcript. Having an Entrepreneurship & Innovation Management certificate on your transcript is an indicator that you are a proactive, self-starter who can creatively solve problems and turn your ideas into reality. Even if you plan to work in a well-established company, having this business school certificate shows that you are able to go beyond your functional expertise and innovate when it counts. Companies are looking for what they call “T-shaped” employees for entry level and managerial positions. These are individuals that have specialization in a relevant field as well as broad understanding of the business environment that allows them to approach issues from a strategic, outside-the-box, boundary spanning perspective. This is part of what you will learn in our certificate program.

- Open to non-business students. Business students should consider the Entrepreneurship & Innovation Management minor or a dual major instead.
- Students must complete the following three-course sequence:
  
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SGM 3501</td>
<td>Entrepreneur and Innovative Thinking</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3033</td>
<td>Entrepreneurial Engineering (Engineering students only)</td>
<td>3</td>
</tr>
<tr>
<td>MSP 4614</td>
<td>Creating a Media Business</td>
<td>3</td>
</tr>
<tr>
<td>SGM 3001</td>
<td>Becoming a Manager: Building, Leading, and Managing New and Small Businesses</td>
<td>3</td>
</tr>
<tr>
<td>SGM 3511</td>
<td>Doing Well by Doing Good: Where Innovation and Entrepreneurship Meet Social Impact</td>
<td>3</td>
</tr>
<tr>
<td>SGM 3580</td>
<td>Special Topics - Strategic Management 1</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 4040</td>
<td>Special Topics (Engineering students only)</td>
<td>3</td>
</tr>
<tr>
<td>SGM 3002</td>
<td>Be Your Own Boss: Planning to Start Your Own Business</td>
<td>3</td>
</tr>
<tr>
<td>SGM 3521</td>
<td>Finance Your Ideas: Crowdfunding, Grants, Banks, Venture Funds, Corporate and Private Investment 2</td>
<td>2</td>
</tr>
<tr>
<td>SGM 3580</td>
<td>Special Topics - Strategic Management 1</td>
<td>1</td>
</tr>
<tr>
<td>SGM 3682</td>
<td>Independent Study 3</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credit Hours** 9

1 Approval of the Innovation & Entrepreneurship Institute (IEI) Academic or Managing Director or department chair required. The same special topics course can never apply to both Entrepreneurial Management and Entrepreneurial Action electives.

2 Students interested in taking SGM 3521 should have already assessed the viability of their idea for a new venture. SGM 3501 or SGM 0827 and SGM 3003 are strongly recommended prior to taking SGM 3521. Students who do not meet these criteria may be required to complete additional supplementary work and should contact the professor to find out if they are sufficiently prepared to take this course. Students are encouraged to take SGM 3521 concurrently with or after SGM 4596.

3 Independent Study projects will be identified or created by the IEI. Approval of the IEI Academic or Managing Director or department chair required.

Courses cannot be used to meet certificate requirements if already used to meet the requirements for a major or a different minor or certificate.

For more information and to declare or rescind this certificate, contact the entrepreneurship advisor in the Center for Undergraduate Advising, Fox School of Business, Speakman 101.

Interested students should discuss with their home college advisors or with personnel in the Innovation & Entrepreneurship Institute (503 Alter Hall) how the courses in the certificate will fit into their overall degree plan. Students are strongly encouraged to declare the certificate early in their academic career.

**Certificate in Leadership**

- Open only to business students.
- Develop enhanced skills needed for effective leadership: organizational communication, conflict management, and team building.
- Expertise and perspective developed through these courses enable graduates to think and act in ways that reflect sophisticated competencies (from interpersonal to technical) that will benefit the interests of multiple organizational stakeholders.

**Four courses are required** and can be taken in any order:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRM 3501</td>
<td>Power, Influence and Negotiation</td>
<td>3</td>
</tr>
<tr>
<td>HRM 3502</td>
<td>Leading People at Work</td>
<td>3</td>
</tr>
<tr>
<td>HRM 3503</td>
<td>Communicating in Organizations</td>
<td>3</td>
</tr>
<tr>
<td>HRM 3504</td>
<td>Leadership in the 21st Century 1</td>
<td>3</td>
</tr>
</tbody>
</table>
or HRM 3505

<table>
<thead>
<tr>
<th>Total Credit Hours</th>
<th>12</th>
</tr>
</thead>
</table>

1. HRM 3504 is typically taught as a compressed (one week), winter break course.

- Three of these courses must be taken at Temple University.
- A grade point average of 2.0 in the certificate is required as well as a minimum grade of C- in each course unless otherwise specified.
- Courses cannot be used to meet certificate requirements if already used to meet the requirements for a major or a different minor or certificate.
- Courses for the certificate must be completed prior to graduation; if completed, the certificate will be recorded on the final transcript upon graduation.
- To declare or rescind this certificate, visit the Fox School of Business and Management (http://www.fox.temple.edu/cms_academics/dept/advising/minors).

Interested students should discuss with their advisors how the courses in the certificate will fit into their overall degree plan and are strongly encouraged to declare the certificate early in their academic career.

### Corporate Social Responsibility Minor

- Open to business or non-business students.
- Understand how to incorporate economics, the environment, and social responsibility into corporate decision-making. A placement with a community organization practicing sustainability is required as part of BA 3531.
- Six courses required (five of the courses must be taken at Temple University):

<table>
<thead>
<tr>
<th>Required Foundation Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRM 2511 Corporate Sustainability: People, Profits &amp; Planet</td>
</tr>
<tr>
<td>LGLS 3511 Environmental Law and Sustainability</td>
</tr>
<tr>
<td>BA 3531 Sustainability on the Ground</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Electives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select three of the following:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 3102</td>
<td>Business Society and Ethics (non-business students only)</td>
</tr>
<tr>
<td>ECON 3596</td>
<td>Energy, Ecology, and Economy</td>
</tr>
<tr>
<td>HRM 3505</td>
<td>Sustainable Organizational Leadership</td>
</tr>
<tr>
<td>MKTG 2511</td>
<td>Marketing for the Sustainable Enterprise</td>
</tr>
<tr>
<td>SGM 3511</td>
<td>Doing Well by Doing Good: Where Innovation and Entrepreneurship Meet Social Impact</td>
</tr>
<tr>
<td>CRP 0807</td>
<td>People, Places, and Environment</td>
</tr>
<tr>
<td>ENVT 0845</td>
<td>The Environment</td>
</tr>
<tr>
<td>GUS 0842</td>
<td>Sustainable Environments</td>
</tr>
<tr>
<td>LARC 0841</td>
<td>Sustainable Design</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Credit Hours</th>
<th>18</th>
</tr>
</thead>
</table>

1. HRM 2511 & LGLS 3511 must be completed prior to BA 3531.

2. Students must contact Debbie Campbell (dcampbell@temple.edu) in spring for permission. This course includes both field study and an academic component.

- Some courses are only offered once a year depending on demand for the course.
- A cumulative grade point average of 2.0 in the minor is required as well as a minimum grade of C- in each course.
- Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.
- Courses for the minor must be completed prior to graduation; if completed, the minor will be recorded on the final transcript upon graduation.
- To declare or rescind this minor, visit the Fox School of Business and Management (http://www.fox.temple.edu/cms_academics/dept/advising/minors).

Interested students should discuss with their home college advisors how the courses in the minor will fit into their overall degree plan and are strongly encouraged to declare the minor early in their academic career.

### Digital Marketing Minor

- Open to business students.
• Integrates marketing with digital technology and analytics and prepares students for new and emerging jobs related to analytics, blogging, search engine optimization, e-detailing, site design, Internet research, digital demographics, personalization, customer relationship management, information architecture, social media, e-commerce, and media design.

• Appropriate for all business students, but particularly relevant for students majoring in Marketing, Human Resource Management, Business Management, and MIS.

• Quantitative, critical thinking, and problem-solving skills required for success in this minor; a cumulative GPA of 3.0 is recommended.

• Completion of MIS 2101 or MIS 2901 and MKTG 2101 with minimum grades of "C" and MKTG 3596 with a minimum grade of "C-" are prerequisites to this minor.

• Five courses required (four must be taken at Temple University):
  
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MIS 2501</td>
<td>Enterprise IT Architecture</td>
<td>3</td>
</tr>
<tr>
<td>MIS 2502</td>
<td>Data Analytics</td>
<td>3</td>
</tr>
<tr>
<td>MIS 3538</td>
<td>Social Media Innovation</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 3507</td>
<td>Direct Marketing</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 3508</td>
<td>Digital Marketing</td>
<td>3</td>
</tr>
</tbody>
</table>

  **Total Credit Hours** 15

• A supervised corporate internship is optional. Students approved for this option will register for MIS 3581 as a sixth course.

• Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.

• **Marketing majors** who declare Digital Marketing Minor will complete MKTG 3507 and MKTG 3508 as well as two other Marketing electives for the Marketing major.

• **MIS majors** who declare Digital Marketing Minor will complete:

  **Required Courses**
  
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MIS 3538</td>
<td>Social Media Innovation</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 3596</td>
<td>Consumer and Buyer Behavior</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 3507</td>
<td>Direct Marketing</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 3508</td>
<td>Digital Marketing</td>
<td>3</td>
</tr>
</tbody>
</table>

  **Elective**
  
  Select one of the following: 3
  
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSP 1021</td>
<td>Media and Society</td>
</tr>
<tr>
<td>MSP 1655</td>
<td>The Business of Media</td>
</tr>
<tr>
<td>MSP 1701</td>
<td>Introduction to Media Technology</td>
</tr>
<tr>
<td>MSP 2741</td>
<td>Introduction to Internet Studies and Web Authoring</td>
</tr>
<tr>
<td>FMA 1171</td>
<td>Media &amp; Culture</td>
</tr>
<tr>
<td>FMA 1451</td>
<td>Survey of New Media</td>
</tr>
<tr>
<td>FMA 2452</td>
<td>Web Art &amp; Design</td>
</tr>
<tr>
<td>JRN 1113</td>
<td>Audio/Visual Newsgathering</td>
</tr>
<tr>
<td>JRN 1114</td>
<td>Design for Journalists</td>
</tr>
<tr>
<td>JRN 3601</td>
<td>Multimedia Storytelling</td>
</tr>
<tr>
<td>GAD 2071</td>
<td>Mac Design Programs I</td>
</tr>
<tr>
<td>GAD 2073</td>
<td>Introduction to Web Design</td>
</tr>
<tr>
<td>GAD 2075</td>
<td>Communication Through Graphic Design</td>
</tr>
<tr>
<td>MKTG 3502</td>
<td>Information Management for Marketing Strategies</td>
</tr>
<tr>
<td>MKTG 3504</td>
<td>Sales and Sales Management</td>
</tr>
<tr>
<td>MKTG 3505</td>
<td>Entrepreneurial Marketing</td>
</tr>
<tr>
<td>MKTG 3511</td>
<td>Marketing Research</td>
</tr>
<tr>
<td>MIS 3501</td>
<td>Data-Centric Application Development</td>
</tr>
<tr>
<td>MIS 3504</td>
<td>Digital Design and Innovation</td>
</tr>
<tr>
<td>MIS 3536</td>
<td>Information Systems Innovation</td>
</tr>
<tr>
<td>MIS 3581</td>
<td>Co-operative Experience in Management Information Systems</td>
</tr>
<tr>
<td>SGM 3501</td>
<td>Entrepreneurial and Innovative Thinking</td>
</tr>
</tbody>
</table>

  **Total Credit Hours** 15

• Some courses are only offered once a year depending on demand for the course.
• A cumulative grade point average of 2.0 in the minor is required as well as a minimum grade of C- in each course unless otherwise specified.
• Courses for the minor must be completed prior to graduation; if completed, the minor will be recorded on the final transcript upon graduation.
• All interested students must meet with Dr. Michael Smith (msmith@temple.edu) to declare or rescind this minor.

Interested students should discuss with their home college advisors how the courses in the minor will fit into their overall degree plan and are strongly encouraged to declare the minor early in their academic career.

Economics Minor

• Open to business students. Non-business students interested in an Economics minor should contact the College of Liberal Arts (p. 749).
• Understand basic business foundations and learn how the impact of economics affects public and personal issues.
• Four departmental courses are required (three must be completed at Temple University):

  **Required Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 3501</td>
<td>Intermediate Microeconomic Analysis</td>
<td>3</td>
</tr>
<tr>
<td>or ECON 3502</td>
<td>Intermediate Macroeconomic Analysis</td>
<td>3</td>
</tr>
<tr>
<td>Select three of the following:</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>ECON 3503</td>
<td>Introduction to Econometrics</td>
<td></td>
</tr>
<tr>
<td>ECON 3504</td>
<td>Mathematical Economics</td>
<td></td>
</tr>
<tr>
<td>ECON 3506/3596</td>
<td>Energy, Ecology, and Economy</td>
<td></td>
</tr>
<tr>
<td>ECON 3507/3597</td>
<td>Health Economics</td>
<td></td>
</tr>
<tr>
<td>ECON 3511</td>
<td>The Economics and Management of Privatization</td>
<td></td>
</tr>
<tr>
<td>ECON 3512</td>
<td>Public Finance</td>
<td></td>
</tr>
<tr>
<td>ECON 3513</td>
<td>Economics of State and Local Governments</td>
<td></td>
</tr>
<tr>
<td>ECON 3521</td>
<td>Economics of Risk and Uncertainty</td>
<td></td>
</tr>
<tr>
<td>ECON 3522</td>
<td>Economic Theory of Networks</td>
<td></td>
</tr>
<tr>
<td>ECON 3531</td>
<td>History of Economic Theory</td>
<td></td>
</tr>
<tr>
<td>ECON 3532</td>
<td>Economic History of the United States</td>
<td></td>
</tr>
<tr>
<td>ECON 3535</td>
<td>Public Control of Business: Antitrust</td>
<td></td>
</tr>
<tr>
<td>ECON 3536</td>
<td>Economics of American Industry</td>
<td></td>
</tr>
<tr>
<td>ECON 3537</td>
<td>Comparative Economic Systems</td>
<td></td>
</tr>
<tr>
<td>ECON 3538</td>
<td>Managerial Economics</td>
<td></td>
</tr>
<tr>
<td>ECON 3539</td>
<td>Economics of Socialist Countries</td>
<td></td>
</tr>
<tr>
<td>ECON 3541/3597</td>
<td>The Economics of Sports</td>
<td></td>
</tr>
<tr>
<td>ECON 3542</td>
<td>Economics of the Arts and Culture</td>
<td></td>
</tr>
<tr>
<td>ECON 3543</td>
<td>Law and Economics</td>
<td></td>
</tr>
<tr>
<td>ECON 3544</td>
<td>Computer-Based Modeling</td>
<td></td>
</tr>
<tr>
<td>ECON 3545</td>
<td>Economics of Labor Markets</td>
<td></td>
</tr>
<tr>
<td>ECON 3546</td>
<td>Women in the Economy</td>
<td></td>
</tr>
<tr>
<td>ECON 3547</td>
<td>Economics of Development and Growth</td>
<td></td>
</tr>
<tr>
<td>ECON 3548</td>
<td>Behavioral Economics</td>
<td></td>
</tr>
<tr>
<td>ECON 3563</td>
<td>International Trade</td>
<td></td>
</tr>
<tr>
<td>ECON 3564</td>
<td>International Monetary Economics</td>
<td></td>
</tr>
<tr>
<td>ECON 3571</td>
<td>Money and Banking</td>
<td></td>
</tr>
<tr>
<td>ECON 3580</td>
<td>Special Topics</td>
<td></td>
</tr>
<tr>
<td>ECON 3582</td>
<td>Independent Study</td>
<td></td>
</tr>
<tr>
<td>ECON 3598</td>
<td>Economics Writing Seminar</td>
<td></td>
</tr>
<tr>
<td>ECON 3682</td>
<td>Independent Study</td>
<td></td>
</tr>
<tr>
<td>ECON 3900</td>
<td>Honors Topics in Economics</td>
<td></td>
</tr>
</tbody>
</table>

**Total Credit Hours** 12

1 If both ECON 3501 and ECON 3502 are taken, one counts as one of these electives.

• ECON 3408, ECON 3581, ECON 3696, ECON 3999, and ECON 4999 cannot be used to fulfill an Elective for the Economics minor.
• A grade point average of 2.0 in courses in the minor is required as well as a minimum grade of C- in each course unless otherwise specified.
• Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.
• Courses for the minor must be completed prior to graduation; if completed, the minor will be recorded on the final transcript upon graduation.
• To declare or rescind this minor, visit the Fox School of Business and Management (http://www.fox.temple.edu/cms_academics/dept/advising/minors).

Interested students should discuss with their home college advisors how the courses in the minor will fit into their overall degree plan and are strongly encouraged to declare the minor early in their academic career.

Entertainment Law and Business Minor

• Open only to business students and students in the School of Tourism and Hospitality Management.
• Learn about the special legal issues that confront this industry that provides about 2 million jobs a year.
• Provide students with the appropriate knowledge and skills to progress into management careers within the entertainment sector.
• All students in the Fox School are required to take a Legal Studies course as part of their lower division Fox School foundation. In addition to the required introductory law course, LGLS 1101 (LGLS 1901), four courses are required:

  Required Courses
  LGLS 1112 Law for Business 3
  LGLS 3504 Sports and the Law 3
  LGLS 3509 Entertainment Law 3
  LGLS 3522 Technology, Privacy and Intellectual Property Law 3

  Total Credit Hours 12

• LGLS 1102 completed prior to Spring 2016 may be used to fulfill LGLS 1112.
• Three of the four courses required for the minor must be taken at Temple University. Residency excludes the required Legal Studies course that fills the lower division foundation requirement.
• Some courses are only offered once a year depending on demand for the course.
• A grade point average of 2.0 in the minor is required, as well as a minimum grade of C- in each course unless otherwise specified.
• Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.
• Courses for the minor must be completed prior to graduation; if completed, the minor will be recorded on the final transcript upon graduation.
• To declare or rescind this minor, visit the Fox School of Business and Management (http://www.fox.temple.edu/cms_academics/dept/advising/minors).

Interested students should discuss with their home college advisors how the courses in the minor will fit into their overall degree plan and are strongly encouraged to declare the minor early in their academic career.

Entrepreneurship & Innovation Management Minor

• Open to business or non-business students.
• Integrates entrepreneurship theory and practice in an interdisciplinary approach to develop an understanding of the creation and management of an entrepreneurial business.
• Prepares students to start a business, run a consulting or freelancing practice, be a productive member of an entrepreneurial or small business, assume responsibilities in a family business, or become an effective manager in a growing business. Theory, cases, guest speakers, and hands-on or experiential learning are used to study creativity, innovation, idea generation, business models, feasibility analysis, market research, strategic planning, and venture financing.
• At their core, entrepreneurs are creative problem-solvers that are driven to identify and grab hold of opportunities. Anyone can be entrepreneurial — whether you want to start the next Facebook, take control of your work-life balance with a lifestyle business, have a positive impact on the world with a social venture, or drive change and innovation in an existing company.

• Eight courses are prerequisites 1 for the minor:
  ECON 1101 Macroeconomic Principles 3
  ECON 1102 Microeconomic Principles 3
  HRM 1101 Leadership and Organizational Management 3
  ACCT 2101 Financial Accounting 3
  ACCT 2102 Managerial Accounting 3
  or ACCT 2521 Cost Accounting

1 Prerequisites for the Entrepreneurship & Innovation Management Minor include:

ECON 1101 Macroeconomic Principles 3
ECON 1102 Microeconomic Principles 3
HRM 1101 Leadership and Organizational Management 3
ACCT 2101 Financial Accounting 3
ACCT 2102 Managerial Accounting 3
or ACCT 2521 Cost Accounting
MKTG 2101  Marketing Management 3
RMI 2101  Introduction to Risk Management 3
STAT 2103  Statistical Business Analytics (or STAT 2101 or MATH 1013) 4

One of the following can be substitute for STAT 2103 if required for the student’s program:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEE 3048</td>
<td>Probability, Statistics &amp; Stochastic Methods</td>
<td>3</td>
</tr>
<tr>
<td>PSY 1167</td>
<td>Foundations in Statistical Methods</td>
<td>4</td>
</tr>
<tr>
<td>PSY 2168</td>
<td>Inferential Methods in Psychology</td>
<td>4</td>
</tr>
<tr>
<td>SOC 1167</td>
<td>Social Statistics</td>
<td>4</td>
</tr>
<tr>
<td>SOC 3201</td>
<td>Statistical Methods in Sociology</td>
<td>4</td>
</tr>
</tbody>
</table>

Total Credit Hours 25

1 Minimum grades of C- are required in prerequisite courses and are not calculated in the minor GPA.

• Eight course alternate prerequisites¹ for the minor:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 2101</td>
<td>Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1101</td>
<td>Macroeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>HRM 1101</td>
<td>Leadership and Organizational Management</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 2101</td>
<td>Marketing Management</td>
<td>3</td>
</tr>
<tr>
<td>RMI 2501</td>
<td>Fundamentals of Personal Financial Planning</td>
<td>3</td>
</tr>
</tbody>
</table>

Three electives chosen from the menu of the General Business Studies Minor, excluding SGM courses listed below.²

Total Credit Hours 24

1 Minimum grades of C- are required in prerequisite courses and are not calculated in the minor GPA.

² Please see the General Business Studies minor (p. 579) for list of electives.

• Three departmental courses are required (two must be taken at Temple University):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>SGM 3501</td>
<td>Entrepreneurial and Innovative Thinking</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one Entrepreneurial Management Course:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>SGM 3503</td>
<td>Innovation that Works: Building and Assessing Innovative Business Models</td>
<td>3</td>
</tr>
<tr>
<td>SGM 3511</td>
<td>Doing Well by Doing Good: Where Innovation and Entrepreneurship Meet Social Impact</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one Entrepreneurial Action Course:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>SGM 3002</td>
<td>Be Your Own Boss: Planning to Start Your Own Business</td>
<td>3</td>
</tr>
<tr>
<td>SGM 3521</td>
<td>Finance Your Ideas: Crowdfunding, Grants, Banks, Venture Funds, Corporate and Private Investment</td>
<td>3</td>
</tr>
<tr>
<td>SGM 3580</td>
<td>Special Topics - Strategic Management²</td>
<td>3</td>
</tr>
<tr>
<td>SGM 3682</td>
<td>Independent Study³</td>
<td>3</td>
</tr>
<tr>
<td>SGM 4596</td>
<td>Strategic Planning: The Business Plan as a Strategic Tool for Existing Businesses and Entrepreneurs</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credit Hours 9

¹ Students interested in taking SGM 3521 should have already assessed the viability of their idea for a new venture. SGM 3501 or SGM 0827 and SGM 3503 are strongly recommended prior to taking SGM 3521. Students who do not meet these criteria may be required to complete additional supplementary work and should contact the professor to find out if they are sufficiently prepared to take this course.

² Approval of the Innovation and Entrepreneurship Institute (IEI) Academic or Managing Director or department chair required.

³ Independent Study projects will be identified or created by the IEI. Approval of the IEI Academic or Managing Director or department chair required.

• A grade point average of 2.0 as well as a minimum grade of C- in each course is required unless otherwise specified.

• Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.

• Courses for the minor must be completed prior to graduation; if completed, the minor will be recorded on the final transcript upon graduation.

• To declare or rescind this minor, visit the Fox School of Business and Management (http://www.fox.temple.edu/cms_academics/dept/advising/minors).

Interested students should discuss with their home college advisors how the courses in the minor will fit into their overall degree plan and are strongly encouraged to declare the minor early in their academic career.
Finance Minor

- Open to business or non-business students.
- Provides in-depth understanding of financial principles and their application to financial issues faced by decision-makers in corporate, financial, and government sectors of the global economy.
- Students majoring in Accounting, Economics, Marketing, Risk Management, and Real Estate will enhance their marketable skills with this minor.

**Prerequisite courses required for non-business students:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 2101</td>
<td>Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 2102</td>
<td>Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>or ACCT 2521</td>
<td>Cost Accounting</td>
<td></td>
</tr>
<tr>
<td>ECON 1101</td>
<td>Macroeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1102</td>
<td>Microeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>FIN 3101</td>
<td>Financial Management</td>
<td>3</td>
</tr>
</tbody>
</table>

Pre-Calculus/Calculus sequence:

<table>
<thead>
<tr>
<th>Course Group</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 1001 &amp; STAT 1102</td>
<td>Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1021 &amp; MATH 1031</td>
<td>Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1022 &amp; MATH 1041</td>
<td>Cost Accounting</td>
<td>3</td>
</tr>
<tr>
<td>STAT 2103</td>
<td>Statistical Business Analytics</td>
<td>4</td>
</tr>
</tbody>
</table>

- Minimum grades of C- are required in prerequisite courses except for FIN 3101 which requires a minimum grade of C. These grades are not calculated in the minor GPA.
- Four departmental courses required (three of these courses must be taken at Temple University):
  - **Required Courses**
    | Course       | Title                                | Credits |
    |--------------|--------------------------------------|---------|
    | FIN 3504     | Intermediate Corporate Finance (must be completed at Temple) | 3       |
    | FIN 3507     | Investments                          | 3       |
  - **Electives**
    Select two of the following: 6
    | Course       | Title                                | Credits |
    |--------------|--------------------------------------|---------|
    | FIN 3505     | Management of Financial Institutions  |         |
    | FIN 3509     | Real Estate Investment and Finance   |         |
    | FIN 3512     | Financial Modeling                   |         |
    | FIN 3513     | Financial Statement Analysis         |         |
    | FIN 3515     | Financial Markets and Institutions for Business |         |
    | FIN 3551     | International Finance                |         |

**Total Credit Hours** 12

- Minimum grades of C are required for the departmental courses.
- A grade point average of 2.0 in the minor is required.
- Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.
- Courses for the minor must be completed prior to graduation; if completed, the minor will be recorded on the final transcript upon graduation.
- To declare or rescind this minor, visit the Fox School of Business and Management (http://www.fox.temple.edu/cms_academics/dept/advising/minors).

Interested students should discuss with their home college advisors how the courses in the minor will fit into their overall degree plan and are strongly encouraged to declare the minor early in their academic career.

General Business Studies Minor

- Open to non-business students only
- Less quantitative than the Business Minor
- Provides a good foundation of business skills with the flexibility to explore selected areas of interest in business
- Eight courses required (five of these courses must be taken at Temple University):
  - **Foundation**
    | Course       | Title                                | Credits |
    |--------------|--------------------------------------|---------|
    | ECON 1101    | Macroeconomic Principles             | 3       |
    | HRM 1101     | Leadership and Organizational Management | 3       |
### Electives

Select three of the following: 9

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 2102</td>
<td>Managerial Accounting</td>
</tr>
<tr>
<td>ACCT 3511</td>
<td>Intermediate Accounting I</td>
</tr>
<tr>
<td>BA 3102</td>
<td>Business Society and Ethics</td>
</tr>
<tr>
<td>ECON 1102</td>
<td>Microeconomic Principles</td>
</tr>
<tr>
<td>ECON 3501</td>
<td>Intermediate Microeconomic Analysis</td>
</tr>
<tr>
<td>ECON 3502</td>
<td>Intermediate Macroeconomic Analysis</td>
</tr>
<tr>
<td>ECON 3503</td>
<td>Introduction to Econometrics</td>
</tr>
<tr>
<td>ECON 3504</td>
<td>Mathematical Economics</td>
</tr>
<tr>
<td>ECON 3506/3596</td>
<td>Energy, Ecology, and Economy</td>
</tr>
<tr>
<td>ECON 3507/3597</td>
<td>Health Economics</td>
</tr>
<tr>
<td>ECON 3511</td>
<td>The Economics and Management of Privatization</td>
</tr>
<tr>
<td>ECON 3512</td>
<td>Public Finance</td>
</tr>
<tr>
<td>ECON 3513</td>
<td>Economics of State and Local Governments</td>
</tr>
<tr>
<td>ECON 3521</td>
<td>Economics of Risk and Uncertainty</td>
</tr>
<tr>
<td>ECON 3522</td>
<td>Economic Theory of Networks</td>
</tr>
<tr>
<td>ECON 3531</td>
<td>History of Economic Theory</td>
</tr>
<tr>
<td>ECON 3532</td>
<td>Economic History of the United States</td>
</tr>
<tr>
<td>ECON 3535</td>
<td>Public Control of Business: Antitrust</td>
</tr>
<tr>
<td>ECON 3536</td>
<td>Economics of American Industry</td>
</tr>
<tr>
<td>ECON 3537</td>
<td>Comparative Economic Systems</td>
</tr>
<tr>
<td>ECON 3538</td>
<td>Managerial Economics</td>
</tr>
<tr>
<td>ECON 3539</td>
<td>Economics of Socialist Countries</td>
</tr>
<tr>
<td>ECON 3541/3697</td>
<td>The Economics of Sports</td>
</tr>
<tr>
<td>ECON 3542</td>
<td>Economics of the Arts and Culture</td>
</tr>
<tr>
<td>ECON 3543</td>
<td>Law and Economics</td>
</tr>
<tr>
<td>ECON 3544</td>
<td>Computer-Based Modeling</td>
</tr>
<tr>
<td>ECON 3545</td>
<td>Economics of Labor Markets</td>
</tr>
<tr>
<td>ECON 3546</td>
<td>Women in the Economy</td>
</tr>
<tr>
<td>ECON 3547</td>
<td>Economics of Development and Growth</td>
</tr>
<tr>
<td>ECON 3548</td>
<td>Behavioral Economics</td>
</tr>
<tr>
<td>ECON 3563</td>
<td>International Trade</td>
</tr>
<tr>
<td>ECON 3564</td>
<td>International Monetary Economics</td>
</tr>
<tr>
<td>ECON 3571</td>
<td>Money and Banking</td>
</tr>
<tr>
<td>ECON 3580</td>
<td>Special Topics</td>
</tr>
<tr>
<td>ECON 3582</td>
<td>Independent Study</td>
</tr>
<tr>
<td>ECON 3598</td>
<td>Economics Writing Seminar</td>
</tr>
<tr>
<td>ECON 3682</td>
<td>Independent Study</td>
</tr>
<tr>
<td>ECON 3900</td>
<td>Honors Topics in Economics</td>
</tr>
<tr>
<td>HCM 3501</td>
<td>Introduction to Health Services Systems</td>
</tr>
<tr>
<td>HCM 3502</td>
<td>Healthcare Financing and Information Technology</td>
</tr>
<tr>
<td>HCM 4596</td>
<td>Healthcare Quality and Risk Management</td>
</tr>
<tr>
<td>HRM 2501</td>
<td>Introduction to Human Resource Management</td>
</tr>
<tr>
<td>HRM 2511</td>
<td>Corporate Sustainability: People, Profits &amp; Planet</td>
</tr>
<tr>
<td>HRM 3501</td>
<td>Power, Influence and Negotiation</td>
</tr>
<tr>
<td>HRM 3502</td>
<td>Leading People at Work</td>
</tr>
<tr>
<td>HRM 3503</td>
<td>Communicating in Organizations</td>
</tr>
<tr>
<td>HRM 3504</td>
<td>Leadership in the 21st Century</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
</tr>
<tr>
<td>------------</td>
<td>--------------------------------------------------------</td>
</tr>
<tr>
<td>HRM 3505</td>
<td>Sustainable Organizational Leadership</td>
</tr>
<tr>
<td>HRM 3531</td>
<td>HR on the Ground</td>
</tr>
<tr>
<td>HRM 3580</td>
<td>Special Topics - Human Resource Management</td>
</tr>
<tr>
<td>IB 2501</td>
<td>Fundamentals of Asian Business</td>
</tr>
<tr>
<td></td>
<td>or ASST 2511</td>
</tr>
<tr>
<td>IB/LAS 2502</td>
<td>Fundamentals of Latin American Business</td>
</tr>
<tr>
<td>IB 2503</td>
<td>Fundamentals of European Business</td>
</tr>
<tr>
<td>LGLS 1101</td>
<td>Legal Environment of Business</td>
</tr>
<tr>
<td>LGLS 1102</td>
<td>Law of Contracts</td>
</tr>
<tr>
<td>LGLS 3502</td>
<td>Law for the Entrepreneur</td>
</tr>
<tr>
<td>LGLS 3503</td>
<td>The Consumer and the Law</td>
</tr>
<tr>
<td>LGLS 3504</td>
<td>Sports and the Law</td>
</tr>
<tr>
<td>LGLS 3509</td>
<td>Entertainment Law</td>
</tr>
<tr>
<td>LGLS 3511</td>
<td>Environmental Law and Sustainability</td>
</tr>
<tr>
<td>LGLS 3512</td>
<td>Law of Nonprofits</td>
</tr>
<tr>
<td>LGLS 3580</td>
<td>Special Topics - Law</td>
</tr>
<tr>
<td>MIS 2101</td>
<td>Information Systems in Organizations</td>
</tr>
<tr>
<td>MIS 2501</td>
<td>Enterprise IT Architecture</td>
</tr>
<tr>
<td>MIS 2502</td>
<td>Data Analytics</td>
</tr>
<tr>
<td>MIS 3536</td>
<td>Information Systems Innovation</td>
</tr>
<tr>
<td>MIS 3537</td>
<td>Internet Enabled Supply Chains</td>
</tr>
<tr>
<td>MIS 3538</td>
<td>Social Media Innovation</td>
</tr>
<tr>
<td>MKTG 2511</td>
<td>Marketing for the Sustainable Enterprise</td>
</tr>
<tr>
<td>MKTG 3501</td>
<td>Integrated Marketing Communications</td>
</tr>
<tr>
<td>MKTG 3503</td>
<td>Promotion Management</td>
</tr>
<tr>
<td>MKTG 3504</td>
<td>Sales and Sales Management</td>
</tr>
<tr>
<td>MKTG 3505</td>
<td>Entrepreneurial Marketing</td>
</tr>
<tr>
<td>MKTG 3508</td>
<td>Digital Marketing</td>
</tr>
<tr>
<td>MKTG 3580</td>
<td>Special Topics - Marketing</td>
</tr>
<tr>
<td>RE 3501</td>
<td>Real Estate Fundamentals</td>
</tr>
<tr>
<td>RE 3502</td>
<td>Real Estate Practice</td>
</tr>
<tr>
<td>RMI 2101</td>
<td>Introduction to Risk Management</td>
</tr>
<tr>
<td>STAT 2103</td>
<td>Statistical Business Analytics (or STAT 2101)</td>
</tr>
<tr>
<td>STAT 2521</td>
<td>Data Analysis and Statistical Computing</td>
</tr>
<tr>
<td>STAT 2522</td>
<td>Survey Design and Sampling</td>
</tr>
<tr>
<td>STAT 2523</td>
<td>Design of Experiments and Quality Control</td>
</tr>
<tr>
<td>SGM 3501</td>
<td>Entrepreneurial and Innovative Thinking</td>
</tr>
<tr>
<td>SGM 3511</td>
<td>Doing Well by Doing Good: Where Innovation and Entrepreneurship Meet Social Impact</td>
</tr>
</tbody>
</table>

Total Credit Hours: 24

- A grade point average of 2.0 in the minor is required.
- Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.
- Courses for the minor must be completed prior to graduation; if completed, the minor will be recorded on the final transcript upon graduation.
- To declare or rescind this minor, visit the Fox School of Business and Management (http://www.fox.temple.edu/cms_academics/dept/advising/minors).

Interested students should discuss with their home college advisors how the courses in the minor will fit into their overall degree plan and are strongly encouraged to declare the minor early in their academic career.

**Healthcare Management Minor**

- Open to business or non-business students.
• Develop value-added skills for students who aim to understand the structure, policy, finance, and strategy/operations issues of healthcare organizations.

• Three courses required (all three courses must be taken at Temple University):

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HCM 3501: Introduction to Health Services Systems</td>
<td>3</td>
</tr>
<tr>
<td>HCM 3502: Healthcare Financing and Information Technology</td>
<td>3</td>
</tr>
<tr>
<td>HCM 4596: Healthcare Quality and Risk Management (fall only)</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credit Hours: 9

• Courses must be taken in sequence, not concurrently, so a minimum of three semesters is required to complete this minor.

• A grade point average of 2.0 in the minor is required as well as a minimum grade of C in each course unless otherwise specified.

• Health Economics (ECON 3507) is recommended but not required as an additional course.

• Risk Management majors who complete the Healthcare track are not eligible for the minor.

• Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.

• Courses for the minor must be completed prior to graduation; if completed, the minor will be recorded on the final transcript upon graduation.

• A grade point average of 2.0 in courses in the minor is required, as well as a minimum grade of C- in each course unless otherwise specified.

• Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.

• Courses for the minor must be completed prior to graduation; if completed, the minor will be recorded on the final transcript upon graduation.

• To declare or rescind this minor, visit the Fox School of Business and Management ([http://www.fox.temple.edu/cms_academics/dept/advising/minors](http://www.fox.temple.edu/cms_academics/dept/advising/minors)). Contact hcm.minor@temple.edu for further information or assistance.

Interested students should discuss with their home college advisors how the courses in the minor will fit into their overall degree plan and are strongly encouraged to declare the minor early in their academic career.

### Human Resource Minor for Legal Studies

• Open only to Legal Studies majors

• Provides Legal Studies majors who understand the legal aspects of business decisions with the additional understanding of human resource practices (e.g., recruitment and reward systems, public policy compliance and labor relations) and negotiation strategies.

• Four courses required (three of these must be taken at Temple University):

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRM 2501: Introduction to Human Resource Management</td>
<td>3</td>
</tr>
<tr>
<td>HRM 3501: Power, Influence and Negotiation</td>
<td>3</td>
</tr>
<tr>
<td>HRM 3512: Human Resource Management and Public Policy</td>
<td>3</td>
</tr>
<tr>
<td>HRM 3513: Labor Relations: Strategy and Practice</td>
<td>3</td>
</tr>
</tbody>
</table>

A grade point average of 2.0 in courses in the minor is required, as well as a minimum grade of C- in each course unless otherwise specified.

• Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.

• Courses for the minor must be completed prior to graduation; if completed, the minor will be recorded on the final transcript upon graduation.

• To declare or rescind this minor, visit the Fox School of Business and Management ([http://www.fox.temple.edu/cms_academics/dept/advising/minors](http://www.fox.temple.edu/cms_academics/dept/advising/minors)).

Interested students should discuss with their home college advisors how the courses in the minor will fit into their overall degree plan and are strongly encouraged to declare the minor early in their academic career.

### Information Technology Innovation & Entrepreneurship Minor

• Open only to business students who have completed MIS 2101.

• Integrate two of the most important elements of the Fox School: the enabling role of IT and the drive of entrepreneurial thinking.

• Four courses required (all four must be taken at Temple University):

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SGM 3501: Entrepreneurial and Innovative Thinking</td>
<td>3</td>
</tr>
<tr>
<td>MIS 3536: Information Systems Innovation</td>
<td>3</td>
</tr>
</tbody>
</table>

Electives

Select two of the following: 6

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MIS 2502: Data Analytics</td>
<td></td>
</tr>
<tr>
<td>MIS 3504: Digital Design and Innovation</td>
<td></td>
</tr>
<tr>
<td>MIS 3581: Co-operative Experience in Management Information Systems</td>
<td></td>
</tr>
<tr>
<td>SGM 3503: Innovation that Works: Building and Assessing Innovative Business Models</td>
<td></td>
</tr>
</tbody>
</table>
• Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.
• Entrepreneurship majors who declare ITIE Minor may need to substitute different courses. Students are encouraged to find a relevant course appropriate to their interest. Substitutions will need to be approved in advance by the department and Senior Assistant Dean for Undergraduate Programs.
• MIS majors who declare ITIE Minor are encouraged to take the non-MIS courses for the electives.
• A grade point average of 2.0 in the minor is required as well as a minimum grade of C in each course unless otherwise specified.
• Courses for the minor must be completed prior to graduation; if completed, the minor will be recorded on the final transcript upon graduation.
• For more information and to declare or rescind this minor, visit the MIS department (http://community.mis.temple.edu/programs/minor-in-ite).

Interested students should discuss with their home college advisors how the courses in the minor will fit into their overall degree plan and are strongly encouraged to declare the minor early in their academic career.

Legal Studies Minor

• Open only to business and Tourism and Hospitality Management students.
• Designed to expose students to a curriculum in legal studies, particularly students majoring in other disciplines such as accounting, risk management or finance who are considering law school. Students will learn how to read cases and statutes, do legal research and make a legal argument as well as identify the legal issues that will impact their business and personal decisions.
• All students in the Fox School are required to take LGLS 1101 as part of their lower division Fox School foundation. Four additional courses are required:

  Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LGLS 1112</td>
<td>Law for Business</td>
<td>3</td>
</tr>
<tr>
<td>LGLS 3562</td>
<td>Legal Aspects of Global Business</td>
<td>3</td>
</tr>
</tbody>
</table>

  Electives

  Select two of the following: 6

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>LGLS 3504</td>
<td>Sports and the Law</td>
</tr>
<tr>
<td>LGLS 3509</td>
<td>Entertainment Law</td>
</tr>
<tr>
<td>LGLS 3511</td>
<td>Environmental Law and Sustainability</td>
</tr>
<tr>
<td>LGLS 3521</td>
<td>Corporate Governance</td>
</tr>
<tr>
<td>LGLS 3522</td>
<td>Technology, Privacy and Intellectual Property Law</td>
</tr>
<tr>
<td>LGLS 3523</td>
<td>Detecting Financial Crimes</td>
</tr>
<tr>
<td>LGLS 3524</td>
<td>Legal and Policy Issues in the Workplace</td>
</tr>
<tr>
<td>LGLS 3580</td>
<td>Special Topics - Law</td>
</tr>
<tr>
<td>LGLS 3581</td>
<td>Pre-Law Internship and Seminar</td>
</tr>
<tr>
<td>LGLS 3582</td>
<td>Independent Study</td>
</tr>
<tr>
<td>RE 3501</td>
<td>Real Estate Fundamentals</td>
</tr>
<tr>
<td>RE 3502</td>
<td>Real Estate Practice</td>
</tr>
</tbody>
</table>

  Total Credit Hours 12

  1  LGLS 1102 completed prior to Spring 2016 may be used to fulfill LGLS 1112.

• Three of the four courses required for the minor must be taken at Temple University. Residency excludes the required Legal Studies course that fills the lower division foundation requirement.
• A grade point average of 2.0 in the minor is required as well as a minimum grade of C- in each course unless otherwise specified.
• Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.
• Courses for the minor must be completed prior to graduation; if completed, the minor will be recorded on the final transcript upon graduation.
• To declare or rescind this minor, visit the Fox School of Business and Management (http://www.fox.temple.edu/cms_academics/dept/advising/minors).

Interested students should discuss with their home college advisors how the courses in the minor will fit into their overall degree plan and are strongly encouraged to declare the minor early in their academic career.
Legal Studies Minor for Human Resource Managers

- Open only to Human Resource Management majors
- Prepare students for the legal issues that human resource professionals regularly address in the workplace.
- All students in the Fox School are required to take LGLS 1101 as part of their lower division Fox School foundation. Four additional courses are required:

<table>
<thead>
<tr>
<th>Required Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>LGLS 1112 Law for Business</td>
</tr>
<tr>
<td>LGLS 3513 Public Policy</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Elective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select two of the following:</td>
</tr>
<tr>
<td>LGLS 3521 Corporate Governance</td>
</tr>
<tr>
<td>LGLS 3522 Technology, Privacy and Intellectual Property Law</td>
</tr>
<tr>
<td>LGLS 3523 Detecting Financial Crimes</td>
</tr>
<tr>
<td>LGLS 3562 Legal Aspects of Global Business (recommended)</td>
</tr>
<tr>
<td>LGLS 3580 Special Topics - Law</td>
</tr>
<tr>
<td>or LGLS 3900 Honors Special Topics</td>
</tr>
<tr>
<td>LGLS 3581 Pre-Law Internship and Seminar</td>
</tr>
</tbody>
</table>

**Total Credit Hours**: 12

1 LGLS 1102 completed prior to Spring 2016 may be used to fulfill LGLS 1112.

- Three of the four courses required for the minor must be taken at Temple University. Residency excludes LGLS 1101 or LGLS 1901.
- A grade point average of 2.0 in the minor is required as well as a minimum grade of C- in each course unless otherwise specified.
- Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.
- Courses for the minor must be completed prior to graduation; if completed, the minor will be recorded on the final transcript upon graduation.
- To declare or rescind this minor, visit the Fox School of Business and Management (http://www.fox.temple.edu/cms_academics/dept/advising/minors).

Interested students should discuss with their home college advisors how the courses in the minor will fit into their overall degree plan and are strongly encouraged to declare the minor early in their academic career.

Management Information Systems Certificate

- Open to non-business students.
- Learn to identify, select and evaluate technology solutions for business problems.
- Become a knowledgeable user of IT and the person in the organization who can successfully interact with technology professionals.
- **Three courses required** (all courses must be taken at Temple University):

<table>
<thead>
<tr>
<th>Required Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>MIS 2101 Information Systems in Organizations</td>
</tr>
<tr>
<td>MIS 2502 Data Analytics</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Elective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select one of the following:</td>
</tr>
<tr>
<td>MIS 2501 Enterprise IT Architecture</td>
</tr>
<tr>
<td>MIS 3504 Digital Design and Innovation</td>
</tr>
<tr>
<td>MIS 3534 Strategic Management of Information Technology</td>
</tr>
<tr>
<td>MIS 3536 Information Systems Innovation</td>
</tr>
<tr>
<td>MIS 3537 Internet Enabled Supply Chains</td>
</tr>
</tbody>
</table>

**Total Credit Hours**: 9

- A grade point average of 2.0 in the certificate is required, including a minimum grade of C in each course.
- Courses cannot be used to meet certificate requirements if already used to meet the requirements for a major or a different minor or certificate.
Interested students should discuss with their home college advisors how the courses in the certificate will fit into their overall degree plan and are strongly encouraged to declare the certificate early in their academic career.

Management Information Systems Minor

- Open to business or non-business students.
- Learn to identify, select and evaluate technology solutions for business problems, become a knowledgeable user of IT and become the person in the organization who can successfully interact with technology professionals.

**Nine courses are prerequisites for the minor:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 1101</td>
<td>Macroeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1102</td>
<td>Microeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>HRM 1101</td>
<td>Leadership and Organizational Management</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 2101</td>
<td>Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 2102</td>
<td>Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>or ACCT 2521</td>
<td>Cost Accounting</td>
<td></td>
</tr>
<tr>
<td>MIS 2101</td>
<td>Information Systems in Organizations</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 2101</td>
<td>Marketing Management</td>
<td>3</td>
</tr>
<tr>
<td>RMI 2101</td>
<td>Introduction to Risk Management</td>
<td>3</td>
</tr>
<tr>
<td>STAT 2103</td>
<td>Statistical Business Analytics (or STAT 2101 or MATH 1013)</td>
<td>4</td>
</tr>
</tbody>
</table>

One of the following can be substituted for STAT 2103 if required for the student’s program:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEE 3048</td>
<td>Probability, Statistics &amp; Stochastic Methods</td>
</tr>
<tr>
<td>PSY 1167</td>
<td>Foundations in Statistical Methods</td>
</tr>
<tr>
<td>PSY 2168</td>
<td>Inferential Methods in Psychology</td>
</tr>
<tr>
<td>SOC 1167</td>
<td>Social Statistics</td>
</tr>
<tr>
<td>SOC 3201</td>
<td>Statistical Methods in Sociology</td>
</tr>
</tbody>
</table>

**Total Credit Hours**

28

**Nine course alternative prerequisites for the minor:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 2101</td>
<td>Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1101</td>
<td>Macroeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>HRM 1101</td>
<td>Leadership and Organizational Management</td>
<td>3</td>
</tr>
<tr>
<td>MIS 2101</td>
<td>Information Systems in Organizations</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 2101</td>
<td>Marketing Management</td>
<td>3</td>
</tr>
<tr>
<td>RMI 2501</td>
<td>Fundamentals of Personal Financial Planning</td>
<td>3</td>
</tr>
</tbody>
</table>

Three electives chosen from the menu of the General Business Studies Minor, excluding MIS courses listed below for the minor.  

**Total Credit Hours**

27

Please see the General Business Studies minor (p. 579) for list of electives.

- Minimum grades of C- are required in prerequisite courses and are not calculated in the minor GPA.
- Three departmental courses are required (two of these must be taken at Temple University):

**Required Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MIS 2502</td>
<td>Data Analytics</td>
<td>3</td>
</tr>
<tr>
<td>MIS 3504</td>
<td>Digital Design and Innovation</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MIS 2501</td>
<td>Enterprise IT Architecture</td>
<td></td>
</tr>
<tr>
<td>MIS 3533</td>
<td>Electronic Commerce Site Design</td>
<td></td>
</tr>
<tr>
<td>MIS 3534</td>
<td>Strategic Management of Information Technology</td>
<td></td>
</tr>
<tr>
<td>MIS 3536</td>
<td>Information Systems Innovation</td>
<td></td>
</tr>
<tr>
<td>MIS 3537</td>
<td>Internet Enabled Supply Chains</td>
<td></td>
</tr>
<tr>
<td>MIS 3538</td>
<td>Social Media Innovation</td>
<td></td>
</tr>
<tr>
<td>MIS 3580</td>
<td>Special Topics</td>
<td></td>
</tr>
</tbody>
</table>
MIS 3581  Co-operative Experience in Management Information Systems

<table>
<thead>
<tr>
<th>Total Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
</tr>
</tbody>
</table>

- A grade point average of 2.0 in the minor is required as well as a minimum grade of C- in each course unless otherwise specified.
- Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.
- Courses for the minor must be completed prior to graduation; if completed, the minor will be recorded on the final transcript upon graduation.
- For more information and to declare or rescind this minor visit the Fox MIS Minor web site (http://community.mis.temple.edu/programs/misminor).

Interested students should discuss with their home college advisors how the courses in the minor will fit into their overall degree plan and are strongly encouraged to declare the minor early in their academic career.

Marketing Minor

- Open only to business students.
- Minor allows students to explore a firm’s value creation, customer acquisition, and development and retention processes, expanding career options especially for students with majors in Business Management, Entrepreneurship, Finance, Human Resources, International Business, Management Information Systems, and Real Estate.
- All students in Fox School are required to take MKTG 2101 as part of the lower division Fox School Foundation
- Four additional Marketing courses required (all four must be taken at Temple University):

  Required Courses
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MKTG 3511</td>
<td>Marketing Research</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 3596</td>
<td>Consumer and Buyer Behavior</td>
<td>3</td>
</tr>
</tbody>
</table>

  Electives
  Select two of the following: 6
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MKTG 2511</td>
<td>Marketing for the Sustainable Enterprise</td>
</tr>
<tr>
<td>MKTG 3501</td>
<td>Integrated Marketing Communications</td>
</tr>
<tr>
<td>MKTG 3502</td>
<td>Information Management for Marketing Strategies</td>
</tr>
<tr>
<td>MKTG 3503</td>
<td>Promotion Management</td>
</tr>
<tr>
<td>MKTG 3504</td>
<td>Sales and Sales Management</td>
</tr>
<tr>
<td>MKTG 3505</td>
<td>Entrepreneurial Marketing</td>
</tr>
<tr>
<td>MKTG 3506</td>
<td>Value Delivery Networks in Marketing</td>
</tr>
<tr>
<td>MKTG 3507</td>
<td>Direct Marketing</td>
</tr>
<tr>
<td>MKTG 3508</td>
<td>Digital Marketing</td>
</tr>
<tr>
<td>MKTG 3509</td>
<td>Customer Data Analytics</td>
</tr>
<tr>
<td>MKTG 3553</td>
<td>International Marketing</td>
</tr>
<tr>
<td>MKTG 3580</td>
<td>Special Topics - Marketing</td>
</tr>
</tbody>
</table>

  Total Credit Hours 12

- Courses have a prerequisite of MKTG 3511 and are most appropriate for students who like to be challenged with quantitative methods and applications.

- A grade point average of 2.0 in the minor is required as well as a minimum grade of C in each course, including MKTG 2101.
- Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.
- Courses for the minor must be completed prior to graduation; if completed, the minor will be recorded on the final transcript upon graduation.
- For more information on this minor, visit the Marketing department (http://www.fox.temple.edu/cms_academics/dept/marketing_and_supply_chain_management/programs/undergraduate-academics/concentrations-in-marketing).
- To declare or rescind this minor, visit the Fox School of Business and Management (http://www.fox.temple.edu/cms_academics/dept/advising/minors).

Interested students should discuss with their home college advisors how the courses in the minor will fit into their overall degree plan and are strongly encouraged to declare the minor early in their academic career.

Statistics Minor

- Open to business or non-business students.
• Become proficient in the ability to select, utilize, and apply quantitative and data analysis skills to your major field of study. Skilled users of data enhance their career opportunities.

• Actuarial Science, HRM, Finance, MIS, and Marketing majors will benefit as well as students in all undergraduate business majors.

• Completion of STAT 2103 is a prerequisite for the courses in the minor. (Please note that STAT 2103 has additional prerequisites.)

• One of the following courses can be substituted for STAT 2103 if required for the student's program:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEE 3048</td>
<td>Probability, Statistics &amp; Stochastic Methods</td>
<td>3</td>
</tr>
<tr>
<td>PSY 1167</td>
<td>Foundations in Statistical Methods</td>
<td>3</td>
</tr>
<tr>
<td>PSY 2168</td>
<td>Inferential Methods in Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 1167</td>
<td>Social Statistics</td>
<td>3</td>
</tr>
<tr>
<td>SOC 3201</td>
<td>Statistical Methods in Sociology</td>
<td>4</td>
</tr>
</tbody>
</table>

• A minimum grade of C is required for this prerequisite.

• Four courses required (three of the four courses must be completed at Temple University):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 0827</td>
<td>Statistical Reasoning &amp; Games of Chance</td>
<td></td>
</tr>
<tr>
<td>STAT 2512</td>
<td>Intermediate Statistics</td>
<td></td>
</tr>
<tr>
<td>STAT 2521</td>
<td>Data Analysis and Statistical Computing</td>
<td></td>
</tr>
<tr>
<td>STAT 2522</td>
<td>Survey Design and Sampling</td>
<td></td>
</tr>
<tr>
<td>STAT 2523</td>
<td>Design of Experiments and Quality Control</td>
<td></td>
</tr>
<tr>
<td>STAT 3503</td>
<td>Intermediate Business Statistics</td>
<td></td>
</tr>
</tbody>
</table>

• A grade point average of 2.0 in the minor is required as well as a minimum grade of C- in each course.

• Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.

• Courses for the minor must be completed prior to graduation; if completed, the minor will be recorded on the final transcript upon graduation.

• To declare or rescind this minor, visit the Fox School of Business and Management (http://www.fox.temple.edu/cms_academics/dept/advising/minors).

Interested students should discuss with their home college advisors how the courses in the minor will fit into their overall degree plan and are strongly encouraged to declare the minor early in their academic career.

Supply Chain Management Minor

Michael F. Smith, MSCM Department Chair
Office: Alter Hall 512
215-204-1682
msmith@temple.edu
www.fox.temple.edu/cms_academics/dept/marketing_and_supply_chain_management/

The Supply Chain Management Minor is ideal for students innovative enough to think creatively, yet meticulous enough to forecast the bigger picture. Students completing the SCM Minor pursue careers which direct the efficient flow of goods and services within and among organizations—from suppliers and manufacturers to retailers and consumers.

The SCM Minor course sequence is a strong complement with majors such as Marketing, International Business, Accounting, Information System, Finance and Healthcare Management.

The SCM Minor provides students with basic knowledge of supply chain management, such as distribution strategies, planning, and procurement, while also working on their communication, negotiation, and leadership abilities. Courses balance theory and practice in supply chain management to bridge the gap between academic and business practices and devise innovative research and teaching methods. The minor prepares students to operate and lead major aspects of the supply system in established and start-up firms.

All interested students must meet with Dr. Neha Mittal to declare or rescind this minor: nmittal@temple.edu

Student Professional Organization (SPO) in Supply Chain Management

A Supply Chain Management SPO was established on-campus, TU-SCA (Temple University Supply Chain Association). For more information, please contact: Dr. Misty Blessley (misty.blessley@temple.edu).
Requirements

- Open to business students. Appropriate for all business students, but particularly relevant for students majoring in IB, Entrepreneurship, Finance, Marketing, Business Management, and MIS.
- Integrates SCM topics and themes to prepare students for new and emerging jobs related to SCM, Fulfillment, Planning, Storage and Distribution, and Customer Service.
- Quantitative, critical thinking, and problem-solving skills required for success in this minor; a cumulative GPA of 2.75 is recommended.
- Four courses required (three must be taken at Temple University):
  - SCM 3515 Principles of Supply Chain Management 3
  - SCM 3516 Transportation and Logistics Management 3
  - Select one of the following: 3
    - SCM 3517 Inventory and Warehouse Management
    - SCM 3518 Sourcing and Procurement
  - Select one of the following: 3
    - MIS 3537 Internet Enabled Supply Chains
    - MKTG 3506 Value Delivery Networks in Marketing
    - MKTG 3581 Marketing Internship/Co-Operative Experience
    - MAT 3509 Customer Data Analytics
    - SCM 3517 Inventory and Warehouse Management
    - SCM 3518 Sourcing and Procurement

Total Credit Hours 12

1 MKTG 3581, a supervised corporate internship, requires department approval.

- Courses taken for this minor cannot be double-counted toward the major or another minor.
- A cumulative grade point average of 2.0 in courses in the minor is required as well as a minimum grade of C- in each course unless otherwise specified.
- Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.
- Courses for the minor must be completed prior to graduation; if completed, the minor will be recorded on the final transcript upon graduation.

All interested students must meet with Dr. Neha Mittal to declare or rescind this minor: nmittal@temple.edu

Interested students should discuss with their advisor how the courses in the minor will fit into their overall degree plan and are strongly encouraged to declare the minor early in their academic career.

Accounting

Eric G. Press, Chairman
Office: Alter Hall 448
215-204-8127
eric.press@temple.edu
www.fox.temple.edu/cms_academics/dept/accounting/

The program provides students with a broad general education and intensive study within the major as preparation for professional careers in public accounting, industry, consulting, government, and not-for-profit institutions.

The curriculum in accounting is designed to acquaint students with the conceptual framework and theory of accounting, transactional analysis, asset management, liabilities, owners’ equity, and financial reporting. Cost analysis and control, accounting information systems, taxation, consolidated financial statements, and foreign operations also are covered, along with auditing techniques and an understanding of the ethical and performance standards of the profession.

Accounting majors are encouraged to join a professional student organization, such as:

- Beta Alpha Psi (http://www.fox.temple.edu/cms_career/student-professional-organizations/beta-alpha-psi) (BAP--National Honorary Fraternity);
- Institute of Management Accountants - Temple Chapter (IMA-T) (http://www.fox.temple.edu/cms_career/student-professional-organizations/institute-of-management-accountants);
- National Association of Black Accountants (http://www.fox.temple.edu/cms_career/student-professional-organizations/national-association-of-black-accountants) (NABA);
Students seeking the CPA designation after graduation:

Effective January 1, 2012 the education and experience required to become a licensed CPA in Pennsylvania changed. All candidates seeking the CPA designation after January 1, 2012 must complete 150 hours of college education (undergraduate or graduate courses, or a combination of both), including 36 hours in accounting and auditing, business law, finance or tax subjects acceptable to the Pennsylvania State Board of Accountancy. With this change, Pennsylvania conforms to the national education standard of 150 credit hours and one year of public accounting experience—in addition to the successful completion of the CPA Exam—before the granting of a CPA license.

For additional information regarding the PA CPA exam, please visit the following web sites:

- www.fox.temple.edu/cms_academics/dept/accounting/cpa-exam/overview/
- www.picpa.org/Content/40441.aspx

Master of Accountancy Program (MAcc) — new cycles begin each fall semester

Students can meet the new Pennsylvania requirements by completing a Bachelor’s degree (e.g. the current accounting major in the Fox School’s BBA) and the Fox School of Business Master of Accountancy degree (MAcc). Students enrolled in the Fox School’s undergraduate accounting program will be eligible to apply for the MAcc after completing 90 semester-hour credits (that is, they can apply for admission to the MAcc at the completion of their junior year). Students can also meet the new requirements by completing 150 undergraduate credit hours. For more information, visit MAcc (http://www.fox.temple.edu/cms_academics/specialized-masters-program/concentrations/master-of-accountancy).

Online BBA Program

The Accounting major is available as an online BBA degree completion program designed for new students ready to start their junior year in a business curriculum. Please visit the Online BBA website for program and admission information (http://www.fox.temple.edu/cms_academics/undergraduate-2/online-bba).

Accelerated 3 Year BBA

Motivated students can accelerate their BBA program to finish in 3 years. Please see the suggested sequence (http://www.fox.temple.edu/web_dev/accel_docs/3yearBB AinAccountingfinal.pdf).

Minor

Students in any college who wish to understand basic business foundations, financial statements, and the accountant’s role in the management of a company can pursue a minor in accounting. Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor. Requirements (p. 570) for the minor must be completed prior to graduation.

Summary of Requirements

University Requirements

All new students are required to complete the university’s General Education (GenEd (p. 143)) curriculum.

Note that students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of re-enrollment.

College Requirements

Students must meet College Graduation Requirements (p. 559) including the requirements of the major listed below. Accounting students must attain a 2.0 GPA in the major and a 2.0 cumulative GPA in order to graduate. To calculate the GPA in the major, use the major GPA calculator (http://www.fox.temple.edu/cms_academics/dept/advising/students/gpa-calculator).

Major Requirements

Students must follow the Major Requirements and College Requirements current at the time of declaration. Students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University, College, and Major requirements current at the time of re-enrollment.

Requirements of Accounting Major

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 2521</td>
<td>Cost Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 3511</td>
<td>Intermediate Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 3512</td>
<td>Intermediate Accounting II</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 3526</td>
<td>Accounting Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 3531</td>
<td>Federal Taxes on Income</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 3533</td>
<td>Advanced Accounting</td>
<td>3</td>
</tr>
</tbody>
</table>
### Suggested Academic Plan

**Bachelor of Business Administration in Accounting**

**Requirements for New Students starting in the 2015-2016 Academic Year**

Please note that this plan is suggested only, ensuring prerequisites are met.

#### Year 1

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 1001</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1101</td>
<td>3</td>
</tr>
<tr>
<td>HRM 1101</td>
<td>3</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td>STAT 1102</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1102</td>
<td>3</td>
</tr>
<tr>
<td>LGLS 1101</td>
<td>3</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

#### Year 2

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 2103</td>
<td>4</td>
</tr>
<tr>
<td>ACCT 2101</td>
<td>3</td>
</tr>
<tr>
<td>MIS 2101</td>
<td>3</td>
</tr>
<tr>
<td>BA 2104</td>
<td>1</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>17</strong></td>
</tr>
<tr>
<td>MKTG 2101</td>
<td>3</td>
</tr>
<tr>
<td>BA 2101</td>
<td>1</td>
</tr>
<tr>
<td>BA 2196</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 2521</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 3511</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

#### Year 3

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MKTG 2101</td>
<td>3</td>
</tr>
<tr>
<td>BA 2101</td>
<td>1</td>
</tr>
<tr>
<td>BA 2196</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 2521</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 3511</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>
Actuarial Science

Krupa S. Viswanathan, Associate Professor, Program Director
Alter Hall 629
215-204-6183
krupa@temple.edu
www.fox.temple.edu/mcm_people/krupa-s-viswanathan/

Located in the Department of Risk, Insurance, and Healthcare Management, Temple’s Actuarial Science program provides students the opportunity to develop a strong foundation in mathematics and statistics while being exposed to a wide range of business disciplines. Temple’s program in Actuarial Science is one of only a few programs designated as a Center of Actuarial Excellence by the Society of Actuaries.

Actuaries specialize in the evaluation of insurance and financial risks. They hold positions of responsibility with insurance companies, consulting firms, investment banks, government regulatory organizations, and government insurance programs. Actuaries must also pass a series of professional exams, administered by the Society of Actuaries and Casualty Actuarial Society, to receive the credential of Associate or Fellow. These professional exams are both quantitative and qualitative, demanding that the actuary demonstrate expertise in a variety of mathematical and business analytic applications. Coursework in Temple’s Actuarial Science program help prepare students for several actuarial exams. Courses in our curriculum are also approved by the Society of Actuaries and Casualty Actuarial Society as satisfying VEE (Validation by Educational Experience) requirements.

Students should meet with the Program Director as soon as they enter the Actuarial Science program. In addition to their coursework and professional examinations, students are strongly encouraged to become active in the Sigma chapter of Gamma Iota Sigma, Temple’s national award-winning professional student organization in Risk Management, Insurance, and Actuarial Science. The organization hosts numerous guest speakers from the
industry, sponsors a variety of career development seminars, and maintains a widely-distributed résumé book. For more information, please contact the GIS President at 215-204-9368 or visit www.sigmachapter.org (http://www.sigmachapter.org).

Summary of Requirements

University Requirements

All new students are required to complete the university’s General Education (GenEd (p. 143)) curriculum.

Note that students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of re-enrollment.

College Requirements

Students are strongly encouraged to take the professional actuarial exams immediately after completing the relevant coursework. Students must meet the College Graduation Requirements (p. 559) including the requirements of the major listed below. Students must attain a 2.0 cumulative GPA and 2.0 in the major to graduate with the Actuarial Science major. To calculate the GPA in the major, use the major GPA calculator (http://www.fox.temple.edu/cms_academics/dept/advising/students/gpa-calculator).

Major Requirements

Students must follow the Major Requirements and College Requirements current at the time of declaration. Students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University, College, and Major requirements current at the time of re-enrollment.

Requirements of Actuarial Science Major

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AS 1501</td>
<td>Actuarial Probability and Statistics I</td>
<td>3</td>
</tr>
<tr>
<td>AS 2502</td>
<td>Theory of Interest</td>
<td>3</td>
</tr>
<tr>
<td>AS 2503</td>
<td>Corporate Finance for Actuarial Science</td>
<td>3</td>
</tr>
<tr>
<td>AS 3501</td>
<td>Actuarial Modeling I</td>
<td>3</td>
</tr>
<tr>
<td>AS 3502</td>
<td>Actuarial Modeling II</td>
<td>3</td>
</tr>
<tr>
<td>AS 3596</td>
<td>Casualty Contingencies</td>
<td>3</td>
</tr>
<tr>
<td>RMI 3567</td>
<td>International Risk Management</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credit Hours: 21

1. AS 2503 replaces FIN 3101 in the upper division foundation. This course is not calculated in the major GPA.
2. This is the major capstone, and all prerequisites must be met.
3. RMI 3567 replaces IB 3101 in the upper division foundation. This course is not calculated in the major GPA.

Non-Business Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1042</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 2043</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>AS 2101</td>
<td>Actuarial Probability and Statistics II</td>
<td>3</td>
</tr>
<tr>
<td>STAT 2512</td>
<td>Intermediate Statistics</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credit Hours: 18

1. MATH 1041 & MATH 1042 replace the STAT 1001 & STAT 1102 requirements listed in the Fox School of Business & Management foundation course requirements. MATH 1041 also satisfies the Quantitative Literacy (GQ) General Education requirement.
2. These courses replace STAT 2103 in the Fox School of Business & Management foundation course requirements.

Suggested Academic Plan

Bachelor of Business Administration in Actuarial Science

Requirements for New Students starting in the 2015-2016 Academic Year

Please note that this plan is suggested only, ensuring prerequisites are met.

Year 1

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>MATH 1041</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td></td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
<td>---------</td>
<td></td>
</tr>
<tr>
<td>ECON 1101</td>
<td>Macroeconomic Principles</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>HRM 1101</td>
<td>Leadership and Organizational Management</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Term Credit Hours** 17

### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1042</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>ECON 1102</td>
<td>Microeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>LGLS 1101</td>
<td>Legal Environment of Business</td>
<td>3</td>
</tr>
<tr>
<td>AS 1501</td>
<td>Actuarial Probability and Statistics I</td>
<td>3</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours** 16

### Year 2

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 2043</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>ACCT 2101</td>
<td>Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>RMI 2101</td>
<td>Introduction to Risk Management</td>
<td>3</td>
</tr>
<tr>
<td>AS 2502</td>
<td>Theory of Interest</td>
<td>3</td>
</tr>
<tr>
<td>BA 2104</td>
<td>Excel for Business Applications</td>
<td>1</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours** 17

### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 2102</td>
<td>Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>MIS 2101</td>
<td>Information Systems in Organizations</td>
<td>3</td>
</tr>
<tr>
<td>BA 2101</td>
<td>Professional Development Strategies</td>
<td>1</td>
</tr>
<tr>
<td>BA 2196</td>
<td>Business Communications [WI]</td>
<td>3</td>
</tr>
<tr>
<td>AS 2101</td>
<td>Actuarial Probability and Statistics II</td>
<td>3</td>
</tr>
<tr>
<td>AS 2503</td>
<td>Corporate Finance for Actuarial Science</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours** 16

### Year 3

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MKTG 2101</td>
<td>Marketing Management</td>
<td>3</td>
</tr>
<tr>
<td>STAT 2512</td>
<td>Intermediate Statistics</td>
<td>3</td>
</tr>
<tr>
<td>MSOM 3101</td>
<td>Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>AS 3501</td>
<td>Actuarial Modeling I</td>
<td>3</td>
</tr>
<tr>
<td>AS 3596</td>
<td>Casualty Contingencies [WI]</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours** 15

### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 3102</td>
<td>Business Society and Ethics</td>
<td>3</td>
</tr>
<tr>
<td>BA 3103</td>
<td>Integrative Business Applications</td>
<td>3</td>
</tr>
<tr>
<td>RMI 3567</td>
<td>International Risk Management</td>
<td>3</td>
</tr>
<tr>
<td>AS 3502</td>
<td>Actuarial Modeling II</td>
<td>3</td>
</tr>
<tr>
<td>Free Elective (AS 2504 recommended)</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours** 15

### Year 4

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 4101</td>
<td>Global Business Policies</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Free Elective (STAT 3503 recommended)</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours** 15
### Spring
- GenEd Breadth Course 3
- GenEd Breadth Course 3
- GenEd Breadth Course 3
- Free Elective (AS 3503 recommended) 3
- Free Elective 1

**Term Credit Hours** 13

**Total Credit Hours:** 124

### Business Management

101 Speakman Hall  
1810 N. 13th Street  
Philadelphia, PA 19122  
215-204-7672  
www.fox.temple.edu/cms_academics/dept/business-management/

The business management curriculum is designed for students who wish to follow a broad and general curriculum. Students are encouraged to join a student professional organization (http://www.fox.temple.edu/cms_career/student-professional-organizations) that meets their interests and also to pursue a minor or certificate program in addition to their major. Courses taken for the major will not also count for a minor or certificate.

### Online BBA Program

The Business Management major is available as an online BBA degree completion program designed for new students ready to start their junior year in a business curriculum. Please see our web site program and admission information (http://www.fox.temple.edu/cms_academics/undergraduate-2/online-bba).

### Accelerated 3 Year BBA

Motivated students can accelerate their BBA program to finish in 3 years. Please see the suggested sequence. (http://www.fox.temple.edu/cms_academics/dept/business-management)

### 4+1 Master of Education Degree (M.Ed.)

The 4+1 Master of Education (M.Ed.) program is designed for students who are interested in pursuing a Master of Education while completing the Bachelor of Business Administration (B.B.A.) in Business Management program requirements. After completion of the programs, students earn a B.B.A. degree and an M.Ed. in Business, Computers & Information Technology Education (BCITE) or Marketing Education (ME), and a Commonwealth of Pennsylvania Instructional I Teaching Certificate in BCITE or ME. There is an application process. The deadline to apply is June 15th for fall admittance. For more information please contact:

Dr. D. James Gilmour, Program Advisor  
Ritter Hall 348  
215-204-6197  
jgilmour@temple.edu

### Summary of Requirements

#### University Requirements

All new students are required to complete the university's General Education (GenEd (p. 143)) curriculum. Note that students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of re-enrollment.

#### College Requirements

Students must meet College Graduation Requirements (p. 559), including the requirements of the major listed below. Business Management students must attain a 2.0 GPA in the major and a 2.0 cumulative GPA in order to graduate. To calculate the GPA in the major, use the major GPA calculator (http://www.fox.temple.edu/cms_academics/dept/advising/students/gpa-calculator).

#### Major Requirements

Students must follow the Major Requirements and College Requirements current at the time of declaration. Students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University, College, and Major requirements current at the time of re-enrollment.
## Requirements of Business Management

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRM 3501</td>
<td>Power, Influence and Negotiation</td>
<td>3</td>
</tr>
<tr>
<td>HRM 3503</td>
<td>Communicating in Organizations</td>
<td>3</td>
</tr>
<tr>
<td>HRM 4597</td>
<td>Critical Skills for Effective Managers</td>
<td>3</td>
</tr>
</tbody>
</table>

Select three of the following:  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASST 2511</td>
<td>Introduction to Asian Business</td>
</tr>
<tr>
<td>ECON 3507</td>
<td>Health Economics</td>
</tr>
<tr>
<td>or ECON 3597</td>
<td>Health Economics</td>
</tr>
<tr>
<td>ECON 3511</td>
<td>The Economics and Management of Privatization</td>
</tr>
<tr>
<td>ECON 3513</td>
<td>Economics of State and Local Governments</td>
</tr>
<tr>
<td>ECON 3522</td>
<td>Economic Theory of Networks</td>
</tr>
<tr>
<td>ECON 3531</td>
<td>History of Economic Theory</td>
</tr>
<tr>
<td>ECON 3532</td>
<td>Economic History of the United States</td>
</tr>
<tr>
<td>ECON 3535</td>
<td>Public Control of Business: Antitrust</td>
</tr>
<tr>
<td>ECON 3536</td>
<td>Economics of American Industry</td>
</tr>
<tr>
<td>ECON 3537</td>
<td>Comparative Economic Systems</td>
</tr>
<tr>
<td>ECON 3541</td>
<td>The Economics of Sports</td>
</tr>
<tr>
<td>ECON 3546</td>
<td>Women in the Economy</td>
</tr>
<tr>
<td>ECON 3547</td>
<td>Economics of Development and Growth</td>
</tr>
<tr>
<td>ECON 3548</td>
<td>Behavioral Economics</td>
</tr>
<tr>
<td>HCM 3501</td>
<td>Introduction to Health Services Systems</td>
</tr>
<tr>
<td>HCM 3502</td>
<td>Healthcare Financing and Information Technology</td>
</tr>
<tr>
<td>HRM 2501</td>
<td>Introduction to Human Resource Management</td>
</tr>
<tr>
<td>HRM 3504</td>
<td>Leadership in the 21st Century</td>
</tr>
<tr>
<td>HRM 3505</td>
<td>Sustainable Organizational Leadership</td>
</tr>
<tr>
<td>LAS 2502</td>
<td>Fundamentals of Latin American Business</td>
</tr>
<tr>
<td>LGLS 1102</td>
<td>Law of Contracts</td>
</tr>
<tr>
<td>LGLS 3502</td>
<td>Law for the Entrepreneur</td>
</tr>
<tr>
<td>LGLS 3503</td>
<td>The Consumer and the Law</td>
</tr>
<tr>
<td>LGLS 3504</td>
<td>Sports and the Law</td>
</tr>
<tr>
<td>LGLS 3505</td>
<td>Constitutional Law</td>
</tr>
<tr>
<td>LGLS 3506</td>
<td>Law, Technology and E-Commerce</td>
</tr>
<tr>
<td>LGLS 3508</td>
<td>The Litigation Process</td>
</tr>
<tr>
<td>LGLS 3509</td>
<td>Entertainment Law</td>
</tr>
<tr>
<td>LGLS 3511</td>
<td>Environmental Law and Sustainability</td>
</tr>
<tr>
<td>LGLS 3512</td>
<td>Law of Nonprofits</td>
</tr>
<tr>
<td>MKTG 3501</td>
<td>Integrated Marketing Communications</td>
</tr>
<tr>
<td>MKTG 3503</td>
<td>Promotion Management</td>
</tr>
<tr>
<td>MKTG 3504</td>
<td>Sales and Sales Management</td>
</tr>
<tr>
<td>RE 3501</td>
<td>Real Estate Fundamentals</td>
</tr>
<tr>
<td>RE 3502</td>
<td>Real Estate Practice</td>
</tr>
<tr>
<td>SGM 3501</td>
<td>Entrepreneurial and Innovative Thinking</td>
</tr>
</tbody>
</table>

### Total Credit Hours

18

---

1. This major capstone is taken in the final semester, and all prerequisites must be met.
2. Students cannot receive academic credit towards graduation requirements for both HRM 3502 and HRM 4597. If a student takes both, one of the courses will be deducted from the overall credits applicable towards graduation requirements.
# Suggested Academic Plan

## Bachelor of Business Administration in Business Management

### Requirements for New Students starting in the 2015-2016 Academic Year

Please note that this plan is suggested only, ensuring prerequisites are met.

<table>
<thead>
<tr>
<th>Year 1</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td><strong>Credit Hours</strong></td>
<td></td>
</tr>
<tr>
<td>STAT 1001</td>
<td>Quantitative Methods for Business I</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1101</td>
<td>Macroeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>HRM 1101</td>
<td>Leadership and Organizational Management</td>
<td>3</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STAT 1102</td>
<td>Quantitative Methods for Business II</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1102</td>
<td>Microeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>LGLS 1101</td>
<td>Legal Environment of Business</td>
<td>3</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STAT 2103</td>
<td>Statistical Business Analytics (waives GenEd Quantitative Literacy requirement)</td>
<td>4</td>
</tr>
<tr>
<td>ACCT 2101</td>
<td>Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>MIS 2101</td>
<td>Information Systems in Organizations</td>
<td>3</td>
</tr>
<tr>
<td>BA 2104</td>
<td>Excel for Business Applications</td>
<td>1</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>17</strong></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACCT 2102</td>
<td>Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 2101</td>
<td>Marketing Management</td>
<td>3</td>
</tr>
<tr>
<td>BA 2101</td>
<td>Professional Development Strategies</td>
<td>1</td>
</tr>
<tr>
<td>BA 2196</td>
<td>Business Communications [WI]</td>
<td>3</td>
</tr>
<tr>
<td>RMI 2101</td>
<td>Introduction to Risk Management</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FIN 3101</td>
<td>Financial Management</td>
<td>3</td>
</tr>
<tr>
<td>MSOM 3101</td>
<td>Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>BA 3102</td>
<td>Business Society and Ethics</td>
<td>3</td>
</tr>
<tr>
<td>HRM 3501</td>
<td>Power, Influence and Negotiation</td>
<td>3</td>
</tr>
<tr>
<td>Major Course - Select one Elective course from Requirements list</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BA 3103</td>
<td>Integrative Business Applications</td>
<td>3</td>
</tr>
<tr>
<td>IB 3101</td>
<td>Fundamentals of International Business</td>
<td>3</td>
</tr>
<tr>
<td>HRM 3503</td>
<td>Communicating in Organizations</td>
<td>3</td>
</tr>
<tr>
<td>Major Course - Select one Elective course from Requirements list</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>
**Year 4**

**Fall**
- BA 4101 Global Business Policies 3
- Major Course - Select one Elective course from Requirements list 3
- GenEd Breadth Course 3
- GenEd Breadth Course 3
- Free Elective 3

**Term Credit Hours** 15

**Spring**
- HRM 4597 Critical Skills for Effective Managers [WI] 3
- Free Elective 3
- Free Elective 3
- Free Elective 3
- Free Elective 3

**Term Credit Hours** 15

**Total Credit Hours:** 124

---

**Economics**

Dr. Michael Bognanno, Chair
Dr. William Holmes, Advisor
Office: Ritter Annex 804
215-204-8175
wholmes@temple.edu
www.cla.temple.edu/economics/

Economics is the study of how we allocate resources among alternative uses to satisfy our wants. Virtually all of the public and personal issues which confront us today have an important economic component. For this reason, the economic way of thinking plays a valuable role in helping us make sense of the complex world in which we live. In addition, the study of economics is excellent preparation for a wide range of careers. Economics majors with bachelor's degrees are well prepared to be managers in both the public and private sectors. Training in economics also provides a solid basis for professional study in law, business, public administration, and the health sciences.

The Temple Economics Society is the student professional organization for economics majors and is open to all students interested in economics. Economics majors may also become members of Omicron Delta Epsilon (ODE), the National Honor Society, if they meet the admissions requirements of the organization. For more information, please contact Dr. William Holmes at wholmes@temple.edu or phone 215-204-8175.

**Accelerated 3 Year BBA**

Motivated students can accelerate their BBA program to finish in 3 years. Please see the suggested sequence. (http://www.cla.temple.edu/economics/undergraduate/three-year-bba-grid)

**Minor**

Students in any college who wish to understand basic business foundations and how the impact of economics affects public and personal issues may want to minor in Economics. Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor. The requirements (p. 576) must be completed prior to graduation.

**Summary of Requirements**

**University Requirements**

All new students are required to complete the university's General Education (GenEd (p. 143)) curriculum.

Note that students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of re-enrollment.
College Requirements

In addition to completing the economics courses required of all students in the Fox School of Business and Management, Economics majors must fulfill the additional requirements listed below as well as meet College Graduation Requirements (p. 559). Students must attain at least a 2.0 GPA in their major and 2.0 GPA overall in order to graduate. To calculate the GPA in the major, use the major GPA calculator (http://www.fox.temple.edu/cms_academics/dept/advising/students/gpa-calculator).

Major Requirements

Students must follow the Major Requirements and College Requirements current at the time of declaration. Students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University, College, and Major requirements current at the time of re-enrollment.

Requirements of Economics Major

<table>
<thead>
<tr>
<th>Required Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 3501</td>
</tr>
<tr>
<td>ECON 3502</td>
</tr>
<tr>
<td>ECON 3563</td>
</tr>
<tr>
<td>or ECON 3564</td>
</tr>
<tr>
<td>ECON 3598</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Electives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select three of the following:</td>
</tr>
<tr>
<td>ECON 3503</td>
</tr>
<tr>
<td>ECON 3504</td>
</tr>
<tr>
<td>ECON 3506/3596</td>
</tr>
<tr>
<td>ECON 3507/3597</td>
</tr>
<tr>
<td>ECON 3511</td>
</tr>
<tr>
<td>ECON 3512</td>
</tr>
<tr>
<td>ECON 3513</td>
</tr>
<tr>
<td>ECON 3521</td>
</tr>
<tr>
<td>ECON 3522</td>
</tr>
<tr>
<td>ECON 3531</td>
</tr>
<tr>
<td>ECON 3532</td>
</tr>
<tr>
<td>ECON 3535</td>
</tr>
<tr>
<td>ECON 3536</td>
</tr>
<tr>
<td>ECON 3537</td>
</tr>
<tr>
<td>ECON 3538</td>
</tr>
<tr>
<td>ECON 3539</td>
</tr>
<tr>
<td>ECON 3541/3697</td>
</tr>
<tr>
<td>ECON 3542</td>
</tr>
<tr>
<td>ECON 3543</td>
</tr>
<tr>
<td>ECON 3544</td>
</tr>
<tr>
<td>ECON 3545</td>
</tr>
<tr>
<td>ECON 3546</td>
</tr>
<tr>
<td>ECON 3547</td>
</tr>
<tr>
<td>ECON 3548</td>
</tr>
<tr>
<td>ECON 3563</td>
</tr>
<tr>
<td>ECON 3564</td>
</tr>
<tr>
<td>ECON 3571</td>
</tr>
<tr>
<td>ECON 3572</td>
</tr>
<tr>
<td>ECON 3580</td>
</tr>
<tr>
<td>ECON 3582</td>
</tr>
<tr>
<td>ECON 3672</td>
</tr>
<tr>
<td>ECON 3682</td>
</tr>
<tr>
<td>ECON 3900</td>
</tr>
</tbody>
</table>
### Suggested Academic Plan

#### Bachelor of Business Administration in Economics

**Requirements for New Students starting in the 2015-2016 Academic Year**

Please note that this plan is suggested only, ensuring prerequisites are met.

#### Year 1

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 1001</td>
<td>Quantitative Methods for Business I</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1101</td>
<td>Macroeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>HRM 1101</td>
<td>Leadership and Organizational Management</td>
<td>3</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**  

16

**Spring**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 1102</td>
<td>Quantitative Methods for Business II</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1102</td>
<td>Microeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>LGLS 1101</td>
<td>Legal Environment of Business</td>
<td>3</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**  

15

#### Year 2

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 2103</td>
<td>Statistical Business Analytics (waives GenEd Quantitative Literacy requirement)</td>
<td>4</td>
</tr>
<tr>
<td>ACCT 2101</td>
<td>Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>MIS 2101</td>
<td>Information Systems in Organizations</td>
<td>3</td>
</tr>
<tr>
<td>BA 2104</td>
<td>Excel for Business Applications</td>
<td>1</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**  

17

**Spring**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 2102</td>
<td>Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 2101</td>
<td>Marketing Management</td>
<td>3</td>
</tr>
<tr>
<td>BA 2101</td>
<td>Professional Development Strategies</td>
<td>1</td>
</tr>
<tr>
<td>BA 2196</td>
<td>Business Communications [WI]</td>
<td>3</td>
</tr>
<tr>
<td>RMI 2101</td>
<td>Introduction to Risk Management</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**  

16

#### Year 3

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIN 3101</td>
<td>Financial Management</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**  

16

---

1. ECON 3563 or ECON 3564 replaces IB 3101 in the upper division foundation. This course is not calculated in the major GPA.
2. This major capstone is usually taken in the final semester, and all prerequisites must be met.
3. In order to satisfy a Major Elective, Fox Students must take “Behavioral Economics” as ECON 3548. Students cannot receive credit for both ECON 3548 and ECON 3696.
4. This course was previously offered as ECON 3505. Students who have earned credit in ECON 3505 will not earn additional credit in ECON 4071.

ECON 3408, ECON 3581, ECON 3696, ECON 3999, and ECON 4999 cannot be used to fulfill an Elective for the Economics major. These courses as well as other courses in Economics not included above can be taken as free electives for the degree.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSOM 3101</td>
<td>Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>BA 3102</td>
<td>Business Society and Ethics</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ECON 3501</td>
<td>Intermediate Microeconomic Analysis</td>
<td>3</td>
</tr>
<tr>
<td>ECON 3502</td>
<td>Intermediate Macroeconomic Analysis</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours** 15

### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 3103</td>
<td>Integrative Business Applications</td>
<td>3</td>
</tr>
<tr>
<td>ECON 3502</td>
<td>Intermediate Macroeconomic Analysis</td>
<td>3</td>
</tr>
<tr>
<td>ECON 3501</td>
<td>Intermediate Microeconomic Analysis</td>
<td>3</td>
</tr>
<tr>
<td>ECON 3563</td>
<td>International Trade</td>
<td>3</td>
</tr>
<tr>
<td>ECON 3564</td>
<td>International Monetary Economics</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours** 15

### Year 4

### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 4101</td>
<td>Global Business Policies</td>
<td>3</td>
</tr>
<tr>
<td>ECON Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ECON Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours** 15

### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 3598</td>
<td>Economics Writing Seminar [WI]</td>
<td>3</td>
</tr>
<tr>
<td>ECON Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours** 15

**Total Credit Hours:** 124

---

**Entrepreneurship & Innovation Management**

Arvind Parkhe, Chair  
215-204-6618  
aparkhe@temple.edu  
http://www.fox.temple.edu/cms_academics/dept/strategic-management/

Robert McNamee, Academic Director  
robert.mcnamee@temple.edu  
www.fox.temple.edu/mcm_people/robert-mcnamee/

Entrepreneurs are creative problem-solvers that are driven to have a big impact on the world. Many of Temple University's Entrepreneurship students start new businesses during or after college, but many more go on to work in exciting jobs with companies that realize the importance of innovation and the value of students that can think outside the box, recognize opportunities, and get the job done.

For students interested in Entrepreneurship and Innovation Management, we offer several options ranging from our major, minor, and certificate (see below) to a Living Learning Community & Freshman Seminar (Innovate and Create), a General Education Human Behavior course (SGM 0827 Creativity and Organizational Innovation), and numerous free workshops and competitions that are open to students from across Temple University.
Please check Innovation & Entrepreneurship Institute (http://www.fox.temple.edu/cms_research/institutes-and-centers/innovation-entrepreneurship-institute) for details on all of our programs. Note that Entrepreneurship courses are listed under the subject Strategic Management.

Temple’s Entrepreneurship and Innovation Management programs are consistently ranked among the top in the nation (2014 Princeton Review: #11 undergraduate). Through these programs you will learn how to be more creative, to recognize opportunities and generate innovations in all their forms, to understand the ecosystems and value chains of industries in order to envision new venture or product ideas, and you will be given the knowledge and tools necessary to launch and manage your own business or successfully propose new business ideas and change initiatives in any organizations you work for or with.

The Entrepreneurship and Innovation Management major is a good choice for students who:

• Would like to start a new business
• Want to have a positive social impact with a social venture
• Anticipate doing consulting or freelance work
• Plan to assume responsibilities in a family business
• Want to be a creative and productive member of an innovative, high-growth business

The program is designed with a balance of theory (why) and practice (how), and our courses are taught by world-leading researchers, successful serial entrepreneurs, experienced venture capital executives, and senior innovation managers. Course work is closely tied to the co-curricular programs of the Innovation & Entrepreneurship Institute (IEI) like the Be Your Own Boss Bowl (BYOBB) (e.g., our capstone course focuses on coaching students on finalizing an idea for a new business and writing a business plan that can be submitted to the BYOBB for a chance to win over $100k in prizes) and other competitions (e.g., multiple students in our GenEd course (SGM 0827) and Entrepreneurial Thinking course (SGM 3501) typically win prizes in our Innovative Idea Competition).

We want our Entrepreneurship and Innovation Management majors to have experience when they graduate. Thus, our program includes a required internship course, and we expect all Entrepreneurship and Innovation Management majors to be active members in the Entrepreneurial Student Association (ESA) where they can work on a variety of interesting projects with local companies and the community.

Finally, students are able to focus on actually launching a new venture while completing their degree and taking our courses. Experiential courses like Launch a Venture in 100 Days, Selling Professional Services, and Financing Your Ideas get students out of the classroom so they can become successful entrepreneurs, or even serial entrepreneurs, before they graduate.

**Accelerated 3 Year BBA**

Motivated students can accelerate their BBA program to finish in 3 years. Please see the suggested sequence (http://www.fox.temple.edu/cms_academics/dept/entrepreneurship).

**Minors**

**Entrepreneurship & Innovation Management Minor**

Students in any college who wish to understand how to innovate, pursue opportunities, and turn their ideas into reality by creating and managing a successful entrepreneurial or innovative business or social venture can pursue a minor in Entrepreneurship and Innovation Management.

The minor is appropriate for all Fox School majors but particularly relevant for students in marketing, finance, human resources, and MIS who are interested in being high-potential, creative, and innovative employees as well as those who would like to launch a venture or work as part of the growing entrepreneurial ecosystem.

Requirements (p. 577) for the minor must be completed prior to graduation. Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor.

**Information Technology Innovation and Entrepreneurship Minor**

The Fox School Information Technology Innovation and Entrepreneurship (ITIE) minor integrates two of the most important elements of the Fox School: the enabling role of information technology and the creativity and drive of entrepreneurial thinking. It is offered as a joint venture between the departments of Strategic Management and Management Information Systems.

The minor is appropriate for all Fox School majors but particularly relevant for students in marketing, finance, human resources, and MIS who are interested in applying IT in an entrepreneurial manner. Students who minor in ITIE will be well suited to work for corporations who want to drive new IT enabled innovative projects and for technology enabled start-ups.

Requirements (p. 582) for the minor must be completed prior to graduation. Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor.
Certificate

Certificate in Entrepreneurship & Innovation Management (Non-Business Majors)

The nine-credit, three course undergraduate Certificate in Entrepreneurship & Innovation Management is designed to provide coursework to support alternative, entrepreneurial career paths for students across the university; to promote the entrepreneurial spirit by fostering opportunity recognition and resource acquisition that leads to innovation and invention; and to increase awareness of, and participation in, entrepreneurial opportunities available to all Temple students. This certificate will be jointly issued by the Fox School of Business and Management and its partner schools, and will appear on the student's transcript.

The requirements (p. 572) for this certificate must be completed prior to graduation. Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.

Summary of Requirements

University Requirements

All new students are required to complete the university's General Education (GenEd (p. 143)) curriculum.

Note that students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of re-enrollment.

College Requirements

Students must meet College Graduation Requirements (p. 559), including the requirements of the major listed below. Students must attain an overall GPA of 2.0 or higher in the major and must maintain a 2.0 GPA overall in order to graduate as an entrepreneurship major. Entrepreneurship & Innovation Management students are expected to participate in the Entrepreneurial Student Association. To calculate the GPA in the major, use the major GPA calculator (http://www.fox.temple.edu/cms_academics/dept/advising/students/gpa-calculator).

Major Requirements

Students must follow the Major Requirements and College Requirements current at the time of declaration. Students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University, College, and Major requirements current at the time of re-enrollment.

Requirements of Entrepreneurship & Innovation Management Major

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 2521</td>
<td>Cost Accounting</td>
<td>3</td>
</tr>
<tr>
<td>SGM 3685</td>
<td>New Venture Internship: Learning to be a High-Value Employee, Manager, or Founder</td>
<td>3</td>
</tr>
<tr>
<td>SGM 4596</td>
<td>Strategic Planning: The Business Plan as a Strategic Tool for Existing Businesses and Entrepreneurs</td>
<td>3</td>
</tr>
<tr>
<td>SGM 3501</td>
<td>Entrepreneurial and Innovative Thinking</td>
<td>3</td>
</tr>
<tr>
<td>SGM 3503</td>
<td>Innovation that Works: Building and Assessing Innovative Business Models</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 3505</td>
<td>Entrepreneurial Marketing</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 3511</td>
<td>Marketing Research</td>
<td></td>
</tr>
<tr>
<td>SGM 3511</td>
<td>Doing Well by Doing Good: Where Innovation and Entrepreneurship Meet Social Impact</td>
<td>3</td>
</tr>
<tr>
<td>SGM 3521</td>
<td>Finance Your Ideas: Crowdfunding, Grants, Banks, Venture Funds, Corporate and Private Investment</td>
<td>3</td>
</tr>
<tr>
<td>SGM 3580</td>
<td>Special Topics - Strategic Management</td>
<td></td>
</tr>
<tr>
<td>SGM 3585</td>
<td>Incubator Internship: Contribute, Connect and Learn as a Part of the Entrepreneurial Ecosystem</td>
<td>3</td>
</tr>
<tr>
<td>SGM 3682</td>
<td>Independent Study</td>
<td></td>
</tr>
<tr>
<td>HRM 3501</td>
<td>Power, Influence and Negotiation</td>
<td></td>
</tr>
<tr>
<td>IB 2509</td>
<td>Short Study Trip Abroad: Doing Business in a Foreign Country</td>
<td></td>
</tr>
<tr>
<td>IB 3596</td>
<td>Global Entrepreneurship</td>
<td></td>
</tr>
<tr>
<td>LGLS 3502</td>
<td>Law for the Entrepreneur</td>
<td></td>
</tr>
<tr>
<td>MIS 3536</td>
<td>Information Systems Innovation</td>
<td></td>
</tr>
<tr>
<td>MIS 3538</td>
<td>Social Media Innovation</td>
<td></td>
</tr>
</tbody>
</table>

Total Credit Hours 21
ACCT 2521 replaces ACCT 2102 in the lower-division foundation requirements for Entrepreneurship & Innovation Management majors. This course is not calculated in the major GPA. Students who have already completed ACCT 2102 are still required to take ACCT 2521.

Although SGM 3685 is not a prerequisite for SGM 4596, students are strongly encouraged to take SGM 3685 prior to their final semester at Temple.

This is the major capstone, and all prerequisites must be met.

Students interested in taking SGM 3521 should have already assessed the viability of their idea for a new venture. SGM 3501 or SGM 0827 and SGM 3503 are strongly recommended prior to taking SGM 3521. Students who do not meet these criteria may be required to complete additional supplementary work and should contact the professor to find out if they are sufficiently prepared to take this course. Students are encouraged to take SGM 3521 concurrently with or after SGM 4596.

SGM 3580 course topics vary each year and depending on the topic may be used to fill Entrepreneurial Thinking, Entrepreneurial Management, Entrepreneurial Marketing, or Breadth-Depth category requirements. Approval of the IEI Academic or Managing Director or department chair required.

Independent Study projects will be identified or created by the IEI. Approval of the IEI Academic or Managing Director or department chair required.

Students interested in enrolling in IB 2509 should be aware that it is a competitive program and, if accepted, their research project must be Entrepreneurship related. Please contact: study.abroad@temple.edu

NOTES

Students pursuing a double major in business can double-count a maximum of one course toward both majors.

Students pursuing a minor may not double count courses for the major and minor.

Suggested Academic Plan

Bachelor of Business Administration in Entrepreneurship & Innovation Management

Requirements for New Students starting in the 2015-2016 Academic Year

Please note that this plan is suggested only, ensuring prerequisites are met.

<table>
<thead>
<tr>
<th>Year 1</th>
<th></th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>Credit Hours</td>
<td></td>
</tr>
<tr>
<td>STAT 1001</td>
<td>Quantitative Methods for Business I</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1101</td>
<td>Macroeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>HRM 1101</td>
<td>Leadership and Organizational Management</td>
<td>3</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td>Spring</td>
<td>Credit Hours</td>
<td></td>
</tr>
<tr>
<td>STAT 1102</td>
<td>Quantitative Methods for Business II</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1102</td>
<td>Microeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>LGLS 1101</td>
<td>Legal Environment of Business</td>
<td>3</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th></th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>Credit Hours</td>
<td></td>
</tr>
<tr>
<td>STAT 2103</td>
<td>Statistical Business Analytics (waives GenEd Quantitative Literacy requirement)</td>
<td>4</td>
</tr>
<tr>
<td>ACCT 2101</td>
<td>Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>MIS 2101</td>
<td>Information Systems in Organizations</td>
<td>3</td>
</tr>
<tr>
<td>BA 2104</td>
<td>Excel for Business Applications</td>
<td>1</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>17</strong></td>
</tr>
<tr>
<td>Spring</td>
<td>Credit Hours</td>
<td></td>
</tr>
<tr>
<td>ACCT 2521</td>
<td>Cost Accounting</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 2101</td>
<td>Marketing Management</td>
<td>3</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
</tr>
<tr>
<td>------------</td>
<td>--------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>BA 2101</td>
<td>Professional Development Strategies</td>
<td>1</td>
</tr>
<tr>
<td>BA 2196</td>
<td>Business Communications [WI]</td>
<td>3</td>
</tr>
<tr>
<td>RMI 2101</td>
<td>Introduction to Risk Management</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

### Year 3

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIN 3101</td>
<td>Financial Management</td>
<td>3</td>
</tr>
<tr>
<td>MSOM 3101</td>
<td>Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>BA 3102</td>
<td>Business Society and Ethics</td>
<td>3</td>
</tr>
<tr>
<td>IB 3101</td>
<td>Fundamentals of International Business</td>
<td>3</td>
</tr>
<tr>
<td>SGM 3501</td>
<td>Entrepreneurial and Innovative Thinking</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 3103</td>
<td>Integrative Business Applications</td>
<td>3</td>
</tr>
<tr>
<td>SGM 3503</td>
<td>Innovation that Works: Building and Assessing Innovative Business Models</td>
<td>3</td>
</tr>
<tr>
<td>Select one Entrepreneurial Marketing elective:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>MKTG 3505</td>
<td>Entrepreneurial Marketing</td>
<td></td>
</tr>
<tr>
<td>MKTG 3511</td>
<td>Marketing Research</td>
<td></td>
</tr>
<tr>
<td>Select one Entrepreneurial Breadth-Depth elective:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>SGM 3511</td>
<td>Doing Well by Doing Good: Where Innovation and Entrepreneurship Meet Social Impact</td>
<td></td>
</tr>
<tr>
<td>SGM 3521</td>
<td>Finance Your Ideas: Crowdfunding, Grants, Banks, Venture Funds, Corporate and Private Investment</td>
<td></td>
</tr>
<tr>
<td>SGM 3580</td>
<td>Special Topics - Strategic Management</td>
<td></td>
</tr>
<tr>
<td>SGM 3585</td>
<td>Incubator Internship: Contribute, Connect and Learn as a Part of the Entrepreneurial Ecosystem</td>
<td></td>
</tr>
<tr>
<td>SGM 3682</td>
<td>Independent Study</td>
<td></td>
</tr>
<tr>
<td>HRM 3501</td>
<td>Power, Influence and Negotiation</td>
<td></td>
</tr>
<tr>
<td>IB 2509</td>
<td>Short Study Trip Abroad: Doing Business in a Foreign Country</td>
<td></td>
</tr>
<tr>
<td>IB 3596</td>
<td>Global Entrepreneurship [WI]</td>
<td></td>
</tr>
<tr>
<td>LGLS 3502</td>
<td>Law for the Entrepreneur</td>
<td></td>
</tr>
<tr>
<td>MIS 3536</td>
<td>Information Systems Innovation</td>
<td></td>
</tr>
<tr>
<td>MIS 3538</td>
<td>Social Media Innovation</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

### Year 4

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 4101</td>
<td>Global Business Policies</td>
<td>3</td>
</tr>
<tr>
<td>SGM 3685</td>
<td>New Venture Internship: Learning to be a High-Value Employee, Manager, or Founder</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SGM 4596</td>
<td>Strategic Planning: The Business Plan as a Strategic Tool for Existing Businesses and Entrepreneurs [WI]</td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

**Total Credit Hours:** 124

---

1. SGM 0827 recommended for students interested in participating in Innovation Idea Competition or taking SGM 3580 Special Topics courses like Launch a Venture in 100 Days. SGM 0827 also fulfills GenEd Human Behavior (GB) requirement.
Finance

Ronald Anderson, Chair
Office: Alter Hall 420
215-204-8279
ron.anderson@temple.edu

Jonathan Scott, Undergraduate Program Coordinator
Office: Alter Hall 419
215-204-7605
jonathan.scott@temple.edu

Howard Keen, Undergraduate Core Coordinator
Office: Alter Hall 429
215-204-5990
hkeen@temple.edu

Financial analyst, equity or bond trader, wealth management, credit analyst, treasury analyst, risk analysis, and compliance. Some of the most rewarding and challenging careers in domestic and international corporate community demand a background in finance. A Finance major from the Fox School of Business and Management prepares students for exciting and challenging careers in all areas of finance, a robust curriculum, a broad and deep range of electives, and an impressive array of networking opportunities.

Finance majors follow many career paths including:

1. Financial analyst in a corporation dealing with activities such as merger and acquisitions, initial public offerings, capital budgeting proposals, treasury operations;
2. Bank analyst, reviewing and overseeing loans to business and individuals, and relationship manager who deals directly with customers;
3. Wealth and investment managers helping large organizations and individuals effectively allocate their capital into appropriate investment vehicles; and
4. Program analyst with federal, state and local governments or non-profit organizations to efficiently raise and deploy capital across a broad spectrum of projects, provide pension fund support, work with financial advisors on security issuance, and support of day-to-day cash management.

We strongly encourage Finance majors to become involved in the Financial Management Association and the Temple University Investment Association. These student organizations offer our majors the opportunity to meet business leaders in the financial industry, attend career development seminars, learn and gain real-life experience in the investment work, and gain an invaluable network to Temple alumni.

Accelerated 3 Year BBA

Motivated students can accelerate their BBA program to finish in 3 years. Please see the suggested sequence (http://www.fox.temple.edu/cms_academics/dept/finance/undergraduate/finance-major).

Minor

The four-course minor is designed for students interested in obtaining a deeper understanding of the principles of finance and their application to various financial issues facing decision-makers in corporate, financial, and government sectors of the economy. Students majoring in accounting, marketing, real estate, and risk management can benefit from minoring in finance.

Requirements (p. 579) for the minor must be completed prior to graduation. Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor.

Summary of Requirements

University Requirements

All new students are required to complete the university's General Education (GenEd (p. 143)) curriculum.

Note that students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of re-enrollment.

College Requirements

Students must meet College Graduation Requirements (p. 559), including the requirements of the major listed below. Students must attain an overall GPA of 2.0 and a 2.0 GPA in the major to graduate as a Finance major. To calculate the GPA in the major, use the major GPA calculator (http://www.fox.temple.edu/cms_academics/dept/advising/students/gpa-calculator).
Major Requirements

Students must follow the Major Requirements and College Requirements current at the time of declaration. Students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University, College, and Major requirements current at the time of re-enrollment.

Requirements of Finance Major

**FIN 3504**  Intermediate Corporate Finance  3
**FIN 3507**  Investments  3
**FIN 3551**  International Finance  1
**FIN 4596**  Seminar in Financial Management  3

Select three of the following:  9

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIN 3505</td>
<td>Management of Financial Institutions</td>
<td></td>
</tr>
<tr>
<td>FIN 3506</td>
<td>Derivatives and Financial Risk Management</td>
<td></td>
</tr>
<tr>
<td>FIN 3508</td>
<td>Money and Fixed Income Markets</td>
<td></td>
</tr>
<tr>
<td>FIN 3509</td>
<td>Real Estate Investment and Finance</td>
<td></td>
</tr>
<tr>
<td>FIN 3512</td>
<td>Financial Modeling</td>
<td></td>
</tr>
<tr>
<td>FIN 3513</td>
<td>Financial Statement Analysis</td>
<td></td>
</tr>
<tr>
<td>FIN 3514</td>
<td>Commercial Real Estate Analysis</td>
<td></td>
</tr>
<tr>
<td>FIN 3515</td>
<td>Financial Markets and Institutions for Business</td>
<td></td>
</tr>
<tr>
<td>FIN 3571</td>
<td>Owl Fund Seminar</td>
<td></td>
</tr>
<tr>
<td>FIN 3581</td>
<td>Field Experience in Finance</td>
<td></td>
</tr>
<tr>
<td>FIN 3671</td>
<td>Advanced Owl Fund Seminar</td>
<td></td>
</tr>
</tbody>
</table>

Total Credit Hours  21

1 FIN 3551 replaces IB 3101 in the upper division foundation. This course is not calculated in the major GPA.
2 This major capstone is taken in the final semester, and all prerequisites must be met.
3 FIN 3509 and FIN 3514 may not be taken as Finance electives if double majoring in Real Estate.
4 FIN 3571 and FIN 3671 require permission of the instructor, and all prerequisites must be met.

Suggested Academic Plan

Bachelor of Business Administration in Finance

Requirements for New Students starting in the 2015-2016 Academic Year

Please note that this plan is suggested only, ensuring prerequisites are met.

**Year 1**

**Fall**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 1001</td>
<td>Quantitative Methods for Business I</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1101</td>
<td>Macroeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>HRM 1101</td>
<td>Leadership and Organizational Management</td>
<td>3</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**  16

**Spring**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 1102</td>
<td>Quantitative Methods for Business II</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1102</td>
<td>Microeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>LGLS 1101</td>
<td>Legal Environment of Business</td>
<td>3</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**  15

**Year 2**

**Fall**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 2103</td>
<td>Statistical Business Analytics (waives GenEd Quantitative Literacy requirement)</td>
<td>4</td>
</tr>
</tbody>
</table>

**Term Credit Hours**  4
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 2101</td>
<td>Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>MIS 2101</td>
<td>Information Systems in Organizations</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 2101</td>
<td>Marketing Management</td>
<td>3</td>
</tr>
<tr>
<td>BA 2104</td>
<td>Excel for Business Applications</td>
<td>1</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours** 17

**Spring**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 2102</td>
<td>Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BA 2101</td>
<td>Professional Development Strategies</td>
<td>1</td>
</tr>
<tr>
<td>BA 2196</td>
<td>Business Communications [WI]</td>
<td>3</td>
</tr>
<tr>
<td>RMI 2101</td>
<td>Introduction to Risk Management</td>
<td>3</td>
</tr>
<tr>
<td>FIN 3101</td>
<td>Financial Management</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours** 16

**Year 3**

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSOM 3101</td>
<td>Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>BA 3102</td>
<td>Business Society and Ethics</td>
<td>3</td>
</tr>
<tr>
<td>FIN 3504</td>
<td>Intermediate Corporate Finance</td>
<td>3</td>
</tr>
<tr>
<td>FIN 3507</td>
<td>Investments</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Spring**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 3103</td>
<td>Integrative Business Applications</td>
<td>3</td>
</tr>
<tr>
<td>FIN 3507</td>
<td>Investments</td>
<td>3</td>
</tr>
<tr>
<td>FIN 3504</td>
<td>Intermediate Corporate Finance</td>
<td>3</td>
</tr>
<tr>
<td>FIN 3505</td>
<td>Management of Financial Institutions</td>
<td>3</td>
</tr>
<tr>
<td>FIN 3506</td>
<td>Derivatives and Financial Risk Management</td>
<td>3</td>
</tr>
<tr>
<td>FIN 3508</td>
<td>Money and Fixed Income Markets</td>
<td>3</td>
</tr>
<tr>
<td>FIN 3509</td>
<td>Real Estate Investment and Finance</td>
<td>3</td>
</tr>
<tr>
<td>FIN 3512</td>
<td>Financial Modeling</td>
<td>3</td>
</tr>
<tr>
<td>FIN 3513</td>
<td>Financial Statement Analysis</td>
<td>3</td>
</tr>
<tr>
<td>FIN 3514</td>
<td>Commercial Real Estate Analysis</td>
<td>3</td>
</tr>
<tr>
<td>FIN 3515</td>
<td>Financial Markets and Institutions for Business</td>
<td>3</td>
</tr>
<tr>
<td>FIN 3571</td>
<td>Owl Fund Seminar</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours** 15

**Year 4**

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 4101</td>
<td>Global Business Policies</td>
<td>3</td>
</tr>
<tr>
<td>FIN 3551</td>
<td>International Finance</td>
<td>3</td>
</tr>
<tr>
<td>FIN 3505</td>
<td>Management of Financial Institutions</td>
<td>3</td>
</tr>
<tr>
<td>FIN 3506</td>
<td>Derivatives and Financial Risk Management</td>
<td>3</td>
</tr>
<tr>
<td>FIN 3508</td>
<td>Money and Fixed Income Markets</td>
<td>3</td>
</tr>
<tr>
<td>FIN 3509</td>
<td>Real Estate Investment and Finance</td>
<td>3</td>
</tr>
<tr>
<td>FIN 3512</td>
<td>Financial Modeling</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours** 15
FIN 3513  Financial Statement Analysis  
FIN 3514  Commercial Real Estate Analysis  
FIN 3515  Financial Markets and Institutions for Business  
FIN 3571  Owl Fund Seminar  
FIN 3671  Advanced Owl Fund Seminar  
FIN 3581  Field Experience in Finance  
GenEd Breadth Course  
Free Elective  

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring</td>
</tr>
<tr>
<td>FIN 4596  Seminar in Financial Management [WI]</td>
</tr>
<tr>
<td>Select one of the following:</td>
</tr>
<tr>
<td>FIN 3505  Management of Financial Institutions</td>
</tr>
<tr>
<td>FIN 3506  Derivatives and Financial Risk Management</td>
</tr>
<tr>
<td>FIN 3508  Money and Fixed Income Markets</td>
</tr>
<tr>
<td>FIN 3509  Real Estate Investment and Finance</td>
</tr>
<tr>
<td>FIN 3512  Financial Modeling</td>
</tr>
<tr>
<td>FIN 3513  Financial Statement Analysis</td>
</tr>
<tr>
<td>FIN 3514  Commercial Real Estate Analysis</td>
</tr>
<tr>
<td>FIN 3515  Financial Markets and Institutions for Business</td>
</tr>
<tr>
<td>FIN 3571  Owl Fund Seminar</td>
</tr>
<tr>
<td>FIN 3671  Advanced Owl Fund Seminar</td>
</tr>
<tr>
<td>FIN 3581  Field Experience in Finance</td>
</tr>
<tr>
<td>Free Elective</td>
</tr>
<tr>
<td>Free Elective</td>
</tr>
<tr>
<td>Free Elective</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
</tr>
</tbody>
</table>

Total Credit Hours: 124

**Financial Planning**

Ronald Anderson, Chair  
Office: Alter Hall 420  
215-204-8279  
ron.anderson@temple.edu

Jonathan Scott, Undergraduate Program Coordinator  
Office: Alter Hall 419  
215-204-7605  
jonathan.scott@temple.edu

Cindy Axelrod, Director of the Financial Planning Program  
Office: Alter Hall 422  
215-204-1917  
cindy.axelrod@temple.edu

As the first wave of the baby-boom generation hits retirement age, an intense need and demand has arisen for skilled financial professionals to assist boomers – and other generations – in protecting, growing, and managing their assets. This major provides the skills and knowledge to meet the increased demand for financial-planning professionals.

Financial planning is about determining how an individual can meet their life goals through the proper management of financial resources. Financial planning encompasses establishing client goals, analyzing clients’ current financial status, developing and presenting recommendations and alternatives to meet the client’s goals and, implementing and monitoring the recommendations and alternatives.

Because a financial planner needs to manage their clients overall financial situation, several skills are required. These include:

- Retirement planning  
- Investment allocation
• Income tax and estate planning
• Insurance and employee benefits planning
• Financial statement preparation and analysis

Financial planners are in great demand in the Philadelphia area as well as in the national market. Potential employers include national and regional banks (i.e., Wells Fargo, Bank of America, Citigroup, JPMorgan Chase, etc.), asset managers (i.e., Vanguard, Fidelity, T. Rowe Price, etc.), accounting firms, and independent financial planning businesses and institutions.

Summary of Requirements

University Requirements

All new students are required to complete the university's General Education (GenEd (p. 143)) curriculum.

Note that students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of re-enrollment.

College Requirements

Students must meet College Graduation Requirements (p. 559), including the requirements of the major listed below. Students must attain an overall GPA of 2.0 and a 2.0 GPA in the major to graduate as a Finance major. To calculate the GPA in the major, use the major GPA calculator (http://www.fox.temple.edu/cms_academics/dept/advising/students/gpa-calculator).

Major Requirements

Students must follow the Major Requirements and College Requirements current at the time of declaration. Students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University, College, and Major requirements current at the time of re-enrollment.

Requirements of Financial Planning Major

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIN 3507</td>
<td>Investments</td>
<td>3</td>
</tr>
<tr>
<td>FIN 3519</td>
<td>Introduction to Financial Planning</td>
<td>3</td>
</tr>
<tr>
<td>LGLS 3519</td>
<td>Tax, Estate and Trust Planning</td>
<td>3</td>
</tr>
<tr>
<td>RMI 3519</td>
<td>Insurance, Benefits and Retirement Planning</td>
<td>3</td>
</tr>
<tr>
<td>FIN 4598</td>
<td>Seminar in Financial Planning</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following:

- AOD 1166 Interpersonal Communication through the Life Span
- AOD 2214 Conflict and Communication
- AOD 2215 Mediation: Principles and Practice
- AOD 3316 Negotiation Processes
- AOD 3376 Facilitating Group Decision-Making
- HRM 3501 Power, Influence and Negotiation
- MKTG 3504 Sales and Sales Management

**Total Credit Hours**: 18

1 This major capstone is taken in the final semester, and all prerequisites must be met.

Suggested Academic Plan

Bachelor of Business Administration in Financial Planning

Requirements for New Students starting in the 2015-2016 Academic Year

Please note that this plan is suggested only, ensuring prerequisites are met.

**Year 1**

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 1001</td>
<td>Quantitative Methods for Business I</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1101</td>
<td>Macroeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>HRM 1101</td>
<td>Leadership and Organizational Management</td>
<td>3</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>Year 1</td>
<td>Term Credit Hours</td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>-------------------</td>
<td></td>
</tr>
<tr>
<td>Spring</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>STAT 1102</td>
<td>Quantitative Methods for Business II</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1102</td>
<td>Microeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>LGLS 1101</td>
<td>Legal Environment of Business</td>
<td>3</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Year 2</td>
<td>Term Credit Hours</td>
<td></td>
</tr>
<tr>
<td>Fall</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>STAT 2103</td>
<td>Statistical Business Analytics (waives GenEd Quantitative Literacy requirement)</td>
<td>4</td>
</tr>
<tr>
<td>ACCT 2101</td>
<td>Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>MIS 2101</td>
<td>Information Systems in Organizations</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 2101</td>
<td>Marketing Management</td>
<td>3</td>
</tr>
<tr>
<td>BA 2104</td>
<td>Excel for Business Applications</td>
<td>1</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>Spring</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>ACCT 2102</td>
<td>Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>FIN 3101</td>
<td>Financial Management</td>
<td>3</td>
</tr>
<tr>
<td>BA 2101</td>
<td>Professional Development Strategies</td>
<td>3</td>
</tr>
<tr>
<td>BA 2196</td>
<td>Business Communications [WI]</td>
<td>1</td>
</tr>
<tr>
<td>RMI 2101</td>
<td>Introduction to Risk Management</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Year 3</td>
<td>Term Credit Hours</td>
<td></td>
</tr>
<tr>
<td>Fall</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>MSOM 3101</td>
<td>Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>BA 3102</td>
<td>Business Society and Ethics</td>
<td>3</td>
</tr>
<tr>
<td>FIN 3519</td>
<td>Introduction to Financial Planning</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Year 4</td>
<td>Term Credit Hours</td>
<td></td>
</tr>
<tr>
<td>Spring</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>BA 3103</td>
<td>Integrative Business Applications</td>
<td>3</td>
</tr>
<tr>
<td>IB 3101</td>
<td>Fundamentals of International Business</td>
<td>3</td>
</tr>
<tr>
<td>Select two of the following:</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>FIN 3507</td>
<td>Investments</td>
<td></td>
</tr>
<tr>
<td>LGLS 3519</td>
<td>Tax, Estate and Trust Planning</td>
<td></td>
</tr>
<tr>
<td>RMI 3519</td>
<td>Insurance, Benefits and Retirement Planning</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Year 4</td>
<td>Term Credit Hours</td>
<td></td>
</tr>
<tr>
<td>Fall</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>BA 4101</td>
<td>Global Business Policies</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>FIN 3507</td>
<td>Investments</td>
<td></td>
</tr>
<tr>
<td>LGLS 3519</td>
<td>Tax, Estate and Trust Planning</td>
<td></td>
</tr>
<tr>
<td>RMI 3519</td>
<td>Insurance, Benefits and Retirement Planning</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Free Elective</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>
Free Elective

**Term Credit Hours**

<table>
<thead>
<tr>
<th>Term</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring</td>
<td>15</td>
</tr>
</tbody>
</table>

FIN 4598 Seminar in Financial Planning [WI] 3
Select one of the following: 3

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AOD 1166</td>
<td>Interpersonal Communication through the Life Span</td>
</tr>
<tr>
<td>AOD 2214</td>
<td>Conflict and Communication</td>
</tr>
<tr>
<td>AOD 2215</td>
<td>Mediation: Principles and Practice</td>
</tr>
<tr>
<td>AOD 3316</td>
<td>Negotiation Processes</td>
</tr>
<tr>
<td>AOD 3376</td>
<td>Facilitating Group Decision-Making</td>
</tr>
<tr>
<td>HRM 3501</td>
<td>Power, Influence and Negotiation</td>
</tr>
<tr>
<td>MKTG 3504</td>
<td>Sales and Sales Management</td>
</tr>
<tr>
<td>Free Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

Free Elective 3
Free Elective 3
Free Elective 3

**Term Credit Hours**

<table>
<thead>
<tr>
<th>Term</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring</td>
<td>15</td>
</tr>
</tbody>
</table>

Total Credit Hours: 124

---

**Human Resource Management**

Dr. Deanna Geddes, Chair  
Alter Hall 353  
215-204-8195  
geddes@temple.edu

Debbie Donato, Assistant Director  
Alter Hall 333 (HRM Department Office)  
215-204-8099  
deborahdonato@temple.edu


The Human Resource Management (HRM) major prepares students for careers in human resource (HR) management and general management. Increasingly, organizations are hiring well-trained professionals to recruit, develop, manage, and retain their most valuable business asset - human capital. The Human Resource Management department prepares students with the knowledge and skills needed for the strategic and interpersonal management of company employees.

Typical first jobs for Human Resource Management majors include corporate recruiter, employee relations specialist, compensation analyst, corporate trainer, HR generalist, and management trainee. Typical jobs held five-ten years out include HR director, staffing manager, compensation manager, training manager, and employee relations director.

Human Resource Management majors are expected to become involved in the Society for Human Resource Management (SHRM). Guest speakers, networking events, internships and co-ops, and other career development activities and are just a few benefits of joining. There are two student SHRM chapters, one at Main Campus and the other at Ambler. The Main Campus chapter office is located in Alter Hall 333C. For more information, contact Andrea Brooks-Lopez at 215-204-4226, ablopez@temple.edu or the SHRM office at 215-204-1626. For Ambler, contact Ken Riemer at riemertr@aol.com or the SHRM Main office.

In addition to SHRM, the HRM Department also invites all majors to join our student chapter of Net Impact or Student Professional Sales Organizations (PSO). For information on Net Impact go to their web site (http://www.foxnetimpact.org/) or contact faculty advisor Lynne Andersson at 215-204-5088, landerss@temple.edu. For more information on PSO, go to their web site (www.temple-pso.org (http://www.temple-pso.org)) or contact faculty advisor Tony Petrucci at 215-204-8138, petrucci@temple.edu.

**Accelerated 3 Year BBA**

Motivated students can accelerate their BBA program to finish in 3 years. Please see the suggested sequence (http://www.fox.temple.edu/cms_academics/dept/human-resource-management-welcome/undergraduate).
Minors & Certificates

Legal Studies Minor for Human Resource Managers

Human Resource Management majors only

The legal aspects of managing people at all levels of business and nonprofit organizations come into play in a wide variety of human resources policies and decisions as well as the ramifications of decisions about the business itself. Compliance with local, state and federal laws and regulations also creates the need for HR practitioners to consider the legal ramifications of hiring, training, coaching, disciplining and terminating individual employees. Larger organizational issues such as layoffs, restructuring, outsourcing, benefits and retirement programs and decisions must also be made in compliance with the law.

Requirements (p. 584) for this minor must be completed prior to graduation. Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor.

Human Resource Minor for Legal Studies

Legal Studies majors only.

Law permeates most aspects of our business lives and few decisions lack legal repercussions. In a business setting, the law regulates such things as who businesses can hire and fire, the liability for people injured on a business premises and labor/management relations. On the other hand, organizations are hiring non-lawyer professionals to manage the most important asset of business, its human talent. Those employees are usually trained in human resource management. In practice, lawyers and human resource managers work hand in hand to deal with employee problems and statutory regulations dealing with compliance issues. A major in law with a minor in human resource management is a natural fit. Students will learn the legal repercussions of a business decision while also being exposed to the management and human side of that decision with practical exposure to those issues.

Requirements (p. 582) for this minor must be completed prior to graduation. Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor.

Certificate in Leadership

The Fox Certificate in Leadership responds to workplace demands for effective leadership development. Corporate executives and numerous studies for years indicate the need for business school graduates to move beyond their technical competence as they step into leadership roles. In today's environment, a leadership mind-set with enhanced skills in organizational communication, conflict management, and team building gives individuals and organizations a competitive advantage. Expertise and perspective developed through the Leadership Certificate courses enable graduates to think and act in ways that reflect sophisticated competencies (from interpersonal to technical) and that benefit the interests of multiple organizational stakeholders.

Requirements (p. 573) for this certificate must be completed prior to graduation. Courses cannot be used to meet certificate requirements if already used to meet the requirements for a major or a different minor or certificate.

RMI & HRM Focus

The Risk Management and Insurance (RMI) Department and Human Resource Management (HRM) Department offer several complimentary courses for students interested in a career in employee benefits and/or human resource management. These courses allow students to broaden their career options by taking advantage of the cross-training offered by these departments.

- HRM major with a RMI focus: Students take RMI 3501 and RMI 3503
- RMI major with a HRM focus: Students take HRM 2501 and HRM 3511
- Dual HRM/RMI major. Students fulfill all requirements for both majors.

Summary of Requirements

University Requirements

All new students are required to complete the university's General Education (GenEd (p. 143)) curriculum.

Note that students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of re-enrollment.

College Requirements

Students must meet College Graduation Requirements (p. 559), including the requirements of the major listed below. Human Resource Management students must attain a 2.0 GPA in the major and a 2.0 cumulative GPA in order to graduate. To calculate the GPA in the major, use the major GPA calculator (http://www.fox.temple.edu/cms_academics/dept/advising/students/gpa-calculator).
Major Requirements

Students must follow the Major Requirements and College Requirements current at the time of declaration. Students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University, College, and Major requirements current at the time of re-enrollment.

Requirements of the Human Resource Management Major

**HRM 2501**  Introduction to Human Resource Management  3
**HRM 3511**  Compensation Management  3
**HRM 3512**  Human Resource Management and Public Policy  3
**HRM 4596**  Organizational Staffing and Career Management  3

Select two of the following:  6

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRM 3501</td>
<td>Power, Influence and Negotiation</td>
<td>2</td>
</tr>
<tr>
<td>HRM 3502</td>
<td>Leading People at Work</td>
<td>2</td>
</tr>
<tr>
<td>HRM 3503</td>
<td>Communicating in Organizations</td>
<td>2</td>
</tr>
<tr>
<td>HRM 3504</td>
<td>Leadership in the 21st Century</td>
<td>2</td>
</tr>
<tr>
<td>or HRM 3505</td>
<td>Sustainable Organizational Leadership</td>
<td></td>
</tr>
<tr>
<td>HRM 3506</td>
<td>HR Metrics: Using Data, Scorecards and Dashboards to Drive Business Performance</td>
<td></td>
</tr>
<tr>
<td>HRM 3513</td>
<td>Labor Relations: Strategy and Practice</td>
<td></td>
</tr>
<tr>
<td>HRM 3531</td>
<td>HR on the Ground</td>
<td></td>
</tr>
<tr>
<td>or HRM 3581</td>
<td>Co-op Experience in Human Resource Management</td>
<td></td>
</tr>
<tr>
<td>HRM 3565</td>
<td>International Human Resource Management</td>
<td></td>
</tr>
<tr>
<td>HRM 3580</td>
<td>Special Topics - Human Resource Management (topics may change)</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credit Hours  18

1. This major capstone is typically taken in the final semester, and all prerequisites (HRM 2501, HRM 3511, & HRM 3512) must be met.
2. These courses make up the Fox Leadership Certificate which will appear on your official transcript similar to a Minor. However, they cannot be double counted for HRM major requirements if applied toward the Leadership Certificate.
3. This course may be offered multiple semesters with different topics. It can be applied once toward the major. It can be used as a free elective if completed with a different topic.

Suggested Academic Plan

Bachelor of Business Administration in Human Resource Management

Requirements for New Students starting in the 2015-2016 Academic Year

Please note that this plan is suggested only, ensuring prerequisites are met.

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 1001</td>
<td>Quantitative Methods for Business I</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1101</td>
<td>Macroeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>HRM 1101</td>
<td>Leadership and Organizational Management</td>
<td>3</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>16</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 1102</td>
<td>Quantitative Methods for Business II</td>
</tr>
<tr>
<td>ECON 1102</td>
<td>Microeconomic Principles</td>
</tr>
<tr>
<td>LGLS 1101</td>
<td>Legal Environment of Business</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 2103</td>
<td>Statistical Business Analytics (waives GenEd Quantitative Literacy requirement)</td>
<td>4</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credit Hours</td>
</tr>
<tr>
<td>------------</td>
<td>--------------------------------------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>ACCT 2101</td>
<td>Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>MIS 2101</td>
<td>Information Systems in Organizations</td>
<td>3</td>
</tr>
<tr>
<td>BA 2104</td>
<td>Excel for Business Applications</td>
<td>1</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours: 17**

### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 2102</td>
<td>Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BA 2101</td>
<td>Professional Development Strategies</td>
<td>1</td>
</tr>
<tr>
<td>BA 2196</td>
<td>Business Communications [WI]</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 2101</td>
<td>Marketing Management</td>
<td>3</td>
</tr>
<tr>
<td>RMI 2101</td>
<td>Introduction to Risk Management</td>
<td>3</td>
</tr>
<tr>
<td>HRM 2501</td>
<td>Introduction to Human Resource Management</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours: 16**

### Year 3

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIN 3101</td>
<td>Financial Management</td>
<td>3</td>
</tr>
<tr>
<td>MSOM 3101</td>
<td>Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>BA 3102</td>
<td>Business Society and Ethics</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>HRM 3511</td>
<td>Compensation Management</td>
<td></td>
</tr>
<tr>
<td>HRM 3512</td>
<td>Human Resource Management and Public Policy</td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>HRM 3501</td>
<td>Power, Influence and Negotiation</td>
<td></td>
</tr>
<tr>
<td>HRM 3502</td>
<td>Leading People at Work</td>
<td></td>
</tr>
<tr>
<td>HRM 3503</td>
<td>Communicating in Organizations</td>
<td></td>
</tr>
<tr>
<td>HRM 3504 or 3505</td>
<td>Leadership in the 21st Century (or Sustainable Organizational Leadership)</td>
<td>3</td>
</tr>
<tr>
<td>HRM 3506</td>
<td>HR Metrics: Using Data, Scorecards and Dashboards to Drive Business Performance</td>
<td></td>
</tr>
<tr>
<td>HRM 3513</td>
<td>Labor Relations: Strategy and Practice</td>
<td></td>
</tr>
<tr>
<td>HRM 3531 or 3581</td>
<td>HR on the Ground (or Co-op Experience in Human Resource Management)</td>
<td>3</td>
</tr>
<tr>
<td>HRM 3565</td>
<td>International Human Resource Management</td>
<td></td>
</tr>
<tr>
<td>HRM 3580</td>
<td>Special Topics - Human Resource Management</td>
<td></td>
</tr>
</tbody>
</table>

**Term Credit Hours: 15**

### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 3103</td>
<td>Integrative Business Applications</td>
<td>3</td>
</tr>
<tr>
<td>IB 3101</td>
<td>Fundamentals of International Business</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>HRM 3512</td>
<td>Human Resource Management and Public Policy</td>
<td></td>
</tr>
<tr>
<td>HRM 3511</td>
<td>Compensation Management</td>
<td></td>
</tr>
</tbody>
</table>

**Term Credit Hours: 15**

### Year 4

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 4101</td>
<td>Global Business Policies</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>HRM 3501</td>
<td>Power, Influence and Negotiation</td>
<td></td>
</tr>
<tr>
<td>HRM 3502</td>
<td>Leading People at Work</td>
<td></td>
</tr>
<tr>
<td>HRM 3503</td>
<td>Communicating in Organizations</td>
<td></td>
</tr>
<tr>
<td>HRM 3505 or 3504</td>
<td>Sustainable Organizational Leadership (or Leadership in the 21st Century)</td>
<td>3</td>
</tr>
<tr>
<td>HRM 3506</td>
<td>HR Metrics: Using Data, Scorecards and Dashboards to Drive Business Performance</td>
<td></td>
</tr>
<tr>
<td>HRM 3513</td>
<td>Labor Relations: Strategy and Practice</td>
<td></td>
</tr>
</tbody>
</table>

**Term Credit Hours: 15**
### Schools, Colleges, and Divisions

#### Co-op Experience in Human Resource Management (or HR on the Ground)
- **HRM 3581 or 3531**

#### International Human Resource Management
- **HRM 3565**

#### Special Topics - Human Resource Management
- **HRM 3580**

#### GenEd Breadth Course
- **3**

#### Free Elective
- **3**

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>HRM 4596</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Total Credit Hours: 124

### International Business Administration

**Arvind Parkhe, Chair**  
215-204-6618  
aparkhe@temple.edu

**Bertrand Guillotin, Academic Director, IB Program**  
bguillotin@temple.edu  
ciber@temple.edu  
www.fox.temple.edu/cms_academics/dept/strategic-management-department/programs/international-business/

A major in International Business Administration is a great choice for students who:

- Want to have productive and enriching interactions with foreigners
- Want to develop and leverage a foreign language proficiency
- Want to be able to assess and hedge risks of doing business abroad for their employer
- Will pursue international business opportunities (e.g. international procurement, foreign clients) for their employer
- Want to become familiar with the practical techniques required by international trade
- Would like to pursue a professional career that requires frequent travel abroad

The **U.S. News & World Report** has regularly ranked the Fox School of Business and Management's undergraduate International Business (IB) major in the Top 10 in the nation.

A major in International Business Administration combines coursework in international business (IB), geographical area studies, and foreign language. This educational experience is designed to equip students with the knowledge and global perspectives required to thrive in the global workforce of the twenty-first century. The IB major prepares students to understand the various challenges businesses face when they operate in an international environment. As the world is globalizing several emerging markets such as China, India, and Brazil have become important players in the international arena in the past two decades. The IB program emphasizes learning to do business in these emerging markets through elective courses such as *Fundamentals of Asian Business, Fundamentals of Latin American Business,* and *Special Topics in IB*.

Since an understanding of language and cultural differences plays an important role in international interactions, there is additional emphasis given to learning a second language. Students are required to demonstrate proficiency in a second language at the fourth semester level through coursework or examination. In addition, a cultural, historical, and geographic area of understanding is also essential. Students are encouraged to acquire this background through completion of a Certificate of Specialization in Spanish and Latin American Studies for Business, or Asian Business and Society facilitated by IGMS/CIBER, or elective courses offered by the College of Liberal Arts. See Spanish and Latin American Studies for Business (p. 928) and Asian Business and Society Certificate (p. 800) for information.

To further round out a student's education, experience abroad is required. Students are provided opportunities to intern or study for two weeks, a summer, a semester, or a year abroad in various countries where the university has established business programs or at partner institutions. See Temple CIBER, Study Abroad (http://www.fox.temple.edu/cms_research/institutes-and-centers/center-for-international-business-education-and-research/study-abroad-programs/overview) for information.
International Business Administration majors are strongly encouraged to either double major or earn an Area Studies and Language Certificate, and become actively involved in the International Business Association. This student organization hosts the Global Lecture Series with guest speakers from international business disciplines, networking events, and career development activities. This organization is open to all FSBM majors. For more information, visit International Business Association (http://www.fox.temple.edu/cms_career/student-professional-organizations/international-business-association) or contact the IBA officers at 215-204-8185.

**Accelerated 3 Year BBA**

Motivated students can accelerate their BBA program to finish in 3 years. Please see the suggested sequence (http://www.fox.temple.edu/cms_academics/dept/strategic-management-department/programs/international-business/undergraduate).

**Certificates**

Several interdisciplinary certificates are offered that will enhance international understanding: Asian Business & Society (p. 800) and Spanish & Latin American Studies for Business (p. 928). (p. 918)

**Programs**

- International Economics Concentration (p. 616)
- International Entrepreneurship Concentration (p. 618)
- International Finance Concentration (p. 621)
- International Marketing Concentration (p. 623)
- International Sales & Business Development Concentration (p. 626)
- International Supply Chain Management, Transportation & Logistics Concentration (p. 628)

**International Economics Concentration**

**Summary of Requirements**

**University Requirements**

All new students are required to complete the university's General Education (GenEd (p. 143)) curriculum.

Note that students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of re-enrollment.

**College Requirements**

Students must meet College Graduation Requirements (p. 559), including the requirements of the major listed below. Students must maintain a 2.0 GPA overall and a 2.0 GPA in the major to graduate as an International Business major. To calculate the GPA in the major, use the major GPA calculator (http://www.fox.temple.edu/cms_academics/dept/advising/students/gpa-calculator).

**Major Requirements**

Students must follow the Major Requirements and College Requirements current at the time of declaration. Students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University, College, and Major requirements current at the time of re-enrollment.

**Requirements of International Economics Concentration**

Undergraduate students may earn a Bachelor of Business Administration (B.B.A.) degree in International Business Administration (IB) with a concentration in International Economics. Students are strongly encouraged to pursue a complementary major or minor to enhance their professional marketability by specializing in a functional area of business and/or pursuing area studies expertise.

**Foreign Language Requirement**

(All students must be proficient in two languages)

**Major Requirements**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IB 3596</td>
<td>Global Entrepreneurship</td>
<td>3</td>
</tr>
<tr>
<td>IB 4587</td>
<td>International Business Practicum</td>
<td>3</td>
</tr>
<tr>
<td>IB/MKTG 3553</td>
<td>International Marketing</td>
<td>3</td>
</tr>
</tbody>
</table>

Select ONE Geographical Area IB course:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>IB 2501</td>
<td>Fundamentals of Asian Business</td>
</tr>
<tr>
<td>or ASST 2511</td>
<td>Introduction to Asian Business</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>IB/LAS 2502</td>
<td>Fundamentals of Latin American Business</td>
</tr>
<tr>
<td>IB 2503</td>
<td>Fundamentals of European Business</td>
</tr>
<tr>
<td>IB 2509</td>
<td>Short Study Trip Abroad: Doing Business in a Foreign Country</td>
</tr>
</tbody>
</table>

**Concentration Requirements**

Select three of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 3511</td>
<td>The Economics and Management of Privatization</td>
</tr>
<tr>
<td>ECON 3547</td>
<td>Economics of Development and Growth</td>
</tr>
<tr>
<td>ECON 3563</td>
<td>International Trade</td>
</tr>
<tr>
<td>ECON 3564</td>
<td>International Monetary Economics</td>
</tr>
</tbody>
</table>

**Total Credit Hours**

1 This major capstone is taken in the final semester, and all prerequisites must be met.

**Suggested Academic Plan**

**Bachelor of Business Administration in International Business Administration: International Economics Concentration**

**Requirements for New Students starting in the 2015-2016 Academic Year**

Please note that this plan is suggested only, ensuring prerequisites are met.

**Year 1**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>STAT 1001</td>
<td>Quantitative Methods for Business I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ECON 1101</td>
<td>Macroeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>HRM 1101</td>
<td>Leadership and Organizational Management</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Foreign Language or Free Elective</td>
<td>3-4</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>16-17</strong></td>
<td></td>
</tr>
<tr>
<td>Spring</td>
<td>STAT 1102</td>
<td>Quantitative Methods for Business II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ECON 1102</td>
<td>Microeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>LGLS 1101</td>
<td>Legal Environment of Business</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Foreign Language or Free Elective</td>
<td>3-4</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15-16</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Year 2**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>STAT 2103</td>
<td>Statistical Business Analytics (waives GenEd Quantitative Literacy requirement)</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>ACCT 2101</td>
<td>Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MIS 2101</td>
<td>Information Systems in Organizations</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>BA 2104</td>
<td>Excel for Business Applications</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Foreign Language or Free Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>17</strong></td>
<td></td>
</tr>
<tr>
<td>Spring</td>
<td>ACCT 2102</td>
<td>Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MKTG 2101</td>
<td>Marketing Management</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>BA 2101</td>
<td>Professional Development Strategies</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>BA 2196</td>
<td>Business Communications [WI]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>RMI 2101</td>
<td>Introduction to Risk Management</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Foreign Language or Free Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>16</strong></td>
<td></td>
</tr>
</tbody>
</table>
### Year 3

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIN 3101</td>
<td>Financial Management</td>
<td>3</td>
</tr>
<tr>
<td>MSOM 3101</td>
<td>Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>BA 3102</td>
<td>Business Society and Ethics</td>
<td>3</td>
</tr>
<tr>
<td>IB 3101</td>
<td>Fundamentals of International Business</td>
<td>3</td>
</tr>
</tbody>
</table>

Select ONE Geographical Area IB course:
- IB 2501 or ASST 2511: Fundamentals of Asian Business
- IB 2502 or LAS 2502: Fundamentals of Latin American Business
- IB 2503: Fundamentals of European Business
- IB 2509: Short Study Trip Abroad: Doing Business in a Foreign Country

| Term Credit Hours | 15 |

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 3103</td>
<td>Integrative Business Applications</td>
<td>3</td>
</tr>
<tr>
<td>IB 3553 or MKTG 3553</td>
<td>International Marketing</td>
<td>3</td>
</tr>
<tr>
<td>IB 3596</td>
<td>Global Entrepreneurship [WI]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

| Term Credit Hours | 15 |

### Year 4

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 4101</td>
<td>Global Business Policies</td>
<td>3</td>
</tr>
</tbody>
</table>

Select two of the following:
- ECON 3511: The Economics and Management of Privatization
- ECON 3547: Economics of Development and Growth
- ECON 3563: International Trade
- ECON 3564: International Monetary Economics

GenEd Breadth Course: 3
GenEd Breadth Course: 3

| Term Credit Hours | 15 |

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IB 4587</td>
<td>International Business Practicum</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following:
- ECON 3511: The Economics and Management of Privatization
- ECON 3547: Economics of Development and Growth
- ECON 3563: International Trade
- ECON 3564: International Monetary Economics

GenEd Breadth Course: 3
GenEd Breadth Course: 3
GenEd Breadth Course: 3

| Term Credit Hours | 15 |

| Total Credit Hours | 124-126 |

### International Entrepreneurship Concentration

#### Summary of Requirements

#### University Requirements

All new students are required to complete the university's General Education (GenEd (p. 143)) curriculum.

Note that students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of re-enrollment.
College Requirements

Students must meet College Graduation Requirements (p. 559), including the requirements of the major listed below. Students must maintain a 2.0 GPA overall and a 2.0 GPA in the major to graduate as an International Business major. To calculate the GPA in the major, use the major GPA calculator (http://www.fox.temple.edu/cms_academics/dept/advising/students/gpa-calculator).

Major Requirements

Students must follow the Major Requirements and College Requirements current at the time of declaration. Students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University, College, and Major requirements current at the time of re-enrollment.

Requirements of International Entrepreneurship Concentration

Undergraduate students may earn a Bachelor of Business Administration (B.B.A.) degree in International Business Administration (IB) with a concentration in International Entrepreneurship. Students are strongly encouraged to pursue a complementary major or minor to enhance their professional marketability by specializing in a functional area of business and/or pursuing area studies expertise.

Foreign Language Requirement

(All students must be proficient in two languages)

Major Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IB 3596</td>
<td>Global Entrepreneurship</td>
<td>3</td>
</tr>
<tr>
<td>IB 4587</td>
<td>International Business Practicum</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 3553</td>
<td>International Marketing</td>
<td>3</td>
</tr>
</tbody>
</table>

Select ONE Geographical Area IB course:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IB 2501</td>
<td>Fundamentals of Asian Business</td>
<td>3</td>
</tr>
<tr>
<td>or ASST 2511</td>
<td>Introduction to Asian Business</td>
<td></td>
</tr>
<tr>
<td>IB/LAS 2502</td>
<td>Fundamentals of Latin American Business</td>
<td>3</td>
</tr>
<tr>
<td>IB 2503</td>
<td>Fundamentals of European Business</td>
<td>3</td>
</tr>
<tr>
<td>IB 2509</td>
<td>Short Study Trip Abroad: Doing Business in a Foreign Country</td>
<td>3</td>
</tr>
</tbody>
</table>

Concentration Requirements

Select three of the following: 9

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IB 3581</td>
<td>International Business Internship</td>
<td></td>
</tr>
<tr>
<td>or IB 3585</td>
<td>International Business Internship</td>
<td></td>
</tr>
<tr>
<td>IB 3562</td>
<td>International Law</td>
<td></td>
</tr>
<tr>
<td>or LGLS 3562</td>
<td>Legal Aspects of Global Business</td>
<td></td>
</tr>
<tr>
<td>SGM 3002</td>
<td>Be Your Own Boss: Planning to Start Your Own Business</td>
<td>3</td>
</tr>
<tr>
<td>SGM 3501</td>
<td>Entrepreneurial and Innovative Thinking</td>
<td></td>
</tr>
<tr>
<td>SGM 3503</td>
<td>Innovation that Works: Building and Assessing Innovative Business Models</td>
<td>3</td>
</tr>
<tr>
<td>SGM 3511</td>
<td>Doing Well by Doing Good: Where Innovation and Entrepreneurship Meet Social Impact</td>
<td>3</td>
</tr>
<tr>
<td>SGM 3580</td>
<td>Special Topics - Strategic Management (Ready, Fire, Aim: Launching a Micro Venture)</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credit Hours 21

1 This major capstone is taken in the final semester, and all prerequisites must be met.

Suggested Academic Plan

Bachelor of Business Administration in International Business Administration: International Entrepreneurship Concentration

Requirements for New Students starting in the 2015-2016 Academic Year

Please note that this plan is suggested only, ensuring prerequisites are met.

Year 1

Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 1001</td>
<td>Quantitative Methods for Business I</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1101</td>
<td>Macroeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>HRM 1101</td>
<td>Leadership and Organizational Management</td>
<td>3</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
</tbody>
</table>
### Year 1

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 1102</td>
<td>Quantitative Methods for Business II</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1102</td>
<td>Microeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>LGLS 1101</td>
<td>Legal Environment of Business</td>
<td>3</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Term Credit Hours

| 16-17 |

---

#### Foreign Language or Free Elective

3-4

### Year 2

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 2103</td>
<td>Statistical Business Analytics (waives GenEd Quantitative Literacy requirement)</td>
<td>4</td>
</tr>
<tr>
<td>ACCT 2101</td>
<td>Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>MIS 2101</td>
<td>Information Systems in Organizations</td>
<td>3</td>
</tr>
<tr>
<td>BA 2104</td>
<td>Excel for Business Applications</td>
<td>1</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Foreign Language or Free Elective

3

#### Term Credit Hours

| 15-16 |

---

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 2102</td>
<td>Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 2101</td>
<td>Marketing Management</td>
<td>3</td>
</tr>
<tr>
<td>BA 2101</td>
<td>Professional Development Strategies</td>
<td>1</td>
</tr>
<tr>
<td>BA 2196</td>
<td>Business Communications [WI]</td>
<td>3</td>
</tr>
<tr>
<td>RMI 2101</td>
<td>Introduction to Risk Management</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Foreign Language or Free Elective

3

#### Term Credit Hours

| 17 |

---

### Year 3

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIN 3101</td>
<td>Financial Management</td>
<td>3</td>
</tr>
<tr>
<td>MSOM 3101</td>
<td>Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>BA 3102</td>
<td>Business Society and Ethics</td>
<td>3</td>
</tr>
<tr>
<td>IB 3101</td>
<td>Fundamentals of International Business</td>
<td>3</td>
</tr>
<tr>
<td>IB 2501 or ASST 2511</td>
<td>Fundamentals of Asian Business</td>
<td>3</td>
</tr>
<tr>
<td>IB 2502 or LAS 2502</td>
<td>Fundamentals of Latin American Business</td>
<td>3</td>
</tr>
<tr>
<td>IB 2503</td>
<td>Fundamentals of European Business</td>
<td>3</td>
</tr>
<tr>
<td>IB 2509</td>
<td>Short Study Trip Abroad: Doing Business in a Foreign Country</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Select ONE Geographical Area IB course:

#### Term Credit Hours

| 16 |

---

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 3103</td>
<td>Integrative Business Applications</td>
<td>3</td>
</tr>
<tr>
<td>IB 3553 or MKTG 3553</td>
<td>International Marketing</td>
<td>3</td>
</tr>
<tr>
<td>IB 3596</td>
<td>Global Entrepreneurship [WI]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Term Credit Hours

| 15 |

---

### Year 4

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 4101</td>
<td>Global Business Policies</td>
<td>3</td>
</tr>
<tr>
<td>IB 3581 or 3585</td>
<td>International Business Internship</td>
<td>3</td>
</tr>
<tr>
<td>IB 3562 or LGLS 3562</td>
<td>International Law</td>
<td>3</td>
</tr>
<tr>
<td>SGM 3002</td>
<td>Be Your Own Boss: Planning to Start Your Own Business</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Select two of the following:

#### Term Credit Hours

| 15 |

---
International Finance Concentration

Summary of Requirements

University Requirements

All new students are required to complete the university's General Education (GenEd (p. 143)) curriculum.

Note that students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of re-enrollment.

College Requirements

Students must meet College Graduation Requirements (p. 559), including the requirements of the major listed below. Students must maintain a 2.0 GPA overall and a 2.0 GPA in the major to graduate as an International Business major. To calculate the GPA in the major, use the major GPA calculator (http://www.fox.temple.edu/cms_academics/dept/advising/students/gpa-calculator).

Major Requirements

Students must follow the Major Requirements and College Requirements current at the time of declaration. Students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University, College, and Major requirements current at the time of re-enrollment.

Requirements of International Finance Concentration

Undergraduate students may earn a Bachelor of Business Administration (B.B.A.) degree in International Business Administration (IB) with a concentration in International Finance. Students are strongly encouraged to pursue a complementary major or minor to enhance their professional marketability by specializing in a functional area of business and/or pursuing area studies expertise.

Foreign Language Requirement

(All students must be proficient in two languages)

Major Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IB 3596</td>
<td>Global Entrepreneurship</td>
<td>3</td>
</tr>
<tr>
<td>IB 4587</td>
<td>International Business Practicum</td>
<td>3</td>
</tr>
<tr>
<td>IB/MKTG 3553</td>
<td>International Marketing</td>
<td>3</td>
</tr>
</tbody>
</table>

Select ONE Geographical Area IB course:
IB 2501  Fundamentals of Asian Business
or ASST 2511  Introduction to Asian Business
IB/LAS 2502  Fundamentals of Latin American Business
IB 2503  Fundamentals of European Business
IB 2509  Short Study Trip Abroad: Doing Business in a Foreign Country

Concentration Requirements
FIN 3504  Intermediate Corporate Finance 3
FIN 3551  International Finance 3
FIN 3505  Management of Financial Institutions 3
or FIN 3507  Investments

Total Credit Hours 21

This major capstone is taken in the final semester, and all prerequisites must be met.

Suggested Academic Plan
Bachelor of Business Administration in International Business Administration: International Finance Concentration

Requirements for New Students starting in the 2015-2016 Academic Year
Please note that this plan is suggested only, ensuring prerequisites are met.

Year 1

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>STAT 1001</td>
<td>Quantitative Methods for Business I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ECON 1101</td>
<td>Macroeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>HRM 1101</td>
<td>Leadership and Organizational Management</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Foreign Language or Free Elective</td>
<td></td>
<td>3-4</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>16-17</strong></td>
</tr>
<tr>
<td>Spring</td>
<td>STAT 1102</td>
<td>Quantitative Methods for Business II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ECON 1102</td>
<td>Microeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>LGLS 1101</td>
<td>Legal Environment of Business</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Foreign Language or Free Elective</td>
<td></td>
<td>3-4</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>15-16</strong></td>
</tr>
</tbody>
</table>

Year 2

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>STAT 2103</td>
<td>Statistical Business Analytics (waives GenEd Quantitative Literacy requirement)</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>ACCT 2101</td>
<td>Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MIS 2101</td>
<td>Information Systems in Organizations</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>BA 2104</td>
<td>Excel for Business Applications</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Foreign Language or Free Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>17</strong></td>
</tr>
<tr>
<td>Spring</td>
<td>ACCT 2102</td>
<td>Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MKTG 2101</td>
<td>Marketing Management</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>BA 2101</td>
<td>Professional Development Strategies</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>BA 2196</td>
<td>Business Communications [WI]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>RMI 2101</td>
<td>Introduction to Risk Management</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Foreign Language or Free Elective</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>
### Year 3

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIN 3101</td>
<td>Financial Management</td>
<td>3</td>
</tr>
<tr>
<td>MSOM 3101</td>
<td>Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>BA 3102</td>
<td>Business Society and Ethics</td>
<td>3</td>
</tr>
<tr>
<td>IB 3101</td>
<td>Fundamentals of International Business</td>
<td>3</td>
</tr>
</tbody>
</table>

Select ONE Geographical Area IB course:

- IB 2501 or ASST 2511: Fundamentals of Asian Business
- IB 2502 or LAS 2502: Fundamentals of Latin American Business
- IB 2503: Fundamentals of European Business
- IB 2509: Short Study Trip Abroad: Doing Business in a Foreign Country

**Term Credit Hours**: 15

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 3103</td>
<td>Integrative Business Applications</td>
<td>3</td>
</tr>
<tr>
<td>IB 3553 or MKTG 3553</td>
<td>International Marketing</td>
<td>3</td>
</tr>
<tr>
<td>IB 3596</td>
<td>Global Entrepreneurship [WI]</td>
<td>3</td>
</tr>
</tbody>
</table>

GenEd Breadth Course

GenEd Breadth Course

**Term Credit Hours**: 15

### Year 4

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 4101</td>
<td>Global Business Policies</td>
<td>3</td>
</tr>
<tr>
<td>FIN 3504</td>
<td>Intermediate Corporate Finance</td>
<td>3</td>
</tr>
<tr>
<td>FIN 3551</td>
<td>International Finance</td>
<td>3</td>
</tr>
</tbody>
</table>

GenEd Breadth Course

GenEd Breadth Course

**Term Credit Hours**: 15

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IB 4587</td>
<td>International Business Practicum</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following:

- FIN 3505: Management of Financial Institutions
- FIN 3507: Investments

GenEd Breadth Course

GenEd Breadth Course

GenEd Breadth Course

**Term Credit Hours**: 15

**Total Credit Hours**: 124-126

### International Marketing Concentration

#### Summary of Requirements

**University Requirements**

All new students are required to complete the university's General Education (GenEd (p. 143)) curriculum.

Note that students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of re-enrollment.

**College Requirements**

Students must meet College Graduation Requirements (p. 559), including the requirements of the major listed below. Students must maintain a 2.0 GPA overall and a 2.0 GPA in the major to graduate as an International Business major. To calculate the GPA in the major, use the major GPA calculator (http://www.fox.temple.edu/cms_academics/dept/advising/students/gpa-calculator).
**Major Requirements**

Students must follow the Major Requirements and College Requirements current at the time of declaration. Students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University, College, and Major requirements current at the time of re-enrollment.

**Requirements of International Marketing Concentration**

Undergraduate students may earn a Bachelor of Business Administration (B.B.A.) degree in International Business Administration (IB) with a concentration in International Marketing. Students are strongly encouraged to pursue a complementary major or minor to enhance their professional marketability by specializing in a functional area of business and/or pursuing area studies expertise.

**Foreign Language Requirement**

(All students must be proficient in two languages)

**Major Requirements**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IB 3596</td>
<td>Global Entrepreneurship</td>
<td>3</td>
</tr>
<tr>
<td>IB 4587</td>
<td>International Business Practicum</td>
<td>3</td>
</tr>
<tr>
<td>IB/MKTG 3553</td>
<td>International Marketing</td>
<td>3</td>
</tr>
</tbody>
</table>

Select ONE Geographical Area IB course:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>IB 2501</td>
<td>Fundamentals of Asian Business</td>
</tr>
<tr>
<td>or ASST 2511</td>
<td>Introduction to Asian Business</td>
</tr>
<tr>
<td>IB/LAS 2502</td>
<td>Fundamentals of Latin American Business</td>
</tr>
<tr>
<td>IB 2503</td>
<td>Fundamentals of European Business</td>
</tr>
<tr>
<td>IB 2509</td>
<td>Short Study Trip Abroad: Doing Business in a Foreign Country</td>
</tr>
</tbody>
</table>

**Concentration Requirements**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>IB 3581</td>
<td>International Business Internship</td>
</tr>
<tr>
<td>or IB 3585</td>
<td>International Business Internship</td>
</tr>
</tbody>
</table>

Select two of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MKTG 3501</td>
<td>Integrated Marketing Communications</td>
</tr>
<tr>
<td>MKTG 3504</td>
<td>Sales and Sales Management</td>
</tr>
<tr>
<td>MKTG 3505</td>
<td>Entrepreneurial Marketing</td>
</tr>
<tr>
<td>MKTG 3508</td>
<td>Digital Marketing</td>
</tr>
<tr>
<td>MKTG 3511</td>
<td>Marketing Research</td>
</tr>
</tbody>
</table>

**Total Credit Hours**

21

This major capstone is taken in the final semester, and all prerequisites must be met.

**Suggested Academic Plan**

**Bachelor of Business Administration in International Business Administration: International Marketing Concentration**

**Requirements for New Students starting in the 2015-2016 Academic Year**

Please note that this plan is suggested only, ensuring prerequisites are met.

**Year 1**

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 1001</td>
<td>Quantitative Methods for Business I</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1101</td>
<td>Macroeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>HRM 1101</td>
<td>Leadership and Organizational Management</td>
<td>3</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>Foreign Language or Free Elective</td>
<td></td>
<td>3-4</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

16-17

**Spring**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 1102</td>
<td>Quantitative Methods for Business II</td>
</tr>
<tr>
<td>ECON 1102</td>
<td>Microeconomic Principles</td>
</tr>
<tr>
<td>LGLS 1101</td>
<td>Legal Environment of Business</td>
</tr>
<tr>
<td>Year 2</td>
<td>Fall</td>
</tr>
<tr>
<td>--------</td>
<td>------</td>
</tr>
<tr>
<td></td>
<td>STAT 2103</td>
</tr>
<tr>
<td></td>
<td>ACCT 2101</td>
</tr>
<tr>
<td></td>
<td>MIS 2101</td>
</tr>
<tr>
<td></td>
<td>BA 2104</td>
</tr>
<tr>
<td></td>
<td>IH 0852 or 0952</td>
</tr>
<tr>
<td></td>
<td>Term Credit Hours</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ACCT 2102</td>
<td>Managerial Accounting</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MKTG 2101</td>
<td>Marketing Management</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>BA 2101</td>
<td>Professional Development Strategies</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>BA 2196</td>
<td>Business Communications [WI]</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>RMI 2101</td>
<td>Introduction to Risk Management</td>
<td>3</td>
<td>Foreign Language or Free Elective</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Term Credit Hours</td>
<td>17</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3</th>
<th>Fall</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>Term Credit Hours</th>
<th>16</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FIN 3101</td>
<td>Financial Management</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MSOM 3101</td>
<td>Operations Management</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>BA 3102</td>
<td>Business Society and Ethics</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IB 3101</td>
<td>Fundamentals of International Business</td>
<td>3</td>
<td>Select ONE Geographical Area IB course:</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IB 2501 or ASST 2511</td>
<td>Fundamentals of Asian Business</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IB 2502 or LAS 2502</td>
<td>Fundamentals of Latin American Business</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IB 2503</td>
<td>Fundamentals of European Business</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IB 2509</td>
<td>Short Study Trip Abroad: Doing Business in a Foreign Country</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Term Credit Hours</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BA 3103</td>
<td>Integrative Business Applications</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IB 3553 or MKTG 3553</td>
<td>International Marketing</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IB 3596</td>
<td>Global Entrepreneurship [WI]</td>
<td>3</td>
<td>GenEd Breadth Course</td>
<td>3</td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Term Credit Hours</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 4</th>
<th>Fall</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BA 4101</td>
<td>Global Business Policies</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Select two of the following:</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MKTG 3501</td>
<td>Integrated Marketing Communications</td>
<td>3</td>
<td>GenEd Breadth Course</td>
<td>3</td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MKTG 3504</td>
<td>Sales and Sales Management</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MKTG 3505</td>
<td>Entrepreneurial Marketing</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MKTG 3508</td>
<td>Digital Marketing</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MKTG 3511</td>
<td>Marketing Research</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Term Credit Hours</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
International Sales & Business Development Concentration

Summary of Requirements

University Requirements

All new students are required to complete the university’s General Education (GenEd (p. 143)) curriculum. Note that students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of re-enrollment.

College Requirements

Students must meet College Graduation Requirements (p. 559), including the requirements of the major listed below. Students must maintain a 2.0 GPA overall and a 2.0 GPA in the major to graduate as an International Business major. To calculate the GPA in the major, use the major GPA calculator (http://www.fox.temple.edu/cms_academics/dept/advising/students/gpa-calculator).

Major Requirements

Students must follow the Major Requirements and College Requirements current at the time of declaration. Students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University, College, and Major requirements current at the time of re-enrollment.

Requirements of International Sales & Business Development Concentration

Undergraduate students may earn a Bachelor of Business Administration (B.B.A.) degree in International Business Administration (IB) with a concentration in International Sales & Business Development. Students are strongly encouraged to pursue a complementary major or minor to enhance their professional marketability by specializing in a functional area of business and/or pursuing area studies expertise.

Foreign Language Requirement

(All students must be proficient in two languages)

Major Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IB 3596</td>
<td>Global Entrepreneurship</td>
<td>3</td>
</tr>
<tr>
<td>IB 4587</td>
<td>International Business Practicum</td>
<td>3</td>
</tr>
<tr>
<td>IB/MKTG 3553</td>
<td>International Marketing</td>
<td>3</td>
</tr>
<tr>
<td>Select ONE Geographical Area IB course:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>IB 2501</td>
<td>Fundamentals of Asian Business</td>
<td></td>
</tr>
<tr>
<td>or ASST 2511</td>
<td>Introduction to Asian Business</td>
<td></td>
</tr>
<tr>
<td>IB/LAS 2502</td>
<td>Fundamentals of Latin American Business</td>
<td></td>
</tr>
<tr>
<td>IB 2503</td>
<td>Fundamentals of European Business</td>
<td></td>
</tr>
<tr>
<td>IB 2509</td>
<td>Short Study Trip Abroad: Doing Business in a Foreign Country</td>
<td></td>
</tr>
</tbody>
</table>

Concentration Requirements

Select three of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IB 3581</td>
<td>International Business Internship</td>
<td></td>
</tr>
<tr>
<td>or IB 3585</td>
<td>International Business Internship</td>
<td></td>
</tr>
<tr>
<td>IB 3562</td>
<td>International Law</td>
<td></td>
</tr>
<tr>
<td>or LGLS 3562</td>
<td>Legal Aspects of Global Business</td>
<td></td>
</tr>
<tr>
<td>MKTG 3504</td>
<td>Sales and Sales Management</td>
<td></td>
</tr>
<tr>
<td>SGM 3002</td>
<td>Be Your Own Boss: Planning to Start Your Own Business</td>
<td></td>
</tr>
</tbody>
</table>

Total Credit Hours: 124-126
This major capstone is taken in the final semester, and all prerequisites must be met.

**Suggested Academic Plan**

**Bachelor of Business Administration in International Business Administration: International Sales & Business Development Concentration**

Requirements for New Students starting in the 2015-2016 Academic Year

Please note that this plan is suggested only, ensuring prerequisites are met.

### Year 1

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 1001</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1101</td>
<td>3</td>
</tr>
<tr>
<td>HRM 1101</td>
<td>3</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>4</td>
</tr>
<tr>
<td>Foreign Language or Free Elective</td>
<td>3-4</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>16-17</strong></td>
</tr>
<tr>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td>STAT 1102</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1102</td>
<td>3</td>
</tr>
<tr>
<td>LGLS 1101</td>
<td>3</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>3</td>
</tr>
<tr>
<td>Foreign Language or Free Elective</td>
<td>3-4</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15-16</strong></td>
</tr>
</tbody>
</table>

### Year 2

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 2103</td>
<td>4</td>
</tr>
<tr>
<td>ACCT 2101</td>
<td>3</td>
</tr>
<tr>
<td>MIS 2101</td>
<td>3</td>
</tr>
<tr>
<td>BA 2104</td>
<td>1</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>3</td>
</tr>
<tr>
<td>Foreign Language or Free Elective</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>17</strong></td>
</tr>
<tr>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td>ACCT 2102</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 2101</td>
<td>3</td>
</tr>
<tr>
<td>BA 2101</td>
<td>1</td>
</tr>
<tr>
<td>BA 2196</td>
<td>3</td>
</tr>
<tr>
<td>RMI 2101</td>
<td>3</td>
</tr>
<tr>
<td>Foreign Language or Free Elective</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

### Year 3

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIN 3101</td>
<td>3</td>
</tr>
<tr>
<td>MSOM 3101</td>
<td>3</td>
</tr>
<tr>
<td>BA 3102</td>
<td>3</td>
</tr>
<tr>
<td>IB 3101</td>
<td>3</td>
</tr>
<tr>
<td>Select ONE Geographical Area IB course:</td>
<td>3</td>
</tr>
<tr>
<td>IB 2501 or ASST 2511</td>
<td></td>
</tr>
<tr>
<td>IB 2502 or LAS 2502</td>
<td></td>
</tr>
<tr>
<td>IB 2503</td>
<td></td>
</tr>
<tr>
<td>IB 2509</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td>Semester</td>
<td>Course Options</td>
</tr>
<tr>
<td>---------------</td>
<td>-------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>BA 3103  Integrative Business Applications</td>
</tr>
<tr>
<td></td>
<td>IB 3553 or MKTG 3553  International Marketing</td>
</tr>
<tr>
<td></td>
<td>IB 3596  Global Entrepreneurship [WI]</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
</tr>
<tr>
<td>Term Credit Hours</td>
<td>15</td>
</tr>
<tr>
<td><strong>Year 4</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>BA 4101  Global Business Policies</td>
</tr>
<tr>
<td></td>
<td>Select two of the following:</td>
</tr>
<tr>
<td></td>
<td>IB 3581 or 3585  International Business Internship</td>
</tr>
<tr>
<td></td>
<td>IB 3562 or LGLS 3562  International Law</td>
</tr>
<tr>
<td></td>
<td>MKTG 3504  Sales and Sales Management</td>
</tr>
<tr>
<td></td>
<td>SGM 3002  Be Your Own Boss: Planning to Start Your Own Business</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
</tr>
<tr>
<td>Term Credit Hours</td>
<td>15</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IB 4587  International Business Practicum</td>
</tr>
<tr>
<td></td>
<td>Select one of the following:</td>
</tr>
<tr>
<td></td>
<td>IB 3581 or 3585  International Business Internship</td>
</tr>
<tr>
<td></td>
<td>IB 3562 or LGLS 3562  International Law</td>
</tr>
<tr>
<td></td>
<td>MKTG 3504  Sales and Sales Management</td>
</tr>
<tr>
<td></td>
<td>SGM 3002  Be Your Own Boss: Planning to Start Your Own Business</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
</tr>
<tr>
<td>Term Credit Hours</td>
<td>15</td>
</tr>
<tr>
<td><strong>Total Credit Hours</strong></td>
<td>124-126</td>
</tr>
</tbody>
</table>

**International Supply Chain Management, Transportation & Logistics Concentration**

**Summary of Requirements**

**University Requirements**

All new students are required to complete the university's General Education (GenEd (p. 143)) curriculum.

Note that students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of re-enrollment.

**College Requirements**

Students must meet College Graduation Requirements (p. 559), including the requirements of the major listed below. Students must maintain a 2.0 GPA overall and a 2.0 GPA in the major to graduate as an International Business major. To calculate the GPA in the major, use the major GPA calculator (http://www.fox.temple.edu/cms_academics/dept/advising/students/gpa-calculator).

**Major Requirements**

Students must follow the Major Requirements and College Requirements current at the time of declaration. Students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University, College, and Major requirements current at the time of re-enrollment.
Requirements of International Supply Chain Management, Transportation & Logistics Concentration

Undergraduate students may earn a Bachelor of Business Administration (B.B.A.) degree in International Business Administration (IB) with a concentration in International Supply Chain Management, Transportation & Logistics. Students are strongly encouraged to pursue a complementary major or minor to enhance their professional marketability by specializing in a functional area of business and/or pursuing area studies expertise.

Foreign Language Requirement
(All students must be proficient in two languages)

Major Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IB 3596</td>
<td>Global Entrepreneurship</td>
<td>3</td>
</tr>
<tr>
<td>IB 4587</td>
<td>International Business Practicum ^1</td>
<td>3</td>
</tr>
<tr>
<td>IB/MKTG 3553</td>
<td>International Marketing</td>
<td>3</td>
</tr>
</tbody>
</table>

Select ONE Geographical Area IB course:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>IB 2501</td>
<td>Fundamentals of Asian Business</td>
</tr>
<tr>
<td>or ASST 2511</td>
<td>Introduction to Asian Business</td>
</tr>
<tr>
<td>IB/LAS 2502</td>
<td>Fundamentals of Latin American Business</td>
</tr>
<tr>
<td>IB 2503</td>
<td>Fundamentals of European Business</td>
</tr>
<tr>
<td>IB 2509</td>
<td>Short Study Trip Abroad: Doing Business in a Foreign Country</td>
</tr>
</tbody>
</table>

Concentration Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IB 3581</td>
<td>International Business Internship</td>
<td>3</td>
</tr>
<tr>
<td>or IB 3585</td>
<td>International Business Internship</td>
<td>3</td>
</tr>
</tbody>
</table>

Select two of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IB 3562</td>
<td>International Law</td>
<td>3</td>
</tr>
<tr>
<td>or LGLS 3562</td>
<td>Legal Aspects of Global Business</td>
<td>3</td>
</tr>
<tr>
<td>SCM 3515</td>
<td>Principles of Supply Chain Management</td>
<td>3</td>
</tr>
<tr>
<td>SCM 3516</td>
<td>Transportation and Logistics Management</td>
<td>3</td>
</tr>
<tr>
<td>SCM 3517</td>
<td>Inventory and Warehouse Management</td>
<td>3</td>
</tr>
<tr>
<td>SCM 3518</td>
<td>Sourcing and Procurement</td>
<td>3</td>
</tr>
<tr>
<td>MIS 3537</td>
<td>Internet Enabled Supply Chains</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credit Hours
21

^1 This major capstone is taken in the final semester, and all prerequisites must be met.

Suggested Academic Plan

Bachelor of Business Administration in International Business Administration: International Supply Chain Management, Transportation & Logistics Concentration

Requirements for New Students starting in the 2015-2016 Academic Year

Please note that this plan is suggested only, ensuring prerequisites are met.

Year 1

<table>
<thead>
<tr>
<th>Term</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>STAT 1001</td>
<td>Quantitative Methods for Business I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ECON 1101</td>
<td>Macroeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>HRM 1101</td>
<td>Leadership and Organizational Management</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Foreign Language or Free Elective</td>
<td>3-4</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total Credit Hours</strong></td>
<td><strong>16-17</strong></td>
<td></td>
</tr>
<tr>
<td>Spring</td>
<td>STAT 1102</td>
<td>Quantitative Methods for Business II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ECON 1102</td>
<td>Microeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>LGLS 1101</td>
<td>Legal Environment of Business</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Foreign Language or Free Elective</td>
<td>3-4</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total Credit Hours</strong></td>
<td><strong>15-16</strong></td>
<td></td>
</tr>
<tr>
<td>Year 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------</td>
<td>----------------------------------------------------------------------</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td><strong>Fall</strong></td>
<td><strong>STAT 2103</strong> Statistical Business Analytics (waives GenEd Quantitative Literacy requirement)</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>ACCT 2101</strong> Financial Accounting</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>MIS 2101</strong> Information Systems in Organizations</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>BA 2104</strong> Excel for Business Applications</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>IH 0852 or 0952</strong> Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Foreign Language or Free Elective</strong></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>17</td>
<td></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td><strong>ACCT 2102</strong> Managerial Accounting</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>MKTG 2101</strong> Marketing Management</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>BA 2101</strong> Professional Development Strategies</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>BA 2196</strong> Business Communications [WI]</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>RMI 2101</strong> Introduction to Risk Management</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Foreign Language or Free Elective</strong></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>16</td>
<td></td>
</tr>
<tr>
<td><strong>Year 3</strong></td>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>FIN 3101</strong> Financial Management</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>MSOM 3101</strong> Operations Management</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>BA 3102</strong> Business Society and Ethics</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>IB 3101</strong> Fundamentals of International Business</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Select ONE Geographical Area IB course:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>IB 2501 or ASST 2511</strong> Fundamentals of Asian Business</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>IB 2502 or LAS 2502</strong> Fundamentals of Latin American Business</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>IB 2503</strong> Fundamentals of European Business</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>IB 2509</strong> Short Study Trip Abroad: Doing Business in a Foreign Country</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>15</td>
<td></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td><strong>BA 3103</strong> Integrate Business Applications</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>IB 3553 or MKTG 3553</strong> International Marketing</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>IB 3596</strong> Global Entrepreneurship [WI]</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>GenEd Breadth Course</strong></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>GenEd Breadth Course</strong></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>15</td>
<td></td>
</tr>
<tr>
<td><strong>Year 4</strong></td>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>BA 4101</strong> Global Business Policies</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Select two of the following:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>IB 3562 or LGLS 3562</strong> International Law</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>SCM 3515</strong> Principles of Supply Chain Management</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>SCM 3516</strong> Transportation and Logistics Management</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>SCM 3517</strong> Inventory and Warehouse Management</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>SCM 3518</strong> Sourcing and Procurement</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>MIS 3537</strong> Internet Enabled Supply Chains</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>GenEd Breadth Course</strong></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>GenEd Breadth Course</strong></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>15</td>
<td></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td><strong>IB 4587</strong> International Business Practicum</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>IB 3581 or 3585</strong> International Business Internship</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>
The Legal Studies curriculum is designed to acquaint students with the broad spectrum of the economic, political, and sociological framework within which the law functions. It also may be pursued as a pre-law major in preparation for law school. Majors will be exposed to a curriculum that will challenge their thinking process and reasoning abilities through the use of actual court cases, trial simulations, negotiations and other advocacy skills that stress written and oral communication. All faculty are law trained, and the courses offer an interesting blend of theory and practice.


Legal Studies majors are encouraged to become involved in Phi Alpha Delta (PAD) Law Fraternity, International. This organization hosts guest speakers, sponsors law-related field trips, and assists students in gaining internships within the legal field.

**Accelerated 3 Year BBA**

Motivated students can accelerate their BBA program to finish in 3 years. Please see the suggested sequence (http://www.fox.temple.edu/cms_academics/dept/legal-studies-in-business/undergraduate/major).

**Online BBA Program**

The Legal Studies major is available as an online BBA degree completion program designed for new students ready to start their junior year in a business curriculum. Please visit our web site for program and admission information (http://www.fox.temple.edu/cms_academics/undergraduate-2/online-bba).

**The Temple Law Scholars Program**

Temple University School of Law and the Temple University Fox School of Business and Management have created a program for exceptional students who plan on attending law school. The Temple Law Scholars Program provides an opportunity for outstanding students to gain provisional admission to Temple University School of Law at the same time they are accepted into the Fox School of Business and Management. As Temple Law Scholars, students will spend their undergraduate years in Temple’s Honors Program with a major in Legal Studies, after which they will enroll in Temple University School of Law, leading to the degree of Juris Doctor. While undergraduates, students may choose to add a second major or minor.

The Temple Law Scholars Program offers two options:

1. The 3/3 option offers an accelerated experience in which the student begins law school after three years of undergraduate work in the Honors program. The bachelor's degree in Business Administration with a major in Legal Studies is awarded after completion of the first year of law school, and the law degree is received after three years of law school.
2. The 4/3 program offers an enriched undergraduate experience in which the student receives the bachelor's degree in Business Administration with a major in Legal Studies after four years in the Honors Program, and the law degree after three years of law school.

Students who wish to seek additional work experience prior to matriculating in law school can also be granted a one-year deferral between college and law school.

Visit our web site for more information about the Department of Legal Studies (http://www.fox.temple.edu/cms_academics/dept/legal-studies-in-business) and its course offerings.

**Minors**

Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor.
Human Resource Minor for Legal Studies

Legal Studies majors only.

Law permeates most aspects of our business lives and few decisions lack legal repercussions. In a business setting, the law regulates such things as
who businesses can hire and fire, the liability for people injured on business premises and labor/management relations. On the other hand, organizations
are hiring non-lawyer professionals to manage the most important asset of business, its human talent. Those employees are usually trained in
human resource management. In practice, lawyers and human resource managers work hand in hand to deal with employee problems and statutory
regulations dealing with compliance issues. A major in law with a minor in human resource management is a natural fit. Students will learn the legal
repercussions of a business decision while also being exposed to management and human side of that decision with practical exposure to those issues.

Requirements (p. 582) for this minor must be completed prior to graduation. Courses cannot be used to meet minor requirements if already used to
meet the requirements for a major or a different minor or certificate.

Entertainment Law and Business Minor

Business and Tourism & Hospitality Management students only.

As long as people have had free time, they have pursued leisure activities. Music, theaters, and sports have been a part of culture since ancient times.
As leisure time and personal incomes have grown, so has the arts, entertainment, and recreation industry. There are about 125,500 establishments,
ranging from art museums to minor league sports teams in the entertainment field. Practically any activity that occupies a person's leisure time, excluding
the viewing of motion pictures and video rentals, is part of this industry. What is often overlooked by those who wish to make a career in the field is that
this endeavor is still a business and requires an understanding of the business enterprise. Not only will students who pursue this minor obtain a business
degree but they will also learn about the special legal issues that confront this industry that provides about 2 million jobs a year.

Requirements (p. 577) for this minor must be completed prior to graduation. Courses cannot be used to meet minor requirements if already used to
meet the requirements for a major or a different minor or certificate.

Legal Studies Minor

Business and Tourism & Hospitality Management students only.

This four course, 12-credit minor is designed to expose students to a curriculum in legal studies, particularly students majoring in other disciplines such
as accounting, risk management or finance who are considering law school. Students will learn how to read cases and statutes, do legal research and
make a legal argument as well as identify the legal issues that will impact their business and personal decisions.

Requirements (p. 583) for this minor must be completed prior to graduation. Courses cannot be used to meet minor requirements if already used to
meet the requirements for a major or a different minor or certificate.

Legal Studies Minor for Human Resource Managers

Human Resource Management majors only.

The legal aspects of managing people at all levels of business and non profit organizations come into play in a wide variety of human resource policies
and decisions as well as the ramifications of decisions about the business itself. Compliance with local, state and federal laws and regulations also
creates the need for HR practitioners to consider the legal ramifications of hiring, training, coaching, disciplining and terminating individual employees.
Larger organizational issues such as layoffs, restructuring, outsourcing, benefits and retirement programs and decisions must also be made in
compliance with the law.

Requirements (p. 584) for this minor must be completed prior to graduation. Courses cannot be used to meet minor requirements if already used to
meet the requirements for a major or a different minor or certificate.

Summary of Requirements

University Requirements

All new students are required to complete the university's General Education (GenEd (p. 143)) curriculum.

Note that students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University
requirements current at the time of re-enrollment.

College Requirements

Students must meet College Graduation Requirements (p. 559), including the requirements of the major listed below. Legal Studies students must
attain a 2.0 GPA in the major and a 2.0 cumulative GPA in order to graduate. Please note that GPA requirements for Law School admission will be
significantly higher. To calculate the GPA in the major, use the major GPA calculator (http://www.fox.temple.edu/cms_academics/dept/advising/students/gpa-calculator).
Major Requirements

Students must follow the Major Requirements and College Requirements current at the time of declaration. Students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University, College, and Major requirements current at the time of re-enrollment.

Requirements of Legal Studies Major

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LGLS 1112</td>
<td>Law for Business</td>
<td>3</td>
</tr>
<tr>
<td>LGLS 3513</td>
<td>Public Policy</td>
<td>3</td>
</tr>
<tr>
<td>LGLS 4596</td>
<td>Legal Reasoning in Action</td>
<td>3</td>
</tr>
</tbody>
</table>

Select three of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LGLS 3504</td>
<td>Sports and the Law</td>
<td></td>
</tr>
<tr>
<td>LGLS 3509</td>
<td>Entertainment Law</td>
<td></td>
</tr>
<tr>
<td>LGLS 3511</td>
<td>Environmental Law and Sustainability</td>
<td></td>
</tr>
<tr>
<td>LGLS 3521</td>
<td>Corporate Governance</td>
<td></td>
</tr>
<tr>
<td>LGLS 3522</td>
<td>Technology, Privacy and Intellectual Property Law</td>
<td></td>
</tr>
<tr>
<td>LGLS 3523</td>
<td>Detecting Financial Crimes</td>
<td></td>
</tr>
<tr>
<td>LGLS 3524</td>
<td>Legal and Policy Issues in the Workplace</td>
<td></td>
</tr>
<tr>
<td>LGLS 3562</td>
<td>Legal Aspects of Global Business</td>
<td></td>
</tr>
<tr>
<td>LGLS 3580</td>
<td>Special Topics - Law</td>
<td></td>
</tr>
<tr>
<td>LGLS 3581</td>
<td>Pre-Law Internship and Seminar</td>
<td></td>
</tr>
<tr>
<td>LGLS 3582</td>
<td>Independent Study</td>
<td></td>
</tr>
<tr>
<td>RE 3501</td>
<td>Real Estate Fundamentals</td>
<td></td>
</tr>
<tr>
<td>RE 3502</td>
<td>Real Estate Practice</td>
<td></td>
</tr>
</tbody>
</table>

Total Credit Hours 18

1 LGLS 1102 completed prior to Spring 2016 may be used to fulfill LGLS 1112.

2 This major capstone is taken in the final semester, and all prerequisites must be met.

Suggested Academic Plan

Bachelor of Business Administration in Legal Studies

Requirements for New Students starting in the 2015-2016 Academic Year

Please note that this plan is suggested only, ensuring prerequisites are met.

Year 1

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 1001</td>
<td>Quantitative Methods for Business I</td>
</tr>
<tr>
<td>ECON 1101</td>
<td>Macroeconomic Principles</td>
</tr>
<tr>
<td>HRM 1101</td>
<td>Leadership and Organizational Management</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
</tr>
</tbody>
</table>

Term Credit Hours 16

Spring

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 1102</td>
<td>Quantitative Methods for Business II</td>
</tr>
<tr>
<td>ECON 1102</td>
<td>Microeconomic Principles</td>
</tr>
<tr>
<td>LGLS 1101</td>
<td>Legal Environment of Business</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
</tr>
</tbody>
</table>

Term Credit Hours 15

Year 2

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 2103</td>
<td>Statistical Business Analytics (waives GenEd Quantitative Literacy requirement)</td>
</tr>
<tr>
<td>ACCT 2101</td>
<td>Financial Accounting</td>
</tr>
</tbody>
</table>
MIS 2101  Information Systems in Organizations  3
BA 2104  Excel for Business Applications  1
IH 0852 or 0952  Mosaic: Humanities Seminar II [GZ]  3

GenEd Breadth Course  3

**Term Credit Hours**  17

### Spring

ACCT 2102  Managerial Accounting  3
MKTG 2101  Marketing Management  3
BA 2101  Professional Development Strategies  1
BA 2196  Business Communications [WI]  3
RMI 2101  Introduction to Risk Management  3
LGLS 1112  Law for Business  3

**Year 3**

### Fall

FIN 3101  Financial Management  3
MSOM 3101  Operations Management  3
BA 3102  Business Society and Ethics  3
LGLS 3513  Public Policy  3

Select one of the following:  

- LGLS 3504  Sports and the Law  3
- LGLS 3509  Entertainment Law  
- LGLS 3511  Environmental Law and Sustainability  
- LGLS 3521  Corporate Governance  
- LGLS 3522  Technology, Privacy and Intellectual Property Law  
- LGLS 3523  Detecting Financial Crimes  
- LGLS 3524  Legal and Policy Issues in the Workplace  
- LGLS 3562  Legal Aspects of Global Business  
- LGLS 3580  Special Topics - Law  
- LGLS 3581  Pre-Law Internship and Seminar  
- LGLS 3582  Independent Study  
- RE 3501  Real Estate Fundamentals  
- RE 3502  Real Estate Practice  

**Term Credit Hours**  15

### Spring

BA 3103  Integrative Business Applications  3
IB 3101  Fundamentals of International Business  3

Select one of the following:  

- LGLS 3504  Sports and the Law  3
- LGLS 3509  Entertainment Law  
- LGLS 3511  Environmental Law and Sustainability  
- LGLS 3521  Corporate Governance  
- LGLS 3522  Technology, Privacy and Intellectual Property Law  
- LGLS 3523  Detecting Financial Crimes  
- LGLS 3524  Legal and Policy Issues in the Workplace  
- LGLS 3562  Legal Aspects of Global Business  
- LGLS 3580  Special Topics - Law  
- LGLS 3581  Pre-Law Internship and Seminar  
- LGLS 3582  Independent Study  
- RE 3501  Real Estate Fundamentals  
- RE 3502  Real Estate Practice  

GenEd Breadth Course  3
Schools, Colleges, and Divisions

GenEd Breadth Course

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
</table>

**Year 4**

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 4101</td>
<td>Global Business Policies</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>LGLS 3504</td>
<td>Sports and the Law</td>
</tr>
<tr>
<td>LGLS 3509</td>
<td>Entertainment Law</td>
</tr>
<tr>
<td>LGLS 3511</td>
<td>Environmental Law and Sustainability</td>
</tr>
<tr>
<td>LGLS 3521</td>
<td>Corporate Governance</td>
</tr>
<tr>
<td>LGLS 3522</td>
<td>Technology, Privacy and Intellectual Property Law</td>
</tr>
<tr>
<td>LGLS 3523</td>
<td>Detecting Financial Crimes</td>
</tr>
<tr>
<td>LGLS 3524</td>
<td>Legal and Policy Issues in the Workplace</td>
</tr>
<tr>
<td>LGLS 3562</td>
<td>Legal Aspects of Global Business</td>
</tr>
<tr>
<td>LGLS 3580</td>
<td>Special Topics - Law</td>
</tr>
<tr>
<td>LGLS 3581</td>
<td>Pre-Law Internship and Seminar</td>
</tr>
<tr>
<td>LGLS 3582</td>
<td>Independent Study</td>
</tr>
<tr>
<td>RE 3501</td>
<td>Real Estate Fundamentals</td>
</tr>
<tr>
<td>RE 3502</td>
<td>Real Estate Practice</td>
</tr>
</tbody>
</table>

GenEd Breadth Course: 3

| Term Credit Hours | 15 |

**Spring**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LGLS 4596</td>
<td>Legal Reasoning in Action [WI]</td>
<td>3</td>
</tr>
</tbody>
</table>

Free Elective: 3

| Term Credit Hours | 15 |

Total Credit Hours: 124

1 Please note that some electives are only offered once a year depending on demand for the course.

Management Information Systems

Munir Mandviwalla, Department Chair
Office: Speakman Hall 210
215-204-5617
munir.mandviwalla@temple.edu
http://community.mis.temple.edu

Mart Doyle, Assistant Professor & Program Director
Office: Speakman Hall 209H
215-204-4684
mdoyle@temple.edu

Joseph Allegra, Associate Director
Office: Speakman Hall 210C
215-204-3060
jallegra@temple.edu

The nationally ranked Fox BBA Major in Management Information Systems (MIS) produces leaders who initiate, design, and apply technology to transform business functions and produce innovative products and services.

TechRepublic. In this region it is the only ranked MIS program at a public university. Fox MIS graduates are sought by the top firms in the nation and enjoy 100% placement. The BBA in MIS is a STEM program that provides access to exclusive scholarships (http://community.mis.temple.edu/stem-scholarships-and-awards).

The BBA in MIS prepares students for a digital centric economy in which large and growing IT centric firms provide infrastructure like services that smaller entrepreneurial firms re-imagine to create innovative and value added services for consumers and business. Fox MIS students will successfully compete in a world in which traditional large corporations continue to streamline their IT operations but grow by adding new technologically enhanced innovative capabilities.

Fox MIS students will learn to:

• Initiate and lead technology enabled change (e.g., act as a change agent in a large firm)
• Analyze and design innovative digital products and services (e.g., create and implement the social media strategy for a new start-up)
• Apply IT to automate and improve business processes (e.g., apply analytics to discover new insights)
• Transform a business function with IT (e.g., mobile apps to reach new customers)
• Analyze clients, specify needs, integrate applications, and manage projects (e.g., acquire a new customer relationship management system)

Professional Achievement Program

Fox MIS majors benefit from an innovative one-of-a-kind three part professional achievement program (http://community.mis.temple.edu/current-students/professionalachievement):

1. Earn required points for professional development activities and for applying learning to practice (http://community.mis.temple.edu/current-students/professionalachievement/professional-achievement-points) (e.g., internships, student leadership)
3. Showcase your educational and professional achievements at the MIS specific Fox IT Career Fair (http://ibit.temple.edu/careerfair).

Careers and Placement

Fox MIS BBA majors get placed in the top firms in the region and nationally achieved 100% placement in May 2012 (http://community.mis.temple.edu/blog/2012/11/09/100-placement-congratulations-to-the-class-of-may-2012), 2013 (http://community.mis.temple.edu/blog/2013/11/15/100-placement-again-congratulations-to-the-class-of-may-2013), and 2014 - (Three consecutive years). Learn about careers in IS (http://community.mis.temple.edu/miscareers) and participate in the Fox IT Career Fair (http://ibit.temple.edu/careerfair) which provides exclusive one-stop placement and internship opportunities for MIS students. The Fox led ISJobIndex.com (http://ibit.temple.edu/isjobindex) project provides national level data on jobs in the IS field:

• Bachelor MIS students average salary is $57,212 nationally.
• 76% of IS graduates are satisfied with their jobs, and 76% are confident they will perform well in those jobs. 73% found jobs related to their chosen degree.
• Information Technology, Financial Services, and Business Services / Consulting are the top industries for IS jobs.
• The most common job classification is Systems Analyst at 35% for Bachelor students.

The top IS jobs are listed below:

• Business analyst | Systems analyst
• Data analytics | Business Intelligence
• Database administrator / manager
• Information systems / project manager
• Consultant
• Application developer / web designer
• Information architect
• Social media consultant
• Digital entrepreneur and innovator

The Fox MIS Edge

1. What is MIS and why should you consider MIS? (http://community.mis.temple.edu/what-is-mis)
2. What is unique about the Fox MIS program? (http://community.mis.temple.edu/why-fox-mis)
3. Exclusive scholarships (http://ibit.temple.edu/programs/scholarships) and awards (http://community.mis.temple.edu/current-students/annual-mis-awards). BBA in MIS students can access STEM designated scholarships (http://community.mis.temple.edu/stem-scholarships-and-awards).

5. Temple’s Association for Information Systems (http://www.temple-ais.org) (AIS) student organization is the best AIS student chapter (http://community.mis.temple.edu/blog/2014/01/08/temple-ais-wins-2013-student-chapter-of-the-year) and provides professional, social, and community activities.

6. The Fox BBA in MIS is designed in partnership with the Fox IT Industry Advisory Board (http://ibit.temple.edu/programs/fox-it-advisory-board). Members of the board mentor (http://ibit.temple.edu/programs/ibit-mentoring-program) students on projects.

7. Access networking opportunities through Fox’s Institute of Business and Information Technology (http://www.ibit.temple.edu). Learn about innovation and design at the Center for Design+Innovation. (http://design.temple.edu/events/fox-designweek-challenge-2014)

8. Learn the latest technologies (http://community.mis.temple.edu/technology).

9. Fox is one of the largest and most highly-ranked (http://www.fox.temple.edu/cms_about-fox/rankings) business schools.

10. Accelerated 3 Year BBA – Motivated students can finish in 3 years (http://community.mis.temple.edu/files/2015/03/Fox-3-year-BBA-in-MIS-3.27.2015.pdf).

Next Steps

1. Take a look at our internationally renowned faculty (http://community.mis.temple.edu/about/faculty)


3. Contact Temple AIS on Facebook (https://www.facebook.com/tuAIS)

If you are a high-performing, motivated student, we want to recruit you. Please contact Joseph Allegra at jallegra@temple.edu.

Accelerated 3 Year BBA

Motivated students can accelerate their BBA program to finish in 3 years. Please see the suggested sequence (http://community.mis.temple.edu/programs/bba-in-mis).

Minors

Management Information Systems Minor

A minor in MIS provides undergraduate students the ability to specify, select, utilize, and apply information technology (IT) to their major field of study. The minor provides the skills and terminology needed to become an expert user of IT in the business world.

Who Should Minor in Management Information Systems?

Business students will benefit from a minor in MIS. The minor in MIS will position you for jobs in business application areas, consulting positions, technical liaisons, and selling and acquisition of business software.

What is in it for me?

- Understand the key information technologies used by organizations.
- Learn how to specify technology solutions and engage with IT professionals.
- Understand the importance of business processes
- Identify how specific IT solutions are designed and implemented to increase efficiency and effectiveness.
- Apply data analytics to collect, store, analyze, and disseminate organizational information.

Requirements (p. 585) for the minor must be completed prior to graduation. Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor. For more information or to declare Management Information Systems as your minor, visit: http://community.mis.temple.edu/programs/misminor/

Information Technology Innovation and Entrepreneurship Minor (ITIE)

The Information Technology Innovation and Entrepreneurship (ITIE) minor integrates the enabling role of IT and the drive of entrepreneurial thinking. The minor includes courses in Entrepreneurship, Management Information Systems (MIS), and other related areas.

Who Should Minor in ITIE?

The minor is appropriate for all majors and particularly relevant for students in Marketing, Finance, Human Resources, and Management Information Systems. ITIE minors can drive new IT-enabled innovative projects in existing firms and create technology enabled start-ups.

The minor is a joint venture between the MIS department and the Strategic Management department.
Requirements (p. 582) for the minor must be completed prior to graduation. Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor. For more information or to declare ITIE as your minor, visit: http://community.mis.temple.edu/programs/minor-in-itie/.

**Digital Marketing Minor**

The Digital Marketing Minor prepares students for careers related to customer relationship management, social media, information architecture, e-commerce, search engine optimization, e-detailing, site design, Internet research, demographic and sales analytics, blogging, and media design. The Digital Marketing minor is appropriate for all BBA students in the Fox School of Business and is particularly relevant for Marketing, Human Resource Management, Business Management, and Management Information Systems students.

Requirements (p. 574) for the minor must be completed prior to graduation. Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor.

For more information about the Digital Marketing minor, visit: http://community.mis.temple.edu/programs/digital-marketing-minor/

**Certificate**

Students who wish to earn a Certificate in Management Information Systems can do so by completing the required courses. Courses cannot be used to meet certificate requirements if already used to meet the requirements for a major or a different minor or certificate. The certificate does not require the completion of the Business Minor or the Business Studies Minor. Certificates are not listed on the academic transcript.

Requirements (p. 584) for the certificate must be completed prior to graduation. Go to http://community.mis.temple.edu/form/?formname=mis_cert_dec_form to declare the Management Information Systems certificate.

**Summary of Requirements**

**University Requirements**

All new students are required to complete the university's General Education (GenEd (p. 143)) curriculum.

Note that students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of re-enrollment.

**College Requirements**

Students must meet College Graduation Requirements (p. 559), including the requirements of the major listed below. Management Information Systems students must attain a 2.0 GPA in the major, including a minimum grade of C in every course, and a 2.0 cumulative GPA in order to graduate. To calculate the GPA in the major, use the major GPA calculator (http://www.fox.temple.edu/cms_academics/dept/advising/students/gpa-calculator).

**Major Requirements**

Students must follow the Major Requirements and College Requirements current at the time of declaration. Students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University, College, and Major requirements current at the time of re-enrollment.

**Requirements of the Management Information Systems Major**

Note that minimum grades of C are required in the courses below.

<table>
<thead>
<tr>
<th>Semester 4</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MIS 2502</td>
<td>Data Analytics</td>
</tr>
<tr>
<td>MIS 3501</td>
<td>Data-Centric Application Development</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester 5</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MIS 2501</td>
<td>Enterprise IT Architecture</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester 6</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MIS 3504</td>
<td>Digital Design and Innovation</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester 7</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MIS 3535</td>
<td>Lead Global Digital Projects</td>
</tr>
</tbody>
</table>

Select one of the following: 3

<table>
<thead>
<tr>
<th>MIS 3502</th>
<th>Application Integration and Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>MIS 3503</td>
<td>User Interface Design</td>
</tr>
<tr>
<td>MIS 3505</td>
<td>Applied Predictive Analytics</td>
</tr>
<tr>
<td>MIS 3533</td>
<td>Electronic Commerce Site Design</td>
</tr>
<tr>
<td>MIS 3534</td>
<td>Strategic Management of Information Technology</td>
</tr>
</tbody>
</table>
MIS 3536  Information Systems Innovation  
MIS 3537  Internet Enabled Supply Chains  
MIS 3538  Social Media Innovation  
MIS 3580  Special Topics  
MIS 3581  Co-operative Experience in Management Information Systems  
MIS 3582  Independent Study  
MIS 3682  Independent Study  

**Semester 8**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MIS 4596</td>
<td>Information Systems Integration ¹</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credit Hours** 21

¹ This major capstone is taken in the final semester, and all prerequisites must be met.

Note: All MIS majors are waived from the college requirement of IB 3101 unless a second major or a minor is added. Please see an academic advisor to review this waiver further.

**Suggested Academic Plan**

**Bachelor of Business Administration in Management Information Systems**

**Requirements for New Students starting in the 2015-2016 Academic Year**

Please note that this plan is suggested only, ensuring prerequisites are met.

**Year 1**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course</th>
<th>Description</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>STAT 1001</td>
<td>Quantitative Methods for Business I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ECON 1101</td>
<td>Macroeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>HRM 1101</td>
<td>Leadership and Organizational Management</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>16</td>
</tr>
<tr>
<td>Spring</td>
<td>STAT 1102</td>
<td>Quantitative Methods for Business II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ECON 1102</td>
<td>Microeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>LGLS 1101</td>
<td>Legal Environment of Business</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>Year 2</td>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>STAT 2103</td>
<td>Statistical Business Analytics (waives GenEd Quantitative Literacy requirement)</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>ACCT 2101</td>
<td>Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MIS 2101</td>
<td>Information Systems in Organizations</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>BA 2104</td>
<td>Excel for Business Applications</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>17</td>
</tr>
<tr>
<td>Spring</td>
<td>ACCT 2102</td>
<td>Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MKTG 2101</td>
<td>Marketing Management</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>BA 2101</td>
<td>Professional Development Strategies</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>BA 2196</td>
<td>Business Communications [WI]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MIS 2502</td>
<td>Data Analytics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MIS 3501</td>
<td>Data-Centric Application Development</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>16</td>
</tr>
</tbody>
</table>
### Year 3

#### Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>RMI 2101</td>
<td>Introduction to Risk Management</td>
<td>3</td>
</tr>
<tr>
<td>FIN 3101</td>
<td>Financial Management</td>
<td>3</td>
</tr>
<tr>
<td>MSOM 3101</td>
<td>Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>BA 3102</td>
<td>Business Society and Ethics</td>
<td>3</td>
</tr>
<tr>
<td>MIS 2501</td>
<td>Enterprise IT Architecture</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

#### Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 3103</td>
<td>Integrative Business Applications</td>
<td>3</td>
</tr>
<tr>
<td>MIS 3504</td>
<td>Digital Design and Innovation</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

### Year 4

#### Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 4101</td>
<td>Global Business Policies</td>
<td>3</td>
</tr>
<tr>
<td>MIS 3535</td>
<td>Lead Global Digital Projects</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>MIS 3502</td>
<td>Application Integration and Evaluation</td>
<td></td>
</tr>
<tr>
<td>MIS 3503</td>
<td>User Interface Design</td>
<td></td>
</tr>
<tr>
<td>MIS 3505</td>
<td>Applied Predictive Analytics</td>
<td></td>
</tr>
<tr>
<td>MIS 3533</td>
<td>Electronic Commerce Site Design</td>
<td></td>
</tr>
<tr>
<td>MIS 3534</td>
<td>Strategic Management of Information Technology</td>
<td></td>
</tr>
<tr>
<td>MIS 3536</td>
<td>Information Systems Innovation</td>
<td></td>
</tr>
<tr>
<td>MIS 3537</td>
<td>Internet Enabled Supply Chains</td>
<td></td>
</tr>
<tr>
<td>MIS 3538</td>
<td>Social Media Innovation</td>
<td></td>
</tr>
<tr>
<td>MIS 3580</td>
<td>Special Topics</td>
<td></td>
</tr>
<tr>
<td>MIS 3581</td>
<td>Co-operative Experience in Management Information Systems</td>
<td></td>
</tr>
<tr>
<td>MIS 3582</td>
<td>Independent Study</td>
<td></td>
</tr>
<tr>
<td>MIS 3682</td>
<td>Independent Study</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

#### Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MIS 4596</td>
<td>Information Systems Integration [WI]</td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

### Total Credit Hours: 124

---

**Marketing**

Michael F. Smith, MSCM Department Chair
Office: Alter Hall 512
215-204-1682
msmith@temple.edu
www.fox.temple.edu/cms_academics/dept/marketing_and_supply_chain_management/
Marketing serves critical economic functions; companies of all sizes must develop effective marketing strategies to reach customers; this requires an understanding of how to innovate and develop new products, create effective promotional programs, price products and services, and distribute these in a global marketplace. The marketing curriculum at Fox provides students with occupationally-viable skills and professional development opportunities.

Contemporary marketing focuses on performance metrics and the Fox marketing curriculum seeks to immerse students in the quantitative methods and the behavioral sciences necessary to address marketing problems. Experiential and active learning are common in the upper division curriculum and projects are often offered in cooperation with business and government organizations.

Students are encouraged to choose specific course sequences within the curriculum which offer more in-depth coverage of topics and provide job-ready skills; these sequences include: Supply Chain Management, Digital Marketing, Consumer Insights, Sales Force Effectiveness and Retailing. Information on these industry-focused sequences can be found on our department’s web site (http://www.fox.temple.edu/cms_academics/dept/marketing_and_supply_chain_management/programs/undergraduate-academics/career-focused-sequences).

Marketing majors have varied career choices, including:

- Advertising – including media planning, social media, or account management
- Direct Marketing
- Digital Marketing
- Global Marketing
- Logistics and supply chain management
- Marketing Management
- Marketing Research and consumer insights
- Non-profit organizations such as hospitals and universities
- Sales and sales management
- Wholesaling and Retail Management, including buying and allocations

Marketing majors are encouraged to become involved in the American Marketing Association (AMA), a student professional organization that offers students the opportunity to meet business leaders in marketing. The AMA hosts regular meetings and career development programs. The AMA is open to all majors. For more information, please see the AMA web site (http://www.fox.temple.edu/cms_career/student-professional-organizations/american-marketing-association) or contact Professor Craig Atwater at atwater@temple.edu (215-204-5220).

**BBA Online Program Option**

The Marketing major is available as an online BBA degree completion program designed for new students ready to start their junior year in a business curriculum. Please see our program and admission information (http://www.fox.temple.edu/cms_academics/undergraduate-2/online-bba).

**Accelerated 3 Year BBA**

Motivated students can accelerate their BBA program to finish in 3 years. Please see the suggested sequence (http://www.fox.temple.edu/cms_academics/dept/marketing_and_supply_chain_management/programs/undergraduate-academics/3-1-program).

**Minors**

**The Marketing Minor**

Students in the Fox School who are interested in expanding their career options through a general knowledge of marketing principles and specializing in an area of marketing should consider completing a minor in Marketing. The requirements (p. 586) must be completed prior to graduation. Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor.

**The Digital Marketing Minor**

The Digital Marketing Minor prepares students for careers related to customer relationship management, social media, information architecture, e-commerce, search engine optimization, e-detailing, site design, internet research, demographic and sales analytics, blogging, and media design. The Digital Marketing minor is appropriate for all BBA students in the Fox School of Business and is particularly relevant for Marketing, Human Resource Management, Business Management, and MIS students. All students must complete declaration form and meet with Dr. Michael Smith (msmith@temple.edu) to declare or rescind this minor. The requirements (p. 574) must be completed prior to graduation. Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor.

**4+1 Master of Education Degree (M.Ed.)**

The 4+1 Master of Education (M.Ed.) program is designed for students interested in pursuing a Master of Education while completing the Bachelor of Business Administration (B.B.A.) in Marketing requirements. After completion of the programs, students earn a B.B.A. degree and an M.Ed. in Business,
Computers & Information Technology Education (BCITE) or Marketing Education (ME), and a Commonwealth of Pennsylvania Instructional I Teaching Certificate in BCITE or ME. There is an application process. The deadline to apply is June 15th for fall admittance. For more information please contact:

Dr. D. James Gilmour, Program Advisor
Ritter Hall 348
215-204-6197
jgilmour@temple.edu

**Summary of Requirements**

**University Requirements**

All new students are required to complete the university's General Education (GenEd (p. 143)) curriculum.

Note that students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of re-enrollment.

**College Requirements**

Students must meet College Graduation Requirements (p. 559), including the requirements of the major listed below. Students must attain an overall GPA of 2.0 and a 2.0 GPA in the major to graduate as a Marketing major. To calculate the GPA in the major, use the major GPA calculator (http://www.fox.temple.edu/cms_academics/dept/advising/students/gpa-calculator).

**Major Requirements**

Students must follow the Major Requirements and College Requirements current at the time of declaration. Students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University, College, and Major requirements current at the time of re-enrollment.

**Requirements of the Marketing Major**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MKTG 3596</td>
<td>Consumer and Buyer Behavior</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 3511</td>
<td>Marketing Research</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 3509</td>
<td>Customer Data Analytics</td>
<td>3</td>
</tr>
<tr>
<td>MKTG/IB 3553</td>
<td>International Marketing</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 4501</td>
<td>Marketing Strategy</td>
<td>3</td>
</tr>
</tbody>
</table>

Select two of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MKTG 2511</td>
<td>Marketing for the Sustainable Enterprise</td>
<td></td>
</tr>
<tr>
<td>MKTG 3501</td>
<td>Integrated Marketing Communications</td>
<td></td>
</tr>
<tr>
<td>MKTG 3502</td>
<td>Information Management for Marketing Strategies</td>
<td></td>
</tr>
<tr>
<td>MKTG 3503</td>
<td>Promotion Management</td>
<td></td>
</tr>
<tr>
<td>MKTG 3504</td>
<td>Sales and Sales Management</td>
<td></td>
</tr>
<tr>
<td>MKTG 3505</td>
<td>Entrepreneurial Marketing</td>
<td></td>
</tr>
<tr>
<td>MKTG 3506</td>
<td>Value Delivery Networks in Marketing</td>
<td></td>
</tr>
<tr>
<td>MKTG 3507</td>
<td>Direct Marketing</td>
<td></td>
</tr>
<tr>
<td>MKTG 3508</td>
<td>Digital Marketing</td>
<td></td>
</tr>
<tr>
<td>MKTG 3580</td>
<td>Special Topics - Marketing</td>
<td></td>
</tr>
<tr>
<td>MKTG 3581</td>
<td>Marketing Internship/Co-Operative Experience</td>
<td></td>
</tr>
<tr>
<td>MKTG 3582</td>
<td>Independent Study</td>
<td></td>
</tr>
<tr>
<td>SCM 3515</td>
<td>Principles of Supply Chain Management</td>
<td></td>
</tr>
<tr>
<td>SCM 3516</td>
<td>Transportation and Logistics Management</td>
<td></td>
</tr>
</tbody>
</table>

**Total Credit Hours**

**Note:** Some courses listed above have minimum grade requirements. Click the course for details.
Recommended Electives for Industry Focused Course Sequences

**Consumer Insights**
- MKTG 3502: Information Management for Marketing Strategies
  - Select one:
    - MKTG 3507: Direct Marketing
    - MKTG 3508: Digital Marketing

**Sales Force Effectiveness**
- MKTG 3504: Sales and Sales Management
- MKTG 3508: Digital Marketing

**Retailing Management**
- MKTG 3506: Value Delivery Networks in Marketing
- MKTG 3508: Digital Marketing

**Digital Marketing Minor**
Marketing majors who declare Digital Marketing Minor (p. 574) will complete MKTG 3507 and MKTG 3508 as well as two other Marketing electives for the Marketing major.

**Suggested Academic Plan**

**Bachelor of Business Administration in Marketing**

**Requirements for New Students starting in the 2015-2016 Academic Year**
Please note that this plan is suggested only, ensuring prerequisites are met.

### Year 1
#### Fall
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 1001</td>
<td>Quantitative Methods for Business I</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1101</td>
<td>Macroeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>HRM 1101</td>
<td>Leadership and Organizational Management</td>
<td>3</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

#### Spring
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 1102</td>
<td>Quantitative Methods for Business II</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1102</td>
<td>Microeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>LGLS 1101</td>
<td>Legal Environment of Business</td>
<td>3</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

### Year 2
#### Fall
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 2103</td>
<td>Statistical Business Analytics (waives GenEd Quantitative Literacy requirement)</td>
<td>4</td>
</tr>
<tr>
<td>ACCT 2101</td>
<td>Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>MIS 2101</td>
<td>Information Systems in Organizations</td>
<td>3</td>
</tr>
<tr>
<td>BA 2104</td>
<td>Excel for Business Applications</td>
<td>1</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

#### Spring
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 2102</td>
<td>Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 2101</td>
<td>Marketing Management</td>
<td>3</td>
</tr>
<tr>
<td>BA 2101</td>
<td>Professional Development Strategies</td>
<td>1</td>
</tr>
<tr>
<td>BA 2196</td>
<td>Business Communications [WI]</td>
<td>3</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credit Hours</td>
</tr>
<tr>
<td>------------</td>
<td>-------------------------------------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>RMI 2101</td>
<td>Introduction to Risk Management</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours** 16

**Year 3**

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIN 3101</td>
<td>Financial Management</td>
<td>3</td>
</tr>
<tr>
<td>MSOM 3101</td>
<td>Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>BA 3102</td>
<td>Business Society and Ethics</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 3596</td>
<td>Consumer and Buyer Behavior [WI]</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 3511</td>
<td>Marketing Research</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours** 15

**Spring**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 3103</td>
<td>Integrative Business Applications</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 3509</td>
<td>Customer Data Analytics</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following: 3

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MKTG 2511</td>
<td>Marketing for the Sustainable Enterprise</td>
<td></td>
</tr>
<tr>
<td>MKTG 3501</td>
<td>Integrated Marketing Communications</td>
<td></td>
</tr>
<tr>
<td>MKTG 3502</td>
<td>Information Management for Marketing Strategies</td>
<td></td>
</tr>
<tr>
<td>MKTG 3503</td>
<td>Promotion Management</td>
<td></td>
</tr>
<tr>
<td>MKTG 3504</td>
<td>Sales and Sales Management</td>
<td></td>
</tr>
<tr>
<td>MKTG 3505</td>
<td>Entrepreneurial Marketing</td>
<td></td>
</tr>
<tr>
<td>MKTG 3506</td>
<td>Value Delivery Networks in Marketing</td>
<td></td>
</tr>
<tr>
<td>MKTG 3507</td>
<td>Direct Marketing</td>
<td></td>
</tr>
<tr>
<td>MKTG 3508</td>
<td>Digital Marketing</td>
<td></td>
</tr>
<tr>
<td>MKTG 3580</td>
<td>Special Topics - Marketing</td>
<td></td>
</tr>
<tr>
<td>MKTG 3581</td>
<td>Marketing Internship/Co-Operative Experience</td>
<td></td>
</tr>
<tr>
<td>MKTG 3582</td>
<td>Independent Study</td>
<td></td>
</tr>
<tr>
<td>SCM 3515</td>
<td>Principles of Supply Chain Management</td>
<td></td>
</tr>
<tr>
<td>SCM 3516</td>
<td>Transportation and Logistics Management</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours** 15

**Year 4**

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 4101</td>
<td>Global Business Policies</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 3553 or IB 3553</td>
<td>International Marketing</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following: 3

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MKTG 2511</td>
<td>Marketing for the Sustainable Enterprise</td>
<td></td>
</tr>
<tr>
<td>MKTG 3501</td>
<td>Integrated Marketing Communications</td>
<td></td>
</tr>
<tr>
<td>MKTG 3502</td>
<td>Information Management for Marketing Strategies</td>
<td></td>
</tr>
<tr>
<td>MKTG 3503</td>
<td>Promotion Management</td>
<td></td>
</tr>
<tr>
<td>MKTG 3504</td>
<td>Sales and Sales Management</td>
<td></td>
</tr>
<tr>
<td>MKTG 3505</td>
<td>Entrepreneurial Marketing</td>
<td></td>
</tr>
<tr>
<td>MKTG 3506</td>
<td>Value Delivery Networks in Marketing</td>
<td></td>
</tr>
<tr>
<td>MKTG 3507</td>
<td>Direct Marketing</td>
<td></td>
</tr>
<tr>
<td>MKTG 3508</td>
<td>Digital Marketing</td>
<td></td>
</tr>
<tr>
<td>MKTG 3580</td>
<td>Special Topics - Marketing</td>
<td></td>
</tr>
<tr>
<td>MKTG 3581</td>
<td>Marketing Internship/Co-Operative Experience</td>
<td></td>
</tr>
<tr>
<td>MKTG 3582</td>
<td>Independent Study</td>
<td></td>
</tr>
<tr>
<td>SCM 3515</td>
<td>Principles of Supply Chain Management</td>
<td></td>
</tr>
<tr>
<td>SCM 3516</td>
<td>Transportation and Logistics Management</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>
The real estate major is designed to provide an educational foundation for students interested in learning about real estate and real estate markets and/or pursuing careers in real estate. Traditional career paths include real estate investment and financial analysis, real estate financing and mortgage lending, real estate appraisal and valuation, property management, residential and commercial brokerage and marketing, and corporate real estate analysis.

Core competencies to be developed include the ability to analyze real estate investment opportunities from investor and lender perspectives, conduct asset and risk assessments and implement risk management strategies, understand the dynamics of real estate markets, and develop an understanding of the legal framework surrounding real estate ownership, title transfer, and the regulatory and legal requirements, including agency obligations, common in real estate transactions.

All real estate-interested students are encouraged to participate in Temple Real Estate Organization (TREO), the Fox School student professional organization (SPO) for real estate interested students. TREO (http://www.fox.temple.edu/cms_career/student-professional-organizations/temple-real-estate-organization) meets regularly throughout the semester and has an active real estate speaker series. A Temple University real estate student listserv serves as a conduit for various internships and job/career opportunities from real estate companies in the local area. Temple University also hosts a chapter of Alpha Sigma Gamma, the International Real Estate Honorary Society. Alpha Sigma Gamma is the premier honorary organization for real estate students, faculty and professionals with over 30 university chapters and program affiliates. Membership in ASG is based on academic achievement. Real estate majors are eligible for a number of professional and university scholarships and financial awards, including the Fox School's E. Fred Kemner Scholarship Award, devoted exclusively to Temple real estate students. Students interested in any of the opportunities above should contact Professor Huffman for more information.

**Accelerated 3 Year BBA**

Motivated students can accelerate their BBA program to finish in 3 years. Please see the suggested sequence (http://www.fox.temple.edu/cms_academics/dept/finance/undergraduate/real-estate-major).

**Summary of Requirements**

**University Requirements**

All students are required to complete the university's General Education (GenEd (p. 143)) curriculum.

Note that students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of re-enrollment.
College Requirements
Students must meet College Graduation Requirements (p. 559), including the requirements of the major listed below. Students must maintain a 2.0 GPA overall and a 2.0 GPA in the major to graduate. To calculate the GPA in the major, use the major GPA calculator (http://www.fox.temple.edu/cms_academics/dept/advising/students/gpa-calculator).

Major Requirements
Students must follow the Major Requirements and College Requirements current at the time of declaration. Students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University, College, and Major requirements current at the time of re-enrollment.

Requirements of Real Estate Major

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>RE 3501</td>
<td>Real Estate Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>RE 3502</td>
<td>Real Estate Practice</td>
<td>3</td>
</tr>
<tr>
<td>FIN 3504</td>
<td>Intermediate Corporate Finance</td>
<td>3</td>
</tr>
<tr>
<td>FIN 3509</td>
<td>Real Estate Investment and Finance</td>
<td>3</td>
</tr>
<tr>
<td>FIN 3514</td>
<td>Commercial Real Estate Analysis</td>
<td>3</td>
</tr>
<tr>
<td>FIN 3551</td>
<td>International Finance ¹</td>
<td>3</td>
</tr>
<tr>
<td>FIN 4597</td>
<td>Seminar in Real Estate Asset Analysis (spring only) ²</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credit Hours 21

¹ FIN 3551 replaces IB 3101 in the upper division foundation. This course is not calculated in the major GPA.
² This major capstone is taken in the final semester, and all prerequisites must be met. This course is currently only offered in the Spring semester.

Suggested Academic Plan

Bachelor of Business Administration in Real Estate

Requirements for New Students starting in the 2015-2016 Academic Year

Please note that this plan is suggested only, ensuring prerequisites are met.

Year 1

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 1001</td>
<td>Quantitative Methods for Business I</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1101</td>
<td>Macroeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>HRM 1101</td>
<td>Leadership and Organizational Management</td>
<td>3</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>16</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Spring</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 1102</td>
<td>Quantitative Methods for Business II</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1102</td>
<td>Microeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>LGLS 1101</td>
<td>Legal Environment of Business</td>
<td>3</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

Year 2

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 2103</td>
<td>Statistical Business Analytics (waives GenEd Quantitative Literacy requirement)</td>
<td>4</td>
</tr>
<tr>
<td>ACCT 2101</td>
<td>Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>MIS 2101</td>
<td>Information Systems in Organizations</td>
<td>3</td>
</tr>
<tr>
<td>BA 2104</td>
<td>Excel for Business Applications</td>
<td>1</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>17</td>
</tr>
</tbody>
</table>
### Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 2102</td>
<td>Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 2101</td>
<td>Marketing Management</td>
<td>3</td>
</tr>
<tr>
<td>BA 2101</td>
<td>Professional Development Strategies</td>
<td>1</td>
</tr>
<tr>
<td>BA 2196</td>
<td>Business Communications [WI]</td>
<td>3</td>
</tr>
<tr>
<td>RMI 2101</td>
<td>Introduction to Risk Management</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 16

#### Year 3

### Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIN 3101</td>
<td>Financial Management</td>
<td>3</td>
</tr>
<tr>
<td>MSOM 3101</td>
<td>Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>BA 3102</td>
<td>Business Society and Ethics</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RE 3501</td>
<td>Real Estate Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>RE 3502</td>
<td>Real Estate Practice</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 15

### Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 3103</td>
<td>Integrative Business Applications</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RE 3502</td>
<td>Real Estate Practice</td>
<td>3</td>
</tr>
<tr>
<td>RE 3501</td>
<td>Real Estate Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>FIN 3509</td>
<td>Real Estate Investment and Finance</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 15

#### Year 4

### Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 4101</td>
<td>Global Business Policies</td>
<td>3</td>
</tr>
<tr>
<td>FIN 3504</td>
<td>Intermediate Corporate Finance</td>
<td>3</td>
</tr>
<tr>
<td>FIN 3514</td>
<td>Commercial Real Estate Analysis</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 15

### Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIN 3551 or IB 3551</td>
<td>International Finance</td>
<td>3</td>
</tr>
<tr>
<td>FIN 4597</td>
<td>Seminar in Real Estate Asset Analysis [WI] (spring only)</td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 15

**Total Credit Hours:** 124

---

**Risk Management & Insurance**

R. B. Drennan, Program Director  
Alter Hall 628  
215-204-8894  
rob.drennan@temple.edu  
Temple University’s program in Risk Management and Insurance (RMI) is nationally recognized. Located in the Department of Risk, Insurance, and Healthcare Management, the program prepares students to identify and evaluate various sources of risk, then select and implement solutions to control these risks through insurance and other mechanisms of risk transfer and distribution.

Graduates of this program often enter the risk management or employee benefit departments of large businesses and other organizations. They may also take challenging positions within insurance or benefit consulting firms, brokerage firms, agency operations, or insurance companies.

Risk management and insurance majors are strongly encouraged to become active in the Sigma chapter of Gamma Iota Sigma, Temple's national award-winning professional student organization in Risk Management, Insurance, and Actuarial Science. The organization hosts numerous guest speakers from the industry, sponsors a variety of career development seminars, and maintains a widely-distributed résumé book. For more information, please contact the GIS President, at 215-204-9368 or visit the website at www.sigmachapter.org.

RMI & HRM Focus

The Risk Management Insurance (RMI) Department and Human Resource Management (HRM) Department offer several complimentary courses for students interested in a career in employee benefits and/or human resource management. These courses allow students to broaden their career options by taking advantage of the cross-training offered by these departments.

- HRM major with a RMI focus: Students take RMI 3501 and RMI 3503.
- RMI major with a HRM focus: Students take HRM 2501 and HRM 3511.
- Dual HRM/RMI major: Students fulfill all requirements for both majors.

For more information on joint HRM/RMI courses, contact Rob Drennan at 215-204-8894.

Minor

Students in any college who are interested in the health professions and want to enhance their skills by understanding the business principles underlying healthcare systems should consider a minor in Healthcare Management (p. 581). Risk Management majors who complete the Healthcare track are not eligible for the minor. Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor.

Major Tracks within Risk Management & Insurance

Students in the Risk Management & Insurance major may select from one of three tracks depending on their interests. These include:

- Employee Benefits Track (p. 648)
- Healthcare Risk Management Track (p. 650)
- Property-Liability/Corporate Risk Management Track (p. 652)

Employee Benefits Track

Summary of Requirements

University Requirements

All students are required to complete the university’s General Education (GenEd (p. 143)) curriculum.

Note that students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of re-enrollment.

College Requirements

Students must meet College Graduation requirements (p. 559), including the requirements of the major listed below. Students pursuing any of the Risk Management and Insurance major/tracks must attain a 2.0 cumulative GPA and 2.0 in the major/track to graduate with the Risk Management major. To calculate the GPA in the major, use the major GPA calculator (http://www.fox.temple.edu/cms_academics/dept/advising/students/gpa-calculator).

Major Requirements

Students must follow the Major Requirements and College Requirements current at the time of declaration. Students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University, College, and Major requirements current at the time of re-enrollment.

Requirements of Employee Benefits Track

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>RMI 3501</td>
<td>Life and Health Insurance and Employee Benefits</td>
<td>3</td>
</tr>
<tr>
<td>RMI 3502</td>
<td>Property and Liability Insurance Coverages</td>
<td>3</td>
</tr>
<tr>
<td>RMI 3503</td>
<td>Retirement Plans</td>
<td>3</td>
</tr>
</tbody>
</table>
Schools, Colleges, and Divisions

RMI 3567  International Risk Management  3
RMI 4596  Advanced Topics in Health and Welfare Employee Benefits (fall only)  3

Select one of the following:  3

- RMI 3504  Property and Liability Insurance Functions
- RMI 3505  Actuarial Applications in Risk Management and Insurance
- RMI 4597  Global Corporate Risk Management
- HCM 4596  Healthcare Quality and Risk Management

Total Credit Hours  18

1 International Risk Management (RMI 3567) replaces IB 3101 in the upper division foundation. This course is not calculated in the major GPA.
2 This major capstone is taken in the final fall semester, and all prerequisites must be met.
3 Completion of prerequisites of Introduction to Health Services Systems (HCM 3501) and Healthcare Financing and Information Technology (HCM 3502) required. HCM 3501 and HCM 3502 can be used to replace free electives (6 credits).

Suggested Academic Plan

Bachelor of Business Administration in Risk Management & Insurance: Employee Benefits Track

Requirements for New Students starting in the 2015-2016 Academic Year

Please note that this plan is suggested only, ensuring prerequisites are met.

Year 1

Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 1001</td>
<td>Quantitative Methods for Business I</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1101</td>
<td>Macroeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>HRM 1101</td>
<td>Leadership and Organizational Management</td>
<td>3</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

Term Credit Hours 16

Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 1102</td>
<td>Quantitative Methods for Business II</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1102</td>
<td>Microeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>LGLS 1101</td>
<td>Legal Environment of Business</td>
<td>3</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

Term Credit Hours 15

Year 2

Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 2103</td>
<td>Statistical Business Analytics (waives GenEd Quantitative Literacy requirement)</td>
<td>4</td>
</tr>
<tr>
<td>ACCT 2101</td>
<td>Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>MIS 2101</td>
<td>Information Systems in Organizations</td>
<td>3</td>
</tr>
<tr>
<td>BA 2104</td>
<td>Excel for Business Applications</td>
<td>1</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

Term Credit Hours 17

Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 2102</td>
<td>Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 2101</td>
<td>Marketing Management</td>
<td>3</td>
</tr>
<tr>
<td>BA 2101</td>
<td>Professional Development Strategies</td>
<td>1</td>
</tr>
<tr>
<td>BA 2196</td>
<td>Business Communications [WI]</td>
<td>3</td>
</tr>
<tr>
<td>RMI 2101</td>
<td>Introduction to Risk Management</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

Term Credit Hours 16
### Year 3
#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIN 3101</td>
<td>Financial Management</td>
<td>3</td>
</tr>
<tr>
<td>MSOM 3101</td>
<td>Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>BA 3102</td>
<td>Business Society and Ethics</td>
<td>3</td>
</tr>
<tr>
<td>RMI 3501</td>
<td>Life and Health Insurance and Employee Benefits</td>
<td>3</td>
</tr>
<tr>
<td>RMI 3502</td>
<td>Property and Liability Insurance Coverages</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 15

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 3103</td>
<td>Integrative Business Applications</td>
<td>3</td>
</tr>
<tr>
<td>RMI 3503</td>
<td>Retirement Plans</td>
<td>3</td>
</tr>
<tr>
<td>RMI 3567</td>
<td>International Risk Management</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 15

### Year 4
#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>RMI 4596</td>
<td>Advanced Topics in Health and Welfare Employee Benefits [WI] (fall only)</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>RMI 3504</td>
<td>Property and Liability Insurance Functions</td>
<td>3</td>
</tr>
<tr>
<td>RMI 3505</td>
<td>Actuarial Applications in Risk Management and Insurance</td>
<td>3</td>
</tr>
<tr>
<td>RMI 4597</td>
<td>Global Corporate Risk Management [WI]</td>
<td>3</td>
</tr>
<tr>
<td>HCM 4596</td>
<td>Healthcare Quality and Risk Management [WI] (fall only)^1</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 15

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 4101</td>
<td>Global Business Policies</td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 15

**Total Credit Hours:** 124

^1 Completion of prerequisites of Introduction to Health Services Systems (HCM 3501) and Healthcare Financing and Information Technology (HCM 3502) required. Students who want to take this option as an elective should plan to take HCM 3501 in Year 3 Fall (switching BA 3102 to Year 3 Spring), HCM 3502 in Year 3 Spring, and HCM 4596 in Year 4 Fall. HCM 3501 and HCM 3502 can be used to replace free electives.

### Healthcare Risk Management Track

#### Summary of Requirements

##### University Requirements

All students are required to complete the university’s General Education (GenEd (p. 143)) curriculum.

Note that students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of re-enrollment.

##### College Requirements

Students must meet College Graduation requirements (p. 559), including the requirements of the major listed below. Students pursuing any of the Risk Management and Insurance major/tracks must attain a 2.0 cumulative GPA and 2.0 in the major/track to graduate with the Risk Management major. To calculate the GPA in the major, use the major GPA calculator (http://www.fox.temple.edu/cms_academics/dept/advising/students/gpa-calculator).
Major Requirements

Students must follow the Major Requirements and College Requirements current at the time of declaration. Students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University, College, and Major requirements current at the time of re-enrollment.

Requirements of Healthcare Risk Management Track

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>RMI 3501</td>
<td>Life and Health Insurance and Employee Benefits</td>
<td>3</td>
</tr>
<tr>
<td>RMI 3502</td>
<td>Property and Liability Insurance Coverages</td>
<td>3</td>
</tr>
<tr>
<td>RMI 3567</td>
<td>International Risk Management</td>
<td>3</td>
</tr>
<tr>
<td>HCM 3501</td>
<td>Introduction to Health Services Systems</td>
<td>3</td>
</tr>
<tr>
<td>HCM 3502</td>
<td>Healthcare Financing and Information Technology</td>
<td>3</td>
</tr>
<tr>
<td>HCM 4596</td>
<td>Healthcare Quality and Risk Management (fall only)</td>
<td>3</td>
</tr>
<tr>
<td>ECON 3507</td>
<td>Health Economics</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credit Hours: 21

1 RMI 3567 replaces IB 3101 Fundamentals of International Business in the upper division foundation. This course is not calculated in the major GPA.

Suggested Academic Plan

Bachelor of Business Administration in Risk Management & Insurance: Healthcare Risk Management Track

Requirements for New Students starting in the 2015-2016 Academic Year

Please note that this plan is suggested only, ensuring prerequisites are met.

Year 1

Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 1001</td>
<td>Quantitative Methods for Business I</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1101</td>
<td>Macroeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>HRM 1101</td>
<td>Leadership and Organizational Management</td>
<td>3</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

Term Credit Hours: 16

Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 1102</td>
<td>Quantitative Methods for Business II</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1102</td>
<td>Microeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>LGLS 1101</td>
<td>Legal Environment of Business</td>
<td>3</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

Term Credit Hours: 15

Year 2

Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 2103</td>
<td>Statistical Business Analytics (waives GenEd Quantitative Literacy requirement)</td>
<td>4</td>
</tr>
<tr>
<td>ACCT 2101</td>
<td>Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>MIS 2101</td>
<td>Information Systems in Organizations</td>
<td>3</td>
</tr>
<tr>
<td>BA 2104</td>
<td>Excel for Business Applications</td>
<td>1</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

Term Credit Hours: 17

Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 2102</td>
<td>Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 2101</td>
<td>Marketing Management</td>
<td>3</td>
</tr>
<tr>
<td>BA 2101</td>
<td>Professional Development Strategies</td>
<td>1</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credit Hours</td>
</tr>
<tr>
<td>------------</td>
<td>--------------------------------------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>BA 2196</td>
<td>Business Communications [WI]</td>
<td>3</td>
</tr>
<tr>
<td>RMI 2101</td>
<td>Introduction to Risk Management</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

### Year 3

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIN 3101</td>
<td>Financial Management</td>
<td>3</td>
</tr>
<tr>
<td>MSOM 3101</td>
<td>Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>RMI 3501</td>
<td>Life and Health Insurance and Employee Benefits</td>
<td>3</td>
</tr>
<tr>
<td>RMI 3502</td>
<td>Property and Liability Insurance Coverages</td>
<td>3</td>
</tr>
<tr>
<td>HCM 3501</td>
<td>Introduction to Health Services Systems</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 3102</td>
<td>Business Society and Ethics</td>
<td>3</td>
</tr>
<tr>
<td>BA 3103</td>
<td>Integrative Business Applications</td>
<td>3</td>
</tr>
<tr>
<td>RMI 3567</td>
<td>International Risk Management</td>
<td>3</td>
</tr>
<tr>
<td>HCM 3502</td>
<td>Healthcare Financing and Information Technology</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

### Year 4

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 4101</td>
<td>Global Business Policies</td>
<td>3</td>
</tr>
<tr>
<td>HCM 4596</td>
<td>Healthcare Quality and Risk Management [WI] (fall only)</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 3507</td>
<td>Health Economics</td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

### Total Credit Hours: 124

**Property-Liability/Corporate Risk Management Track**

**Summary of Requirements**

**University Requirements**

All students are required to complete the university's General Education (GenEd (p. 143)) curriculum.

Note that students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of re-enrollment.

**College Requirements**

Students must meet College Graduation requirements (p. 559), including the requirements of the major listed below. Students pursuing any of the Risk Management and Insurance major/tracks must attain a 2.0 cumulative GPA and 2.0 in the major/track to graduate with the Risk Management major. To calculate the GPA in the major, use the major GPA calculator (http://www.fox.temple.edu/cms_academics/dept/advising/students/gpa-calculator).
Major Requirements

Students must follow the Major Requirements and College Requirements current at the time of declaration. Students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University, College, and Major requirements current at the time of re-enrollment.

Requirements of Property-Liability/Corporate Risk Management Track

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>RMI 3501</td>
<td>Life and Health Insurance and Employee Benefits</td>
<td>3</td>
</tr>
<tr>
<td>RMI 3502</td>
<td>Property and Liability Insurance Coverages</td>
<td>3</td>
</tr>
<tr>
<td>RMI 3504</td>
<td>Property and Liability Insurance Functions</td>
<td>3</td>
</tr>
<tr>
<td>RMI 3567</td>
<td>International Risk Management</td>
<td>3</td>
</tr>
<tr>
<td>RMI 4597</td>
<td>Global Corporate Risk Management</td>
<td>3</td>
</tr>
<tr>
<td>RMI 3503</td>
<td>Retirement Plans</td>
<td>3</td>
</tr>
<tr>
<td>or RMI 3505</td>
<td>Actuarial Applications in Risk Management and Insurance</td>
<td></td>
</tr>
</tbody>
</table>

Total Credit Hours 18

1. RMI 3567 replaces IB 3101 Fundamentals of International Business in the upper division foundation. This course is not calculated in the major GPA.

2. This major capstone is taken in the final semester, and all prerequisites must be met.

Suggested Academic Plan

Bachelor of Business Administration in Risk Management & Insurance: Property-Liability/Corporate Risk Management Track

Requirements for New Students starting in the 2015-2016 Academic Year

Please note that this plan is suggested only, ensuring prerequisites are met.

Year 1

Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 1001</td>
<td>Quantitative Methods for Business I</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1101</td>
<td>Macroeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>HRM 1101</td>
<td>Leadership and Organizational Management</td>
<td>3</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
</tbody>
</table>

Term Credit Hours 16

Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 1102</td>
<td>Quantitative Methods for Business II</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1102</td>
<td>Microeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>LGLS 1101</td>
<td>Legal Environment of Business</td>
<td>3</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
</tbody>
</table>

Term Credit Hours 15

Year 2

Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 2103</td>
<td>Statistical Business Analytics (waives GenEd Quantitative Literacy requirement)</td>
<td>4</td>
</tr>
<tr>
<td>ACCT 2101</td>
<td>Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>MIS 2101</td>
<td>Information Systems in Organizations</td>
<td>3</td>
</tr>
<tr>
<td>BA 2104</td>
<td>Excel for Business Applications</td>
<td>1</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
</tbody>
</table>

Term Credit Hours 17

Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 2102</td>
<td>Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 2101</td>
<td>Marketing Management</td>
<td>3</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credit Hours</td>
</tr>
<tr>
<td>------------</td>
<td>--------------------------------------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>BA 2101</td>
<td>Professional Development Strategies</td>
<td>1</td>
</tr>
<tr>
<td>BA 2196</td>
<td>Business Communications [WI]</td>
<td>3</td>
</tr>
<tr>
<td>RMI 2101</td>
<td>Introduction to Risk Management</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Year 3**

<table>
<thead>
<tr>
<th>Term</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>16</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIN 3101</td>
<td>Financial Management</td>
<td>3</td>
</tr>
<tr>
<td>MSOM 3101</td>
<td>Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>BA 3102</td>
<td>Business Society and Ethics</td>
<td>3</td>
</tr>
<tr>
<td>RMI 3501</td>
<td>Life and Health Insurance and Employee Benefits</td>
<td>3</td>
</tr>
<tr>
<td>RMI 3502</td>
<td>Property and Liability Insurance Coverages</td>
<td>3</td>
</tr>
</tbody>
</table>

**Spring**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 3103</td>
<td>Integrative Business Applications</td>
<td>3</td>
</tr>
<tr>
<td>RMI 3504</td>
<td>Property and Liability Insurance Functions</td>
<td>3</td>
</tr>
<tr>
<td>RMI 3567</td>
<td>International Risk Management</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Year 4**

<table>
<thead>
<tr>
<th>Term</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 4101</td>
<td>Global Business Policies</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RMI 3503</td>
<td>Retirement Plans</td>
<td>3</td>
</tr>
<tr>
<td>RMI 3505</td>
<td>Actuarial Applications in Risk Management and Insurance</td>
<td>3</td>
</tr>
</tbody>
</table>

**Spring**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>RMI 4597</td>
<td>Global Corporate Risk Management [WI]</td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Supply Chain Management**

Michael F. Smith, MSCM Department Chair  
Office: Alter Hall 512  
215-204-1682  
msmith@temple.edu  
www.fox.temple.edu/cms_academics/dept/marketing_and_supply_chain_management/

Supply Chain Management (SCM) is both an art and a science. It is a discipline focused on planning and forecasting, purchasing, product assembly, moving, storage, distribution, sales, and customer service – in short, all of the activities that take place to get the right product into the right hands in the right quantity at the right time.

Supply chain management professionals are involved in every facet of the business process and strive to achieve a sustainable competitive advantage by building and delivering products better, faster and at a better value. To achieve success, SCM professionals must work across disciplines, interacting with nearly every department in an organization.
The SCM program provides students with basic knowledge of supply chain management, such as distribution strategies, planning, and procurement, while also working on their communication, negotiation, and leadership abilities.

The academic program is complemented by seminars and career fairs to share best industry practices from the leaders in the market, introduce and acquaint students with the variety of jobs and responsibilities in supply-chain, and help them identify their area of interest.

The SCM program provides opportunities for students to learn about supply chain management in an integrated business framework from distinguished faculty and regional industry experts in the area of supply chain management. The program prepares students to operate and lead major aspects of the supply system in established and start-up firms.

The curriculum focuses on providing knowledge on topics of practical skills and competencies: Supply Chain Principles, Transportation and Logistics Management, Procurement, Warehousing, and Inventory Management. Courses balance theory and practice in supply chain management to bridge the gap between academic and business practices and devise innovative research and teaching methods.

A key feature of this major is that it provides students with individualized career and academic advising. The SCM Faculty work with CSPD (Center for Student’s Professional Development) to help students stay connected with the regional industry associations, leaders, alumni, and corporate partners to prepare them for their future challenges upon entering the work force.

The SCM major requires a high level of quantitative, critical thinking and problem-solving skills; students with an overall GPA of 2.75 or more are recommended to enroll in the major. Prospective students are invited to discuss options with the Director of the Program, Dr. Neha Mittal (nmittal@temple.edu).

Student Professional Organization (SPO) in Supply Chain Management

A Supply Chain Management SPO was established on-campus, TU-SCA (Temple University Supply Chain Association). For more information, please contact Dr. Misty Blessley (misty.blessley@temple.edu).

MINOR

The Supply Chain Management Minor is ideal for students innovative enough to think creatively, yet meticulous enough to forecast the bigger picture. Students completing the SCM Minor pursue careers which direct the efficient flow of goods and services within and among organizations—from suppliers and manufacturers to retailers and consumers.

The SCM Minor course sequence is a strong complement with majors such as Marketing, International Business, Accounting, Information System, Finance and Healthcare Management.

The SCM Minor provides students with basic knowledge of supply chain management, such as distribution strategies, planning, and procurement, while also working on their communication, negotiation, and leadership abilities. Courses balance theory and practice in supply chain management to bridge the gap between academic and business practices and devise innovative research and teaching methods. The minor prepares students to operate and lead major aspects of the supply system in established and start-up firms.

The requirements (p. 587) must be completed prior to graduation. Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor.

University Requirements

All new students are required to complete the university's General Education (GenEd) curriculum.

Note that students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of re-enrollment.

College Requirements

Students must meet College Graduation Requirements (p. 559), including the requirements of the major listed below. Students must attain an overall GPA of 2.0 and a 2.0 GPA in the major to graduate as a Finance major. To calculate the GPA in the major, use the major GPA calculator (http://www.fox.temple.edu/cms_academics/dept/advising/students/gpa-calculator).

Major Requirements

Students must follow the Major Requirements and College Requirements current at the time of declaration. Students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University, College, and Major requirements current at the time of re-enrollment.

Requirements of the Supply Chain Management Major

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCM 3515</td>
<td>Principles of Supply Chain Management</td>
<td>3</td>
</tr>
<tr>
<td>SCM 3516</td>
<td>Transportation and Logistics Management</td>
<td>3</td>
</tr>
</tbody>
</table>
SCM 3517 Inventory and Warehouse Management 3
SCM 3518 Sourcing and Procurement 3
IB 3596 Global Entrepreneurship 3
Select one of the following: 3
MKTG 3506 Value Delivery Networks in Marketing
MIS 3537 Internet Enabled Supply Chains

Total Credit Hours 18

1 This is the major capstone, and all prerequisites must be met.

Suggested Free Elective credits to compliment the major:
MIS 2502 Data Analytics
MKTG 3581 Marketing Internship/Co-Operative Experience
MKTG 3509 Customer Data Analytics
STAT 2521 Data Analysis and Statistical Computing

Suggested Academic Plan
Bachelor of Business Administration in Supply Chain Management
Requirements for New Students starting in the 2015-2016 Academic Year
Please note that this plan is suggested only, ensuring prerequisites are met.

Year 1

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 1001</td>
<td>Quantitative Methods for Business I 3</td>
</tr>
<tr>
<td>ECON 1101</td>
<td>Macroeconomic Principles 3</td>
</tr>
<tr>
<td>HRM 1101</td>
<td>Leadership and Organizational Management 3</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW] 4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
</tbody>
</table>

Term Credit Hours 16

<table>
<thead>
<tr>
<th>Spring</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 1102</td>
<td>Quantitative Methods for Business II 3</td>
</tr>
<tr>
<td>ECON 1102</td>
<td>Microeconomic Principles 3</td>
</tr>
<tr>
<td>LGLS 1101</td>
<td>Legal Environment of Business 3</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY] 3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3-4</td>
</tr>
</tbody>
</table>

Term Credit Hours 15

Year 2

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 2103</td>
<td>Statistical Business Analytics (waives GenEd Quantitative Literacy requirement) 4</td>
</tr>
<tr>
<td>BA 2104</td>
<td>Excel for Business Applications 1</td>
</tr>
<tr>
<td>ACCT 2101</td>
<td>Financial Accounting 3</td>
</tr>
<tr>
<td>MIS 2101</td>
<td>Information Systems in Organizations 3</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ] 3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
</tbody>
</table>

Term Credit Hours 17

<table>
<thead>
<tr>
<th>Spring</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 2102</td>
<td>Managerial Accounting 3</td>
</tr>
<tr>
<td>MKTG 2101</td>
<td>Marketing Management 3</td>
</tr>
<tr>
<td>BA 2101</td>
<td>Professional Development Strategies 1</td>
</tr>
<tr>
<td>BA 2196</td>
<td>Business Communications [WI] 3</td>
</tr>
<tr>
<td>RMI 2101</td>
<td>Introduction to Risk Management 3</td>
</tr>
<tr>
<td>Term</td>
<td>Credit Hours</td>
</tr>
<tr>
<td>----------</td>
<td>--------------</td>
</tr>
<tr>
<td>Year 3</td>
<td>16</td>
</tr>
<tr>
<td>Fall</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Spring</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 4</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Spring</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Credit Hours: 124

¹ See Requirements section for list of suggested free electives to compliment the major.
School of Environmental Design

Effective January 1, 2016, the departments and programs within the School of Environmental Design moved to the Tyler School of Art.

Founded 2000.

School location:
580 Meetinghouse Road
Ambler, PA 19002
267-468-8000
ambler@temple.edu
www.cla.temple.edu/ced

See the Ambler Campus (p. 105) section of this Bulletin for more information on services, facilities, and student life.

Introduction

Temple University Ambler has been connected to sustainable concepts and environmental stewardship for over a century. In June 2000, the Temple University Board of Trustees formally recognized Ambler College, located at the Ambler Campus, as the 17th academic unit of Temple University. This designation provided Ambler College with the ability to plan and develop unique programs consistent with its mission. In July 2009, Ambler College was renamed the School of Environmental Design in the College of Liberal Arts. The School of Environmental Design (SED) was home to the Department of Community and Regional Planning, the Department of Landscape Architecture and Horticulture, and the Center for Sustainable Communities (see Special Programs and Facilities below). On January 1, 2016, the departments and programs within the School of Environmental Design were moved to the Tyler School of Art. They reside with the Department of Architecture and the Center for Sustainable Communities in the newly formed Division of Architecture and Environmental Design.

The mission of the School of Environmental Design is the enhancement of the relationship between individuals, social patterns, and political systems and the natural, built, and cultural environments of contemporary life. The School of Environmental Design upholds the environmental traditions established by the Pennsylvania School of Horticulture for Women and carried forward by our founding Department of Landscape Architecture and Horticulture. As Temple University's 17th college, the School of Environmental Design has a commitment to the health of communities, the preservation and appreciation of the natural and historical landscape, and the recognition of the connections between the natural and constructed worlds. (Adopted by the Faculty, Ambler College [now the School of Environmental Design], December, 2000.) The School of Environmental Design core values are: student-centered learning, community engagement, and environmental responsibility.

The Department of Landscape Architecture and Horticulture traces its origins to the Pennsylvania School of Horticulture for Women, founded in 1911 at Ambler Campus. Originally, the department offered only two-year Associate degree programs, but in 1988 added two four-year degree programs in Landscape Architecture and Horticulture. In Fall 2010 it added a Master of Landscape Architecture (M.L.Arch.) degree. The department’s evolution has combined theory with practice, continuing the tradition of blending art and science with practical experience. Committed to excellence in ecologically-based education, the department provides students with the knowledge and understanding of sustainable environments. Through an ecological approach to planning, design, development, and care of the land, the programs in Landscape Architecture and Horticulture promote the development of skills to improve the quality of urban, suburban, and rural communities. Courses and programs are offered that utilize the 187-acre Ambler Campus as both an arboretum and a living laboratory for faculty and students. Students also have the opportunity to conduct research in a state-of-the-art greenhouse.

Established in 2001, the Department of Community and Regional Planning supports the preparation of skilled practitioners for the dynamic and growing fields of community development and community and regional planning. Through the Bachelor of Science in Community Development, students learn to understand and think critically about the social, political, economic, and cultural dynamics shaping various types of communities. Particular emphasis is given to empowering disadvantaged communities to address inequalities and improve their long-term social, economic, and environmental sustainability. The Master of Science in Community and Regional Planning cultivates an understanding of the physical and economic context of planning, sensitivity to the social and environmental impact of public policies, and knowledge of governmental structures as they apply to planning. Both degree programs enable students to lead efforts to create and maintain healthy, sustainable communities by providing a broad-based understanding and awareness of multi-dimensional aspects of urban, suburban, and rural community challenges and the means of effecting change from both grass-roots and public policy perspectives.

The Ambler Campus continues to be the home of the School of Environmental Design and is also a teaching site for many courses and full degree programs sponsored by other schools and colleges of Temple University. Go to the Ambler Campus (p. 105) section of this Bulletin for a listing of the full degree programs and for additional information on campus facilities, services, and programs.

Accreditations

The Bachelor of Science in Landscape Architecture and the first professional Master of Landscape Architecture programs are both accredited by the Landscape Architectural Accreditation Board of the American Society of Landscape Architects.

The Master of Science program in Community and Regional Planning is accredited by the Planning Accreditation Board.
Admissions Information

Ambler Admissions Office
267-468-8100
ambler@temple.edu
ambler.temple.edu/admissions

A strong interest in the environment, planning, and/or design is highly desirable for students who enroll in all programs offered by the School of Environmental Design. Students interested in Community Development also should have a desire to develop computer, social science, and communications skills. Applicants to the Landscape Architecture and Horticulture programs, depending on the intended area of study, should have a background that includes courses in art, geometry, biology, and geography.

Due to the sequential nature of the required studio classes, students pursuing the Landscape Architecture degree will need to attend for at least seven semesters regardless of the amount of transfer credits accumulated, unless they are transfer students from another Landscape Architecture program.

Lehigh Carbon Community College (LCCC) Agreement

In 2009 Lehigh Carbon Community College and the School of Environmental Design signed a program-to–program articulation agreement to facilitate the transfer of LCCC students with an Associate's in Science in Natural Science-Horticulture and Plant Science to the School of Environmental Design Bachelor of Science in Horticulture (p. 674) program. Call the Office of Academic Advising at 267-468-8200 or visit www.temple.edu/vpus/transfer/agreements/lehighcarbon.html for detailed information.

Longwood Gardens Agreement

Students who graduate from the Longwood Gardens Professional Gardener Program and are admissible to Temple University may receive credits toward the Bachelor of Science degree in Horticulture (p. 674). This agreement is based on an assessment of prior learning for the completion of the Longwood program and is not a course by course articulation. Call the Ambler Office of Academic Advising at 267-468-8200 or visit www.temple.edu/vpus/transfer/agreements/longwood.html for detailed information. Note: Since programs and requirements are subject to change, students are advised to consult with an advisor at Longwood Gardens.

For a listing of all Temple University articulation agreements, go to www.temple.edu/vpus/transfer/agreements.htm.

Financial Aid and Scholarships

In addition to assistance from the Department of Student Financial Services, there are several scholarships and grants-in-aid that are available only to School of Environmental Design students: Horticulture, Landscape Architecture, Community Development, and Community and Regional Planning. Also see the Financial Aid (p. 137) section of this Bulletin.

W. B. Saul High School of Agricultural Sciences Scholarships

Two scholarships, the Robert Hunt Scholarship and the William Mifflin Scholarship, are available to students graduating from Philadelphia’s W. B. Saul High School who are admissible to Temple University and wish to study Horticulture, Landscape Architecture, or Community Development. Interested Saul students should contact the principal of the high school for information.

Scholarships for All School of Environmental Design Students

Peter G. Schlotterer and Elizabeth M. Zipf Scholarships are awarded to students with financial need, with preference for giving four or more $13,000 scholarships each year, based on need, to:

- one undergraduate student enrolled in either the Landscape Architecture or Horticulture program;
- one graduate student enrolled in the Master of Landscape Architecture program;
- one graduate student enrolled in the Master of Science in Community and Regional Planning program; and
- one undergraduate or graduate student who is either taking more than 51% of his or her courses at Ambler or one graduate or undergraduate student enrolled in the School of Environmental Design.

Grants and Scholarships for Community and Regional Planning Students

Recipients are selected by faculty members in the Department of Community and Regional Planning; there are no applications.

- **Arthur F. Loeben Scholarship in Community and Regional Planning**: awarded to undergraduate or graduate students who plan to enter or continue in the Community and Regional Planning programs.
- **Toward Sustainability Scholarship**: provides support for a sophomore or junior majoring in Community Development or Community and Regional Planning who has demonstrated a commitment to community service. Recipients must have a minimum grade point average of 2.75 or higher.
Grants and Scholarships for Landscape Architecture and Horticulture Students

Applications for the following are available in the Department of Landscape Architecture and Horticulture office as well as online (http://ambler.temple.edu/admissions/costs-aid-and-scholarships/scholarships-ambler-campus/landscape-architecture-and).

- **Honorable Judge David Addy Scholarship**: provides tuition assistance for a current student enrolled in the School of Environmental Design, majoring in Horticulture, with financial need and a grade point average of 2.5 or above.
- **Wilmer Atkinson Memorial Scholarship**: provides tuition assistance of varying amounts based on academic performance and financial need.
- **Louise and James Bush-Brown Alumni Scholarship**: presented annually by the Alumni Association of the School of Environmental Design to a current sophomore or junior based on character, worthiness, interest in chosen vocation, and academic excellence during the past year.
- **John Collins Academic Scholarship**: awarded to Landscape Architecture and Horticulture majors in their junior year, with financial need, who demonstrate strong leadership ability and a commitment to interdisciplinary collaboration.
- **Doylestown Nature Club Scholarship**: awarded annually based on academic performance and financial need. Preference is given to students from Bucks County.
- **John Paul Endicott Summer Internship**: annual internship for a Temple Ambler student to manage the food crops garden and the volunteers, to harvest the produce and distribute to local area food cupboards, and to assist with events.
- **Lou Henry Hoover Girl Scout Scholarship**: awarded annually to a student who has been active in the Girl Scouts for at least five years and who completes an endorsement sheet obtained through the Girl Scouts Council, and has good academic standing, aptitude for horticulture, and financial need.
- **Horticulture/Landscape Architecture Alumni Scholarship**: funded by the Alumni Association of the School of Environmental Design and awarded to a full-time student who has completed half of the credit requirement for the major, based on financial need, academic achievement, and volunteer service contributing to the well-being of the Ambler gardens and greenhouse. (Note: Recipients are not eligible for the Louise and James Bush-Brown Alumni Scholarship.)
- **Larkin Family Scholarship**: awarded annually to Temple University Ambler Horticulture and/or Landscape Architecture majors from Maryland based on financial need. Renewable scholarships which provide tuition assistance.
- **Jane R. Martin Memorial Scholarship**: awarded to students entering their sophomore year based on academic achievement and demonstrated potential for future success in Horticulture or Landscape Architecture.
- **Native Plant Summer Internship**: provides funding support for a full-time student in the Horticulture program to enhance learning through practical work experience in the four Native Plant Gardens located in the Ambler Arboretum.
- **Peter G. Schlotterer Ecological Restoration Scholarship**: awarded annually to junior or senior students who reside in southeastern Pennsylvania and demonstrate commitment to environmental preservation and restoration. The scholarships are based on academic performance and financial need.
- **Solomon Scholarship for Academic Excellence in Landscape Architecture**: recognizes a minority and/or female student in Landscape Architecture who demonstrates high academic achievement and financial need.
- **Dr. Eugene Udell Scholarship Endowment Fund**: established in 2009 by the Udell Family and Friends to remember the first dean of the Ambler Campus, it provides scholarships to students in Landscape Architecture and/or Horticulture who demonstrate academic achievement and financial need.
- **Val Udell Scholarship**: awarded to a student enrolled in Landscape Architecture or Horticulture who demonstrates financial need and academic achievement.
- **Lenora Friesleben Vaughan Scholarship**: awarded annually to a student entering the sophomore year, based on academic performance and financial need.
- **Woman’s National Farm and Garden Association, National Level, Scholarship**: awarded annually to female student(s) based on academic performance and financial need.
- **Woman’s National Farm and Garden Association, Pennsylvania Division Scholarship**: awarded annually to a female student, preferably from western Pennsylvania, based on academic performance and financial need.

Special Programs and Facilities

Ambler Arboretum of Temple University

Anne Brennan, Horticulture and Ambler Arboretum Supervisor
Baldev S. Lamba, M.L.A., Academic Director
267-468-8400
ambler.temple.edu/arboretum

The Temple University Ambler Campus has a long history and rich tradition of horticulture and landscape design. Established as the Pennsylvania School of Horticulture for Women in 1911, the 187-acre campus represents a unique mix of natural and designed landscapes.

The gardens and campus serve as an excellent outdoor teaching laboratory for numerous classes and as a source of inspiration for students, faculty, and visitors. The campus was officially designated an arboretum in March 2000. Now known as the Ambler Arboretum of Temple University, this
The historic, public garden continues to develop as a living laboratory. The formal gardens have been revitalized to express the character of their original design, and many new garden additions are included throughout the grounds.

As the home of Temple University's Department of Landscape Architecture and Horticulture, the Ambler Campus has a myriad of learning gardens, including a ground cover garden, native plant garden, formal gardens, green roof garden, rock wall, woodland garden, sustainable wetland garden, trial garden, the Viola Anders Herb Garden, the Philip A. and Barbara F. Albright Winter Garden, the Ernesta Ballard Healing Garden with labyrinth, the Colibraro Conifer Garden, and large perennial borders. The arboretum's three areas of focus are sustainability, the health benefits of gardens, and the history of women in horticulture, agriculture, and design.

**Center for Sustainable Communities (CSC) at Temple University Ambler**

Jeffrey Featherstone, Ph.D., Director  
Susan E. Spinella Sacks, M.S., Assistant Director  
Md. Mahbubur Meenar, PhD., Assistant Director, Geographic Information Systems Operations and Research  
www.temple.edu/ambler/csc/

The Center for Sustainable Communities develops and promotes new approaches to protecting and preserving quality of life through sustainable development, balancing the relationship between environmental integrity, economic prosperity, and social equity. It was designed to build on Temple University Ambler's strengths in horticulture and landscape architecture and to draw upon the expertise of all Temple University faculty. A working resource for government agencies, community organizations, and developers, the center provides objective information and services to improve decision-making relative to land use and water resources planning, in addition to conducting interdisciplinary research and offering educational and community outreach programs. Students in degree programs in Community Development, Community and Regional Planning, Horticulture, Landscape Architecture, and other University programs have the opportunity to take full advantage of the CSC to obtain practical experience.

**Greenhouse**  
Anne Brennan, Horticulture and Ambler Arboretum Supervisor  
Merrill Miller, Staff Horticulturalist  
Kathryn Reber, Staff Horticulturalist  
267-468-8191  
ambler.temple.edu/arboretum/gardens

The Greenhouse provides students with a first-class facility to study plant and soil science. The energy-efficient greenhouse includes computerized climate controls and thermal blankets to protect the plants in the winter and shade them in the summer. Modern fertilizer injection systems water and fertilize plants simultaneously. In addition to being used for coursework, the greenhouse provides faculty and students with a facility to conduct horticulture research that is at the forefront of the industry.

**Semester Abroad**

After careful consultation with their advisors, juniors and seniors in Landscape Architecture and Horticulture and students in other School of Environmental Design programs may elect to enroll in a semester abroad. Many options are available, including the Rome campus. For more information about Study Abroad options, see Education Abroad (p. 49).

**Awards for Achievement and Honor Societies**

**Academic and Leadership Awards**

All Ambler Campus students are eligible to qualify for the academic and leadership awards presented annually that are described in the Ambler Campus (p. 105) section of this Bulletin.

The following annual award is available to all School of Environmental Design students. The recipients are selected; there is no application.

- **School of Environmental Design Alumni Association Award**: recognizes a graduating student in Community Development and a graduating student in Horticulture or Landscape Architecture for dedication, unselfishness, and contribution to the School of Environmental Design.

The following annual awards are available to Department of Community and Regional Planning students only. Recipients are selected by faculty members in the Department of Community and Regional Planning; there are no applications.

- **Community and Regional Planning Award for Academic Excellence**: recognizes students for outstanding achievement in the classroom.
- **Community and Regional Planning Award for Outstanding Planning Studio Leadership**: recognizes leadership among Planning Studio peers, a high level of professionalism, and a strong commitment to effective planning practice.
- **Community and Regional Planning Award for Outstanding Service**: recognizes a Community and Regional Planning student for exceptional leadership and service that furthers planning education and professional practice.
The following annual awards are available to Department of Landscape Architecture and Horticulture students only. To complete an application, visit the online application form (http://ambler.temple.edu/admissions/costs-aid-and-scholarships/scholarships-ambler-campus/landscape-architecture-and) although an application is not available for all honor awards.

- **American Society of Landscape Architects (ASLA) Student Awards of Honor and Merit:** recognize students, with cumulative averages of at least 3.0, who, in the opinions of their faculty and professionals from the local ASLA chapter, have achieved a sustained level of outstanding performance in their studies and show promise of making significant contributions to the profession.

- **Viola Anders Merit Award:** funded by the Alumni Association of the School of Environmental Design and presented to one graduating student and one undergraduate in Horticulture or Landscape Architecture for meritorious service in the greenhouse or the Ambler Arboretum of Temple University.

- **Bierhuizen Family Undergraduate Research Award:** presented annually to a Horticulture student to help defray the costs associated with the Senior Research Project.

- **The Emma Blakiston-Frances Lukens Book Award:** for the purchase of books, given to the member of the graduating class in Horticulture and Landscape Architecture who ranks highest in academic achievement.

- **John Collins Drawing Award:** presented to a graduating student in Landscape Architecture, the recipient is chosen by a selection panel of three landscape architects, nominated by the Pennsylvania/Delaware Chapter of the American Society of Landscape Architects, including at least one Temple University School of Environmental Design representative.

- **Landscape Architecture and Horticulture Faculty Award:** presented to graduating students in Horticulture (A.S.), Horticulture (B.S.), and Landscape Architecture (B.S.) for academic excellence and personal growth during their years at Ambler.

- **Philadelphia Flower Show Commendation:** recognizes students for distinguished leadership and service in the planning and implementation of the department's annual exhibit.

- **The Pi Alpha Xi National Honor Society Award:** recognizes outstanding service and dedication to the department, school, and university by a member of Pi Alpha Xi.

### Landscape Architecture and Horticulture Honor Societies

**Pi Alpha Xi** is the national honor society for students majoring in horticulture. To be admitted to the society, a student must be a junior or senior, have a cumulative grade point average of at least 2.75, and have a grade point average of at least 3.0 in all horticulture courses. This chapter sponsors several fundraising events during the academic year, the largest being the annual Plant Sale that takes place in early May.

**Sigma Lambda Alpha** is the honor society for landscape architecture majors. To be admitted to the society, a student must be a junior or be in the fifth semester of their program and have a cumulative grade point average of at least 3.2. A student who does not qualify in the junior year may be elected in the senior year.

### Student Associations

**Landscape Architecture and Horticulture Student Association**

This organization, which incorporates a Pennsylvania/Delaware Student Chapter of the American Society of Landscape Architects (ASLA), holds annual fundraising events, such as plant sales, and sponsors a student-mentoring program.

**Society for Ecological Restoration (SER)**

For Master of Landscape Architecture students, this society promotes Restoration Ecology worldwide through books, online networks, and conferences.

**Temple Student Planning Organization (T.S.P.O.)**

The Temple Student Planning Organization is affiliated with the American Planning Association. Its mission is to promote awareness of the benefits of regional and sustainable planning by participating in educational programs, engaging in outreach through community service, and encouraging an open dialogue with the community at large. Bi-weekly meetings provide a platform for students and professors to discuss current issues related to the field of planning.

In addition, all the School of Environmental Design students may participate in the student organizations listed in the Ambler Campus (p. 105) section of this Bulletin.

### Important Student Contact Information

Contact information for academic departments can be found under the listing for each individual program.

Director - Academic Advising
Janine C. Warnas, M.S.
West Hall 109
267-468-8200
tuaadvis@temple.edu
Schools, Colleges, and Divisions

ambler.temple.edu/academics/advising-and-support

Assistant Dean for Student Life, Ambler Campus
Wanda Lewis-Campbell, Ed.D.
Bright Hall 101
267-468-8425
wanda.lewis-campbell@temple.edu

Administration

William J. Stull, Interim Dean, College of Liberal Arts and School of Environmental Design, Ph.D., Massachusetts Institute of Technology

Jeffrey Featherstone, Director, Center for Sustainable Communities; Research Professor, Department of Community and Regional Planning, Ph.D., Temple University

Bonnie Frumer, Assistant Dean for Curriculum, M.A., Temple University

Baldev S. Lamba, Chair and Associate Professor, Department of Landscape Architecture and Horticulture, M.L.A., University of Pennsylvania

Linda M. Lowe, Director of Development and Alumni Affairs, B.A., Duquesne University

Lynn A. Mandarano, P.E., Acting Chair and Associate Professor, Department of Community and Regional Planning; Ph.D., University of Pennsylvania

Md. Mahbubur Meenar, Assistant Director, Geographic Information Systems Operations and Research, Center for Sustainable Communities; Adjunct Instructor, Department of Community and Regional Planning, Ph.D., Temple University

Reid Overturf, Manager of Technical Support, Computer Services

Susan E. Spinella Sacks, Assistant Director, Center for Sustainable Communities, M.S., Temple University

Janine C. Warnas, Director-Academic Advising, M.S., Gwynedd-Mercy College

Marcia Whitaker, Assistant Director, Scheduling

Staff

Anne Brennan, Horticulture and Ambler Arboretum Supervisor, ISA Certified Arborist, B.S., The Pennsylvania State University

Kathleen Kristire, Department Manager, Department of Landscape Architecture and Horticulture

Gracie A. Laychock, Coordinator, Department of Landscape Architecture and Horticulture, A.A., Community College of Philadelphia

Merrill Miller, Staff Horticulturist, A.S., Temple University

Kathryn Reber, Staff Horticulturist, B.A., Bryn Mawr College

Karen Sapp, Coordinator, School of Environmental Design, B.A., LaSalle University

For other contact information, such as Financial Services, Registration, Career Services, and Disability Services, see the Ambler Campus (p. 105) section of this Bulletin.

An up-to-date Directory of all Temple University Ambler and School of Environmental Design personnel (name, title, office location, telephone number, and e-mail address) is available at ambler.temple.edu/about/directory. (http://ambler.temple.edu/about/directory)

Academic Policies & Regulations

Please see Academic Policies (p. 81). Students are responsible for complying with all university-wide academic policies that apply to their individual academic status. Additional and unique policies, or exceptions, for the School of Environmental Design appear below.

Dean's List

Each fall and spring semester, those undergraduates who have met the credit hour and academic criteria for their school or college are placed on the Dean's List. See the Dean's List (p. 92) policy for specific GPA and credit-hour requirements.

Leave of Absence/Re-enrollment

School of Environmental Design students who wish to voluntarily withdraw from the university for one or two semesters (fall and/or spring) are strongly encouraged to apply for a Leave of Absence (LOA). If approved, these students remain eligible for the same requirements as when they declared their major and will have access to Temple e-mail, university library systems, and priority and self registration for the approved semester of return. By
contrast, students who leave the university without any notice and without an approved LOA must apply to be re-enrolled and, if allowed to return, must follow the most recent university curricular requirements in place for the semester of their return. If no LOA was filed, before students return, they must indicate any course(s) taken since leaving Temple and provide a copy of an official transcript from each institution attended. Both the academic advisor and the student have the right to request an interview as part of the re-enrollment process. Students who received a medical withdrawal may be asked to provide medical documentation clearing them to return to school and to schedule an interview with an advisor before a re-enrollment decision can be made. Leave of Absence and Re-enrollment forms may be obtained in the Office of Academic Services, West Hall 102, through their academic advisor, or online (http://www.temple.edu/vpus/forms/#alpha). Further details can be viewed at: http://policies.temple.edu/getdoc.asp?policy_no=02.10.16

Students who were dismissed for academic reasons should see the university policy on Academic Standing (http://policies.temple.edu/getdoc.asp?policy_no=02.10.11).

Second Degrees
Students who have earned a bachelor's degree may earn a second bachelor's degree in Landscape Architecture or Horticulture, but they should also consider the Master of Landscape Architecture degree. Students who are interested in Community Development should consider enrolling in the Community and Regional Planning Master of Science degree program. See Second Degrees (p. 101) in the Academic Policies (p. 81) section. For information on graduate programs, refer to the Graduate Bulletin (http://bulletin.temple.edu/graduate).

Student Grievance Procedures
All students have the right to adjudicate grievances concerning academic matters in a fair and expeditious manner. Consult your academic advisor for information on procedures. Non-academic grievances should be directed to the Ambler Campus Office of Student Life. Also see Grievances (p. 41).

General College Graduation Requirements
Please see Academic Policies (p. 81). The following policies apply to all School of Environmental Design students:

Academic Residency Requirements
All undergraduates must take at least 45 of their last 60 semester hours at Temple University. Community Development majors must complete at least half of the courses required in the major at Temple. While candidates for a degree at Temple, students wishing to take academic work at another institution, either classroom or online courses offered during the regular year or in summer sessions, must have an advisor’s prior approval before enrolling at the other institution. Refer to the policy on Permission to Complete a Course at another Institution after Matriculation.

Courses Inapplicable to Graduation
Credits earned in the following courses are not applicable toward degrees awarded by the School of Environmental Design: ELECT, Russell Conwell Center (SRAP), Mathematics 0015, and lower-level courses in Military Science. A maximum of 4 courses or up to 12 semester hours for upper-level Military Science (Army ROTC), Naval Science (Navy ROTC), or Aerospace Studies (Air Force ROTC) courses will be applicable toward graduation credits. For the Department of Landscape Architecture and Horticulture (LAH), Horticulture 1001, unless it is the student’s first LAH course or part of a successful credit certificate, is not applicable toward degree credit.

Grades and Grade Point Average
To be awarded a School of Environmental Design degree, students must have a cumulative grade point average of at least 2.0 and pass all General Education required courses with C- or higher. In addition, Community Development majors must pass every course required for the Community Development major with a C- or higher and have a cumulative average of at least 2.0 for all courses in the major. For degrees in Landscape Architecture and Horticulture, no more than one grade below a C- is allowed in any course in either Landscape Architecture or Horticulture and students must have a cumulative average of at least 2.0 for all courses in the major.

Program Requirements
Planning a Program of Study
The information in the following requirements sections is designed to provide students with guidance in planning their program of study. The requirements, electives, and, in some cases, sequences are detailed. Courses are scheduled for students to follow the planned sequence. If students do not follow their program as designed, they may face conflicts or not have required prerequisites that will necessitate enrolling for additional semesters to complete their requirements.

If students enter a program after the freshman year, they must understand that their degree requirements may not be met within the traditional eight semesters (or four semesters for the Associate’s degree). When students first meet with their academic advisor, they should plan how long it will take to complete their degree requirements.

Requirement Modifications
The requirements for the degrees are under continuing review and are, therefore, subject to modification. See the latest departmental degree requirements for any changes and meet with an advisor to ensure these changes are met.
Additional Notes

The total number of credit hours at graduation may be greater for some students based on initial placement exams, transfer evaluations, individual curricular choices, and academic progress.

Certain courses may fulfill multiple requirements. In consultation with their academic advisor, students will be able to plan their curriculum more effectively.

Students must fulfill the necessary prerequisites for any given course or course sequence. See the Prerequisite and Co-requisite Policy (p. 99) in the university-wide Academic Policies section of this Bulletin.

Academic Advising Information

Janine C. Warnas
Director - Academic Advising
Academic Advising and Career Development
West Hall 109
267-468-8200
tuaadvis@temple.edu
ambler.temple.edu/academics/advising-and-support

The Office of Academic Advising and Career Development provides access for School of Environmental Design students to both professional and faculty advisors who assist students with their choice of programs and curricula, help students understand the university and its policies and procedures, and aid students in attaining their vocational and post-graduation goals.

Students must assume primary responsibility for knowing the requirements for their degree and for acquiring current information about their academic status. Academic advisors attempt to avoid errors when advising students about their program requirements, but schools and colleges cannot assume liability for errors in advising.

Newly-admitted freshmen and transfer students are advised for their first semester by professional advisors. After their first semester, students maintaining at least a 2.0 grade point average may independently register for classes online, but they are encouraged to also meet with an advisor. A graduation review is required in the second semester of the Junior year.

The services provided by this office include:

For New Students (Freshmen and Transfer)

• Freshmen: required online orientation and on-campus Academic Preview during the New Student Orientation Program.
• Transfers: required online orientation and small group on-campus orientation information sessions
• Academic counseling.
• Registration.

For Continuing Students

• Individual academic counseling.
• Academic progress reviews.
• Career development coaching and workshops.
• Curriculum advising.
• Final graduation clearance.
• Pre-professional advising.
• Transfers between colleges and campuses within the university (Change of Program/Campus), withdrawal, re-enrollment, and Leave of Absence interviews.
• Registration assistance.
• Veterans advising.

For Continuing Studies (Non-Degree) Students, including Visiting and High School Students

• Academic counseling.
• Registration.

For Students with Disabilities

• Accommodation arrangements.
For Prospective Students

- Academic counseling.
- Information sessions.

For All Students

- Referrals to other university programs and services.
- Information on academic grievance procedures.
  (Non-academic grievances should be directed to the Ambler Campus Office of Student Life.)

Faculty and Administration

For contact information or updates, go to ambler.temple.edu/about/directory

Kate E. Benisek, Assistant Professor (Teaching/Instructional), Department of Landscape Architecture and Horticulture, School of Environmental Design; M.L.A., Cornell University.

William J. Cohen, Associate Professor (Practice), Department of Community and Regional Planning, School of Environmental Design; Ph.D., University of Pennsylvania.

Jeffrey Doshna, Instructor (Teaching/Instructional), Department of Community and Regional Planning, School of Environmental Design; Ph.D., Rutgers University.

Sasha Eisenman, Assistant Professor, Department of Landscape Architecture and Horticulture, School of Environmental Design; Ph.D., Rutgers University.

Jeffrey P. Featherstone, Professor (Research), Department of Community and Regional Planning, School of Environmental Design; Ph.D., Temple University.

Deborah Anne Howe, Professor, Department of Community and Regional Planning, School of Environmental Design; Ph.D., University of Michigan.

Pauline Hurley-Kurtz, Associate Professor, Department of Landscape Architecture and Horticulture, School of Environmental Design; M.L.A., University of Pennsylvania.

Robert T. Kuper, Associate Professor, Department of Landscape Architecture and Horticulture, School of Environmental Design; M.L.A., Auburn University.

Baldev S. Lamba, Associate Professor, Department of Landscape Architecture and Horticulture, School of Environmental Design; M.L.A., University of Pennsylvania.

Lynn A. Mandarano, Associate Professor, Department of Community and Regional Planning, School of Environmental Design; Ph.D., University of Pennsylvania.

Eva Monheim, Instructor (Teaching/Instructional), Department of Landscape Architecture and Horticulture, School of Environmental Design; M.A.E., Arcadia University.

Mary E. Myers, Associate Professor, Department of Landscape Architecture and Horticulture, School of Environmental Design; Ph.D., Heriot-Watt University, Edinburgh College of Art.

Michael Olszewski, Associate Professor, Department of Landscape Architecture and Horticulture, School of Environmental Design; Ph.D., University of Delaware.

Lolly Tai, Professor, Department of Landscape Architecture and Horticulture, School of Environmental Design; Ph.D., Heriot-Watt University, Edinburgh College of Art.

Community & Regional Planning

Effective January 1, 2016, the departments and programs within the School of Environmental Design moved to the Tyler School of Art.


Lynn A. Mandarano, Ph.D., P.E.
Acting Chair
West Hall 203
267-468-8300
crp@temple.edu
There is a need in this region and throughout the nation for professionals with the skills and knowledge to positively influence the growth and revitalization of communities. The Bachelor of Science in Community Development provides students with the skills to empower culturally, economically, or geographically disadvantaged communities to address inequalities and improve their long-term social, economic, and environmental sustainability. Students learn how to engage stakeholders; assess a community’s assets, needs and opportunities; plan what the community wants to achieve; and develop strategies, programs, and policies to improve the quality of life in urban, rural, and suburban communities. Learning extends beyond the classroom with hands-on experience through service learning, field research, informal gatherings, and workshops.

The Community Development program prepares students for a variety of employment opportunities including community outreach efforts; economic development; community development corporations; nonprofit organizations; private foundations; and consultants. This major also prepares students for graduate studies in planning and related fields. Community Development majors with a minimum grade point average of 3.50 will be eligible to participate in a “four plus one” program (http://www.temple.edu/ambler/crp/academicprograms/bs.htm#four) in which they may take up to four graduate courses that count toward both the bachelor’s degree in Community Development and the Master of Science in Community and Regional Planning.

The Department of Community and Regional Planning offers a four-year baccalaureate program (B.S.) in Community Development, undergraduate minors in Community Development and in Community and Regional Planning, a master’s program (M.S.) in Community and Regional Planning, and two graduate certificates. The Master of Science in Community and Regional Planning is accredited by the Planning Accreditation Board.

### Programs

- Bachelor of Science in Community Development (p. 667)
- Minor in Community Development (p. 672)
- Minor in Community and Regional Planning (p. 672)

## Bachelor of Science in Community Development

The degree of Bachelor of Science in Community Development may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 124 semester hours of credit with a minimum cumulative GPA of 2.0 overall and in the major. A grade of C- or higher is required in the required major courses as well as all General Education courses. At least half of the courses required for the major must be completed at Temple University.

### Summary of Requirements for the Degree

1. **University requirements**
   - MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
   - All Temple students must take a minimum of two writing-intensive courses as part of the major. CDEV 2596 and CDEV 3197 are the specific writing-intensive courses that are required for Community Development majors.
   - Students must complete requirements of the university General Education (GenEd (p. 143)) program (35-36 s.h.)

2. **Community Development (CDEV) major requirements (13 courses with minimum of 39 s.h.)**

#### Fundamentals courses

<table>
<thead>
<tr>
<th>Select one of the following:</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 1003</td>
<td>Statistics for Psychology</td>
</tr>
<tr>
<td>or PSY 1167</td>
<td>Foundations in Statistical Methods</td>
</tr>
<tr>
<td>ANTH/SOC/PSY/POLS 0825</td>
<td>Quantitative Methods in the Social Sciences</td>
</tr>
<tr>
<td>MATH 1013</td>
<td>Elements of Statistics</td>
</tr>
<tr>
<td>SOC 1167</td>
<td>Social Statistics</td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 1001</td>
</tr>
<tr>
<td>ECON 1101</td>
</tr>
<tr>
<td>ECON 1102</td>
</tr>
</tbody>
</table>

#### Community Development Core courses

<table>
<thead>
<tr>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDEV 1113</td>
</tr>
<tr>
<td>CDEV 2155</td>
</tr>
<tr>
<td>or CDEV 3313</td>
</tr>
<tr>
<td>CRP 2524</td>
</tr>
<tr>
<td>CDEV 2596</td>
</tr>
<tr>
<td>CDEV 3113</td>
</tr>
<tr>
<td>CDEV 3197</td>
</tr>
</tbody>
</table>
### Community Development Workshop

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDEV 4889</td>
<td>Community Development Workshop</td>
<td>3</td>
</tr>
</tbody>
</table>

## Community Development Approved Electives

Select four courses from the following list:

### Arts/Material Culture

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMST 2001</td>
<td>Tourism in America</td>
</tr>
<tr>
<td>AMST 2011</td>
<td>The Arts in America</td>
</tr>
<tr>
<td>AMST 2012</td>
<td>American Things: Introduction to Material Culture</td>
</tr>
<tr>
<td>AMST 2022</td>
<td>Museums and American Culture</td>
</tr>
<tr>
<td>AMST 3011</td>
<td>Photography in America</td>
</tr>
</tbody>
</table>

### Community as Place

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMST 2021</td>
<td>Philadelphia Neighborhoods</td>
</tr>
<tr>
<td>AMST 2051</td>
<td>American Places: Home, City, Region</td>
</tr>
<tr>
<td>AMST 3021</td>
<td>Historic Preservation in Philadelphia</td>
</tr>
<tr>
<td>AMST 3022</td>
<td>Architecture, Urban Design, and American Culture</td>
</tr>
<tr>
<td>AMST 3051</td>
<td>American Frontiers</td>
</tr>
</tbody>
</table>

### Diversity

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST/JST 3221</td>
<td>Jewish Experience in America</td>
</tr>
<tr>
<td>PBHL 2203</td>
<td>AIDS and Society</td>
</tr>
<tr>
<td>WMST 2405</td>
<td>Gay and Lesbian Lives</td>
</tr>
<tr>
<td>WMST 2529</td>
<td>Women and Poverty</td>
</tr>
<tr>
<td>WMST 4097</td>
<td>Gender, Race, Class and The City</td>
</tr>
</tbody>
</table>

### Economics and Real Estate

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDEV 2155</td>
<td>Housing and Community Development 1</td>
</tr>
<tr>
<td>CDEV 3313</td>
<td>Community Development Finance 1</td>
</tr>
<tr>
<td>CRP 2166</td>
<td>Land Use Planning 2, 3</td>
</tr>
<tr>
<td>ECON 3512</td>
<td>Public Finance 2</td>
</tr>
<tr>
<td>ECON 3547</td>
<td>Economics of Development and Growth 2</td>
</tr>
<tr>
<td>FIN 3509</td>
<td>Real Estate Investment and Finance 2</td>
</tr>
<tr>
<td>RE 3501</td>
<td>Real Estate Fundamentals</td>
</tr>
<tr>
<td>RE 3502</td>
<td>Real Estate Practice</td>
</tr>
</tbody>
</table>

### Organization and Community Management

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AOD 2214</td>
<td>Conflict and Communication</td>
</tr>
<tr>
<td>AOD 2215</td>
<td>Mediation: Principles and Practice</td>
</tr>
<tr>
<td>AOD 3316</td>
<td>Negotiation Processes</td>
</tr>
<tr>
<td>AOD 3376</td>
<td>Facilitating Group Decision-Making</td>
</tr>
<tr>
<td>AOD 3396</td>
<td>Organizational Communication</td>
</tr>
<tr>
<td>CDEV 3455</td>
<td>Community Engagement and Empowerment</td>
</tr>
<tr>
<td>CRP 3555</td>
<td>Internet and Digital Technologies for Community Engagement 3</td>
</tr>
</tbody>
</table>

### Planning and Sustainability

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRP 2114</td>
<td>Urban Form and Design 3</td>
</tr>
<tr>
<td>CRP 2213</td>
<td>Environmental Planning 3</td>
</tr>
<tr>
<td>CRP 2251</td>
<td>Sustainable Food Systems Planning 3</td>
</tr>
<tr>
<td>CRP 3155</td>
<td>Ecological Planning and Development 3</td>
</tr>
<tr>
<td>CRP 3255</td>
<td>Sustainability in Suburban Communities 3</td>
</tr>
<tr>
<td>CRP 3256</td>
<td>Sustainable Community Design and Development 2, 3</td>
</tr>
<tr>
<td>CRP 3655</td>
<td>Transportation Planning 3</td>
</tr>
<tr>
<td>ENST/REL 3001</td>
<td>Earth Ethics</td>
</tr>
</tbody>
</table>

### Social Change

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMST 2031</td>
<td>Radicalism in the United States</td>
</tr>
<tr>
<td>AMST 2052</td>
<td>The Class Experience in America</td>
</tr>
<tr>
<td>AMST 2071</td>
<td>Immigrant Experiences in America</td>
</tr>
<tr>
<td>AMST 3032</td>
<td>Literature and Political Change</td>
</tr>
</tbody>
</table>
### Schools, Colleges, and Divisions

#### Public Policy
- **AMST 3033**: Courtroom in American Society
- **AMST 3901**: Honors Ideal America: Reform, Revolution, and Utopia
- **HIST 3108**: Modern American Social History

#### Urban Crime and Justice
- **CJ 2002**: Victims in Society
- **CJ 2201**: Criminal Courts and Criminal Justice
- **CJ 2696**: Planned Change
- **CJ 3302**: Prisons in America
- **CJ 3403**: Organized Crime
- **CJ 4002**: Drugs, Crime, and Criminal Justice
- **CJ 4003**: Race and Criminal Justice
- **CJ 4402**: Violence, Crime, and Justice
- **CJ 4403**: Psychology and Criminal Justice

#### Topics in Community Development or Community & Regional Planning
- **CDEV 3860**: Topics in Community Development
- **CDEV 3870**: Special Topics in Community Development
- **CRP 3860**: Topics in Community & Regional Planning
- **CRP 3870**: Special Topics

#### Total Credit Hours

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDEV 1113</td>
<td>Introduction to Community Development (F)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>

Note: This list will be modified periodically by adding appropriate courses and categories and deleting courses no longer offered. In addition, other courses may be added to this list with the approval of the School of Environmental Design academic advisor and the Community & Regional Planning Department Chair.

### Electives (approximately 49-50 s.h.)

- Students should consult with their advisor for additional recommended electives.

### Suggested Academic Plan

Note: The symbol after the course number indicates that the class is offered ONLY in the semester indicated:

- **(F)** = offered fall only
- **(S)** = offered spring only
- **(SE)** = offered spring of even numbered years
- **(SO)** = offered spring of odd numbered years

#### Year 1

<table>
<thead>
<tr>
<th>Semester</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>CDEV 1113</td>
<td>Introduction to Community Development (F)</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
</tr>
<tr>
<td>Elective</td>
<td></td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td></td>
</tr>
</tbody>
</table>
### Year 1

<table>
<thead>
<tr>
<th>Term</th>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Community Planning Analysis [WI] [S]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Select one of the following Fundamentals Statistics courses:</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ANTH 0825, SOC 0825, PSY 0825, or POLS 0825</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MATH 1013</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PSY 1003</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PSY 1167</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SOC 1167</td>
<td></td>
</tr>
</tbody>
</table>

### Year 2

<table>
<thead>
<tr>
<th>Term</th>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>CRP 2524</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Electives</td>
<td>6</td>
</tr>
</tbody>
</table>

### Year 3

<table>
<thead>
<tr>
<th>Term</th>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>Nonprofit Management (F)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Community Development elective (from approved list)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Electives</td>
<td>9</td>
</tr>
</tbody>
</table>

### Year 4

<table>
<thead>
<tr>
<th>Term</th>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>Community-based Organizations [WI] [F]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Community Development elective (from approved list)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Electives</td>
<td>9</td>
</tr>
<tr>
<td>Spring</td>
<td>Community Development Workshop (S)</td>
<td>3</td>
</tr>
</tbody>
</table>
Community Development elective (from approved list) & 3  
Electives$^1$ & 10-11  
**Term Credit Hours** & 17  
**Total Credit Hours:** & 124  

$^1$ Consult with your advisor for suggested options.  
$^2$ Writing-intensive course for the major.

### Suggested Sequence of Required Major Courses for Students Who Begin the Community Development Major as Juniors

Note: The symbol after the course number indicates that the class is offered ONLY in the semester indicated:

- (F) = offered fall only  
- (S) = offered spring only  
- (SE) = offered spring of even numbered years  
- (SO) = offered spring of odd numbered years

#### Year 3

<table>
<thead>
<tr>
<th>Term</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>CDEV 1113</td>
<td>Introduction to Community Development (F)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CRP 2524</td>
<td>Fundamentals of Geographic Information Systems (GIS) (F)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Select one of the following Fundamentals Statistics courses:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MATH 1013</td>
<td>Elements of Statistics</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SOC 1167</td>
<td>Social Statistics</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PSY 1167</td>
<td>Foundations in Statistical Methods</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PSY 1003</td>
<td>Statistics for Psychology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ANTH 0825, SOC 0825, PSY 0825</td>
<td>Quantitative Methods in the Social Sciences [GQ]</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Credit Hours</td>
<td></td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Spring</td>
<td>CDEV 2596</td>
<td>Community Planning Analysis [WI] (S)$^1$</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Community Development elective (from approved list)</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Select one of the following:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CDEV 2155</td>
<td>Housing and Community Development (SO)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CDEV 3313</td>
<td>Community Development Finance (SE)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Select one of the following Fundamentals Economics courses:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ECON 1001</td>
<td>Introduction to the Economy</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ECON 1101</td>
<td>Macroeconomic Principles</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ECON 1102</td>
<td>Microeconomic Principles</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Credit Hours</td>
<td></td>
<td>12</td>
<td></td>
</tr>
</tbody>
</table>

#### Year 4

<table>
<thead>
<tr>
<th>Term</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>CDEV 3113</td>
<td>Nonprofit Management (F)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CDEV 3197</td>
<td>Community-based Organizations [WI] (F)$^1$</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Community Development elective (from approved list)</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Credit Hours</td>
<td></td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Spring</td>
<td>CDEV 4889</td>
<td>Community Development Workshop (S)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Community Development electives (from approved list)</td>
<td></td>
<td>6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Credit Hours</td>
<td></td>
<td>9</td>
<td></td>
</tr>
</tbody>
</table>

$^1$ Writing-intensive course for the major.
Minor in Community Development

Students in the School of Environmental Design (except for Community Development majors) as well as students in other colleges, schools, and departments may choose to minor in Community Development. Community Development as a field embraces both citizen activists and professionals in planned efforts to identify, enhance and create social and physical assets that increase the capacity of residents to improve their quality of life. Through this minor students undertake formal studies about community development, thereby preparing themselves for contributions as informed citizens and civically engaged professionals. The minor provides students with stronger credentials to apply for graduate level work in planning and other related fields.

In this 18 credit minor, students will learn to understand and think critically about the social, political, economic, historic, and cultural dynamics shaping various types of communities. Courses provide important knowledge, values, and skills necessary for community development work. The three electives allow students to explore interests in different facets of community development.

A student may not double count any course for the Minor in Community Development toward any other major, minor, or certificate. At least half of the courses for the minor must be taken at Temple University. Students must complete successfully each of the following courses with a grade of C- or better and a cumulative average of 2.0 or higher for all courses in the minor:

Note: The symbol after the course title indicates that the class is offered ONLY in the semester indicated:

(F) = offered fall only
(S) = offered spring only
(SE) = offered spring of even numbered years
(SO) = offered spring of odd numbered years

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Semester</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDEV 1113</td>
<td>Introduction to Community Development</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CDEV 2155</td>
<td>Housing and Community Development</td>
<td>SO</td>
<td>3</td>
</tr>
<tr>
<td>CDEV 2596</td>
<td>Community Planning Analysis</td>
<td>S</td>
<td>3</td>
</tr>
<tr>
<td>CDEV 3113</td>
<td>Nonprofit Management</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CDEV 3197</td>
<td>Community-based Organizations (F)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>CDEV 3313</td>
<td>Community Development Finance</td>
<td>SE</td>
<td>3</td>
</tr>
<tr>
<td>CRP 2524</td>
<td>Fundamentals of Geographic Information Systems (GIS)</td>
<td>F</td>
<td>3</td>
</tr>
</tbody>
</table>

Electives

Select three (3) courses numbered 2000-3999 from the list of approved electives for the major in Community Development.

Total Credit Hours 18

1 This course has a prerequisite(s).

Minor in Community and Regional Planning

Students in the School of Environmental Design (except for Community & Regional Planning majors) as well as students in other colleges, schools, and departments may choose to minor in Community and Regional Planning. Through this minor students undertake formal studies about public planning, thereby preparing themselves for contributions as informed citizens, civically engaged professionals, or ultimately as professional planners. The minor provides students with the background and with stronger credentials to apply for graduate level work in planning.

In this 18 credit minor, the required courses provide common background in the basics of planning, including history, theory, comprehensive planning and its components, ethics and principles of planning practice with particular emphasis on citizen participation, and exposure to a range of analytical methods for understanding community planning issues. The four electives allow students to explore interests in different facets of community planning: land use; housing; economic development; transportation; sustainability and environmental planning.

A student may not double count any course for the Minor in Community & Regional Planning toward any other major, minor, or certificate. At least half of the courses for the minor must be taken at Temple University. Students must complete successfully each of the following courses with a grade of C- or better and a cumulative average of 2.0 or higher for all courses in the minor:

Note: The symbol after the course title indicates that the class is offered ONLY in the semester indicated:

(F) = offered fall only
(S) = offered spring only
## Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRP 1017</td>
<td>Introduction to Community and Regional Planning</td>
<td>3</td>
</tr>
<tr>
<td>CDEV 2596</td>
<td>Community Planning Analysis (S)</td>
<td>3</td>
</tr>
</tbody>
</table>

## Electives

<table>
<thead>
<tr>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Four Community &amp; Regional Planning electives numbered 1000-3999</td>
<td>12</td>
</tr>
</tbody>
</table>

Total Credit Hours: 18

1. Except CRP 3889
   - Note: One of the four electives may be a course from another subject approved by a School of Environmental Design advisor.

## Landscape Architecture & Horticulture

*Effective January 1, 2016, the departments and programs within the School of Environmental Design moved to the Tyler School of Art.*

Founded 1958.

Baldev S. Lamba, M.L.A.
Chair
Dixon Hall 201
267-468-8181
la.hort@temple.edu
www.temple.edu/ambler/la-hort/default.html

The Department of Landscape Architecture and Horticulture offers four-year baccalaureate degree programs in Landscape Architecture and Horticulture; a two-year Associate in Science degree in Horticulture, with a general or business emphasis; minors in Environmental Horticulture and Landscape Studies; and credit certificates in horticulture. In Fall 2010, a Master of Landscape Architecture degree was added. The undergraduate degree in Landscape Architecture and the first professional master’s degree in Landscape Architecture are accredited by the Landscape Architectural Accreditation Board.

With origins that trace back to the Pennsylvania School of Horticulture for Women, founded at Ambler in 1911, the department, throughout its history, has combined theory with practice. Committed to excellence in ecologically-based education, the department provides students with the knowledge and understanding of sustainable environments. Through an ecological approach to planning, design, development, and care of the land, the programs in Landscape Architecture and Horticulture promote the development of skills to improve the quality of urban, suburban, and rural communities. The unique curricula integrate horticulture and landscape architecture. A state-of-the-art greenhouse is available to students. Students and faculty also utilize the 187-acre Temple University Ambler campus as both an arboretum and living laboratory.

Careers in horticulture and landscape architecture are available in both the public and private sector.

For landscape architecture graduates, there are a variety of employment options including:

- Careers in the public sector in landscape architecture design and management positions. These might be affiliated with regional, county, or city planning commissions.
- Careers in private practice including the design of open space in relation to recreational, residential, commercial, institutional, and industrial projects, as well as the overall planning of new communities.
- Work on parks, recreation, trails, and open space planning and design.
- Work in environmental protection, historic preservation, landscape restoration, land reclamation, and green infrastructure.

Graduates with a degree in horticulture could be involved in the production, use, installation, and management of plants. They may:

- Work in public horticulture in arboreta, botanic gardens, parks, or golf courses.
- Teach in a high school, community college, or at the university level.
- Pursue an advanced degree and conduct research in plant propagation or stormwater management.
- Produce plants in greenhouses and nurseries for sale and landscape use.
- Design, install, and/or maintain residential, commercial, or public landscapes.
- Research new technologies and plants in private and public institutions.
- Work toward registration as a horticultural therapist.
- Write about plants and horticulture for articles, books, and copy on web sites.
- Work as an extension agent or specialist helping residential and commercial clients.
- Work in interior landscaping or floral design.
- Work as a sales representative for horticultural or allied industries.
• Own and operate their own business.

Financial Aid
In addition to assistance from the Department of Student Financial Services, there are several scholarships and grants-in-aid that are available only to Landscape Architecture and Horticulture students. Applications for department scholarships are available from the Department of Landscape Architecture and Horticulture office and online (http://ambler.temple.edu/admissions/costs-aid-and-scholarships/scholarships-ambler-campus). Also see Financial Aid (p. 137).

Continuing Studies
The Department offers a variety of credit courses and certificate programs in the late afternoon, in the evening, and on weekends. These courses and certificates are available to degree-seeking students as well as others interested in horticulture who are not seeking a degree. For many, these courses are a means of advancing their careers; for others, they are a source of personal enrichment. It is also possible, over a period of years, to complete all of the requirements for some credit certificate programs and for the associate’s and the bachelor's degrees in Horticulture by attending late afternoon, evening, and weekend classes. For more information, contact the Department of Landscape Architecture and Horticulture.

Policies and Regulations
The following departmental policy on Class Scheduling is in addition to the university policies and regulations that apply to all undergraduate students and to the policies that apply to all School of Environmental Design students.

Class Scheduling
The associate’s degree and the bachelor's degree in Horticulture and some of the credit certificate programs can be completed either through only daytime classes or through only late afternoon, evening, and Saturday classes. Students in the Bachelor of Science in Landscape Architecture program will be required to take classes during regular daytime hours, with some courses available in the evening and on weekends.

Programs
• Bachelor of Science in Horticulture (p. 674)
• Associate in Science in Horticulture (p. 677)
• Bachelor of Science in Landscape Architecture (p. 679)
• Minor in Environmental Horticulture (p. 681)
• Minor in Landscape Studies (p. 682)
• Certificate in Horticultural Therapy (p. 683)
• Certificate in Landscape Plants (p. 683)
• Certificate in Native Perennial Garden Design (p. 684)

Bachelor of Science in Horticulture
The degree of Bachelor of Science in Horticulture may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 124 semester hours of credit with a minimum cumulative GPA of 2.0 overall and in the major. No more than one grade below a C- is allowed in any course in either Landscape Architecture or Horticulture. Also, a grade of C- or higher is required in all required General Education courses.

Summary of Requirements for the Degree
1. University requirements
   • MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
   • All Temple students must take a minimum of two writing-intensive courses as part of the major. LARC 2496 and HORT 4896 are the specific writing-intensive courses required for Horticulture majors.
   • Students must complete the requirements of the university General Education (GenEd (p. 143)) program (29-30 s.h.)

2. Department of Landscape Architecture and Horticulture bachelor's degree requirements (28 s.h.)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOT 1111</td>
<td>General Botany</td>
<td>4</td>
</tr>
<tr>
<td>BOT 1112</td>
<td>Plant Ecology</td>
<td>3</td>
</tr>
<tr>
<td>HORT 1211</td>
<td>Woody Plants I</td>
<td>3</td>
</tr>
<tr>
<td>HORT 1212</td>
<td>Woody Plants II</td>
<td>3</td>
</tr>
<tr>
<td>HORT 2114</td>
<td>Soils</td>
<td>3</td>
</tr>
<tr>
<td>HORT 3514</td>
<td>Landscape Restoration</td>
<td>3</td>
</tr>
<tr>
<td>LARC 1013</td>
<td>Natural and the Built Environment</td>
<td>3</td>
</tr>
</tbody>
</table>
LARC 1142  Design Communications  3
LARC 2496  Landscape Traditions  3

**Total Credit Hours**  
28

3. Horticulture major requirements (minimum of 54 s.h.)
   
   **BOT 2121**  Plant Physiology  4
   **BOT 3122**  Applied Plant Physiology  3
   **CHEM 1021**  Introduction to Chemistry I  4
   & **CHEM 1023**  and Introduction to Chemistry Laboratory I  
   **CHEM 1022**  Introduction to Chemistry II  4
   & **CHEM 1024**  and Introduction to Chemistry Laboratory II  
   **HORT 2221**  Herbaceous Plants I  3
   **HORT 2222**  Herbaceous Plants II  3
   **HORT 2323**  Greenhouse Management  3
   **HORT 2324**  Plant Propagation  3
   **HORT 2334**  Food Crops I  3
   **HORT 3423**  Applied Entomology  3
   **HORT 3424**  Applied Plant Pathology  3
   **HORT 3523**  Landscape Management  3
   **HORT 4896**  Senior Seminar  3
   **STRC 1111**  Public Speaking  3
   or **AOD 1166**  Interpersonal Communication through the Life Span  

Select a minimum of three Landscape Architecture, Horticulture or Botany electives at the 1000 level or above  9

**Total Credit Hours**  
54

4. Electives (approximately 12 s.h.)

**Suggested Academic Plan**

Note: The symbol after the course number indicates that the class is offered ONLY in the semester indicated:

(F) = offered only in fall semester  
(S) = offered only in spring semester

**Year 1**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOT 1111  General Botany (F)</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1021  Introduction to Chemistry I (F)</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 1023</td>
<td></td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902  Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>LARC 1013  Natural and the Built Environment (F)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**  
15

**Spring**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>IH 0851 or 0951  Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
</tr>
<tr>
<td>BOT 1112  Plant Ecology (S)</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1022  Introduction to Chemistry II (S)</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 1024</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**  
17

**Year 2**

<table>
<thead>
<tr>
<th>Fall</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>HORT 1211  Woody Plants I (F)</td>
<td>3</td>
</tr>
<tr>
<td>HORT 2323  Greenhouse Management (F)</td>
<td>3</td>
</tr>
<tr>
<td>IH 0852 or 0952  Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>Term</td>
<td>Course</td>
</tr>
<tr>
<td>-----------------</td>
<td>------------</td>
</tr>
<tr>
<td>Spring</td>
<td>BOT 2121</td>
</tr>
<tr>
<td></td>
<td>HORT 1212</td>
</tr>
<tr>
<td></td>
<td>HORT 2114</td>
</tr>
<tr>
<td></td>
<td>HORT 2324</td>
</tr>
<tr>
<td></td>
<td>LARC 1142</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 3</td>
<td></td>
</tr>
<tr>
<td>Fall</td>
<td>HORT 2221</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
</tr>
<tr>
<td></td>
<td>HORT 3523</td>
</tr>
<tr>
<td></td>
<td>LARC 2496</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Spring</td>
<td>HORT 2222</td>
</tr>
<tr>
<td></td>
<td>HORT 2334</td>
</tr>
<tr>
<td></td>
<td>HORT 3514</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 4</td>
<td></td>
</tr>
<tr>
<td>Fall</td>
<td>BOT 3122</td>
</tr>
<tr>
<td></td>
<td>HORT 3423</td>
</tr>
<tr>
<td></td>
<td>HORT 4896</td>
</tr>
<tr>
<td></td>
<td>Elective</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Spring</td>
<td>HORT 3424</td>
</tr>
<tr>
<td></td>
<td>Electives</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Satisfactory completion of CHEM 1021, CHEM 1022, CHEM 1023, and CHEM 1024 will waive the two-course GenEd Science (GS) requirement.

Writing-intensive course for the major.

Writing-intensive capstone for the major.

**Associate in Science in Horticulture**

**General Horticulture Option**

This option in the Associate’s Degree is for students interested in developing a well-rounded background in all areas of horticulture or specializing in a particular area of interest such as floral design, integrated pest management, or arboriculture.

**Horticulture Business Option**

This option in the Associate’s Degree is for students interested in developing a background in landscape horticulture and in business.

The degree of Associate in Science in Horticulture may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 60 semester hours with a minimum cumulative GPA of 2.0 overall and in the major. No more than one grade below a C- is allowed in any course in either Landscape Architecture or Horticulture.

**General Horticulture Option**

**Suggested Academic Plan**

Note: The symbol after the course title indicates that the class is offered ONLY in that semester:

\( (F) \) = offered fall only

\( (S) \) = offered spring only

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>BOT 1111</td>
<td>General Botany (F)</td>
</tr>
<tr>
<td>HORT 1001</td>
<td>Fundamentals of Horticulture</td>
</tr>
<tr>
<td>HORT 1211</td>
<td>Woody Plants I (F)</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
</tr>
<tr>
<td>MATH 0701</td>
<td>Elementary Algebra</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td></td>
</tr>
<tr>
<td>STAT 1001</td>
<td>Quantitative Methods for Business I</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOT 1112</td>
<td>Plant Ecology (S)</td>
</tr>
<tr>
<td>HORT 1212</td>
<td>Woody Plants II (S)</td>
</tr>
<tr>
<td>HORT 2334</td>
<td>Food Crops I (S)</td>
</tr>
<tr>
<td>Select two from the following:</td>
<td></td>
</tr>
<tr>
<td>Landscape Architecture Electives (1000-level or higher)</td>
<td></td>
</tr>
<tr>
<td>Horticulture Electives (1000-level or higher)</td>
<td></td>
</tr>
<tr>
<td>Botany Electives (1000-level or higher)</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>HORT 2221</td>
<td>Herbaceous Plants I (F)</td>
</tr>
<tr>
<td>HORT 2323</td>
<td>Greenhouse Management (F)</td>
</tr>
<tr>
<td>HORT 3423</td>
<td>Applied Entomology (F)</td>
</tr>
<tr>
<td>HORT 3523</td>
<td>Landscape Management (F)</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
</tr>
<tr>
<td>Landscape Architecture Elective (1000-level or higher)</td>
<td></td>
</tr>
<tr>
<td>Horticulture Elective (1000-level or higher)</td>
<td></td>
</tr>
</tbody>
</table>
Botany Elective (1000-level or higher)

<table>
<thead>
<tr>
<th>Term</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring</td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HORT 2114</td>
<td>Soils (S)</td>
<td>3</td>
</tr>
<tr>
<td>HORT 2222</td>
<td>Herbaceous Plants II (S)</td>
<td>3</td>
</tr>
<tr>
<td>HORT 2324</td>
<td>Plant Propagation (S)</td>
<td>3</td>
</tr>
<tr>
<td>HORT 3424</td>
<td>Applied Plant Pathology (S)</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Landscape Architecture Elective (1000-level or higher)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Horticulture Elective (1000-level or higher)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Botany Elective (1000-level or higher)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Credit Hours: 60-62

Horticulture Business Option

Suggested Academic Plan

Note: The symbol after the course title indicates that the class is offered ONLY in that semester:

(F) = offered only in fall semester
(S) = offered only in spring semester
(O) = offered occasionally

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HORT 1211</td>
<td>Woody Plants I (F)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>ECON 1101</td>
<td>Macroeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>STAT 1001</td>
<td>Quantitative Methods for Business I</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LGLS 0856</td>
<td>Law and American Society [GU]</td>
<td>3</td>
</tr>
<tr>
<td>LGLS 1101</td>
<td>Legal Environment of Business</td>
<td></td>
</tr>
<tr>
<td>LGLS 1102</td>
<td>Law of Contracts</td>
<td></td>
</tr>
</tbody>
</table>

| Term Credit Hours | 16 |

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HORT 2221</td>
<td>Herbaceous Plants I (F)</td>
<td>3</td>
</tr>
<tr>
<td>HORT 3423</td>
<td>Applied Entomology (F)</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 2101</td>
<td>Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>Select two of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HORT 2323</td>
<td>Greenhouse Management (F)</td>
<td></td>
</tr>
<tr>
<td>HORT 2366</td>
<td>Nursery Operation, Management, and Production Techniques (O)</td>
<td></td>
</tr>
<tr>
<td>HORT 3523</td>
<td>Landscape Management (F)</td>
<td></td>
</tr>
</tbody>
</table>

| Term Credit Hours | 15 |

<table>
<thead>
<tr>
<th>Spring</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HORT 2114</td>
<td>Soils (S)</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
</tr>
<tr>
<td>------------</td>
<td>--------------------------------------</td>
</tr>
<tr>
<td>HORT 3424</td>
<td>Applied Plant Pathology (S)</td>
</tr>
<tr>
<td>MKTG 2101</td>
<td>Marketing Management</td>
</tr>
<tr>
<td>RMI 2101</td>
<td>Introduction to Risk Management</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
</tr>
<tr>
<td>HORT 2222</td>
<td>Herbaceous Plants II (S)</td>
</tr>
<tr>
<td>HORT 2555</td>
<td>Arboriculture (S)</td>
</tr>
<tr>
<td>HORT 2565</td>
<td>Turf Management (O)</td>
</tr>
<tr>
<td>HORT 3514</td>
<td>Landscape Restoration (S)</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td><strong>Total Credit Hours:</strong></td>
<td><strong>61</strong></td>
</tr>
</tbody>
</table>

1 ECON 1102 Microeconomic Principles strongly recommended

**Bachelor of Science in Landscape Architecture**

The degree of Bachelor of Science in Landscape Architecture may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 124 semester hours of credit with a minimum cumulative GPA of 2.0 overall and in the major. No more than one grade below a C- is allowed in any course in either Landscape Architecture or Horticulture. Also, a grade of C- or higher is required in all required General Education courses.

**Summary of Requirements for the Degree**

1. **University requirements**
   - MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
   - All Temple students must take a minimum of two writing-intensive courses as part of the major. LARC 2496 and LARC 4198 are the specific writing-intensive courses that are required for Landscape Architecture majors.
   - Students must complete the requirements of the university General Education (GenEd (p. 143)) program (29-30 s.h.).

2. **Department of Landscape Architecture and Horticulture requirements (28 s.h.)**
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOT 1111</td>
<td>General Botany</td>
<td>4</td>
</tr>
<tr>
<td>BOT 1112</td>
<td>Plant Ecology</td>
<td>3</td>
</tr>
<tr>
<td>HORT 1211</td>
<td>Woody Plants I</td>
<td>3</td>
</tr>
<tr>
<td>HORT 1212</td>
<td>Woody Plants II</td>
<td>3</td>
</tr>
<tr>
<td>HORT 2114</td>
<td>Soils</td>
<td>3</td>
</tr>
<tr>
<td>HORT 3514</td>
<td>Landscape Restoration</td>
<td>3</td>
</tr>
<tr>
<td>LARC 1013</td>
<td>Natural and the Built Environment</td>
<td>3</td>
</tr>
<tr>
<td>LARC 1142</td>
<td>Design Communications</td>
<td>3</td>
</tr>
<tr>
<td>LARC 2496</td>
<td>Landscape Traditions</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credit Hours</strong></td>
<td><strong>28</strong></td>
<td></td>
</tr>
</tbody>
</table>

3. **Landscape Architecture Major requirements (minimum of 60 s.h.)**

**Landscape Architecture**
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LARC 1244</td>
<td>Surveying</td>
<td>3</td>
</tr>
<tr>
<td>LARC 1544</td>
<td>Introduction to CAD</td>
<td>3</td>
</tr>
<tr>
<td>LARC 2241</td>
<td>Landscape Engineering I</td>
<td>3</td>
</tr>
<tr>
<td>LARC 2242</td>
<td>Landscape Engineering II</td>
<td>3</td>
</tr>
<tr>
<td>LARC 3243</td>
<td>Landscape Engineering III</td>
<td>3</td>
</tr>
<tr>
<td>LARC 3345</td>
<td>Planting Design</td>
<td>3</td>
</tr>
<tr>
<td>LARC 3644</td>
<td>Professional Practice</td>
<td>3</td>
</tr>
</tbody>
</table>

**Landscape Architecture Studios**
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LARC 2143</td>
<td>Landscape Architecture Design Studio I</td>
<td>6</td>
</tr>
<tr>
<td>LARC 2144</td>
<td>Landscape Architecture Design Studio II</td>
<td>6</td>
</tr>
<tr>
<td>LARC 3145</td>
<td>Landscape Architecture Design Studio III</td>
<td>6</td>
</tr>
<tr>
<td>LARC 3146</td>
<td>Landscape Architecture Design Studio IV: Design/Build</td>
<td>6</td>
</tr>
<tr>
<td>LARC 4147</td>
<td>Landscape Architecture Design Studio V: Fall Senior Studio</td>
<td>6</td>
</tr>
<tr>
<td>LARC 4198</td>
<td>Landscape Architecture Design Studio VI: Spring Senior Studio</td>
<td>6</td>
</tr>
</tbody>
</table>
Landscape Architecture, Horticulture, or Botany elective at the 1000 level or above 3

Total Credit Hours 60

4. Electives (approximately 6 s.h.)

## Suggested Academic Plan

Note: The symbol after the course number indicates that the class is offered ONLY in the semester indicated:

(F) = offered only in fall semester
(S) = offered only in spring semester

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LARC 1013</td>
<td>Natural and the Built Environment (F)</td>
<td>3</td>
</tr>
<tr>
<td>BOT 1111</td>
<td>General Botany (F)</td>
<td>4</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Spring</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LARC 1142</td>
<td>Design Communications</td>
<td>3</td>
</tr>
<tr>
<td>LARC 1244</td>
<td>Surveying (S)</td>
<td>3</td>
</tr>
<tr>
<td>LARC 1544</td>
<td>Introduction to CAD (S)</td>
<td>3</td>
</tr>
<tr>
<td>BOT 1112</td>
<td>Plant Ecology (S)</td>
<td>3</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LARC 2143</td>
<td>Landscape Architecture Design Studio I (F)</td>
<td>6</td>
</tr>
<tr>
<td>LARC 2241</td>
<td>Landscape Engineering I (F)</td>
<td>3</td>
</tr>
<tr>
<td>LARC 2496</td>
<td>Landscape Traditions [WI] (F)</td>
<td>3</td>
</tr>
<tr>
<td>HORT 1211</td>
<td>Woody Plants I (F)</td>
<td>3</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td><strong>NOTE: Credits in excess of 17 s.h. are additionally assessed at the per semester hour tuition rate.</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Spring</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LARC 2144</td>
<td>Landscape Architecture Design Studio II (S)</td>
<td>6</td>
</tr>
<tr>
<td>LARC 2242</td>
<td>Landscape Engineering II (S)</td>
<td>3</td>
</tr>
<tr>
<td>HORT 1212</td>
<td>Woody Plants II (S)</td>
<td>3</td>
</tr>
<tr>
<td>HORT 2114</td>
<td>Soils (S)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LARC 3145</td>
<td>Landscape Architecture Design Studio III (F)</td>
<td>6</td>
</tr>
<tr>
<td>LARC 3243</td>
<td>Landscape Engineering III (F)</td>
<td>3</td>
</tr>
<tr>
<td>LARC 3345</td>
<td>Planting Design (F)</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3-4</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3</th>
<th>Spring</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LARC 3146</td>
<td>Landscape Architecture Design Studio IV: Design/Build (S)</td>
<td>6</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>
## Year 4
### Fall
Ambler Option

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LARC 4147</td>
<td>Landscape Architecture Design Studio V: Fall Senior Studio</td>
<td>6</td>
</tr>
</tbody>
</table>

Select one of the following:

- Horticulture Elective - 1000 level or higher
- Botany Elective - 1000 level or higher
- Landscape Architecture Elective - 1000 level or higher

**GenEd Breadth Course**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
</tbody>
</table>

**Elective**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Elective</td>
<td>3-4</td>
</tr>
</tbody>
</table>

Rome Option

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LARC 4147</td>
<td>Landscape Architecture Design Studio V: Fall Senior Studio (6 credits; (F))</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Electives [9-10 credits]</th>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>16</td>
</tr>
</tbody>
</table>

### Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LARC 3644</td>
<td>Professional Practice (S)</td>
<td>3</td>
</tr>
<tr>
<td>LARC 4198</td>
<td>Landscape Architecture Design Studio VI: Spring Senior Studio [WI] (S)</td>
<td>6</td>
</tr>
<tr>
<td>HORT 3514</td>
<td>Landscape Restoration (S)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Elective**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Electives [9-10 credits]</th>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

**Total Credit Hours:** 124

---

1. Satisfactory completion of BOT 1111 and HORT 2114 will waive the two-course GenEd Science (GS) requirement.
2. Writing-intensive course for the major.
3. Students who satisfy an approved study abroad option may substitute an elective for the GenEd Global/World Society course.
4. Writing-intensive capstone for the major.
5. Students who attend a semester in Rome must take a Landscape Architecture, Horticulture or Botany elective at 1000-level or higher.

## Minor in Environmental Horticulture

Students in the School of Environmental Design as well as students in other colleges, schools, and departments may choose a Minor in Environmental Horticulture. Students complete courses related to horticultural concepts and practices which allow them to develop an understanding of the science and practice of protecting, restoring, and managing existing and natural landscape resources. This minor provides students with the opportunity to explore the option of graduate level studies in Landscape Architecture or Horticulture.

The curriculum involves 18 credits, with two required courses and at least four elective courses. The required courses give students a solid basis for understanding the fundamentals of horticulture, botany, and plant identification. The electives allow students to explore their own interests in different facets of horticulture including soils, plantscaping, and food crops.

A student may not double count any course for the Minor in Environmental Horticulture toward any other major, minor, or certificate. At least half of the courses for the minor must be taken at Temple University. Students must complete successfully each of the courses for the minor with a grade of C- or better and all of the minor courses with a cumulative average of 2.0 or higher.

**Note:** The symbol after the course title indicates that the class is offered ONLY in the semester indicated:

- (F) = offered fall only
- (FE) = offered fall of even numbered years
- (FO) = offered fall of odd numbered years
- (S) = offered spring only
- (SE) = offered spring of even numbered years
- (SO) = offered spring of odd numbered years
- (O) = offered occasionally

### Required

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HORT 1001</td>
<td>Fundamentals of Horticulture</td>
<td>2</td>
</tr>
<tr>
<td>HORT 2324</td>
<td>Plant Propagation (S)</td>
<td>3</td>
</tr>
</tbody>
</table>
Electives

Select a minimum of 13 credit hours from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOT 1111</td>
<td>General Botany (F)</td>
<td></td>
</tr>
<tr>
<td>BOT 1112</td>
<td>Plant Ecology (S)</td>
<td></td>
</tr>
<tr>
<td>HORT 1211</td>
<td>Woody Plants I (F)</td>
<td></td>
</tr>
<tr>
<td>HORT 1212</td>
<td>Woody Plants II (S)</td>
<td></td>
</tr>
<tr>
<td>HORT 2114</td>
<td>Soils (S)</td>
<td></td>
</tr>
<tr>
<td>HORT 2221</td>
<td>Herbaceous Plants I (F)</td>
<td></td>
</tr>
<tr>
<td>HORT 2222</td>
<td>Herbaceous Plants II (S)</td>
<td></td>
</tr>
<tr>
<td>HORT 2256</td>
<td>Interior Plantscaping (O)</td>
<td></td>
</tr>
<tr>
<td>HORT 2334</td>
<td>Food Crops I (S)</td>
<td></td>
</tr>
<tr>
<td>HORT 2353</td>
<td>Food Crops II (O)</td>
<td></td>
</tr>
<tr>
<td>HORT 2366</td>
<td>Nursery Operation, Management, and Production Techniques (O)</td>
<td></td>
</tr>
<tr>
<td>HORT 2525</td>
<td>Trees in the Urban Landscape (S)</td>
<td></td>
</tr>
<tr>
<td>HORT 2555</td>
<td>Arboriculture (O)</td>
<td></td>
</tr>
<tr>
<td>HORT 2575</td>
<td>Introduction to Public Horticulture (O)</td>
<td></td>
</tr>
<tr>
<td>HORT 2753</td>
<td>Introduction to Horticultural Therapy (FO)</td>
<td></td>
</tr>
<tr>
<td>HORT 3423</td>
<td>Applied Entomology (F)</td>
<td></td>
</tr>
</tbody>
</table>

Total Credit Hours: 18

1 This course has a prerequisite(s).

Minor in Landscape Studies

Students in the School of Environmental Design as well as students in other colleges, schools, and departments may choose a Minor in Landscape Studies. Through this minor, students complete courses that deepen their understanding of the relationship between the natural landscape and the human made environment, but without the professional focus of the bachelor’s degree in Landscape Architecture. The minor prepares students for lifelong contributions as informed, civically-engaged, and environmentally-conscious citizens. Also it allows students the opportunity to consider pursuing a graduate level degree in Landscape Architecture.

The curriculum for the Minor in Landscape Studies involves 18 credits, with two required courses and four elective courses. The required courses ensure that all students have a solid understanding of the fundamentals of Landscape Studies, including history, theory, and the relationship between the natural and built environments. The four electives allow students to explore their own interests in different facets of Landscape Studies.

A student may not double count any course for the Minor in Landscape Studies toward any other major, minor, or certificate. At least half of the courses for the minor must be taken at Temple University. Students must complete successfully each of the courses for the minor with a grade of C- or better and all of the minor courses with a cumulative average of 2.0 or higher.

Note: The symbol after the course title indicates that the class is offered ONLY in the semester indicated:

(F) = offered fall only
(S) = offered spring only
(O) = offered occasionally

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LARC 1013</td>
<td>Natural and the Built Environment (F)</td>
<td>3</td>
</tr>
<tr>
<td>LARC 2496</td>
<td>Landscape Traditions (F)</td>
<td>3</td>
</tr>
</tbody>
</table>

Electives

Select a minimum of four of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOT 1112</td>
<td>Plant Ecology (S)</td>
<td></td>
</tr>
<tr>
<td>CRP 2524</td>
<td>Fundamentals of Geographic Information Systems (GIS) (F)</td>
<td></td>
</tr>
<tr>
<td>HORT 1211</td>
<td>Woody Plants I (F)</td>
<td></td>
</tr>
<tr>
<td>HORT 1212</td>
<td>Woody Plants II (S)</td>
<td></td>
</tr>
<tr>
<td>HORT 2552</td>
<td>Trees in the Urban Landscape (S)</td>
<td></td>
</tr>
<tr>
<td>LARC 1142</td>
<td>Design Communications</td>
<td></td>
</tr>
<tr>
<td>LARC 1244</td>
<td>Surveying (S)</td>
<td></td>
</tr>
<tr>
<td>LARC 1544</td>
<td>Introduction to CAD (S)</td>
<td></td>
</tr>
</tbody>
</table>
### Certificate in Horticultural Therapy

This credit certificate is available to all undergraduate degree students to complete as part of their studies, regardless of their majors. This certificate is available also to non-degree-seeking students. Consult an academic advisor about how the required classes fit into academic and career plans.

Credit certificates may be conferred upon a student by recommendation of the faculty and upon satisfactory completion of the required credits for the specific topic area with a minimum cumulative GPA of 2.0 overall. At least one half of the courses required for the certificate must be completed at Temple University.

This credit certificate course sequence meets the horticultural therapy course content required by the American Horticultural Therapy Association (AHTA) for registration as a Horticultural Therapist. View the AHTA web site (www.ahta.org) for ADDITIONAL requirements for the Voluntary Professional Registration program as a Horticultural Therapist, such as supervised experience.

Note: The symbol after the course title indicates that the class is offered ONLY in the semester indicated:
- (F) = offered only in fall semester
- (S) = offered only in spring semester
- (FA) = offered only in fall of alternate years
- (SA) = offered only in spring of alternate years

#### Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HORT 1001</td>
<td>Fundamentals of Horticulture</td>
<td>2-3</td>
</tr>
<tr>
<td>or HORT 1651</td>
<td>Art of Floral Design I</td>
<td>3</td>
</tr>
<tr>
<td>HORT 2221</td>
<td>Herbaceous Plants I (F)</td>
<td>3</td>
</tr>
<tr>
<td>HORT 2753</td>
<td>Introduction to Horticultural Therapy (FA)</td>
<td>3</td>
</tr>
<tr>
<td>HORT 2754</td>
<td>Horticultural Therapy Skills (SA)</td>
<td>3</td>
</tr>
<tr>
<td>HORT 2755</td>
<td>Horticultural Therapy Program Management (FA)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credit Hours:** 14-15

Note: This course has a prerequisite(s).

### Certificate in Landscape Plants

This credit certificate provides a brief introduction to the areas of horticulture and an intensive learning experience in both woody and herbaceous landscape plants. Learning the names and usage of plants provides a deeper understanding for anyone interested in gardening and landscaping. For the professional, it provides the essential knowledge of plants needed to design high-quality landscapes for clients. For the hobbyist, it provides information that enriches the gardening experience.

This credit certificate is available to all undergraduate degree students to complete as part of their studies, regardless of their majors. This certificate is available also to non-degree-seeking students. Consult an academic advisor about how the required classes fit into academic and career plans.

Credit certificates may be conferred upon a student by recommendation of the faculty and upon satisfactory completion of the required credits for the specific topic area with a minimum cumulative GPA of 2.0 overall. At least one half of the courses required for the certificate must be completed at Temple University.

Note: The symbol after the course title indicates that the class is offered ONLY in the semester indicated:
- (F) = offered only in fall semester
- (S) = offered only in spring semester

#### Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HORT 1001</td>
<td>Fundamentals of Horticulture</td>
<td>2</td>
</tr>
</tbody>
</table>

Note: This course has a prerequisite(s).
Certificate in Native Perennial Garden Design

This credit certificate provides information that enriches the residential planting design experience. Certificate courses provide learning experiences with fundamentals of horticulture, herbaceous plants, and planting design. The skills necessary for a well designed and maintained residential perennial garden will be gained from learning plant identification, cultural conditions, and appropriate use of plants and planting design.

This credit certificate is available to all undergraduate degree students to complete as part of their studies, regardless of their majors. This certificate is available also to non-degree-seeking students. Consult an academic advisor about how the required classes fit into academic and career plans.

Credit certificates may be conferred upon a student by recommendation of the faculty and upon satisfactory completion of the required credits for the specific topic area with a minimum cumulative GPA of 2.0 overall. At least one half of the courses required for the certificate must be completed at Temple University.

Note: The symbol after the course title indicates that the class is offered ONLY in the semester indicated:

(F) = offered only in fall semester
(S) = offered only in spring semester

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HORT 1001</td>
<td>Fundamentals of Horticulture</td>
<td>2</td>
</tr>
<tr>
<td>LARC 1142</td>
<td>Design Communications</td>
<td>3</td>
</tr>
<tr>
<td>HORT 2221</td>
<td>Herbaceous Plants I (F)</td>
<td>3</td>
</tr>
<tr>
<td>HORT 2222</td>
<td>Herbaceous Plants II (S)</td>
<td>3</td>
</tr>
<tr>
<td>HORT 2666</td>
<td>Designing with Perennials (S)</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credit Hours 14

1 This course has a prerequisite(s).

Certificate in Environmental Sustainability

School of Environmental Design
Academic Advising and Career Development
West Hall 109
267-468-8200
tuaadvis@temple.edu

Students who are interested in the environment and in learning how to impact the world around them positively may want to consider completing the School of Environmental Design credit Certificate in Environmental Sustainability. This certificate provides students with the basic knowledge needed to evaluate environmental problems and to draw ecologically- and economically-sound connections between environmental needs, policy issues, and current research.

The certificate is available to all undergraduate degree students to complete as part of their studies, and is also available to non-degree students. Consult a School of Environmental Design academic advisor about how the required classes fit into academic and career plans. Most courses in this certificate program are offered during the daytime at the Ambler Campus; a few courses are available in the evening at the Ambler campus. In addition, some courses are also available at the Main Campus.

This credit certificate may be conferred upon a student by recommendation of the faculty and upon satisfactory completion of the required credits with a minimum cumulative GPA of 2.0. At least one half of the courses required for the certificate must be completed at Temple University.

Note: The symbol after the course number indicates that the class is offered ONLY in the semester indicated:

(F) = offered fall only
(FE) = offered fall of even numbered years
**(FO)** = offered fall of odd numbered years  
**(S)** = offered spring only  
**(SE)** = offered spring of even numbered years  
**(SO)** = offered spring of odd numbered years  
**(O)** = offered occasionally

### Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRP 1017</td>
<td>Introduction to Community and Regional Planning</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following:  
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LARC 0841</td>
<td>Sustainable Design</td>
<td>3</td>
</tr>
<tr>
<td>LARC 1013</td>
<td>Natural and the Built Environment (S)</td>
<td></td>
</tr>
</tbody>
</table>

Select one of the following:  
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOT 1112</td>
<td>Plant Ecology (S)</td>
<td>3-4</td>
</tr>
<tr>
<td>EES 1001</td>
<td>Introductory Geology</td>
<td></td>
</tr>
</tbody>
</table>

### Sustainability Topics

Select two of the following:  
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDEV 2155</td>
<td>Housing and Community Development (SO)</td>
<td></td>
</tr>
<tr>
<td>CRP 2114</td>
<td>Urban Form and Design (S)</td>
<td></td>
</tr>
<tr>
<td>CRP 2166</td>
<td>Land Use Planning (FO)</td>
<td></td>
</tr>
<tr>
<td>CRP 2213</td>
<td>Environmental Planning (S)</td>
<td></td>
</tr>
<tr>
<td>CRP 2251</td>
<td>Sustainable Food Systems Planning (F)</td>
<td></td>
</tr>
<tr>
<td>CRP 3155</td>
<td>Ecological Planning and Development (FE)</td>
<td></td>
</tr>
<tr>
<td>CRP 3255</td>
<td>Sustainability in Suburban Communities (SE)</td>
<td></td>
</tr>
<tr>
<td>CRP 3256</td>
<td>Sustainable Community Design and Development (SO)</td>
<td>1</td>
</tr>
<tr>
<td>CRP 3655</td>
<td>Transportation Planning (F)</td>
<td></td>
</tr>
<tr>
<td>CRP 3860</td>
<td>Topics in Community &amp; Regional Planning (O)</td>
<td>2,3</td>
</tr>
<tr>
<td>CRP 3870</td>
<td>Special Topics (O)</td>
<td>2,3</td>
</tr>
<tr>
<td>HORT 2334</td>
<td>Food Crops I (S)</td>
<td></td>
</tr>
<tr>
<td>HORT 2353</td>
<td>Food Crops II (O)</td>
<td>1,2</td>
</tr>
<tr>
<td>HORT 2575</td>
<td>Introduction to Public Horticulture (O)</td>
<td>2</td>
</tr>
<tr>
<td>HORT 2850</td>
<td>Special Topics in Horticulture/Landscape Architecture I (O)</td>
<td>2,3</td>
</tr>
<tr>
<td>HORT 2860</td>
<td>Special Topics in Horticulture/Landscape Architecture II (O)</td>
<td>2,3</td>
</tr>
<tr>
<td>HORT 2870</td>
<td>Special Topics (O)</td>
<td>2,3</td>
</tr>
<tr>
<td>HORT 3514</td>
<td>Landscape Restoration (S)</td>
<td>1,4</td>
</tr>
<tr>
<td>LARC 2758</td>
<td>Summer Field Ecology (Summer)</td>
<td></td>
</tr>
<tr>
<td>LARC 2870</td>
<td>Special Topics (O)</td>
<td>2,3</td>
</tr>
</tbody>
</table>

**Total Credit Hours:** 15-16

---

1. This course has a prerequisite(s) or registration restriction(s).
2. Contact a School of Environmental Design advisor for information on course scheduling rotations.
3. Acceptable if the topic is appropriate and approved by a School of Environmental Design academic advisor.
4. Prerequisites are HORT 1211 and HORT 1212.

### Certificate in Sustainable Food Systems

School of Environmental Design  
Academic Advising and Career Development  
West Hall 109  
267-468-8200  
tuaadvis@temple.edu

The Certificate in Sustainable Food Systems is available to all undergraduate degree students to complete as part of their studies, and is also available to non-degree students. Through this certificate students investigate the complexities of food systems through an interdisciplinary approach that includes horticulture, planning, and public health. Students explore the relationship of farmland preservation, food production practices, and supply alternatives that improve local economies, reduce energy consumption, lower environmental impact, and ensure widespread access to affordable and healthy food.
This prepares students to contribute to the overall sustainability of the communities in which they live and work and strengthens students' preparation to work as professionals in environmentally-oriented fields or as citizen activists. Also the certificate provides students with an opportunity to explore the option of further studies in planning, horticulture, or related fields.

The curriculum for the Certificate in Sustainable Food Systems consists of 12 credits, with two required foundation courses and at least two elective courses. The required courses ensure that students have a strong foundation for the study of food systems including food crops, planning for food systems, and nutrition. The electives allow students to delve deeper into different facets of food systems planning. Most courses in this certificate program are offered during the daytime at the Ambler Campus; a few courses are available in the evening at the Ambler Campus. In addition, some courses are also available at the Main Campus.

This credit certificate may be conferred upon a student by recommendation of the faculty and upon satisfactory completion of the required credits with a minimum cumulative GPA of 2.0. At least one half of the courses required for the certificate must be completed at Temple University.

Note: The symbol after the course title indicates that the class is offered ONLY in the semester indicated:

- (F) = offered fall only
- (FE) = offered fall of even numbered years
- (FO) = offered fall of odd numbered years
- (S) = offered spring only
- (SE) = offered spring of even numbered years
- (SO) = offered spring of odd numbered years
- (O) = offered occasionally

**Foundation courses**

Select two of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRP 2251</td>
<td>Sustainable Food Systems Planning (F)</td>
<td></td>
</tr>
<tr>
<td>HORT 2334</td>
<td>Food Crops I (S)</td>
<td></td>
</tr>
<tr>
<td>HORT 2353</td>
<td>Food Crops II (O) 1</td>
<td></td>
</tr>
<tr>
<td>PBHL 1104</td>
<td>Nutrition and Health</td>
<td></td>
</tr>
</tbody>
</table>

**Electives**

Select two of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRP 2166</td>
<td>Land Use Planning (FO) 1</td>
<td></td>
</tr>
<tr>
<td>CRP 2213</td>
<td>Environmental Planning (S)</td>
<td></td>
</tr>
<tr>
<td>CRP 3155</td>
<td>Ecological Planning and Development (FE)</td>
<td></td>
</tr>
<tr>
<td>CRP 3255</td>
<td>Sustainability in Suburban Communities (SE)</td>
<td></td>
</tr>
<tr>
<td>HORT 1001</td>
<td>Fundamentals of Horticulture</td>
<td></td>
</tr>
<tr>
<td>HORT 2323</td>
<td>Greenhouse Management (F) 1</td>
<td></td>
</tr>
<tr>
<td>HORT 2324</td>
<td>Plant Propagation (S)</td>
<td></td>
</tr>
</tbody>
</table>

Total Credit Hours: 12

1 This course has a prerequisite(s).

**Minor in Ecological Planning & Design**

Students in the School of Environmental Design as well as students in other colleges, schools, and departments may choose a Minor in Ecological Planning and Design. Through this minor students pursue courses which deepen their understanding of the concept of ecological planning and design. That is, they learn a process of decision making that ensures that development is compatible with natural resources and processes and that takes into consideration social, political, economic, and governance factors to achieve sustainable outcomes. This prepares students for lifelong contributions to the environmental sustainability of the communities in which they live and work. Also the minor provides undergraduates with an opportunity to explore the option of graduate studies in planning, landscape architecture, or horticulture.

The curriculum for the Minor in Ecological Planning and Design involves 18 credits, with two required foundation courses and at least four elective courses. The two foundation courses ensure that all students understand the fundamentals of natural and built systems and ecological planning. The electives allow students to explore their own interests in different facets of horticulture, landscape architecture, and planning while also gaining an appreciation of the science of ecology and the concept of ecologically-sensitive development.

A student may not double count any course for the Minor in Ecological Planning and Design toward any other major, minor, or certificate. At least half of the courses for the minor must be taken at Temple University. Students must complete successfully each course for the minor with a grade of C- or better and all of the minor courses with a cumulative average of 2.0 or higher.
Note: The symbol after the course title indicates that the class is offered ONLY in the semester indicated:

(F) = offered fall only
(Fe) = offered fall of even numbered years
(FO) = offered fall of odd numbered years
(S) = offered spring only
(SE) = offered spring of even numbered years
(SO) = offered spring of odd numbered years
(O) = offered occasionally

Foundation Courses
Select two of the following: 6

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOT 1112</td>
<td>Plant Ecology</td>
<td>S</td>
</tr>
<tr>
<td>CRP 2213</td>
<td>Environmental Planning</td>
<td>S</td>
</tr>
<tr>
<td>CRP 3155</td>
<td>Ecological Planning and Development (FE)</td>
<td>FE</td>
</tr>
<tr>
<td>CRP 3256</td>
<td>Sustainable Community Design and Development (SO)</td>
<td>SO</td>
</tr>
<tr>
<td>LARC 1013</td>
<td>Natural and the Built Environment (F)</td>
<td>F</td>
</tr>
<tr>
<td>LARC 2496</td>
<td>Landscape Traditions</td>
<td>F</td>
</tr>
</tbody>
</table>

Electives
Select four of the following: 3 12

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDEV 2155</td>
<td>Housing and Community Development (SO)</td>
<td>SO</td>
</tr>
<tr>
<td>CRP 1017</td>
<td>Introduction to Community and Regional Planning</td>
<td></td>
</tr>
<tr>
<td>CRP 2114</td>
<td>Urban Form and Design (O)</td>
<td>O</td>
</tr>
<tr>
<td>CRP 2166</td>
<td>Land Use Planning (FO)</td>
<td>FO</td>
</tr>
<tr>
<td>CRP 2524</td>
<td>Fundamentals of Geographic Information Systems (GIS) (F)</td>
<td>F</td>
</tr>
<tr>
<td>CRP 3655</td>
<td>Transportation Planning (F)</td>
<td>F</td>
</tr>
<tr>
<td>HORT 2552</td>
<td>Trees in the Urban Landscape (S)</td>
<td>S</td>
</tr>
<tr>
<td>HORT 3514</td>
<td>Landscape Restoration (S)</td>
<td>S</td>
</tr>
<tr>
<td>LARC 1142</td>
<td>Design Communications</td>
<td></td>
</tr>
<tr>
<td>LARC 1244</td>
<td>Surveying (S)</td>
<td>S</td>
</tr>
<tr>
<td>LARC 1544</td>
<td>Introduction to CAD (S)</td>
<td>S</td>
</tr>
<tr>
<td>LARC 2754</td>
<td>Water Design in the City (O)</td>
<td>O</td>
</tr>
<tr>
<td>LARC 2758</td>
<td>Summer Field Ecology (Summer)</td>
<td>Summer</td>
</tr>
</tbody>
</table>

Total Credit Hours 18

1. This course has a prerequisite(s) or registration restriction.
2. May not be taken by students who have successfully completed GenEd LARC 0841.
3. Foundation courses beyond the minimum required may be used as electives.

Minor in Sustainable Food Systems

Students in the School of Environmental Design as well as students in other colleges, schools, and departments may choose a Minor in Sustainable Food Systems. Through this minor students investigate the complexities of food systems through an interdisciplinary approach that includes horticulture, planning, and public health. Students explore the relationship of farmland preservation, food production practices, and supply alternatives that improve local economies, reduce energy consumption, lower environmental impact, and ensure widespread access to affordable and healthy food. This prepares students to contribute to the overall sustainability of the communities in which they live and work and strengthens students’ preparation to work as professionals in environmentally-oriented fields or as citizen activists. Also the minor provides undergraduates with an opportunity to explore the option of graduate studies in planning, horticulture, or related fields.

The curriculum for the Minor in Sustainable Food Systems consists of 18 credits, with two required foundation courses and at least four elective courses. The required courses ensure that students have a strong foundation for the study of food systems including food crops, planning for food systems, and nutrition. The electives allow students to delve deeper into different facets of food systems planning.

A student may not double count any course for the Minor in Sustainable Food Systems toward any other major, minor, or certificate. At least half of the courses for the minor must be taken at Temple University. Students must complete successfully each course for the minor with a grade of C- or better and all of the minor courses with a cumulative average of 2.0 or higher.
Note: The symbol after the course title indicates that the class is offered ONLY in the semester indicated:

(F) = offered fall only
(Fe) = offered fall of even numbered years
(FO) = offered fall of odd numbered years
(S) = offered spring only
(SE) = offered spring of even numbered years
(SO) = offered spring of odd numbered years
(O) = offered occasionally

**Foundation Courses**
Select two of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRP 2251</td>
<td>Sustainable Food Systems Planning</td>
<td>F</td>
</tr>
<tr>
<td>HORT 2334</td>
<td>Food Crops I</td>
<td>S</td>
</tr>
<tr>
<td>HORT 2353</td>
<td>Food Crops II</td>
<td>O</td>
</tr>
<tr>
<td>PBHL 1104</td>
<td>Nutrition and Health</td>
<td></td>
</tr>
</tbody>
</table>

**Electives**
Select four of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRP 2166</td>
<td>Land Use Planning</td>
<td>FO</td>
</tr>
<tr>
<td>CRP 2213</td>
<td>Environmental Planning</td>
<td>S</td>
</tr>
<tr>
<td>CRP 3155</td>
<td>Ecological Planning and Development</td>
<td>FE</td>
</tr>
<tr>
<td>CRP 3255</td>
<td>Sustainability in Suburban Communities</td>
<td>SE</td>
</tr>
<tr>
<td>HORT 1001</td>
<td>Fundamentals of Horticulture</td>
<td></td>
</tr>
<tr>
<td>HORT 2323</td>
<td>Greenhouse Management</td>
<td>F</td>
</tr>
<tr>
<td>HORT 2324</td>
<td>Plant Propagation</td>
<td>S</td>
</tr>
</tbody>
</table>

**Total Credit Hours**: 18

1 This course has a prerequisite(s).
College of Public Health

The College of Public Health was formerly the College of Health Professions and Social Work.

Laura A. Siminoff, Ph.D., Dean
1938 Liacouras Walk, Room 202
215-204-5200
http://cph.temple.edu

Since its inception in 1966, the College has prepared well-rounded practitioners who are sensitive to patient/client needs and whose professional competence is built on a solid foundation of theory, laboratory practice, and clinical fieldwork/internships. The college offers undergraduate programs that include Athletic Training, Health Information Management, Kinesiology, Linguistics, Nursing, Public Health, Speech, Language & Hearing Science, Therapeutic Recreation, and Social Work. Students graduating with a B.S. degree in Health Information Management, Kinesiology, Nursing, Public Health, or Therapeutic Recreation meet the entry-level requirements of their professions and are qualified to take state and/or national examinations leading to certification or licensure in their fields.

Vision Statement

The College of Public Health aspires to be a global leader in the discovery, dissemination, and integration of health and social welfare related research, practice, and teaching. Our diverse population of students and highly recognized faculty seek to enhance the quality of life for all.

Mission Statement

The College of Public Health prepares future generations of professionals through discovery, ethical practice, and lifelong learning.

Admissions

Those seeking undergraduate admission to the programs in the College of Public Health must apply through Temple's Undergraduate Admissions office at admissions.temple.edu. Prospective students who wish to obtain additional information about our programs are encouraged to visit the College's web site at http://cph.temple.edu or send an e-mail to the Office of Enrollment and Student Services at OESS1@temple.edu.

Please note that many undergraduate programs in the College of Public Health require students to complete clinical/field education experiences at facilities both on and off the University campus. Many of these placements will require criminal background checks, Act 33/34 clearances and perhaps a drug screen. The results of these requirements may limit and potentially eliminate placement options which can, in turn, result in an inability to meet graduation requirements. Additionally, conviction of a misdemeanor, felony, or felonious or illegal act may prevent you from becoming credentialed and/or licensed to practice in certain professions. Please review the requirements for the particular program in which you are interested.


Entering undergraduates, whether freshmen or transfers from other institutions, are admitted to these programs by submitting an application to Temple's Undergraduate Admissions office. Decisions are based on a review of the applicant's academic credentials. Current Temple students may also enter these programs by applying for a change of program within the university. Interested students should direct admission questions to the Office of Enrollment and Student Services by e-mail to OESS1@temple.edu or to the specific department of interest to them. Current Temple University students interested in transferring to one of these majors should review the relevant section below, which describes the required change of program sessions.

Admission to the Nursing Program

Temple's BSN program is a four-year program enabling students to begin fieldwork experience during their first year. The BSN program provides three entry options depending on students' background and education. There is a freshman option for highly qualified high school graduates. Space permitting, the BSN program accepts a limited number of transfer students from current Temple students or from external applicants enrolled in another college or university. Internal transfer admission decisions are highly competitive and made on a space-available basis. This transfer option requires students to begin the nursing program as first-year nursing students. Students admitted via this option will spend eight semesters in Temple's BSN program, entering the program in the fall semester. This option is recommended for Temple students with fewer than 30 college credits. More information about admission to Temple's BSN program is available at BSN Admissions (http://cph.temple.edu/nursing/academic-programs/bsnursing-program/admissions).

Admission to the Health Information Management Program

Prospective first-year students can declare the Pre-Health Information Management major within the College of Public Health. Students following this path should pay careful attention to the requirements and meet with their academic advisor.

During the fall of the sophomore year, students interested in admission to Health Information Management (HIM) must apply to the program. Students may apply prior to completing all of the prerequisites and General Education (GenEd (p. 143)) courses. However, prior to starting the Health Information Management major, a student must successfully complete all pre-professional college work, which includes the University GenEd curriculum and all
program prerequisites, at Temple University or another university or college. In order to be considered, applicants must achieve transferable grades in all prerequisites as well as a competitive grade point average (GPA). For more information, prospective students should visit HIM's Degrees Offered (http://cph.temple.edu/him/degrees-offered).

**Current Students Transferring to Athletic Training, Kinesiology, Linguistics, Public Health, Speech, Language & Hearing Science, Social Work, or Therapeutic Recreation**

Current Temple students interested in transferring into Athletic Training, Kinesiology, Linguistics, Public Health, Social Work, Speech, Language & Hearing Science, or Therapeutic Recreation must attend a change of program session. These are listed on the College of Public Health web site under Student Advising (http://cph.temple.edu/cph/about-current-students/academic-advising). Applications will not be processed until the student attends the required change of program session. A minimum GPA of 2.00 is required for admission to any of these programs. Students should review the curriculum and be aware of the quantitative and scientific skills required to successfully complete the courses. In some cases, students will be asked to meet with the advising director to discuss their change of program request.

**Current Temple University Students Applying to Health Information Management**

Temple students who want to learn more about the program can contact the Health Information Management advisor at 215-204-2037. Those ready to apply to the program should contact Karen McBride at 215-204-5803 or kmcbride@temple.edu.

Students must download an application from the HIM web site (http://cph.temple.edu/healthadminpolicy/programs-offered/undergraduate) and submit it to the address listed on the application. Applicants are notified of a final decision by letter from the College of Public Health. An acceptance letter will include the required departmental courses. Admitted students are required to submit a $100.00 tuition deposit to confirm their acceptance of admission.

**Student Contact Information**

Undergraduate students with general questions are asked to contact the College's Office of Enrollment and Student Services (OESS) at 215-204-5440 or OESS1@temple.edu.

For questions about academic requirements, students should contact the departmental academic advisor. A list of advisors is available at Student Advising (http://cph.temple.edu/cph/about-current-students/academic-advising).

Contact information for specific departments is available at the College of Public Health (http://cph.temple.edu) web site. Please select the academics tab at the top of the College page and follow the links for additional department and program information.

**Academic Policies & Regulations**

Students are responsible for complying with all university-wide academic policies that apply to their individual academic status (Please see the Undergraduate Academic Policies (p. 81)). Additional and unique policies, or exceptions for the College of Public Health, appear below.

**Attendance**

The College of Public Health desires to promote professional responsibility among its students. It is therefore the policy of the college to place the responsibility for class attendance upon the students. Students are accountable for all work missed due to absence. Instructors are generally not required to make special arrangements or examinations for students who are absent. There are certain courses that require a minimum number of hours of student participation in laboratory or clinical experiences, as established by the professional accrediting agency and/or the academic department concerned. At the beginning of each such course, the department shall make the attendance requirement clearly known to the enrolled students. Excessive absences may, at the option of the department, jeopardize the student's grade and/or continuance in the course.

**Dean's List**

Each fall and spring semester, those undergraduates who have met the credit hour and academic criteria for their school or college are named to the Dean's List. See the Dean's List (p. 92) policy for specific GPA and credit-hour requirements.

**Standards of Scholarship**

The grading system is in accordance with the system adopted by Temple University. For students enrolled in this College, a grade of C is the lowest acceptable final grade in major courses, as these are defined in the description of each major. Students not achieving a grade of C or better are required to repeat those courses in which they have failed to demonstrate acceptable performance. Please note that for students enrolled in the School of Social Work a grade of C- is the lowest acceptable final grade.

**Student Code of Ethics and Professional Conduct**

Since students of the College of Public Health are enrolled in professional programs, they are expected to abide by standards of professional conduct and behavior at all times.

The College of Public Health prepares practitioners to fulfill their ideals of service in health or social service settings. In attaining these goals, practitioners must demonstrate exemplary professional behavior, as this is the keystone of the professional associations of the disciplines within this
The Code of Conduct of Temple University's College of Public Health is intended to contribute to an environment in which excellence in learning and conduct may be fostered.

All terms of the Temple University Student Rights, the Student Conduct Code, and disciplinary procedures described in that code apply to students within the College of Public Health. In addition to the major violations noted by the University code, another action has been identified by the faculty of the College as constituting a major infraction of the code: "Unethical conduct or intentional neglect of duty on clinical practice."

Additionally, most College of Public Health programs prepare students for careers that involve close examination of a person's background before being employed or even engaged in clinical training and field education. Thus, students are strongly encouraged to begin gathering required documentation and clearances immediately after admission into their program so that they have sufficient time to assemble their portfolio well before it is required for field-based learning, including internships. Gathering required background information early also provides sufficient time to address any issues that might postpone or prevent fieldwork. Each program publishes more detailed information on health screenings and background clearances that are used for clinical training and field education.

To learn more about the integral role of clinical and field education in the College of Public Health, please use the following links to explore your area of interest.

- Communication Science and Disorders Clinical Education (http://cph.temple.edu/commsci/graduate-programs/clinical-education)
- Health Information Management Clinical Education (http://cph.temple.edu/him/degrees-offered-bs-him/internship)
- Physical Therapy Clinical Education (http://cph.temple.edu/pt/degree-programs/doctor-physical-therapy-dpt/clinical-education-internships)
- Public Health Field Education (http://cph.temple.edu/publichealth/degrees-offered-graduate-programs/master-public-health/#fieldwork)
- Rehabilitation Science/Occupational Therapy (http://cph.temple.edu/rs/occupational-therapy-program-master-occupational-therapy-mot/occupational-therapy-fieldwork)
- Rehabilitation Science/Recreation Therapy (http://cph.temple.edu/rs/therapeutic-recreation/fieldwork-opportunities)
- School of Social Work Field Education (http://cph.temple.edu/ssa/field-education)

**College Graduation Requirements**

Specific graduation requirements for undergraduate programs in the College of Public Health (CPH) are available on the individual program pages within this Bulletin as well as at CPH Academics (http://cph.temple.edu/academics).

**College Core Course**

A key requirement for entering undergraduates as of fall 2015 is the College Core Course, HRPR 1001 Public Health: The Way We Live, Work and Play. For all other students, the new course is strongly recommended, but it will not be required for everyone currently enrolled in the college. The new course will be integrated into existing programs and will not extend time to graduation or increase tuition costs. Students should consult individual program descriptions in this Bulletin to see how the course fits into their programs—replacing either an elective or an existing course requirement—and consult with their program advisors about whether they should or must take the course.

The course is designed to help students think about contemporary health issues from an interdisciplinary perspective. The course includes an introduction to the five core areas of public health—biostatistics, epidemiology, environmental health, health services administration, and social and behavioral sciences—and how these areas relate to various health, health care, and human service professions. Public health helps inform decisions that shape the behavior of individuals and communities. Students will analyze health issues such as health promotion, disease prevention, and health care policy from a variety of perspectives. As part of the course, students will work in small interdisciplinary teams to access and evaluate information about a particular individual or population-level health issue, and learn to argue persuasively, both orally and in writing, for interdisciplinary approaches to that health issue. An aim of the course is to engage students' curiosity about how the discipline of public health and interdisciplinary approaches apply to issues students may confront in their future professional work.

**Military Science Courses**

Undergraduate students in CPH whose degree programs allow for free electives may apply up to 12 credits of military science courses at the 3000 and 4000 levels in Aerospace Studies (Air Force ROTC), Military Science (Army ROTC), and Naval Science (Navy ROTC).

**Academic Advising**

The College of Public Health has an extensive system of academic advising provided by professional and faculty advisors. Professional advisors, coordinated by the Associate Director for Advisement, are available for each department, where they provide assistance with such topics as registration, course scheduling, and transfer credits, as well as referral to other resources. For a complete listing of our professional advising staff and more information on academic advising in the College of Public Health, visit Student Advising (http://cph.temple.edu/cph/about-current-students/academic-advising).
In most departments, when students reach junior or senior standing, they are assigned to faculty advisors who assist with mentoring as students progress in their professional training.

Academic advisors strive to avoid errors when advising students about program requirements; however, the College cannot assume liability for errors in advising. Students must, therefore, assume primary responsibility for knowing the requirements for their degree and for acquiring current information about their academic status.

**Faculty**

William Aaronson, Associate Professor, Department of Health Services Administration and Policy, College of Public Health; Ph.D., Temple University.

Ann B. Addis, Instructor (Clinical), Department of Communication Sciences and Disorders, College of Public Health; M.A., Northwestern University.

Robin Aronow, Instructor (Teaching/Instructional), Department of Communication Sciences and Disorders, College of Public Health; M.A., University of Delaware.

Sarah Bauerle Bass, Associate Professor, Department of Social and Behavioral Sciences, College of Public Health; Ph.D., Temple University.

Katherine W. Bauer, Assistant Professor, Department of Epidemiology and Biostatistics, College of Public Health; Ph.D., University of Minnesota.

Keesha Benson, Instructor (Teaching/Instructional), Department of Social Work, College of Public Health; Ph.D., University of North Carolina at Chapel Hill.

Kristin Berg, Assistant Professor, Department of Rehabilitation Sciences, College of Public Health; Ph.D., University of Chicago.

Algie Lakesa Bond, Assistant Professor (Teaching/Instructional), Department of Health Services Administration and Policy, College of Public Health; M.H.A., St. Joseph's University.

Casey M. Breslin Murphy, Assistant Professor (Teaching/Instructional), Department of Kinesiology, College of Public Health; Ph.D., Auburn University.

Kathryn Brzozowski, Assistant Professor (Teaching/Instructional), Department of Social Work, College of Public Health; D.S.W., University of Pennsylvania.

Heather J. Burket, Instructor (Teaching/Instructional), Department of Rehabilitation Sciences, College of Public Health; M.Ed., Temple University.

Scott Burns, Associate Professor (Clinical), Department of Physical Therapy, College of Public Health; D.P.T., University of Colorado Denver.

Lois A. Butcher, Assistant Professor (Teaching/Instructional), Department of Kinesiology, College of Public Health; Ph.D., Temple University.

William Cabin, Assistant Professor (Teaching/Instructional), Department of Social Work, College of Public Health; Ph.D., City University of New York-Hunter College.

Stephen J. Carp, Associate Professor (Teaching/Instructional), Department of Physical Therapy, College of Public Health; Ph.D., Temple University.

Cheri E. Carter, Assistant Professor (Teaching/Instructional), Department of Social Work, College of Public Health; Ph.D., University of Delaware.

Bradley N. Collins, Associate Professor, Department of Social and Behavioral Sciences, College of Public Health; Ph.D., State University of New York at Binghamton.

James Corbin, Instructor (Teaching/Instructional), Department of Social Work, College of Public Health; M.S.W., Temple University.

Ronald W. Costen, Professor (Teaching/Instructional), Department of Social Work, College of Public Health; Ph.D., University of Pittsburgh.

Catherine Coyle, Professor, Department of Rehabilitation Sciences, College of Public Health; Ph.D., Temple University.

Adam Davey, Professor, Department of Epidemiology and Biostatistics, College of Public Health; Ph.D., Pennsylvania State University.

Claudia J. Dewane, Associate Professor (Teaching/Instructional), Department of Social Work, College of Public Health; Ed.D., Pennsylvania State University.

Susan B. Dickey, Associate Professor, Department of Nursing, College of Public Health; Ph.D., University of Pennsylvania.

Elizabeth A. Dieckman, Assistant Professor (Teaching/Instructional), Department of Nursing, College of Public Health; D.N.P.

Patricia DiGiacomo, Assistant Professor (Teaching/Instructional), Department of Nursing, College of Public Health; M.S.N., Temple University.

Ann E. Dolloff, Instructor (Teaching/Instructional), Department of Rehabilitation Sciences, College of Public Health; M.Ed., Temple University.

Jeffrey N. Draine, Professor, Department of Social Work, College of Public Health; Ph.D., University of Pennsylvania.
Levent Dumenci, Professor, Department of Epidemiology and Biostatistics, College of Public Health; Ph.D., Iowa State University.

William E. Egan, Assistant Professor (Teaching/Instructional), Department of Physical Therapy, College of Public Health; D.P.T., Regis University.

Karin Eyrich-Garg, Associate Professor, Department of Social Work, College of Public Health; Ph.D., Washington University-St. Louis.

Jane Fagan, Assistant Professor (Teaching/Instructional), Department of Physical Therapy, College of Public Health; D.P.T., Simmons College.

Jay S. Fagan, Professor, Department of Social Work, College of Public Health; Ph.D., Columbia University.

Ruth Farber, Associate Professor Emerita, Department of Rehabilitation Sciences, College of Public Health; Ph.D., Temple University.

Jennifer Orlet Fisher, Professor, Department of Social and Behavioral Sciences, College of Public Health; Ph.D., Pennsylvania State University.

Cathy A. Flite, Assistant Professor (Teaching/Instructional), Department of Health Services Administration and Policy, College of Public Health; M.Ed., Widener University.

Margaret M. Foley, Associate Professor (Teaching/Instructional), Department of Health Services Administration and Policy, College of Public Health; Ph.D., Temple University.

Nikki V. Franke, Associate Professor, Department of Social and Behavioral Sciences, College of Public Health; Ed.D., Temple University.

Anne Frankel, Assistant Professor (Teaching/Instructional), Department of Social and Behavioral Sciences, College of Public Health; Ph.D., Florida International University.

Laurie A. Friedman, Instructor (Teaching/Instructional), Department of Social Work, College of Public Health; M.S.W., University of Pennsylvania.

Anne K. Galgon, Associate Professor (Teaching/Instructional), Department of Physical Therapy, College of Public Health; Ph.D., Drexel University.

Kimberly Gargin, Assistant Professor (Teaching/Instructional), Department of Rehabilitation Sciences, College of Public Health; O.T.D., Chatham University.

Jeffrey Gehris, Associate Professor (Teaching/Instructional), Department of Kinesiology, College of Public Health; Ph.D., Temple University.

Letitia G. Gembala, Assistant Professor (Teaching/Instructional), Department of Nursing, College of Public Health; M.S.N., Villanova University.

Thomas F. Gordon, Professor Emeritus, Department of Public Health, College of Public Health; Ph.D., Michigan State University.

Susan Gresko, Assistant Professor (Teaching/Instructional), Department of Nursing, College of Public Health; M.S.N., University of Pennsylvania.

Clara S. Haignere, Associate Professor, Department of Social and Behavioral Sciences, College of Public Health; Ph.D., University of Denver.

Christopher Harris, Instructor (Teaching/Instructional), Department of Social Work, College of Public Health; M.S.W., Widener University.

Kyle Harris, Instructor (Teaching/Instructional), Department of Kinesiology, College of Public Health; M.S., Temple University.

Chantelle Hart, Associate Professor, Department of Social and Behavioral Sciences, College of Public Health; Ph.D., Case Western Reserve University.

Elaine Hatala, Assistant Professor (Teaching/Instructional), Department of Rehabilitation Sciences, College of Public Health; Ph.D., Temple University.

Alice J. Hausman, Professor, Department of Health Services Administration and Policy, College of Public Health; Ph.D., State University of New York at Binghamton.

James Hoffmann, Assistant Professor (Teaching/Instructional), Department of Kinesiology, College of Public Health; Ph.D., East Tennessee State University.

Pei-Chun Hsieh, Assistant Professor (Teaching/Instructional), Department of Rehabilitation Sciences, College of Public Health; Ph.D., Indiana University, Bloomington.

Matthew Bryant Hudson, Assistant Professor, Department of Kinesiology, College of Public Health; Ph.D., University of Florida-Gainesville.

Cheryl A. Hyde, Associate Professor, Department of Social Work, College of Public Health; Ph.D., University of Michigan.

Jennifer K. Ibrahim, Associate Professor, Department of Health Services Administration and Policy, College of Public Health; Ph.D., University of California Berkeley.

Larry D. Icard, Professor, Department of Social Work, College of Public Health; Ph.D., Columbia University.

Roger I. Ideishi, Associate Professor (Teaching/Instructional), Department of Rehabilitation Sciences, College of Public Health; J.D., Temple University.
John Jeka, Professor, Department of Kinesiology, College of Public Health; Ph.D., Florida Atlantic University.

Monika Jelic, Assistant Professor (Teaching/Instructional), Department of Nursing, College of Public Health; M.P.H., Boston University.

Zebulon V. Kendrick, Professor, Department of Kinesiology, College of Public Health; Ph.D., Temple University.

Emily Keshner, Professor, Department of Physical Therapy, College of Public Health; Ed.D., Columbia University.

Moya Kinnealey, Associate Professor Emerita, Department of Rehabilitation Sciences, College of Public Health; Ph.D., Temple University.

Francine P. Kohon, Instructor (Teaching/Instructional), Department of Communication Sciences and Disorders, College of Public Health; M.S., Pennsylvania State University.

Rena A. Krakow, Associate Professor, Department of Communication Sciences and Disorders, College of Public Health; Ph.D., Yale University.

Ann Kriebel-Gasparro, Assistant Professor (Teaching/Instructional), Department of Nursing, College of Public Health; M.S.N., Hahnemann University.

Joseph A. Kumi, Instructor (Teaching/Instructional), Department of Social Work, College of Public Health; M.S.W., Florida State University.

Richard Lauer, Associate Professor, Department of Physical Therapy, College of Public Health; Ph.D., Case Western Reserve University.

Stephen J. Lepore, Professor, Department of Social and Behavioral Sciences, College of Public Health; Ph.D., University of California Irvine.

Beth A. Levine, Instructor (Teaching/Instructional), Department of Communication Sciences and Disorders, College of Public Health; M.S., Boston University.

Grace Xueqin Ma, Professor, Department of Social and Behavioral Sciences, College of Public Health; P.D., University of Oklahoma.

Edwin Maas, Assistant Professor, Department of Communication Sciences and Disorders, College of Public Health; Ph.D., San Diego State University.

Bridget B. Mancano, Instructor (Teaching/Instructional), Department of Communication Sciences and Disorders, College of Public Health; M.A., Temple University.

Jamie Mansell, Assistant Professor (Teaching/Instructional), Department of Kinesiology, College of Public Health; Ph.D., Temple University.

Cindy Joy Marsels, Assistant Professor (Teaching/Instructional), Department of Health Services Administration and Policy, College of Public Health; M.B.A., Temple University.

Nadine Martin, Professor, Department of Communication Sciences and Disorders, College of Public Health; Ph.D., Temple University.

Carlene A. McAleer, Assistant Professor (Teaching/Instructional), Department of Nursing, College of Public Health; M.S.N., Hahnemann University.

Karen McBride, Assistant Professor (Teaching/Instructional), Department of Health Services Administration and Policy, College of Public Health; M.S., Philadelphia University.

Brian D. McHugh, Associate Professor, Department of Communication Sciences and Disorders, College of Public Health; Ph.D., University of California Los Angeles.

Michael McIntosh, Assistant Professor (Teaching/Instructional), Department of Nursing, College of Public Health; Ph.D., Temple University.

Rochelle Mendonca, Assistant Professor (Teaching/Instructional), Department of Rehabilitation Sciences, College of Public Health; Ph.D., University of Wisconsin-Milwaukee.

Lois Millner, Associate Professor, Department of Social Work, College of Public Health; Ph.D., Bryn Mawr College.

Deborah L. Mills, Instructor (Teaching/Instructional), Department of Social Work, College of Public Health; M.S.W., Temple University.

C. Daniel Moser, Assistant Professor (Teaching/Instructional), Department of Kinesiology, College of Public Health; Ph.D., Temple University.

Sheila L. Moyle, Instructor (Teaching/Instructional), Department of Rehabilitation Sciences, College of Public Health; M.S., University of the Sciences.

Heather Murphy, Assistant Professor, Department of Epidemiology and Biostatistics, College of Public Health; Ph.D., University of Guelph.

Maria F. Murt, Instructor (Teaching/Instructional), Department of Nursing, College of Public Health; M.S.N., Widener University.

Miguel Muñoz-Laboy, Associate Professor, Department of Social Work, College of Public Health; Dr.P.H., Columbia University.

Deborah B. Nelson, Associate Professor, Department of Epidemiology and Biostatistics, College of Public Health; Ph.D., University of Pittsburgh.
Rhonda Nelson, Associate Professor (Teaching/Instructional), Department of Rehabilitation Sciences, College of Public Health; Ph.D., Temple University.

Bernie Sue Newman, Associate Professor, Department of Social Work, College of Public Health; Ph.D., University of Pittsburgh.

Duy Nguyen, Associate Professor, Department of Social Work, College of Public Health; Ph.D., Columbia University.

Emeka Nwadiora, Associate Professor, Department of Social Work, College of Public Health; J.D., Hofstra University School of Law.

Cheryl B. Oakman, Assistant Professor (Teaching/Instructional), Department of Social Work, College of Public Health; Ph.D., Bryn Mawr College.

Heidi Ojha, Assistant Professor (Clinical), Department of Physical Therapy, College of Public Health; D.P.T., University of Southern California.

Joon Young Park, Associate Professor, Department of Kinesiology, College of Public Health; Ph.D., University of Maryland College Park.

Alan Pfeffer, Associate Professor (Teaching/Instructional), Department of Social Work, College of Public Health; M.S.W., Temple University.

Elizabeth A. Pfeiffer, Associate Professor (Teaching/Instructional), Department of Rehabilitation Sciences, College of Public Health; Ph.D., Nova Southeastern University.

Lok R. Pokhrel, Assistant Professor (Teaching/Instructional), Department of Epidemiology and Biostatistics, College of Public Health; Ph.D., East Tennessee State University.

Heather Porter, Associate Professor (Teaching/Instructional), Department of Rehabilitation Sciences, College of Public Health; Ph.D., Temple University.

John T. Raflin, Assistant Professor (Teaching/Instructional), Department of Kinesiology, College of Public Health; Ph.D., Temple University.

Meghan Rainone, Instructor (Teaching/Instructional), Department of Communication Sciences and Disorders, College of Public Health; J.D., Temple University.

Jodi Reich, Assistant Professor (Teaching/Instructional), Department of Communication Sciences and Disorders, College of Public Health; Ph.D., Yale University.

James J. Reilly, Associate Professor, Department of Communication Sciences and Disorders, College of Public Health; Ph.D., University of Pennsylvania.

Christen J. Rexing, Assistant Professor (Teaching/Instructional), Department of Health Services Administration and Policy, College of Public Health; Ph.D., Temple University.

Anne Richard, Instructor (Teaching/Instructional), Department of Rehabilitation Sciences, College of Public Health; M.S., Pennsylvania State University.

Jin-Sook Roh, Assistant Professor (Teaching/Instructional), Department of Kinesiology, College of Public Health; Ph.D., Massachusetts Institute of Technology.

Thomas P. Rooney, Assistant Professor (Teaching/Instructional), Department of Kinesiology, College of Public Health; Ph.D., Temple University.

Jo-Ellen Ross, Assistant Professor (Teaching/Instructional), Department of Rehabilitation Sciences, College of Public Health; Ph.D., University of Illinois at Urbana-Champaign.

Nancy L. Rothman, Professor, Department of Nursing, College of Public Health; Ed.D., Temple University.

Anne C. Russ, Assistant Professor (Teaching/Instructional), Department of Kinesiology, College of Public Health; Ph.D., Temple University.

Scott E. Rutledge, Associate Professor, Department of Social Work, College of Public Health; Ph.D., University of Washington.

Kim Sabourin, Instructor (Clinical), Department of Communication Sciences and Disorders, College of Public Health; M.A., University of Maryland.

Michael L. Sachs, Professor, Department of Kinesiology, College of Public Health; Ph.D., Florida State University.

Mark Salzer, Professor, Department of Rehabilitation Sciences, College of Public Health; Ph.D., University of Illinois at Urbana-Champaign.

Susan E. Santalucia, Assistant Professor (Teaching/Instructional), Department of Rehabilitation Sciences, College of Public Health; M.S., Temple University.

Mayra C. Santiago, Associate Professor, Department of Kinesiology, College of Public Health; Ph.D., University of Minnesota.

David B. Sarwer, Professor, Department of Social and Behavioral Sciences, College of Public Health; Ph.D., Loyola University Chicago.
Michelle C. Scarpulla, Instructor (Teaching/Instructional), Department of Social and Behavioral Sciences, College of Public Health; M.P.H., Temple University.

Mark F. Schmitz, Associate Professor (Teaching/Instructional), Department of Social Work, College of Public Health; Ph.D., Iowa State University.

Rosalie Schofield, Associate Professor (Teaching/Instructional), Department of Social Work, College of Public Health; Ph.D., Brandeis University.

Jay S. Segal, Professor, Department of Social and Behavioral Sciences, College of Public Health; Ph.D., Ohio State University.

Anjali B. Shah, Assistant Professor (Teaching/Instructional), Department of Health Services Administration and Policy, College of Public Health; Ph.D., Rutgers University.

Laura Siminoff, Professor, Department of Social and Behavioral Sciences, College of Public Health; Ph.D., Johns Hopkins University.

Jonathan Singer, Assistant Professor, Department of Social Work, College of Public Health; Ph.D., University of Pittsburgh.

Mary C. Sinnott, Associate Professor (Teaching/Instructional), Department of Physical Therapy, College of Public Health; D.P.T., MGH Institute of Health Professions.

Michael R. Sitter, Professor, Department of Kinesiology, College of Public Health; Ed.D., New York University.

Gretchen A. Snethen, Assistant Professor, Department of Rehabilitation Sciences, College of Public Health; Ph.D., Indiana University.

Doris Fallon Snyder, Assistant Professor (Teaching/Instructional), Department of Communication Sciences and Disorders, College of Public Health; M.A., Temple University.

Mary Stec, Assistant Professor (Teaching/Instructional), Department of Nursing, College of Public Health; Ph.D., Widener University.

Gerry A. Stefanatos, Associate Professor, Department of Communication Sciences and Disorders, College of Public Health; D.Phil., Oxford University.

Barbara A. Stephens, Assistant Professor (Clinical), Department of Nursing, College of Public Health; M.S.N., Temple University.

Ricky L. Swalm, Associate Professor, Department of Kinesiology, College of Public Health; Ph.D., Temple University.

Elizabeth Diane Thompson, Assistant Professor (Teaching/Instructional), Department of Physical Therapy, College of Public Health; D.P.T., Temple University.

Ryan T. Tierney, Associate Professor (Teaching/Instructional), Department of Kinesiology, College of Public Health; Ph.D., Temple University.

Heather M. Traino, Associate Professor, Department of Social and Behavioral Sciences, College of Public Health; Ph.D., State University of New York-Buffalo.

Carole Tucker, Associate Professor, Department of Physical Therapy, College of Public Health; Ph.D., State University of New York at Buffalo.

Sylvia Twersky-Bumgardner, Instructor (Teaching/Instructional), Department of Health Services Administration and Policy, College of Public Health; M.P.H., Tulane University.

Gena B. Vargas, Assistant Professor (Teaching/Instructional), Department of Rehabilitation Sciences, College of Public Health; Ph.D., Clemson University.

Sheldon O. Watts, Assistant Professor (Teaching/Instructional), Department of Social and Behavioral Sciences, College of Public Health; Ph.D., New York University.

Mark H. Weir, Assistant Professor, Department of Epidemiology and Biostatistics, College of Public Health; Ph.D., Drexel University.

Donna Weiss, Associate Professor Emerita, Department of Rehabilitation Sciences, College of Public Health; Ph.D., Temple University.

Robert C. Whitaker, Professor, Department of Epidemiology and Biostatistics, College of Public Health; M.D., Johns Hopkins University School of Medicine.

Andre Williams, Assistant Professor (Teaching/Instructional), Department of Epidemiology and Biostatistics, College of Public Health; Ph.D., Virginia Commonwealth University.

Caitlin N. Wolak, Instructor (Teaching/Instructional), Department of Social and Behavioral Sciences, College of Public Health; M.P.H., Temple University.

W. Geoffrey Wright, Associate Professor, Department of Physical Therapy, College of Public Health; Ph.D., Brandeis University.

Andrew Yannaccone, Assistant Professor (Teaching/Instructional), Department of Physical Therapy, College of Public Health; Ph.D., Virginia Commonwealth University School of Medicine.
Cindy Yascavage, Instructor (Teaching/Instructional), Department of Nursing, College of Public Health; Ph.D., Capella University.

Marsha Zibalese Crawford, Associate Professor, Department of Social Work, College of Public Health; D.S.W., Howard University.

Lisa S. Zoll, Instructor (Teaching/Instructional), Department of Social Work, College of Public Health; M.S.W., Temple University.

Dolores M. Zygmont, Associate Professor (Clinical), Department of Nursing, College of Public Health; Ph.D., Temple University.

Communication Sciences & Disorders

Rena Krakow, Ph.D. Professor, Program Director
Weiss Hall 267
215-204-8407
rkrakow@temple.edu

James J. Reilly, Ph.D. Interim Chair
Weiss Hall 110
215-204-3995
http://cph.temple.edu/commsci

The Department of Communication Sciences and Disorders offers two majors: one in Speech, Language & Hearing Science and one in Linguistics. In addition to the majors in Speech, Language & Hearing Science and Linguistics, the department also offers a minor. Enrollment of students pursuing minors in departmental courses is subject to availability.

1. The total number of credit hours required for graduation may be greater for some students, depending on initial placement exams, transfer evaluations, individual curricular choices, and academic progress.
2. Certain courses fulfill multiple requirements. In consultation with an academic advisor, students will be able to plan their curriculum more effectively.
3. Students must fulfill the necessary prerequisites for any given course or course sequence. See the Prerequisite and Co-requisite Policy (p. 99) in the Academic Policies section of this Bulletin.

Bachelor of Arts degrees in the Department of Communication Sciences and Disorders (CSCD) may be conferred upon a student by recommendation of the faculty upon the satisfactory completion of 122 semester hours of credit. A grade of C is the lowest acceptable final grade for courses required by the majors. A grade of C- (C Minus) is the lowest acceptable grade in GenEd courses. The Department of Communication Sciences and Disorders requires that students show a basic level of proficiency in a language other than English. This requirement may be met by taking college-level courses up to or beyond the equivalent of the 1002-level or by showing similar knowledge through a placement examination. Students may take American Sign Language to satisfy this requirement.

Students in the department must elect one of the two majors:

• Speech, Language & Hearing Science
• Linguistics

Distinction in the Major

Students who complete either major may graduate with distinction in the department if they meet the requirements outlined below:

1. GPA of 3.50 or better in the major and overall
2. No grade below B in the major
3. Completion of an honors paper at the end of a 3-credit independent study (CSCD 4979) during which the student will engage in an empirical study or library research in the field of Communication Sciences and Disorders under the supervision of a faculty advisor.
4. Completion of 20 hours of volunteer work, internship, or fieldwork in consultation with the advisor.

Programs

• American Sign Language Certificate (p. 697)
• Bachelor of Arts in Linguistics (p. 698)
• Bachelor of Arts in Speech, Language & Hearing Science (p. 700)
• Communication Sciences & Disorders Minor (p. 703)

American Sign Language Certificate

The Certificate in American Sign Language (ASL) will be awarded to students who successfully complete the ASL Levels 1 through 4, demonstrating competence in expressive and receptive language skills as well as knowledge of Deaf Culture. ASL, the language of the Deaf in the US and Canada,
is as rich and complex as any spoken language, but differs in modality of production and perception. Knowledge of ASL gained in the four courses will also teach students about the human capacity for language, even when access to the more common channel of language reception (hearing) is compromised. In addition to the value of learning ASL as described, competence in ASL will benefit those who may encounter deaf individuals in the future, including those in health professions, education, and legal fields. The certificate will also function as a foundation for those who wish to go on to programs in ASL-English interpreting, education of the Deaf and hearing-impaired, and other related fields.

The Director of our American Sign Language Certificate is Professor Meghan Rainone, tuf28275@temple.edu.

The Certificate in American Sign Language (ASL) will be awarded to students who complete the following 4-course sequence:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSCD 1001</td>
<td>American Sign Language I</td>
<td>3</td>
</tr>
<tr>
<td>or CSCD 1901</td>
<td>Honors American Sign Language 1</td>
<td></td>
</tr>
<tr>
<td>CSCD 1002</td>
<td>American Sign Language II</td>
<td>3</td>
</tr>
<tr>
<td>or CSCD 1902</td>
<td>Honors American Sign Language 2</td>
<td></td>
</tr>
<tr>
<td>CSCD 1003</td>
<td>American Sign Language III</td>
<td>3</td>
</tr>
<tr>
<td>CSCD 1004</td>
<td>American Sign Language IV</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credit Hours: 12

Bachelor of Arts in Linguistics

The Bachelor of Arts in Linguistics may be conferred upon a student by recommendation of the faculty upon the satisfactory completion of 122 semester hours of credit.

Gain a solid foundation for graduate study in a variety of important areas

Build on your passion for language with a BA in Linguistics, the scientific study of language structure. This major prepares students for graduate study in linguistics, psycholinguistics, neurolinguistics, teaching of English as a second language, special education, general education, reading, law, and other disciplines.

Coursework topics include:

- Phonological and phonetic structure of language
- Syntactic and morphologic structure of language
- Language development and language variation

The undergraduate program includes a one-semester fieldwork course during which students design individual projects concerning the structure or use of language.

Students majoring in Linguistics are encouraged to pursue a complementary second major or a minor. A foreign language is a common choice for a complementary program.

The Department of Communication Sciences and Disorders anticipates approval of a certificate in American Sign Language (ASL) in the near future. Students interested in ASL would be able to earn the certificate by taking CSCD 1001, CSCD 1002, CSCD 1003, and CSCD 1004.

Summary of Requirements

University Requirements

All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific writing-intensive courses that are required for the Linguistics major are CSCD 3297 and CSCD 4397.

Students must complete the requirements of the General Education (GenEd (p. 143)) program.

College Requirement

Students must complete the College Core Course, HRPR 1001 Public Health: The Way We Live, Work and Play.

Major Requirements

All of the following major requirements must be passed with a grade of C or better in order to successfully complete the major.

Communication & Science Disorders

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSCD 1108</td>
<td>Introduction to Linguistics</td>
<td>3</td>
</tr>
<tr>
<td>CSCD 2049</td>
<td>Language and the Brain</td>
<td>3</td>
</tr>
</tbody>
</table>
CSCD 2201  Research Methods in Communication Sciences  3  
CSCD 2209  Phonetics and Phonology  4  
CSCD 2219  Psycholinguistics  4  
CSCD 3233  Basic Speech Science  4  
CSCD 3297  Syntax (WI)  3  
CSCD 3301  Speech and Language Development  3  
CSCD 4397  Fieldwork in Linguistics (WI)  3  

**Required Electives**

Select at least three of the following:  

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSCD 2111</td>
<td>Language and Race</td>
<td>3</td>
</tr>
<tr>
<td>CSCD 2197</td>
<td>Communication Deviations and Disorders</td>
<td>3</td>
</tr>
<tr>
<td>CSCD 2202</td>
<td>Sociolinguistics</td>
<td>3</td>
</tr>
<tr>
<td>CSCD 3235</td>
<td>Human Neuroscience</td>
<td>3</td>
</tr>
<tr>
<td>CSCD 5729</td>
<td>Language and Deafness</td>
<td>3</td>
</tr>
<tr>
<td>ENG 3822</td>
<td>Semantics</td>
<td>3</td>
</tr>
<tr>
<td>ENG 3823</td>
<td>History of the English Language</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 2507</td>
<td>Fundamentals of Linguistic Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 3211</td>
<td>Intermediate Logic</td>
<td>3</td>
</tr>
<tr>
<td>PSY 2101</td>
<td>Foundations of Cognitive Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

**Foreign Language**

2 semesters of a foreign language (including American Sign Language) beyond those numbered “1002.” Foreign language courses fulfill free elective credits.

**Total Credit Hours**  39

1. Indicates writing capstone for major
2. Other courses may be taken as electives with approval of advisor.

**Recommended Electives**

A variety of excellent electives is available through the Departments of Philosophy and Psychology (College of Liberal Arts), and the TESOL (Teaching English to Speakers of Other Languages) program (College of Education). Students should consult their advisors for specific course recommendations.

**Suggested Academic Plan**

**Bachelor of Arts in Linguistics**

**Requirements for New Students starting in the 2015-2016 Academic Year**

**Year 1**

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>CSCD 1108</td>
<td>Introduction to Linguistics</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>14</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
</tr>
<tr>
<td>CSCD 2209</td>
<td>Phonetics and Phonology</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
</tr>
<tr>
<td>HRPR 1001</td>
<td>Public Health: The Way We Live, Work and Play</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>16</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>Foreign Language/ASL I (Elective)</td>
<td>3-4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>---------------------</td>
<td>----</td>
</tr>
<tr>
<td>CSCD 2219</td>
<td>Psycholinguistics</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 16-17

### Spring

<table>
<thead>
<tr>
<th>GenEd Breadth Course</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>CSCD 2201</td>
<td>Research Methods in Communication Sciences</td>
</tr>
<tr>
<td>Required Elective</td>
<td>3</td>
</tr>
<tr>
<td>Foreign Language/ASL II (Elective)</td>
<td>3-4</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 15-16

### Year 3

#### Fall

<table>
<thead>
<tr>
<th>CSCD 3301</th>
<th>Speech and Language Development</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Required Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Foreign Language/ASL III (Free Elective)</td>
<td>3-4</td>
<td></td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 15-16

### Spring

<table>
<thead>
<tr>
<th>CSCD 2049</th>
<th>Language and the Brain</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSCD 3297</td>
<td>Syntax [WI]</td>
<td>3</td>
</tr>
<tr>
<td>Required Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Foreign Language/ASL IV (Free Elective)</td>
<td>3-4</td>
<td></td>
</tr>
<tr>
<td>Free Elective</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 15-16

### Year 4

#### Fall

<table>
<thead>
<tr>
<th>CSCD 3233</th>
<th>Basic Speech Science</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free Elective¹</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Free Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Free Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Free Elective</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 16

### Spring

<table>
<thead>
<tr>
<th>CSCD 4397</th>
<th>Fieldwork in Linguistics [WI]</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free Elective¹</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Free Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Free Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Free Elective</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 15

**Total Credit Hours**: 122-126

¹ CSCD 4730 is a recommended elective.

### Bachelor of Arts in Speech, Language & Hearing Science

The Bachelor of Arts in Speech, Language & Hearing Science may be conferred upon a student by recommendation of the faculty upon the satisfactory completion of 122 semester hours of credit.

**A Foundation to Build From**
The Bachelor of Arts in Speech, Language & Hearing Science (SLH) prepares students for graduate programs in speech-language pathology or in education, social work, or various other health professions. An SLH graduate degree can lead to certification and licensure as a speech-language pathologist or audiologist.

**Coursework topics include:**

- Anatomy and physiology of the speech and hearing mechanism
- Neuro-anatomy and -physiology
- Psychology of language and language development
- Psychological factors
- The basis of speech
- Acoustics and perception of speech
- Introduction to clinical populations and practice

Graduates with a major in Speech, Language & Hearing Science will satisfy Standard III-B (Basic Communication Processes) of the Knowledge and Skills Assessment required by the American Speech-Language-Hearing Association.

The Department of Communication Sciences and Disorders anticipates approval of a certificate in American Sign Language (ASL) in the near future. Students interested in ASL would be able to earn the certificate by taking CSCD 1001, CSCD 1002, CSCD 1003, and CSCD 1004.

**Summary of Requirements**

**University Requirements**

All Temple students must take a minimum of two writing-intensive (WI) courses as part of the major. The specific writing-intensive courses that are required for the Speech-Language-Hearing major are CSCD 2197 and CSCD 4396.

Students must complete the requirements of the General Education (GenEd (p. 143)) program.

**College Requirements**

Students must complete the College Core Course, HRPR 1001 Public Health: The Way We Live, Work and Play.

**Major Requirements**

All of the following major requirements must be passed with a grade of C or better in order to successfully complete the major.

**Communication Sciences & Disorders**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSCD 1108</td>
<td>Introduction to Linguistics</td>
<td>3</td>
</tr>
<tr>
<td>CSCD 2197</td>
<td>Communication Deviations and Disorders (WI)</td>
<td>3</td>
</tr>
<tr>
<td>CSCD 2201</td>
<td>Research Methods in Communication Sciences</td>
<td>3</td>
</tr>
<tr>
<td>CSCD 2209</td>
<td>Phonetics and Phonology</td>
<td>4</td>
</tr>
<tr>
<td>CSCD 2219</td>
<td>Psycholinguistics</td>
<td>4</td>
</tr>
<tr>
<td>CSCD 3233</td>
<td>Basic Speech Science</td>
<td>4</td>
</tr>
<tr>
<td>CSCD 3234</td>
<td>Basic Hearing Science</td>
<td>4</td>
</tr>
<tr>
<td>CSCD 3235</td>
<td>Human Neuroscience</td>
<td>4</td>
</tr>
<tr>
<td>CSCD 3301</td>
<td>Speech and Language Development</td>
<td>3</td>
</tr>
<tr>
<td>CSCD 4301</td>
<td>Principles of Audiology</td>
<td>3</td>
</tr>
<tr>
<td>CSCD 4396</td>
<td>Orientation to Clinical Management (WI)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Related Discipline Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 1001</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 2301</td>
<td>Foundations of Developmental Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

**Biological Science**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1001</td>
<td>Human Biology</td>
<td>4</td>
</tr>
<tr>
<td>or BIOL 1012</td>
<td>General Biology II</td>
<td></td>
</tr>
</tbody>
</table>

Another course in biological science may be substituted with advisor approval.

**Foreign Language**

Two semesters of a foreign language at the introductory level or one at the intermediate level.

**Total Credit Hours**

48
Indicates writing capstone for major.

**Recommended Electives**

- PHYS 0872 is not required for the major, but is recommended to fulfill an ASHA physical science requirement for post-graduate work, and will also fulfill one of the two GenEd Science & Technology requirements.

- Statistics is part of the content of CSCD 2201. An additional statistics course is not required for the major, but is recommended to fulfill an ASHA statistics requirement for post-graduate work. Recommended statistics courses are the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 1003</td>
<td>Statistics for Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 1004</td>
<td>Critical Thinking in Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PBHL 2219</td>
<td>Biostatistics and Public Health</td>
<td>3</td>
</tr>
</tbody>
</table>

**Suggested Academic Plan**

**Bachelor of Arts in Speech, Language & Hearing Science**

**Requirements for New Students starting in the 2015-2016 Academic Year**

### Year 1

#### Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSCD 1108</td>
<td>Introduction to Linguistics</td>
<td>3</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course$^1$</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Free Elective</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

17

#### Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSCD 2209</td>
<td>Phonetics and Phonology</td>
<td>4</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>HRPR 1001</td>
<td>Public Health: The Way We Live, Work and Play</td>
<td>3</td>
</tr>
<tr>
<td>Free Elective (e.g., a statistics course)$^2$</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

13

### Year 2

#### Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSCD 2201</td>
<td>Research Methods in Communication Sciences</td>
<td>3</td>
</tr>
<tr>
<td>CSCD 2219</td>
<td>Psycholinguistics</td>
<td>4</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Foreign Language/ASL I (Elective)</td>
<td></td>
<td>3-4</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

16-17

#### Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreign Language/ASL II (Elective)</td>
<td></td>
<td>3-4</td>
</tr>
<tr>
<td>CSCD 2197</td>
<td>Communication Deviations and Disorders [WI]</td>
<td>3</td>
</tr>
<tr>
<td>PSY 1001</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>BIOL 1001</td>
<td>Human Biology</td>
<td></td>
</tr>
<tr>
<td>BIOL 1012</td>
<td>General Biology II</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

16-17

### Year 3

#### Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSCD 3234</td>
<td>Basic Hearing Science</td>
<td>4</td>
</tr>
<tr>
<td>PSY 2301</td>
<td>Foundations of Developmental Psychology</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Free Elective$^3$</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

16-17
Schools, Colleges, and Divisions

Free Elective 3

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>16</th>
</tr>
</thead>
</table>

**Spring**
- CSCD 3233 Basic Speech Science 4
- CSCD 3301 Speech and Language Development 3
- GenEd Breadth Course 3-4
- GenEd Breadth Course 3
- Free Elective 3

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>16-17</th>
</tr>
</thead>
</table>

**Year 4**

**Fall**
- CSCD 4301 Principles of Audiology 3
- CSCD 3235 Human Neuroscience 4
- GenEd Breadth Course 3
- Free Elective 3
- Free Elective 3

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>16</th>
</tr>
</thead>
</table>

**Spring**
- CSCD 4396 Orientation to Clinical Management [WI] 3
- Free Elective 3
- Free Elective 3
- Free Elective 3

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>12</th>
</tr>
</thead>
</table>

**Total Credit Hours:** 122-125

1 PHYS 0872 The Science of Sound is not required for the major, but is recommended to fulfill an ASHA physical science requirement for postgraduate work, and will also fulfill one of the two GenEd Science & Technology requirements.

2 Suggested statistics courses are PSY 1003, PSY 1004, or PBHL 2219.

3 CSCD 1003 and CSCD 1004, or further levels of any language, may be taken as free electives.

**Communication Sciences & Disorders Minor**

**Requirements**
Five courses are required for this minor.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSCD 2111</td>
<td>Language and Race</td>
</tr>
<tr>
<td>or CSCD 2202</td>
<td>Sociolinguistics</td>
</tr>
<tr>
<td>CSCD 2197</td>
<td>Communication Deviations and Disorders</td>
</tr>
<tr>
<td>CSCD 2209</td>
<td>Phonetics and Phonology</td>
</tr>
<tr>
<td>Select two of the following:</td>
<td>6-7</td>
</tr>
<tr>
<td>CSCD 1108</td>
<td>Introduction to Linguistics</td>
</tr>
<tr>
<td>CSCD 2219</td>
<td>Psycholinguistics</td>
</tr>
<tr>
<td>CSCD 3297</td>
<td>Syntax</td>
</tr>
<tr>
<td>CSCD 3301</td>
<td>Speech and Language Development</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Credit Hours</th>
<th>16-17</th>
</tr>
</thead>
</table>

**Health Information Management**

Cathy A. Flite, M.Ed., RHIA, Interim Chair
Ritter Annex 531
215-204-5801
hlthinfo@temple.edu
http://cph.temple.edu/him
Health Information Management (HIM) is focused on the development, implementation, management, and maintenance of patient health information systems in accordance with legal, regulatory, and accrediting agencies’ requirements for health care data collection and dissemination. HIM professionals have a special role in making sure that patient information remains confidential and maintained in a manner that ensures the patient’s privacy and that health care information is secure. A career in HIM combines interests in medicine, management, information technology, electronic health record systems, and finance. HIM professionals design and manage health information systems, with special attention to quality and privacy of health information, in a wide range of settings such as hospitals, managed and ambulatory care, insurance and pharmaceutical companies, consulting firms, and public health organizations.

The Bachelor of Science in Health Information Management (BSHIM) includes classes covering six main areas:

- Core HIM: Health Record Documentation, Legal Aspects of HIM, Internships, Healthcare Delivery Systems, and Professional Development
- Data Analytics: HIM IT Fundamentals, Electronic Health Record Systems, Informatics, and Database Development and Design
- Classification and Reimbursement: ICD-10, CPT4, Intermediate Coding, and Reimbursement
- Clinical Medicine: Pathophysiology, Medical Terminology, Clinical Procedures, and Pharmacology
- Internships: Professional Practice Internship (one full day per week for five weeks at a facility in the Delaware Valley) and Management Internship (four weeks at a facility outside of the area where you will be participating in solving a management project at that organization). Examples of internship sites include the University of Pennsylvania Health System, Thomas Jefferson University Hospital, NYU Medical Center, and Johns Hopkins Hospital.

Certification

Students enrolled in the HIM program and in the last term of study are eligible to apply for and sit for the examination of the American Health Information Management Association for the nationally recognized certification as a Registered Health Information Administrator (RHIA).

Following satisfactory completion of all course requirements, the graduate is awarded the degree of Bachelor of Science in Health Information Management.

Accreditation

The baccalaureate program in Health Information Management at Temple University is accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM).

Summary of Requirements

This is an upper-level program. Students are admitted in the fall of the junior year and must have 55 credits completed by the fall semester of admission to the program. Transfer students must have their transfer credits evaluated by the Admissions Office and must meet general and prerequisite requirements of the program.

University Requirements

All students are required to complete the university’s General Education (GenEd (p. 143)) curriculum (Analytical Reading & Writing, Mosaic I and II, Arts, Human Behavior, Global/World Society, U.S. Society, Race & Diversity, Science & Technology, Quantitative Literacy).

All Temple students must take a minimum of two writing-intensive courses at Temple as part of the major. The writing-intensive courses for this major are HIM 3297 and HIM 4298.

College Requirement

All CPH students must complete the College Core Course, HRPR 1001 Public Health: The Way We Live, Work and Play.

Clearance Requirements

Please note the Health Information Management program requires students to complete internships at facilities both on and off the University campus. These placements may require criminal background checks, Act 33/34 clearances and perhaps a drug screen. The results of these requirements may limit and potentially eliminate placement options which can, in turn, result in an inability to meet graduation requirements.

Program Requirements

Students in the HIM program are required to satisfy the following prerequisite (before program admission) and professional courses (after program admission). A grade of C or better is required for all prerequisite and professional courses (a grade of C- is not acceptable).

Health Information Management Prerequisites:

MATH 1013 Elements of Statistics
or SOC 1167 Social Statistics
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>KINS 1223</td>
<td>Human Anatomy and Physiology I ¹</td>
<td>3-4</td>
</tr>
<tr>
<td>or KINS 1221</td>
<td>Principles of Anatomy and Physiology I</td>
<td></td>
</tr>
<tr>
<td>KINS 1224</td>
<td>Human Anatomy and Physiology II ¹</td>
<td>3-4</td>
</tr>
<tr>
<td>or KINS 1222</td>
<td>Principles of Anatomy and Physiology II</td>
<td></td>
</tr>
<tr>
<td>CIS 1055</td>
<td>Computers and Applications (or successfully pass a computer competency course)</td>
<td>4</td>
</tr>
<tr>
<td>HIM 1101</td>
<td>Medical Terminology</td>
<td>3</td>
</tr>
<tr>
<td>HIM 2203</td>
<td>U.S. Health Care System</td>
<td>3</td>
</tr>
<tr>
<td>HIM 2215</td>
<td>Health Information Management IT Fundamentals</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credit Hours: 22-24**

### Health Information Management Professional Courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIM 3101</td>
<td>Health Record Documentation ²</td>
<td>3</td>
</tr>
<tr>
<td>HIM 3106</td>
<td>Pathophysiology</td>
<td>3</td>
</tr>
<tr>
<td>HIM 3107</td>
<td>Health Information Management Leadership and Strategic Management</td>
<td>3</td>
</tr>
<tr>
<td>HIM 3111</td>
<td>Statistics and Research in Health Care</td>
<td>3</td>
</tr>
<tr>
<td>HIM 3113</td>
<td>Healthcare Database Design and Development</td>
<td>3</td>
</tr>
<tr>
<td>HIM 3203</td>
<td>Electronic Health Record Systems</td>
<td>3</td>
</tr>
<tr>
<td>HIM 3208</td>
<td>International Classification of Diseases</td>
<td>3</td>
</tr>
<tr>
<td>HIM 3212</td>
<td>Clinical Procedures</td>
<td>2</td>
</tr>
<tr>
<td>HIM 3214</td>
<td>Pharmacology</td>
<td>1</td>
</tr>
<tr>
<td>HIM 3271</td>
<td>Professional Development</td>
<td>1</td>
</tr>
<tr>
<td>HIM 3297</td>
<td>Health Information Management Human Resource Management (WI)</td>
<td>3</td>
</tr>
<tr>
<td>HIM 4101</td>
<td>Health Informatics: Infrastructure and Standards</td>
<td>3</td>
</tr>
<tr>
<td>HIM 4102</td>
<td>Legal Aspects of Health Information Management</td>
<td>3</td>
</tr>
<tr>
<td>HIM 4207</td>
<td>Healthcare Quality Improvement</td>
<td>3</td>
</tr>
<tr>
<td>HIM 4105</td>
<td>Current Procedural Terminology Coding</td>
<td>3</td>
</tr>
<tr>
<td>HIM 4113</td>
<td>Healthcare Reimbursement Systems</td>
<td>3</td>
</tr>
<tr>
<td>HIM 4121</td>
<td>Healthcare Data Analytics</td>
<td>1</td>
</tr>
<tr>
<td>HIM 4185</td>
<td>Professional Practice Internship</td>
<td>1</td>
</tr>
<tr>
<td>HIM 4202</td>
<td>Health Information Management Project Management</td>
<td>3</td>
</tr>
<tr>
<td>HIM 4206</td>
<td>Intermediate Coding</td>
<td>3</td>
</tr>
<tr>
<td>HIM 4104</td>
<td>Health Information Management Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>HIM 4286</td>
<td>Management Internship</td>
<td>4</td>
</tr>
<tr>
<td>HIM 4298</td>
<td>Health Information Management Senior Seminar (WI)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credit Hours: 61**

1. You should consult with your advisor for information on the distinctions between Anatomy and Physiology selection sequence and its implication for your degree and career goals. Satisfactory completion of the KINS 1221 and KINS 1222 sequence or the KINS 1223 and KINS 1224 sequence will meet the two-course GenEd Science and Technology requirement. Courses are similar, but not interchangeable and must be taken in the correct sequence. Students choosing the KINS 1221 and KINS 1222 sequence may need to take an additional 2-credit elective to meet credit hours degree graduation requirement. Please see a departmental academic advisor for clarification.

2. The professional courses follow a strict semester-by-semester sequence that requires careful attention to registration dates. See a departmental academic advisor for help planning your professional course registration.

### Electives

6 credits. Strongly recommended electives include business writing electives.

### Suggested Academic Plan

**Bachelor of Science in Health Information Management**

**Requirements for New Students starting in the 2015-2016 Academic Year**

#### Year 1

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
</tbody>
</table>

---

¹ You should consult with your advisor for information on the distinctions between Anatomy and Physiology selection sequence and its implication for your degree and career goals. Satisfactory completion of the KINS 1221 and KINS 1222 sequence or the KINS 1223 and KINS 1224 sequence will meet the two-course GenEd Science and Technology requirement. Courses are similar, but not interchangeable and must be taken in the correct sequence. Students choosing the KINS 1221 and KINS 1222 sequence may need to take an additional 2-credit elective to meet credit hours degree graduation requirement. Please see a departmental academic advisor for clarification.

² The professional courses follow a strict semester-by-semester sequence that requires careful attention to registration dates. See a departmental academic advisor for help planning your professional course registration.
<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>HIM 1101 Medical Terminology</td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>17</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>KINS 1223 or 1221 Human Anatomy and Physiology I (GS)</td>
<td>3-4</td>
</tr>
<tr>
<td>IH 0851 or 0951 Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>15-16</td>
</tr>
<tr>
<td><strong>Year 2</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>IH 0852 or 0952 Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>KINS 1224 or 1222 Human Anatomy and Physiology II (GS)</td>
<td>3-4</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1013 Elements of Statistics</td>
<td></td>
</tr>
<tr>
<td>SOC 1167 Social Statistics</td>
<td></td>
</tr>
<tr>
<td>HRPR 1001 Public Health: The Way We Live, Work and Play</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>15-16</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>CIS 1055 Computers and Applications</td>
<td>4</td>
</tr>
<tr>
<td>HIM 2215 Health Information Management IT Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>HIM 2203 U.S. Health Care System</td>
<td>3</td>
</tr>
<tr>
<td>Free Elective</td>
<td>3</td>
</tr>
<tr>
<td>Free Elective (if needed; see footnote 2)</td>
<td>2</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>15</td>
</tr>
<tr>
<td><strong>Year 3</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>HIM 3101 Health Record Documentation</td>
<td>3</td>
</tr>
<tr>
<td>HIM 3106 Pathophysiology</td>
<td>3</td>
</tr>
<tr>
<td>HIM 3107 Health Information Management Leadership and Strategic Management</td>
<td>3</td>
</tr>
<tr>
<td>HIM 3111 Statistics and Research in Health Care</td>
<td>3</td>
</tr>
<tr>
<td>HIM 3113 Healthcare Database Design and Development</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>15</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>HIM 3297 Health Information Management Human Resource Management [WI]</td>
<td>3</td>
</tr>
<tr>
<td>HIM 3214 Pharmacology</td>
<td>1</td>
</tr>
<tr>
<td>HIM 3271 Professional Development</td>
<td>1</td>
</tr>
<tr>
<td>HIM 3212 Clinical Procedures</td>
<td>2</td>
</tr>
<tr>
<td>HIM 3208 International Classification of Diseases</td>
<td>3</td>
</tr>
<tr>
<td>HIM 3203 Electronic Health Record Systems</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>13</td>
</tr>
<tr>
<td><strong>Year 4</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>HIM 4101 Health Informatics: Infrastructure and Standards</td>
<td>3</td>
</tr>
<tr>
<td>HIM 4102 Legal Aspects of Health Information Management</td>
<td>3</td>
</tr>
<tr>
<td>HIM 4105 Current Procedural Terminology Coding</td>
<td>3</td>
</tr>
<tr>
<td>HIM 4113 Healthcare Reimbursement Systems</td>
<td>3</td>
</tr>
<tr>
<td>HIM 4207 Healthcare Quality Improvement</td>
<td>3</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
</tr>
<tr>
<td>--------------</td>
<td>----------------------------------------</td>
</tr>
<tr>
<td>HIM 4185</td>
<td>Professional Practice Internship</td>
</tr>
<tr>
<td>HIM 4121</td>
<td>Healthcare Data Analytics</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Spring**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIM 4202</td>
<td>Health Information Management Project Management</td>
<td>3</td>
</tr>
<tr>
<td>HIM 4104</td>
<td>Health Information Management Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>HIM 4206</td>
<td>Intermediate Coding</td>
<td>3</td>
</tr>
<tr>
<td>HIM 4286</td>
<td>Management Internship</td>
<td>4</td>
</tr>
<tr>
<td>HIM 4298</td>
<td>Health Information Management Senior Seminar [WI] $^3$</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td><strong>Total Credit Hours:</strong></td>
<td></td>
<td><strong>123-125</strong></td>
</tr>
</tbody>
</table>

A grade of C or better is required to satisfy ALL prerequisite and professional course requirements. Grades below a C will not be accepted.

**Note:** All professional courses are offered only once a year.

1. MATH 0823 or MATH 0824 is strongly recommended.
2. You should consult your advisor for information on the distinctions between the anatomy and physiology selection sequence and its implication for your degree and career goals. Satisfactory completion of the KINS 1221 and KINS 1222 sequence or the KINS 1223 and KINS 1224 sequence will meet the two-course GenEd Science & Technology requirement. These courses are similar but not interchangeable. Courses must be taken in the correct sequence. Students choosing KINS 1221 and KINS 1222 may need to take an additional 2 credit elective to meet credit hour degree requirements as well as annual progress requirements. Please see your advisor for clarification.
3. Indicates writing capstone for major.

---

**Kinesiology**

Rick Swalm, Assistant Chair for Undergraduate Studies
Pearson Hall 233-A
215-204-8713
rswalm@temple.edu

John Jeka, Ph.D, Chair
Pearson Hall 230
215-204-4405
jjeka@temple.edu
http://cph.temple.edu/kinesiology

The undergraduate programs in Kinesiology leading to the Bachelor of Science degree or the Bachelor of Science in Athletic Training degree require students to complete coursework in three broad areas: the General Education (GenEd (p. 143)) Curriculum, the Kinesiology Core, and a professional application of the discipline of Kinesiology. Moreover, all students in the Kinesiology program must complete the College Core Course, HRPR 1001 Public Health: The Way We Live, Work and Play.

The university General Education Curriculum is divided into nine categories:

1. Analytical Reading & Writing
2. Mosaic I & II
3. Arts
4. Human Behavior
5. Global/World Society
6. U.S. Society
7. Race & Diversity
8. Science & Technology $^1$
9. Quantitative Literacy

$^1$ The Kinesiology Department requires KINS 1223 Human Anatomy and Physiology I and KINS 1224 Human Anatomy and Physiology II to fulfill the Science & Technology requirement.

All University GenEd courses must be completed with a minimum C- grade in order to count toward graduation.
Kinesiology is the study of physical activity. The Kinesiology Core includes a group of foundation courses that deal with the intellectual, physical, social, psychological, and philosophical factors which influence and are influenced by human beings as they move.

**Foundation Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>KINS 1201</td>
<td>Introduction to Kinesiology</td>
<td>3</td>
</tr>
<tr>
<td>KINS 1223</td>
<td>Human Anatomy and Physiology I</td>
<td>4</td>
</tr>
<tr>
<td>KINS 1224</td>
<td>Human Anatomy and Physiology II</td>
<td>4</td>
</tr>
<tr>
<td>KINS 2203</td>
<td>Physiology of Physical Activity</td>
<td>4</td>
</tr>
<tr>
<td>KINS 2204</td>
<td>Motor Behavior</td>
<td>3</td>
</tr>
<tr>
<td>KINS 3202</td>
<td>Biomechanics of Physical Activity</td>
<td>4</td>
</tr>
<tr>
<td>KINS 3296</td>
<td>The Social-Psychology of Physical Activity</td>
<td>3</td>
</tr>
<tr>
<td>KINS 4296</td>
<td>History and Philosophy of Kinesiology</td>
<td>3</td>
</tr>
</tbody>
</table>

In addition to taking the foundation courses, students are required to satisfy the forms of movement requirement, which consists of developing knowledge and skills in a broad spectrum of movement activities (i.e., aquatics, fitness, survival, and lifestyle). All Kinesiology Core courses must be completed with a minimum grade of C in order to count toward graduation.

The Kinesiology Department offers four professional application options to allow students to concentrate their studies:

- Athletic Training
- Kinesiology's Exercise and Sport Science concentration
- Kinesiology's Physical and Health Education Teacher Education (PHETE) concentration
- Kinesiology's Pre-Health Professions concentration

Students select the professional application option that satisfies their short term educational and professional objectives. All required professional application courses must be completed with a minimum grade of C in order to count toward graduation (PHETE requires a minimum grade of B-).

The **Athletic Training Education Major** prepares students to work with physically active populations (e.g., athletic teams, dance, circus, NASCAR, Disney, rodeo, and PT clinics). The certified athletic trainer functions as an integral member of the athletic healthcare team in secondary schools, colleges, universities, professional teams, and sports medicine clinics, providing leadership in the prevention, evaluation, immediate care, and rehabilitation of sport-related injuries. The Athletic Training major requires fulfillment of both academic coursework and clinical fieldwork experiences. This program of study is approved by the Commission on the Accreditation of Athletic Training Education (CAATE) and is designed to prepare students for certification as athletic trainers by the Board of Certification (BOC) and for Class "A" certification in the Commonwealth of Pennsylvania.

The **Athletic Training Education Major at the undergraduate level is being phased out**, and those seeking certification in Athletic Training should consult a departmental advisor and review Temple's graduate programs in Athletic Training. No further students will be admitted to this program after fall 2015, although those already in the program will be allowed to graduate in the program as long as they continue study without interruption.

The **Exercise and Sport Science Concentration** provides students with knowledge and competencies required for professional service in a variety of sport, fitness, wellness, and rehabilitation settings. The exercise and sport science concentration also prepares students for graduate study in exercise physiology or in a variety of related health professions. Program competencies include health screening, fitness assessment, exercise program development, health-fitness counseling, and therapeutic exercise supervision of patients with special needs. Concentration courses include but are not limited to advanced exercise physiology, exercise in health and disease, exercise testing and programming, electrocardiography, exercise and aging, and applied technologies. The exercise and sport scientist understands the complexity of the human body and the interaction among physical activity, exercise, and good health. The improved function, health, and well-being of the total person - **Body, Mind, and Spirit** - are the ultimate goals of professionals in this field.

Exercise scientists apply their knowledge, skills, and beliefs to all people regardless of gender, age, social status, and current health-related fitness level or disease state. Wherever there is a need to improve functionality, health-fitness, medical prognosis, optimal aging, or wellness, one will find an exercise scientist providing leadership in programs that help individuals optimize their lives and health. In summary, exercise science is a stimulating area of study and a rewarding professional application with a very bright future.

Teacher education is the focus of the **Physical and Health Education Teacher Education (PHETE) Concentration**. This concentration prepares students to teach physical and health education in public and private schools (grades K through 12). The PHETE concentration integrates academic preparation with fieldwork experiences each semester, culminating in a dual-level (secondary and elementary) full semester, student-teaching experience. Coursework in discipline specific content, methods of teaching, assessment and evaluation, educational psychology, educational foundations, cultural diversity and adapted activities, and administration all help teacher education students assume their roles as competent teachers in today’s society. Admission into the PHETE program takes place after the sophomore year upon completing the pre-admission coursework; two in-school teaching experiences; the PECT PAPA tests in reading, mathematics, and writing; the Praxis II test in fundamental content knowledge, as well as an interview with the PHETE faculty. All PHETE, Health-Related Professions, and required Education courses must be completed with a minimum grade of B- in order to count toward admission and graduation. All PHETE and Health-Related Professions courses required in the concentration are valid toward
certification for a maximum of five (5) years. If one does not get certified within this time period, those courses that have expired must be retaken. A cumulative GPA of 3.00 or greater is required for admission into the junior year and certification. After admission, one additional Praxis II test is required for certification: Health and Physical Education Content Knowledge. Upon completion of the PHETE concentration, passing the appropriate standardized tests, and applying to the Pennsylvania Department of Education for an Instructional I Certificate in Health and Physical Education, graduates will be licensed to teach K-12 Health and Physical Education by the Commonwealth of Pennsylvania.

The Pre-Health Professions Concentration prepares students for admission into graduate programs in a multitude of the health professions such as physical therapy, occupational therapy, medicine, dentistry, physician assistant practice, and optometry. The Department of Kinesiology’s Core is a perfect complement to the standard prerequisite courses and expanded elective courses available through this concentration. This combination of coursework and practical experience will position students well for continued study at the graduate level. While the Pre-Health Professions concentration includes the standard prerequisite courses and the option for elective courses for admission into graduate programs for a multitude of health professions, students are advised to check the prerequisites for their intended graduate programs and work these into their undergraduate programs where elective coursework is afforded. Students are also advised to maintain a minimum grade point average of 3.00 (B) since entry into graduate programs in the health professions is highly competitive. A grade of B or better in the specific prerequisites is required for most graduate programs. In addition to the Pre-Health Professions concentration, the Department of Kinesiology has a memorandum of understanding with Temple University’s Doctor of Physical Therapy (DPT) program providing academically gifted students the opportunity to enter into a 3+3 program. Students who are accepted into Temple’s DPT program at the conclusion of their junior year are allowed to count the first year of their DPT program as the fourth year of their undergraduate studies, thus eliminating one year of academic work. Students can only start the 3+3 program the first semester of their freshman year.

Programs

- Bachelor of Science in Athletic Training (p. 709)
- Bachelor of Science in Kinesiology: Exercise & Sport Science Concentration (p. 712)
- Bachelor of Science in Kinesiology: Physical & Health Education Teacher Education Concentration (p. 714)
- Bachelor of Science in Kinesiology: Pre-Health Professions Concentration (p. 717)
- Bachelor of Science in Kinesiology: Pre-Health Professions Concentration 3+3 Program (p. 720)

Bachelor of Science in Athletic Training

The Athletic Training Education Major prepares students to work with physically-active populations (e.g., athletic teams, dance, circus, NASCAR, Disney, rodeo, PT clinics). The certified athletic trainer functions as an integral member of the athletic health care team in secondary schools, colleges, universities, professional teams, and sports medicine clinics, providing leadership in the prevention, evaluation, immediate care, and rehabilitation of sport-related injuries. The Athletic Training major requires fulfillment of both academic coursework and clinical fieldwork experiences. This program of study is approved by the Commission on the Accreditation of Athletic Training Education (CAATE) and is designed to prepare students for certification as athletic trainers by the Board of Certification (BOC) and for Class “A” certification in the Commonwealth of Pennsylvania.

The Athletic Training Education Major at the undergraduate level is being phased out, and those seeking certification in Athletic Training should consult a departmental advisor and review Temple’s graduate programs in Athletic Training. No further students will be admitted to this program after fall 2015, although those already in the program will be allowed to graduate in the program as long as they continue study without interruption.

Summary of Requirements

University Requirements

All new students are required to complete the university’s General Education (GenEd (p. 143)) curriculum.

All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific writing-intensive courses required for this major are KINS 3296 and KINS 4296.

College Requirement

All College of Public Health undergraduates must successfully complete the College Core Course, HRPR 1001 Public Health: The Way We Live, Work and Play.

Clearance Requirements

Please note the Athletic Training program requires students to complete clinical/field education experiences at facilities both on and off the University campus. These placements will require criminal background checks, Act 33/34 clearances and perhaps a drug screen. The results of these requirements may limit and potentially eliminate placement options which can, in turn, result in an inability to meet graduation requirements. Additionally, conviction of a misdemeanor, felony, or felonious or illegal act may prevent you from becoming credentialed and/or licensed to practice in athletic training.
Major Requirements

Kinesiology Core Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>KINS 1201</td>
<td>Introduction to Kinesiology</td>
<td>3</td>
</tr>
<tr>
<td>KINS 1223</td>
<td>Human Anatomy and Physiology I</td>
<td>4</td>
</tr>
<tr>
<td>KINS 1224</td>
<td>Human Anatomy and Physiology II</td>
<td>4</td>
</tr>
<tr>
<td>KINS 2203</td>
<td>Physiology of Physical Activity</td>
<td>4</td>
</tr>
<tr>
<td>KINS 2204</td>
<td>Motor Behavior</td>
<td>3</td>
</tr>
<tr>
<td>KINS 3202</td>
<td>Biomechanics of Physical Activity</td>
<td>4</td>
</tr>
<tr>
<td>KINS 3296</td>
<td>The Social-Psychology of Physical Activity (WI)</td>
<td>3</td>
</tr>
<tr>
<td>KINS 4296</td>
<td>History and Philosophy of Kinesiology (WI)</td>
<td>3</td>
</tr>
</tbody>
</table>

Forms of Movement Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>KINS 1001-1099</td>
<td>Physical Fitness Activity</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Lifestyle Activity</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Survival Activity</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Aquatics Activity</td>
<td></td>
</tr>
</tbody>
</table>

Program-Specific Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>KINS 1442</td>
<td>Basic Techniques in Athletic Training</td>
<td>2</td>
</tr>
<tr>
<td>KINS 1444</td>
<td>Movement Injuries: Prevention and Care</td>
<td>3</td>
</tr>
<tr>
<td>KINS 2421</td>
<td>Emergency Medical Care for Health Professionals</td>
<td>3</td>
</tr>
<tr>
<td>KINS 2424</td>
<td>Functional Anatomy for Kinesiology</td>
<td>3</td>
</tr>
<tr>
<td>KINS 2441</td>
<td>Lower Extremity: Assessment and Treatment of Injuries</td>
<td>3</td>
</tr>
<tr>
<td>KINS 2442</td>
<td>Upper Extremity: Assessment and Treatment of Injuries</td>
<td>3</td>
</tr>
<tr>
<td>KINS 3441</td>
<td>Therapeutic Modalities in Athletic Training</td>
<td>4</td>
</tr>
<tr>
<td>KINS 3442</td>
<td>Therapeutic Exercises in Athletic Training</td>
<td>4</td>
</tr>
<tr>
<td>KINS 3443</td>
<td>Head, Neck, and Spine: Assessment and Treatment of Injuries</td>
<td>3</td>
</tr>
<tr>
<td>KINS 3444</td>
<td>General Medical Conditions in Athletic Training</td>
<td>3</td>
</tr>
<tr>
<td>KINS 3487</td>
<td>Practicum in Athletic Training I</td>
<td>3</td>
</tr>
<tr>
<td>KINS 3687</td>
<td>Practicum in Athletic Training II</td>
<td>3</td>
</tr>
<tr>
<td>KINS 4242</td>
<td>Exercise, Nutrition and Behavior</td>
<td>3</td>
</tr>
<tr>
<td>or PBHL 1104</td>
<td>Nutrition and Health</td>
<td></td>
</tr>
<tr>
<td>KINS 4311</td>
<td>Advanced Physiology of Exercise</td>
<td>3</td>
</tr>
<tr>
<td>KINS 4314</td>
<td>Neuromuscular Principles of Strength and Conditioning with Application to Special Populations</td>
<td>4</td>
</tr>
<tr>
<td>KINS 4443</td>
<td>Organization and Administration in Athletic Training</td>
<td>3</td>
</tr>
<tr>
<td>KINS 4450</td>
<td>Special Topics in Athletic Training</td>
<td>3</td>
</tr>
<tr>
<td>KINS 4487</td>
<td>Practicum in Athletic Training III</td>
<td>3</td>
</tr>
<tr>
<td>KINS 4687</td>
<td>Practicum in Athletic Training IV</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credit Hours: 92

Note: All courses in the Department of Kinesiology and required courses in the major must be completed with a minimum grade of C. The Kinesiology Core and program requirements must be satisfactorily completed prior to enrolling in any internship/externship or student teaching experience.

The degree of Bachelor of Science in Athletic Training may be conferred upon a student by recommendation of the faculty upon the satisfactory completion of 124 credit hours.

Suggested Academic Plan

Bachelor of Science in Athletic Training

Requirements for New Students starting in the 2015-2016 Academic Year

Year 1

Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>KINS 1223</td>
<td>Human Anatomy and Physiology I</td>
<td>4</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>Term Credit Hours</td>
<td>Year 1</td>
<td></td>
</tr>
<tr>
<td>-------------------</td>
<td>--------</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td>KINS 1201</td>
<td>Introduction to Kinesiology</td>
<td></td>
</tr>
<tr>
<td>KINS 1224</td>
<td>Human Anatomy and Physiology II</td>
<td></td>
</tr>
<tr>
<td>KINS 1442</td>
<td>Basic Techniques in Athletic Training</td>
<td></td>
</tr>
<tr>
<td>KINS 1444</td>
<td>Movement Injuries: Prevention and Care</td>
<td></td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td></td>
</tr>
<tr>
<td>Kinesiology 1001-1099 Forms of Movement</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Term Credit Hours</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Year 2</td>
<td></td>
</tr>
<tr>
<td>KINS 2204</td>
<td>Motor Behavior</td>
<td></td>
</tr>
<tr>
<td>KINS 2421</td>
<td>Emergency Medical Care for Health Professionals</td>
<td></td>
</tr>
<tr>
<td>KINS 2424</td>
<td>Functional Anatomy for Kinesiology</td>
<td></td>
</tr>
<tr>
<td>KINS 3441</td>
<td>Therapeutic Modalities in Athletic Training</td>
<td></td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Term Credit Hours</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td>KINS 2441</td>
<td>Lower Extremity: Assessment and Treatment of Injuries</td>
<td></td>
</tr>
<tr>
<td>KINS 3202</td>
<td>Biomechanics of Physical Activity</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PBHL 1104</td>
<td>Nutrition and Health</td>
<td></td>
</tr>
<tr>
<td>KINS 4242</td>
<td>Exercise, Nutrition and Behavior</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Term Credit Hours</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>Year 3</td>
<td></td>
</tr>
<tr>
<td>KINS 2442</td>
<td>Upper Extremity: Assessment and Treatment of Injuries</td>
<td></td>
</tr>
<tr>
<td>KINS 3487</td>
<td>Practicum in Athletic Training I</td>
<td></td>
</tr>
<tr>
<td>KINS 3444</td>
<td>General Medical Conditions in Athletic Training</td>
<td></td>
</tr>
<tr>
<td>KINS 2203</td>
<td>Physiology of Physical Activity</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Term Credit Hours</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td>KINS 3443</td>
<td>Head, Neck, and Spine: Assessment and Treatment of Injuries</td>
<td></td>
</tr>
<tr>
<td>KINS 3687</td>
<td>Practicum in Athletic Training II</td>
<td></td>
</tr>
<tr>
<td>KINS 3442</td>
<td>Therapeutic Exercises in Athletic Training</td>
<td></td>
</tr>
<tr>
<td>Kinesiology 1001-1099 Forms of Movement</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Term Credit Hours</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>Year 4</td>
<td></td>
</tr>
<tr>
<td>KINS 3296</td>
<td>The Social-Psychology of Physical Activity [WI]</td>
<td></td>
</tr>
<tr>
<td>KINS 4311</td>
<td>Advanced Physiology of Exercise</td>
<td></td>
</tr>
<tr>
<td>KINS 4443</td>
<td>Organization and Administration in Athletic Training</td>
<td></td>
</tr>
<tr>
<td>KINS 4487</td>
<td>Practicum in Athletic Training III</td>
<td></td>
</tr>
<tr>
<td>Kinesiology 1001-1099 Forms of Movement</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>HRPR 1001</td>
<td>Public Health: The Way We Live, Work and Play</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Term Credit Hours</td>
<td>16</td>
</tr>
</tbody>
</table>
Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>KINS 4296</td>
<td>History and Philosophy of Kinesiology [WI]</td>
<td>3</td>
</tr>
<tr>
<td>KINS 4314</td>
<td>Neuromuscular Principles of Strength and Conditioning with Application to Special Populations</td>
<td>4</td>
</tr>
<tr>
<td>KINS 4687</td>
<td>Practicum in Athletic Training IV</td>
<td>3</td>
</tr>
<tr>
<td>KINS 4450</td>
<td>Special Topics in Athletic Training</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Kinesiology 1001-1099 Forms of Movement</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>14</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Total Credit Hours:</strong></td>
<td><strong>124</strong></td>
</tr>
</tbody>
</table>

**Bachelor of Science in Kinesiology: Exercise & Sport Science Concentration**

The Exercise and Sport Science Concentration provides students with knowledge and competencies required for professional service in a variety of sport, fitness, wellness, and rehabilitation settings. The exercise and sport science concentration also prepares students for graduate study in exercise physiology or in a variety of related health professions. Program competencies include health screening, fitness assessment, exercise program development, health-fitness counseling, and therapeutic exercise supervision of patients with special needs. Concentration courses include, but are not limited to, advanced exercise physiology, exercise in health and disease, exercise testing and programming, electrocardiography, exercise and aging, and applied technologies. The exercise and sport scientist understands the complexity of the human body and the interaction among physical activity, exercise, and good health. The improved function, health, and well-being of the total person--*Body, Mind, and Spirit*--are the ultimate goals of professionals in this field.

Exercise scientists apply their knowledge, skills, and beliefs to all people regardless of gender, age, social status, and current health-related fitness level or disease state. Wherever there is a need to improve functionality, health-fitness, medical prognosis, optimal aging, or wellness, one will find an exercise scientist providing leadership in programs that help individuals optimize their lives and health. In summary, exercise science is a stimulating area of study and a rewarding professional application with a very bright future.

**Summary of Requirements**

**University Requirements**

All new students are required to complete the university's General Education (GenEd [p. 143]) curriculum.

All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific writing-intensive courses required for this major are KINS 3296 and KINS 4296.

**College Requirement**

All College of Public Health undergraduates must successfully complete the College Core Course, HRPR 1001 Public Health: The Way We Live, Work and Play.

**Clearance Requirements**

Please note the Exercise and Sport Science program requires students to complete clinical/field education experiences at facilities both on and off the University campus. These placements may require criminal background checks, Act 33/34 clearances and perhaps a drug screen. The results of these requirements may limit and potentially eliminate placement options for the student which can, in turn, result in an inability to meet graduation requirements. Additionally, conviction of a misdemeanor, felony, or felonious or illegal act may prevent you from becoming credentialed and/or licensed to practice.

**Major Requirements**

**Kinesiology Core Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>KINS 1201</td>
<td>Introduction to Kinesiology</td>
<td>3</td>
</tr>
<tr>
<td>KINS 1223</td>
<td>Human Anatomy and Physiology I</td>
<td>4</td>
</tr>
<tr>
<td>KINS 1224</td>
<td>Human Anatomy and Physiology II</td>
<td>4</td>
</tr>
<tr>
<td>KINS 2203</td>
<td>Physiology of Physical Activity</td>
<td>4</td>
</tr>
<tr>
<td>KINS 2204</td>
<td>Motor Behavior</td>
<td>3</td>
</tr>
<tr>
<td>KINS 3202</td>
<td>Biomechanics of Physical Activity</td>
<td>4</td>
</tr>
<tr>
<td>KINS 3296</td>
<td>The Social-Psychology of Physical Activity (WI)</td>
<td>3</td>
</tr>
<tr>
<td>KINS 4296</td>
<td>History and Philosophy of Kinesiology (WI)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Forms of Movement Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kinesiology 1001-1099</td>
<td></td>
</tr>
</tbody>
</table>
### Physical Fitness Activity
- Lifestyle Activity
- Survival Activity
- Aquatics Activity

### Program-Specific Requirements and Electives

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>KINS 1444</td>
<td>Movement Injuries: Prevention and Care</td>
<td>3</td>
</tr>
<tr>
<td>KINS 2362</td>
<td>Introduction to Exercise and Sport Science</td>
<td>3</td>
</tr>
<tr>
<td>KINS 2364</td>
<td>Applied Technologies in Kinesiology</td>
<td>3</td>
</tr>
<tr>
<td>KINS 3363</td>
<td>Basic Electrocardiography</td>
<td>3</td>
</tr>
<tr>
<td>KINS 3368</td>
<td>Principles of Health Fitness Program Management</td>
<td>3</td>
</tr>
<tr>
<td>KINS 4311</td>
<td>Advanced Physiology of Exercise</td>
<td>3</td>
</tr>
<tr>
<td>KINS 4312</td>
<td>Exercise and Nutrient Metabolism</td>
<td>3</td>
</tr>
<tr>
<td>KINS 4313</td>
<td>Exercise and Aging</td>
<td>3</td>
</tr>
<tr>
<td>KINS 4314</td>
<td>Neuromuscular Principles of Strength and Conditioning with Application to Special Populations</td>
<td>4</td>
</tr>
<tr>
<td>KINS 4334</td>
<td>Principles and Practices of Graded Exercise Testing and Exercise Program Development</td>
<td>4</td>
</tr>
<tr>
<td>KINS 4385</td>
<td>Internship in Exercise and Sport Science</td>
<td>12</td>
</tr>
<tr>
<td>PBHL 1104</td>
<td>Nutrition and Health</td>
<td>3</td>
</tr>
<tr>
<td>PBHL 3103</td>
<td>Counseling Techniques for Health Professionals</td>
<td>3</td>
</tr>
<tr>
<td>PSY 1001</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

### Electives

9

### Total Credit Hours

96

Note: All courses in the Department of Kinesiology and required courses in the selected professional application option must be completed with a minimum grade of C. The Kinesiology Core and program requirements must be satisfactorily completed prior to enrolling in any internship/externship or student teaching experience.

The degree of Bachelor of Science in Kinesiology with a concentration in Exercise & Sport Science may be conferred upon a student by recommendation of the faculty upon the satisfactory completion of 128 semester hours of credit.

### Suggested Academic Plan

#### Bachelor of Science in Kinesiology: Exercise & Sport Science Concentration

#### Requirements for New Students starting in the 2015-2016 Academic Year

**Year 1**

**Fall**
- KINS 1223 Human Anatomy and Physiology I          4
- Kinesiology 1001-1099 Forms of Movement          2
- ENG 0802, 0812, or 0902 Analytical Reading and Writing [GW] 4
- GenEd Quantitative Literacy Course [GQ]            4
- GenEd Breadth Course                              3

**Term Credit Hours**

17

**Spring**
- KINS 1201 Introduction to Kinesiology             3
- KINS 1224 Human Anatomy and Physiology II          4
- Kinesiology 1001-1099 Forms of Movement          1
- PSY 1001 Introduction to Psychology               3
- GenEd Breadth Course                              3
- HRPR 1001 Public Health: The Way We Live, Work and Play 3

**Term Credit Hours**

17

**Year 2**

**Fall**
- KINS 2203 Physiology of Physical Activity          4
- Kinesiology 1001-1099 Forms of Movement          1
- PBHL 1104 Nutrition and Health                    3
### Bachelor of Science in Kinesiology: Physical & Health Education Teacher Education Concentration

Teacher education is the focus of the **Physical and Health Education Teacher Education (PHETE) Concentration**. This concentration prepares students to teach physical and health education in public and private schools (grades K through 12). The PHETE concentration integrates academic preparation with fieldwork experiences each semester, culminating in a dual-level (secondary and elementary) full semester, student-teaching experience. Coursework in discipline-specific content, methods of teaching, assessment and evaluation, educational psychology, educational foundations, cultural diversity and adapted activities, and administration all help teacher education students assume their roles as competent teachers in today’s society. Admission into the PHETE program takes place after the sophomore year upon completing the pre-admission coursework; two in-school teaching experiences; the PECT PAPA tests in reading, mathematics, and writing; the Praxis II test in fundamental content knowledge; as well as an interview with the PHETE faculty. All PHETE, Health-Related Professions, and Education courses required in the concentration are valid toward certification for a maximum of five (5) years. If one does not get certified within this time period, those courses that have expired must be retaken. A

<table>
<thead>
<tr>
<th>Year 3</th>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>KINS 2364</td>
<td>Applied Technologies in Kinesiology 3</td>
</tr>
<tr>
<td>KINS 3202</td>
<td>Biomechanics of Physical Activity 4</td>
</tr>
<tr>
<td>KINS 3296</td>
<td>The Social-Psychology of Physical Activity [WI] 3</td>
</tr>
<tr>
<td>KINS 3363</td>
<td>Basic Electrocardiography 3</td>
</tr>
<tr>
<td>KINS 4311</td>
<td>Advanced Physiology of Exercise 3</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>KINS 4312</td>
<td>Exercise and Nutrient Metabolism 3</td>
</tr>
<tr>
<td>KINS 4313</td>
<td>Exercise and Aging 3</td>
</tr>
<tr>
<td>KINS 4314</td>
<td>Neuromuscular Principles of Strength and Conditioning with Application to Special Populations 4</td>
</tr>
<tr>
<td>Kinesiology 1001-1099 Forms of Movement</td>
<td>2</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td><strong>Year 4</strong></td>
<td>Term Credit Hours</td>
</tr>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>KINS 3368</td>
<td>Principles of Health Fitness Program Management 3</td>
</tr>
<tr>
<td>KINS 4296</td>
<td>History and Philosophy of Kinesiology [WI] 3</td>
</tr>
<tr>
<td>KINS 4334</td>
<td>Principles and Practices of Graded Exercise Testing and Exercise Program Development 4</td>
</tr>
<tr>
<td>PBHL 3103</td>
<td>Counseling Techniques for Health Professionals 3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>KINS 4385</td>
<td>Internship in Exercise and Sport Science 12</td>
</tr>
<tr>
<td>Elective</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credit Hours</strong></td>
<td>15</td>
</tr>
</tbody>
</table>

**Total Credit Hours:** 128
cumulative GPA of 3.00 or greater is required for admission into the junior year and certification. After admission, one additional Praxis II test is required for certification: Health and Physical Education Content Knowledge. Upon completion of the PHETE concentration, passing the appropriate standardized tests, and applying to the Pennsylvania Department of Education for an Instructional I Certificate in Health and Physical Education, graduates will be licensed to teach K-12 Health and Physical Education by the Commonwealth of Pennsylvania.

Summary of Requirements

University Requirements

All new students are required to complete the university's General Education (GenEd (p. 143)) curriculum.

All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific writing-intensive courses required for this major are KINS 3296 and KINS 4296.

College Requirement

All College of Public Health undergraduates must successfully complete the College Core Course, HRPR 1001 Public Health: The Way We Live, Work and Play.

Clearance Requirements

Please note the PHETE program requires students to complete student teaching experiences at off campus facilities. These placements will require criminal background checks, Act 33/34/73 clearances and perhaps a drug screen. The results of these requirements may limit and potentially eliminate placement options which can, in turn, result in an inability to meet graduation requirements. Additionally, conviction of a misdemeanor, felony, or felonious or illegal act may prevent you from becoming credentialed and/or licensed to teach.

Major Requirements

Kinesiology Core Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>KINS 1201</td>
<td>Introduction to Kinesiology</td>
<td>3</td>
</tr>
<tr>
<td>KINS 1223</td>
<td>Human Anatomy and Physiology I</td>
<td>4</td>
</tr>
<tr>
<td>KINS 1224</td>
<td>Human Anatomy and Physiology II</td>
<td>4</td>
</tr>
<tr>
<td>KINS 2203</td>
<td>Physiology of Physical Activity</td>
<td>4</td>
</tr>
<tr>
<td>KINS 2204</td>
<td>Motor Behavior</td>
<td>3</td>
</tr>
<tr>
<td>KINS 3202</td>
<td>Biomechanics of Physical Activity</td>
<td>4</td>
</tr>
<tr>
<td>KINS 3296</td>
<td>The Social-Psychology of Physical Activity (WI)</td>
<td>3</td>
</tr>
<tr>
<td>KINS 4296</td>
<td>History and Philosophy of Kinesiology (WI)</td>
<td>3</td>
</tr>
</tbody>
</table>

Forms of Movement Courses

Kinesiology 1001-1099

6

Program-Specific Requirements and Electives

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHTE 2541</td>
<td>Introduction to Teaching Health Education I</td>
<td>1</td>
</tr>
<tr>
<td>PHTE 2542</td>
<td>Introduction to Teaching Health Education II</td>
<td>1</td>
</tr>
<tr>
<td>PHTE 2543</td>
<td>Basic Movement I</td>
<td>1</td>
</tr>
<tr>
<td>PHTE 2544</td>
<td>Basic Movement II</td>
<td>1</td>
</tr>
<tr>
<td>PHTE 2555</td>
<td>Microteaching in PHETE</td>
<td>1</td>
</tr>
<tr>
<td>PHTE 2556</td>
<td>Tutorial in PHETE</td>
<td>1</td>
</tr>
<tr>
<td>PHTE 3541</td>
<td>Advanced Movement I</td>
<td>3</td>
</tr>
<tr>
<td>PHTE 3542</td>
<td>Advanced Movement II</td>
<td>3</td>
</tr>
<tr>
<td>PHTE 3553</td>
<td>PHETE I</td>
<td>4</td>
</tr>
<tr>
<td>PHTE 3554</td>
<td>PHETE II</td>
<td>4</td>
</tr>
<tr>
<td>PHTE 3561</td>
<td>Health Science I</td>
<td>3</td>
</tr>
<tr>
<td>PHTE 3562</td>
<td>Health Science II</td>
<td>3</td>
</tr>
<tr>
<td>PHTE 3587</td>
<td>PHETE Practicum I</td>
<td>1</td>
</tr>
<tr>
<td>or PHTE 3787</td>
<td>Parkway High School Practicum</td>
<td></td>
</tr>
<tr>
<td>PHTE 3687</td>
<td>PHETE Practicum II</td>
<td>1</td>
</tr>
<tr>
<td>or PHTE 3787</td>
<td>Parkway High School Practicum</td>
<td></td>
</tr>
<tr>
<td>PHTE 4554</td>
<td>The School Environment</td>
<td>2</td>
</tr>
<tr>
<td>PHTE 4556</td>
<td>Developmental and Adapted PHETE</td>
<td>3</td>
</tr>
<tr>
<td>PHTE 4563</td>
<td>Health Science III</td>
<td>3</td>
</tr>
<tr>
<td>Course</td>
<td>Title</td>
<td>Credit Hours</td>
</tr>
<tr>
<td>----------</td>
<td>------------------------------------------------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>PHTE 4587</td>
<td>PHETE Practicum III</td>
<td>1</td>
</tr>
<tr>
<td>PHTE 4588</td>
<td>Student Teaching in Health and Physical Education</td>
<td>12</td>
</tr>
<tr>
<td>PHTE 4589</td>
<td>Field Study in PHETE</td>
<td>1</td>
</tr>
<tr>
<td>Math elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>SPED 2231</td>
<td>Introduction to Inclusive Education</td>
<td>3</td>
</tr>
<tr>
<td>SPED 3211</td>
<td>Effective Instructional Strategies for Young Children with Disabilities</td>
<td>3</td>
</tr>
<tr>
<td>ECED 3209</td>
<td>Teaching English Language Learners in the Early Grades</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credit Hours</strong></td>
<td><strong>96</strong></td>
</tr>
</tbody>
</table>

1. PHTE 3787 can only satisfy Practicum I or Practicum II requirements. This course cannot be used to satisfy both requirements.

Note: All courses in the Department of Kinesiology and required courses in the selected professional application options must be completed with a minimum grade of C. The PHETE program has a more stringent requirement of a minimum grade of B- in all PHETE courses and required Health-Related Professions and Education courses. The Kinesiology Core and program requirements must be satisfactorily completed prior to enrolling in any internship/externship or student teaching experience.

The degree of Bachelor of Science in Kinesiology with a concentration in Physical & Health Education Teacher Education may be conferred upon a student by recommendation of the faculty upon the satisfactory completion of 128 semester hours of credit.

### Suggested Academic Plan

#### Bachelor of Science in Kinesiology: Physical & Health Education Teacher Education Concentration

#### Requirements for New Students starting in the 2015-2016 Academic Year

##### Year 1

**Fall**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kinesiology 1001-1099 Forms of Movement</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>HRPR 1001</td>
<td>Public Health: The Way We Live, Work and Play</td>
<td>3</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours** 16

**Spring**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>KINS 1201</td>
<td>Introduction to Kinesiology</td>
<td>3</td>
</tr>
<tr>
<td>Kinesiology 1001-1099 Forms of Movement</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Math Elective</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours** 17

##### Year 2

**Fall**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>KINS 1223</td>
<td>Human Anatomy and Physiology I</td>
<td>4</td>
</tr>
<tr>
<td>KINS 2204</td>
<td>Motor Behavior</td>
<td>3</td>
</tr>
<tr>
<td>PHTE 2541</td>
<td>Introduction to Teaching Health Education I</td>
<td>1</td>
</tr>
<tr>
<td>PHTE 2543</td>
<td>Basic Movement I</td>
<td>1</td>
</tr>
<tr>
<td>PHTE 2555</td>
<td>Microteaching in PHETE</td>
<td>1</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>SPED 2231</td>
<td>Introduction to Inclusive Education</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours** 16

**Spring**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>KINS 1224</td>
<td>Human Anatomy and Physiology II</td>
<td>4</td>
</tr>
<tr>
<td>PHTE 2542</td>
<td>Introduction to Teaching Health Education II</td>
<td>1</td>
</tr>
<tr>
<td>PHTE 2544</td>
<td>Basic Movement II</td>
<td>1</td>
</tr>
</tbody>
</table>
Bachelor of Science in Kinesiology: Pre-Health Professions Concentration

The Pre-Health Professions Concentration prepares students for admission into Graduate Programs in a multitude of the Health Professions such as physical therapy, occupational therapy, medicine, dentistry, physician assistant practice, and optometry. The Department of Kinesiology's Core is a perfect complement to the standard prerequisite courses and expanded elective courses available through this concentration. This combination of coursework and practical experience will position students well for continued study at the graduate level. While the Pre-Health Professions concentration includes the standard prerequisite courses and the option for elective courses for admission into graduate programs for a multitude of health professions, students are advised to check the prerequisites for their intended graduate programs and work these into their programs where elective coursework is afforded. Students are also advised to maintain a minimum grade point average of 3.0 (B) since entry into graduate programs in
the health professions is highly competitive. A grade of B or better in the specific prerequisites is required for most graduate programs. In addition to the Pre-Health Professions concentration, the Department of Kinesiology has a memorandum of understanding with Temple University's Doctor of Physical Therapy (DPT) program providing academically gifted students the opportunity to enter into a 3+3 program. Students who are accepted into Temple's DPT program at the conclusion of their junior year are allowed to count the first year of their DPT program as the fourth year of their undergraduate studies, thus eliminating one year of academic work. Students can only start the 3+3 program the first semester of their freshman year.

**Summary of Requirements**

**University Requirements**

All new students are required to complete the university's General Education (GenEd (p. 143)) curriculum.

All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific writing-intensive courses required for this major are KINS 3296 and KINS 4296.

**College Requirement**

All College of Public Health undergraduates must successfully complete the College Core Course, HRPR 1001 Public Health: The Way We Live, Work and Play.

**Major Requirements**

**Kinesiology Core Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>KINS 1201</td>
<td>Introduction to Kinesiology</td>
<td>3</td>
</tr>
<tr>
<td>KINS 1223</td>
<td>Human Anatomy and Physiology I</td>
<td>4</td>
</tr>
<tr>
<td>KINS 1224</td>
<td>Human Anatomy and Physiology II</td>
<td>4</td>
</tr>
<tr>
<td>KINS 2203</td>
<td>Physiology of Physical Activity</td>
<td>4</td>
</tr>
<tr>
<td>KINS 2204</td>
<td>Motor Behavior</td>
<td>3</td>
</tr>
<tr>
<td>KINS 3202</td>
<td>Biomechanics of Physical Activity</td>
<td>4</td>
</tr>
<tr>
<td>KINS 3296</td>
<td>The Social-Psychology of Physical Activity (WI)</td>
<td>3</td>
</tr>
<tr>
<td>KINS 4296</td>
<td>History and Philosophy of Kinesiology (WI)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Forms of Movement Courses**

- Kinesiology 1001-1099 (5 credit hours)
  - Physical Fitness Activity
  - Lifestyle Activity
  - Survival Activity
  - Aquatics Activity

**Program-Specific Requirements and Electives**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1011</td>
<td>General Biology I</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 1012</td>
<td>General Biology II</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1031</td>
<td>General Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1032</td>
<td>General Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1033</td>
<td>General Chemistry Laboratory I</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 1034</td>
<td>General Chemistry Laboratory II</td>
<td>1</td>
</tr>
<tr>
<td>MATH 1021</td>
<td>College Algebra</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1021</td>
<td>Introduction to General Physics I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1022</td>
<td>Introduction to General Physics II</td>
<td>4</td>
</tr>
<tr>
<td>PSY 1001</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>Statistics Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Advanced Psychology 2000+ Elective</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Electives**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total Credit Hours**

88

Note: All courses in the Department of Kinesiology and required courses in the selected professional application options must be completed with a minimum grade of C. The Kinesiology Core and program requirements must be satisfactorily completed prior to enrolling in any internship/externship or student teaching experience.
The degree of Bachelor of Science in Kinesiology with a concentration in Pre-Health Professions may be conferred upon a student by recommendation of the faculty upon the satisfactory completion of 120 semester hours of credit.

## Suggested Academic Plan

### Bachelor of Science in Kinesiology: Pre-Health Professions Concentration

#### Requirements for New Students starting in the 2015-2016 Academic Year

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th></th>
<th></th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>KINS 1201</td>
<td>Introduction to Kinesiology</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>BIOL 1011</td>
<td>General Biology I</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Fall</th>
<th></th>
<th></th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>KINS 1223</td>
<td>Human Anatomy and Physiology I</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Kinesiology 1001-1099 Forms of Movement</td>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CHEM 1031</td>
<td>General Chemistry I</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CHEM 1033</td>
<td>General Chemistry Laboratory I</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>HRPR 1001</td>
<td>Public Health: The Way We Live, Work and Play</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>16</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3</th>
<th>Fall</th>
<th></th>
<th></th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Psychology 2000+ Advanced Elective</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Kinesiology 1001-1099 Forms of Movement</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>KINS 2204</td>
<td>Motor Behavior</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>PHYS 1021</td>
<td>Introduction to General Physics I</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Elective</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>14</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3</th>
<th>Spring</th>
<th></th>
<th></th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>KINS 3296</td>
<td>The Social-Psychology of Physical Activity [WI]</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PHYS 1022</td>
<td>Introduction to General Physics II</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Elective</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>16</td>
<td></td>
</tr>
</tbody>
</table>
Bachelor of Science in Kinesiology: Pre-Health Professions Concentration 3+3 Program

The Pre-Health Professions Concentration prepares students for admission into graduate programs in a multitude of the health professions such as physical therapy, occupational therapy, medicine, dentistry, physician's assistant practice, and optometry. The Department of Kinesiology's Core is a perfect complement to the standard prerequisite courses and expanded elective courses available through this concentration. This combination of coursework and practical experience will position students well for continued study at the graduate level. While the Pre-Health Professions concentration includes the standard prerequisite courses and the option for elective courses for admission into graduate programs for a multitude of health professions, students are advised to check the prerequisites for their intended graduate programs and work these into their programs where elective coursework is afforded. Students are also advised to maintain a minimum grade point average of 3.00 (B) since entry into graduate programs in the health professions is highly competitive. A grade of B or better in the specific prerequisites is required for most graduate programs. In addition to the Pre-Health Professions concentration, the Department of Kinesiology has a memorandum of understanding with Temple University's Doctor of Physical Therapy (DPT) program providing academically gifted students the opportunity to enter into a 3 + 3 program. Students who are accepted into Temple's DPT program at the conclusion of their junior year are allowed to count the first year of their DPT program as the fourth year of their undergraduate studies, thus eliminating one year of academic work. Students can only start the 3 + 3 program the first semester of their freshmen year.

Kinesiology Pre-Health Professions Concentration, 3+3 Program

Students must meet the admissions requirements (http://cph.temple.edu/pt/degree-programs/doctor-physical-therapy-dpt/33-accelerated-pre-baccalaureate-admission) for early admission to Temple University's College of Public Health Doctor of Physical Therapy program. If you are applying to other physical therapy programs, please use the web to find admissions requirements.

Guidelines for the Completion of the Bachelor of Science Degree from the Department of Kinesiology

• Bachelor of Science candidates in the Department of Kinesiology must complete all requirements for their major before entering the Doctor of Physical Therapy (DPT) Program in the College of Public Health with the following exception: Pre-Health Professions 3+3 students may count 27 to 31 equivalent credit hours from the first year in the DPT Program in the College of Public Health to fulfill their general credit hour requirements for the B.S. degree in the Department of Kinesiology.

• Admission into the Department of Kinesiology's Pre-Health Professions concentration's 3+3 program is highly competitive and challenging. If you are interested in pursuing this accelerated program, you must declare it immediately upon admission and talk to an advisor within the department prior to registering for your first-semester classes. Your SAT scores and high school transcript must support your capacity to handle successfully a rigorous academic workload. Students in this program must be able to achieve and maintain cumulative and prerequisite GPAs of 3.50 or better.

• If students fail to get admitted into the College of Public Health's DPT program after their junior year, they are required to finish their program within the Department of Kinesiology as defined in the academic plan's alternate fourth year.

Summary of Requirements

University Requirements

All new students are required to complete the university's General Education (GenEd (p. 143)) curriculum.
All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific writing-intensive courses required for this major are KINS 3296 and KINS 4296.

**College Requirement**

All College of Public Health undergraduates must successfully complete the College Core Course, HRPR 1001 Public Health: The Way We Live, Work and Play. Because of the highly structured nature of the 3+3 program, students in the program may have to take HRPR 1001 in the summer or as an overload course.

**Major Requirements**

**Kinesiology Core Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>KINS 1201</td>
<td>Introduction to Kinesiology</td>
<td>3</td>
</tr>
<tr>
<td>KINS 1223</td>
<td>Human Anatomy and Physiology I</td>
<td>4</td>
</tr>
<tr>
<td>KINS 1224</td>
<td>Human Anatomy and Physiology II</td>
<td>4</td>
</tr>
<tr>
<td>KINS 2203</td>
<td>Physiology of Physical Activity</td>
<td>4</td>
</tr>
<tr>
<td>KINS 2204</td>
<td>Motor Behavior</td>
<td>3</td>
</tr>
<tr>
<td>KINS 3202</td>
<td>Biomechanics of Physical Activity</td>
<td>4</td>
</tr>
<tr>
<td>KINS 3296</td>
<td>The Social-Psychology of Physical Activity (WI)</td>
<td>3</td>
</tr>
<tr>
<td>KINS 4296</td>
<td>History and Philosophy of Kinesiology (WI)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Forms of Movement Courses**

Select two of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>KINS 1031</td>
<td>Aquatics Workshop I</td>
<td>2</td>
</tr>
<tr>
<td>KINS 1032</td>
<td>Fitness Workshop I</td>
<td></td>
</tr>
<tr>
<td>KINS 1033</td>
<td>Lifestyle Workshop I</td>
<td></td>
</tr>
<tr>
<td>KINS 1034</td>
<td>Survival Workshop I</td>
<td></td>
</tr>
</tbody>
</table>

Select two of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>KINS 1041</td>
<td>Aquatics Workshop II</td>
<td>2</td>
</tr>
<tr>
<td>KINS 1042</td>
<td>Fitness Workshop II</td>
<td></td>
</tr>
<tr>
<td>KINS 1043</td>
<td>Lifestyle Workshop II</td>
<td></td>
</tr>
<tr>
<td>KINS 1044</td>
<td>Survival Workshop II</td>
<td></td>
</tr>
</tbody>
</table>

**Program-Specific Requirements and Electives**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1011</td>
<td>General Biology I</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 1012</td>
<td>General Biology II</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1031</td>
<td>General Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1032</td>
<td>General Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1033</td>
<td>General Chemistry Laboratory I</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 1034</td>
<td>General Chemistry Laboratory II</td>
<td>1</td>
</tr>
<tr>
<td>MATH 1021</td>
<td>College Algebra</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1021</td>
<td>Introduction to General Physics I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1022</td>
<td>Introduction to General Physics II</td>
<td>4</td>
</tr>
<tr>
<td>PSY 1001</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

Statistics Elective

Advanced Psychology 2000+ Elective

Advanced Sociology 2000+ Elective

**Temple DPT Program Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHTH 8503</td>
<td>Human Anatomy II</td>
<td>3</td>
</tr>
<tr>
<td>PHTH 8512</td>
<td>Human Physiology</td>
<td>3</td>
</tr>
<tr>
<td>PHTH 8513</td>
<td>Movement Science I</td>
<td>3</td>
</tr>
<tr>
<td>PHTH 8514</td>
<td>Clinical Decision Making</td>
<td>2</td>
</tr>
<tr>
<td>PHTH 8516</td>
<td>Introduction to Physical Therapy</td>
<td>1</td>
</tr>
<tr>
<td>PHTH 8517</td>
<td>Clinical Examination &amp; Intervention Skills I</td>
<td>3</td>
</tr>
<tr>
<td>PHTH 8521</td>
<td>Neuroscience</td>
<td>3</td>
</tr>
<tr>
<td>PHTH 8522</td>
<td>Rehabilitative Pathophysiology</td>
<td>3</td>
</tr>
<tr>
<td>PHTH 8523</td>
<td>Movement Science II</td>
<td>4</td>
</tr>
</tbody>
</table>
If the student is not accepted into Temple's DPT program, then KINS 4282 and 24 credits of electives must be taken instead of the graduate-level Physical Therapy courses in order to graduate with a minimum of 128 credits.

### Suggested Academic Plan

**Pre-Health Professions Concentration 3+3 Program for Students Entering Temple's DPT Program**

**Requirements for New Students starting in the 2015-2016 Academic Year**

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select one of the following:</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>KINS 1031</td>
<td>Aquatics Workshop I</td>
<td></td>
</tr>
<tr>
<td>KINS 1032</td>
<td>Fitness Workshop I</td>
<td></td>
</tr>
<tr>
<td>KINS 1033</td>
<td>Lifestyle Workshop I</td>
<td></td>
</tr>
<tr>
<td>KINS 1034</td>
<td>Survival Workshop I</td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>KINS 1041</td>
<td>Aquatics Workshop II</td>
<td></td>
</tr>
<tr>
<td>KINS 1042</td>
<td>Fitness Workshop II</td>
<td></td>
</tr>
<tr>
<td>KINS 1043</td>
<td>Lifestyle Workshop II</td>
<td></td>
</tr>
<tr>
<td>KINS 1044</td>
<td>Survival Workshop II</td>
<td></td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 1011</td>
<td>General Biology I</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>17</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>KINS 1223</td>
<td>Human Anatomy and Physiology I</td>
<td>4</td>
</tr>
<tr>
<td>KINS 3296</td>
<td>The Social-Psychology of Physical Activity [WI]</td>
<td>3</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1031</td>
<td>General Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1033</td>
<td>General Chemistry Laboratory I</td>
<td>1</td>
</tr>
<tr>
<td>Statistics Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>17</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Spring</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Spring</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>KINS 1224</td>
<td>Human Anatomy and Physiology II</td>
<td>4</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>KINS 1031</td>
<td>Aquatics Workshop I</td>
<td></td>
</tr>
<tr>
<td>KINS 1032</td>
<td>Fitness Workshop I</td>
<td></td>
</tr>
<tr>
<td>KINS 1033</td>
<td>Lifestyle Workshop I</td>
<td></td>
</tr>
<tr>
<td>KINS 1034</td>
<td>Survival Workshop I</td>
<td></td>
</tr>
</tbody>
</table>
Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>KINS 1041</td>
<td>Aquatics Workshop II</td>
<td>1</td>
</tr>
<tr>
<td>KINS 1042</td>
<td>Fitness Workshop II</td>
<td>1</td>
</tr>
<tr>
<td>KINS 1043</td>
<td>Lifestyle Workshop II</td>
<td>1</td>
</tr>
<tr>
<td>KINS 1044</td>
<td>Survival Workshop II</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 1032</td>
<td>General Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1034</td>
<td>General Chemistry Laboratory II</td>
<td>1</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Advanced Psychology 2000+ level Elective</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

### Year 3

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>KINS 2203</td>
<td>Physiology of Physical Activity</td>
<td>4</td>
</tr>
<tr>
<td>KINS 2204</td>
<td>Motor Behavior</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>PHYS 1021</td>
<td>Introduction to General Physics I</td>
<td>4</td>
</tr>
<tr>
<td>Advanced Sociology 2000+ level Elective</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>KINS 3202</td>
<td>Biomechanics of Physical Activity</td>
<td>4</td>
</tr>
<tr>
<td>KINS 4296</td>
<td>History and Philosophy of Kinesiology [WI]</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 1022</td>
<td>Introduction to General Physics II</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

### Year 4

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHTH 8503</td>
<td>Human Anatomy II</td>
<td>3</td>
</tr>
<tr>
<td>PHTH 8512</td>
<td>Human Physiology</td>
<td>3</td>
</tr>
<tr>
<td>PHTH 8513</td>
<td>Movement Science I</td>
<td>3</td>
</tr>
<tr>
<td>PHTH 8516</td>
<td>Introduction to Physical Therapy</td>
<td>1</td>
</tr>
<tr>
<td>PHTH 8517</td>
<td>Clinical Examination Intervention Skills I</td>
<td>3</td>
</tr>
<tr>
<td>PHTH 8528</td>
<td>Critical Inquiry I</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHTH 8514</td>
<td>Clinical Decision Making</td>
<td>2</td>
</tr>
<tr>
<td>PHTH 8521</td>
<td>Neuroscience</td>
<td>3</td>
</tr>
<tr>
<td>PHTH 8522</td>
<td>Rehabilitative Pathophysiology</td>
<td>3</td>
</tr>
<tr>
<td>PHTH 8523</td>
<td>Movement Science II</td>
<td>4</td>
</tr>
<tr>
<td>PHTH 8525</td>
<td>Clinical Electroneurophysiology</td>
<td>3</td>
</tr>
<tr>
<td>PHTH 8548</td>
<td>Critical Inquiry II</td>
<td>1</td>
</tr>
</tbody>
</table>

### Fourth-Year Requirements For Students Not Accepted Into Temple’s DPT Program

If the student is not accepted into Temple's DPT program, then KINS 4282 and 24 credits of electives must be taken instead of the graduate-level Physical Therapy (PHTH) courses listed above in order to graduate with a minimum of 128 credits.

#### Year 4

#### Fall

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
</tr>
</tbody>
</table>
Elective  3
Elective  2

Term Credit Hours  14

Spring
KINS 4282  Independent Study in Kinesiology  3
Elective  3
Elective  3
Elective  3
Elective  1

Term Credit Hours  13

Total Credit Hours:  27

Nursing

Nancy L. Rothman, Ed.D., R.N., Interim Chair
Jones Hall 515
215-707-4687
rothman@temple.edu
http://cph.temple.edu/nursing

Philosophy

The Department of Nursing addresses the complexity of economic, social, and health care needs of the global community. Consistent with the mission statements of both Temple University and the College of Public Health, the Department of Nursing stimulates life-long learning through research, education, practice, and service. Faculty members of the Department of Nursing believe that nursing is a profession based on a unique body of knowledge derived from nursing research, the humanities and sciences, and hold as essential to their teaching mission the following core values: creativity, cultural competence, excellence, inquiry, integrity, leadership, and respect. Curriculum and research activities focus on clients’ health needs and the nursing care of diverse populations with an emphasis on the underserved. The faculty believes that health care is a basic human right.

The faculty believes that baccalaureate education is essential preparation for entry into professional nursing practice. The Master of Science in Nursing (MSN) Program prepares nurses at an advanced level of nursing science and is required for preparation as a nurse educator or clinical nurse leader. The MSN Program prepares students to synthesize and apply concepts from nursing and related disciplines to engage in evidence-based decision-making, practice and leadership. The Doctor of Nursing Practice (DNP) Program at Temple University prepares advanced practice nurse practitioners. The Doctor of Nursing Practice encompasses advanced clinical practice that influences health care outcomes for individuals, families, and populations including the direct care of individual patients, management of care for individuals and populations, administration of nursing and health care organizations, and the development and implementation of health policy. The DNP prepares leaders for the discipline and profession of nursing that will have the skills to address issues of health disparities.

At each level of education, students learn and apply general nursing principles and concepts to client care. Role development, professional socialization, critical thinking, and evidence-based practice are emphasized. Faculty members are role models who facilitate active learning, self-direction, and a spirit of inquiry. Faculty members are involved in scholarly and professional activities, maintain clinical competence, and conduct, disseminate, and utilize research.

Nursing, as an integral part of the complex health care system, shares responsibility with other disciplines for assuring the availability of comprehensive health services to all consumers. Health is a dynamic state, which embodies physical, psychological, and social dimensions, not merely the absence of illness. The definition of optimal health varies with the client and is determined by personal goals and values and past and present health factors. Nursing is a humanistic profession characterized by the therapeutic use of self in a holistic approach to the care of clients. Nursing supports clients in achieving and maintaining optimal health through health promotion, illness prevention, disease management, health restoration, and rehabilitation. Clients are conceptualized as individuals, families, and communities. The client is an open system engaged in interaction with the environment. Clients perceive and respond to environmental stimuli as integrated wholes.

The professional nurse provides leadership in directing and coordinating nursing care and is accountable to clients and the profession through ongoing evaluation of nursing practice. The professional nurse advocates for optimal client health through counseling, teaching, and social, organizational, and political action. Professional nurses are committed to professional growth and the expansion and validation of nursing knowledge.

Programs

- Bachelor of Science in Nursing (B.S.N.) (p. 725)
- Bachelor of Science in Nursing (B.S.N.): Registered Nurse Option (p. 727)
Bachelor of Science in Nursing (B.S.N.)

Nancy L. Rothman, Ed.D., R.N., Interim Chair
Jones Hall 515
215-707-4687
rothman@temple.edu
cph.temple.edu/nursing

Accreditation

The program is approved by the State Board of Nursing, Commonwealth of Pennsylvania, and is accredited by the Commission on Collegiate Nursing Education (CCNE). CCNE can be reached at One Dupont Circle NW, Suite 503, Washington, D.C. 20036, 202-887-6791. Graduates are eligible to sit for the National Council Licensure Examination (NCLEX) leading to licensure as a Registered Nurse.

The degree of Bachelor of Science in Nursing may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 122 credit hours with a minimum cumulative GPA of 2.0 overall and in the major. The minimum passing grade in all required nursing major courses is 73% (C); this includes all courses listed under Department of Nursing Requirements and Nursing Major requirements.

Summary of Requirements

University Requirements

All students are required to complete the university’s General Education (GenEd p. 143) curriculum.

All students must take a minimum of two writing-intensive courses as part of the major. The writing-intensive courses required for this major are NURS 4198 and NURS 4296.

College Requirement

All College of Public Health undergraduates must successfully complete the College Core Course, HRPR 1001 Public Health: The Way We Live, Work and Play.

Clinical/Fieldwork Agency Compliance

Please note the Nursing program requires students to complete clinical/field education experiences at facilities both on and off the University campus. These placements will require criminal background checks, Act 33/34 clearances and a drug screen. The results of these requirements may limit and potentially eliminate placement options for the student which can, in turn, result in an inability to meet graduation requirements. Additionally, conviction of a misdemeanor, felony, or felonious or illegal act may prevent you from becoming credentialed and/or licensed to practice nursing. Students will also need a medical history, physical examination, immunization record, and annual influenza vaccines. Students who do not comply with the required health and immunization requirements will not be permitted to attend clinical and will be dismissed from the Nursing program. Practice of deceit in the submission of any of the above documentation is cause for immediate dismissal from the Nursing program.

Department of Nursing Requirements

<table>
<thead>
<tr>
<th>Chemistry</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1021 &amp; CHEM 1023</td>
<td>Introduction to Chemistry I and Introduction to Chemistry Laboratory I</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Statistics</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC 1167 or SOC 3201</td>
<td>Social Statistics or Statistical Methods in Sociology</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Psychology</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 1001</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 2301</td>
<td>Foundations of Developmental Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Biology</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1012</td>
<td>General Biology II</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 2001</td>
<td>Clinical Microbiology</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Kinesiology</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>KINS 1223</td>
<td>Human Anatomy and Physiology I</td>
<td>4</td>
</tr>
<tr>
<td>KINS 1224</td>
<td>Human Anatomy and Physiology II</td>
<td>4</td>
</tr>
</tbody>
</table>

Nursing Major Requirements

<p>| NURS 1001       | Introduction to Professional Nursing | 3 |</p>
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 1089</td>
<td>Nursing and Healthy Lifestyles Management</td>
<td>3</td>
</tr>
<tr>
<td>NURS 2144</td>
<td>Health Assessment</td>
<td>3</td>
</tr>
<tr>
<td>NURS 2189</td>
<td>Community Home I</td>
<td>1</td>
</tr>
<tr>
<td>NURS 2261</td>
<td>Pharmacology for Generalist Nursing Practice</td>
<td>3</td>
</tr>
<tr>
<td>NURS 2289</td>
<td>Community Home II</td>
<td>1</td>
</tr>
<tr>
<td>NURS 2589</td>
<td>Generalist Nursing Practice I: Principles of Care and Clinical Decision Making</td>
<td>5</td>
</tr>
<tr>
<td>NURS 3204</td>
<td>Perspectives on Health I: Thinking Globally</td>
<td>3</td>
</tr>
<tr>
<td>NURS 3289</td>
<td>Community Home III</td>
<td>1</td>
</tr>
<tr>
<td>NURS 3305</td>
<td>Evidence Based Practice and Nursing Research: Analysis and Critical Appraisal</td>
<td>3</td>
</tr>
<tr>
<td>NURS 3389</td>
<td>Perspectives on Health II: Acting Locally</td>
<td>3</td>
</tr>
<tr>
<td>NURS 3489</td>
<td>Community Home IV</td>
<td>1</td>
</tr>
<tr>
<td>NURS 3689</td>
<td>Generalist Nursing Practice II: Primary &amp; Secondary Care of the Family</td>
<td>6</td>
</tr>
<tr>
<td>NURS 3789</td>
<td>Generalist Nursing Practice III: Secondary Care Across the Lifespan</td>
<td>6</td>
</tr>
<tr>
<td>NURS 4198</td>
<td>Health Policy and Economics (WI)</td>
<td>3</td>
</tr>
<tr>
<td>NURS 4296</td>
<td>Genetics and Genomics (WI)</td>
<td>3</td>
</tr>
<tr>
<td>NURS 4489</td>
<td>Senior Seminar: Evidence Based Practice Fieldwork Experience</td>
<td>3</td>
</tr>
<tr>
<td>NURS 4589</td>
<td>Community Home V</td>
<td>1</td>
</tr>
<tr>
<td>NURS 4689</td>
<td>Community Home VI</td>
<td>1</td>
</tr>
<tr>
<td>NURS 4885</td>
<td>Generalist Nursing Practice Internship</td>
<td>2</td>
</tr>
<tr>
<td>NURS 4889</td>
<td>Generalist Nursing Practice IV: Tertiary Care Across the Lifespan</td>
<td>6</td>
</tr>
</tbody>
</table>

**Suggested Academic Plan**

**Bachelor of Science in Nursing**

**Requirements for New Students starting in the 2015-2016 Academic Year**

**Year 1**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td>CHEM 1021</td>
<td>Introduction to Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CHEM 1023</td>
<td>Introduction to Chemistry Laboratory I</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>KINS 1223</td>
<td>Human Anatomy and Physiology I1</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>NURS 1001</td>
<td>Introduction to Professional Nursing</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td>15</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td>KINS 1224</td>
<td>Human Anatomy and Physiology II1</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>NURS 1089</td>
<td>Nursing and Healthy Lifestyles Management</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>BIOL 1012</td>
<td>General Biology II</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>PSY 1001</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td>17</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Year 2</strong></th>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td>BIOL 2001</td>
<td>Clinical Microbiology</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>NURS 2261</td>
<td>Pharmacology for Generalist Nursing Practice</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>NURS 2144</td>
<td>Health Assessment</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>NURS 2189</td>
<td>Community Home I</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>HRPR 1001</td>
<td>Public Health: The Way We Live, Work and Play</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td>17</td>
</tr>
</tbody>
</table>

| **Spring** | GenEd Quantitative Literacy Course [GQ] | 4 |
|           | PSY 2301     | Foundations of Developmental Psychology | 3 |
Bachelor of Science in Nursing (B.S.N.): Registered Nurse Option

Nancy L. Rothman, Ed.D., R.N., Interim Chair
Jones Hall 515
215-707-4687
rothman@temple.edu
cph.temple.edu/nursing

Note: The BSN-RN program is currently not accepting students. Please contact the Department of Nursing to inquire about the future status of the program.

Accreditation

The program is approved by the State Board of Nursing, Commonwealth of Pennsylvania, and is accredited by the Commission on Collegiate Nursing Education (CCNE). CCNE can be reached at One Dupont Circle NW, Suite 503, Washington, D.C. 20036, 202-887-6791. Graduates are eligible to sit for the National Council Licensure Examination (NCLEX) leading to licensure as a Registered Nurse.
The degree of Bachelor of Science in Nursing may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 122 credit hours with a minimum cumulative GPA of 2.00 overall and in the major. The minimum passing grade in all required nursing major courses is 73% (C); this includes all courses listed under Department of Nursing Requirements and Nursing Major Requirements.

**Bachelor of Science in Nursing (BSN): Registered Nurse Option**

RN students follow the same curricular path as pre-licensure BSN students. Registered nurses apply directly to the BSN Program. RN applicants must meet the following admission criteria:

1. successful completion of an NLN-AC accredited nursing program with a cumulative GPA of 3.50 or higher;
2. submission of a completed Undergraduate Application for Transfer Students;
3. submission of application fee;
4. submission of all college transcripts and school of nursing transcript; and
5. current unencumbered license as a Registered Nurse.

Once accepted into the BSN program, RN students are awarded thirty-one (31) nursing credits on the basis of completion of their original nursing program, and any additional transfer credits as determined by the Office of Undergraduate Admissions. Registered nurses accepted into the program are required to complete thirty (30) nursing credits within the BSN curriculum, the University’s General Education requirements, and all required Nursing prerequisite courses.

**Clinical/Fieldwork Agency Compliance**

Please note the Nursing program requires students to complete clinical/field education experiences at facilities both on and off the University campus. These placements will require criminal background checks, Act 33/34 clearances and a drug screen. The results of these requirements may limit and potentially eliminate placement options for the student which can, in turn, result in an inability to meet graduation requirements. Additionally, conviction of a misdemeanor, felony, or felonious or illegal act may prevent you from becoming credentialed and/or licensed to practice nursing. Students will also need a medical history, physical examination, immunization record, and annual influenza vaccines. Students who do not comply with the required health and immunization requirements will not be permitted to attend clinical and will be dismissed from the Nursing program. Practice of deceit in the submission of any of the above documentation is cause for immediate dismissal from the Nursing program.

**Required Nursing Courses for the RN Option**

<table>
<thead>
<tr>
<th>Term</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>NURS 2144</td>
<td>Health Assessment</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>NURS 4296</td>
<td>Genetics and Genomics</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>NURS 1089</td>
<td>Nursing and Healthy Lifestyles Management</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>NURS 3204</td>
<td>Perspectives on Health I: Thinking Globally</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>Select one of the following based on student preference, with faculty advisement:</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>NURS 3689</td>
<td>Generalist Nursing Practice II: Primary &amp; Secondary Care of the Family</td>
<td></td>
</tr>
<tr>
<td></td>
<td>NURS 3789</td>
<td>Generalist Nursing Practice III: Secondary Care Across the Lifespan</td>
<td></td>
</tr>
<tr>
<td></td>
<td>NURS 4889</td>
<td>Generalist Nursing Practice IV: Tertiary Care Across the Lifespan</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>NURS 3389</td>
<td>Perspectives on Health II: Acting Locally</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>NURS 3305</td>
<td>Evidence Based Practice and Nursing Research: Analysis and Critical Appraisal</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>NURS 4198</td>
<td>Health Policy and Economics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>NURS 4489</td>
<td>Senior Seminar: Evidence Based Practice Fieldwork Experience</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credit Hours**

30

1. Writing Intensive
2. Statistics is a prerequisite
3. Capstone Course. Must be taken in the last semester of study.

**Rehabilitation Sciences**

The Department of Rehabilitation Sciences is at the forefront of innovative academics, research, and knowledge translation activities to support those who have long-term disabilities or who are at risk of experiencing short- or long-term disruptions in their lives, in order to help them live full, satisfying,
active, and meaningful lives. Our disciplines are based on evidence-based practices that have been shown to improve the lives of many individuals from various backgrounds and conditions.

Encompassing Therapeutic Recreation and Occupational Therapy, our programs are nationally recognized for academic excellence, cutting-edge research, and outstanding service that enhances and promotes health and wellness.

**Occupational Therapy** [http://cph.temple.edu/rs/academics-rehabilitation-sciences/occupational-therapy]

These graduate programs identify and address the aspects of injury or disability that prevent people from performing essential tasks or engaging in activities that are meaningful to them. Activities and adaptation are used to improve function, performance, independence, and quality of life, with a particular expertise and focus on meaningful participation in community settings.

**Therapeutic Recreation** [http://cph.temple.edu/rs/academics-rehabilitation-sciences/therapeutic-recreation]

These undergraduate and graduate programs prepare students for careers as entry-level and advanced recreation therapists who use play and recreation as a means of psychosocial adaptation, health promotion, rehabilitation, and life quality for children, adults, and the elderly who have illnesses and disabilities.

**What Makes Us Distinct?:**

- We guide national policies, programs, and practices that improve the delivery of services to diverse populations of individuals with disabilities and facilitate their community participation, inclusion, and active living.
- Our innovative philosophy is firmly grounded in the social model of disability, the World Health Organization’s International Classification of Functioning, Disability, and Health, capabilities theory, and the independent living movement philosophy.
- Key concepts in our approach include ecological, opportunity, strengths-based, evidence-based, and empowerment.
- Both our therapeutic recreation and occupational therapy programs are accredited and many aspects exceed accreditation standards.
- Our academic philosophy focuses on appropriate experiences and evidenced-based interventions for people of all ages who experience disabilities and other life challenges.
- Consistent with our solid science and research underpinnings, our professional training emphasizes state-of-the-art, evidence-based practices.

**Innovation and Outreach**

Intensive student engagement in research projects is beneficial to students’ clinical practice and may influence their interest in pursuing an academic career in research. Our four innovative research labs are:

- Active Living and Quality of Life for Older Adults
- Autism Spectrum Disorders (ASD) and ADHD
- The International Classification of Functioning, Disability & Health (ICF) and Recreational Therapy Evidence Based Practice
- Temple University Collaborative on Community Inclusion for Individuals with Psychiatric Disabilities [http://www.tucollaborative.org]

Our program’s research, education, and service are guided by a respect for and understanding of cultural and ethnic diversity and human rights, while acknowledging that other challenges, such as racism, sexism, classism, and homophobia/heterosexism, interact with ableism and other disability-specific discrimination in ways that further limit community participation, inclusion, and active living.

**Programs**

- Bachelor of Science in Therapeutic Recreation (p. 729)

**Bachelor of Science in Therapeutic Recreation**

Rhonda Nelson Ph.D., CTRS, Associate Professor, Program Director
1700 N. Broad Street
Suite 304
215-204-2703
rhonda.nelson@temple.edu
http://cph.temple.edu/rs/academics-rehabilitation-sciences/therapeutic-recreation

**About the Therapeutic Recreation Major**

The Therapeutic Recreation Program offers two degrees:
• B.S. in Therapeutic Recreation
• M.S. in Recreation Therapy

Additionally, the Therapeutic Recreation program offers an accelerated M.S. degree program (5 year B.S. to M.S. degree program), which provides the opportunity for qualifying students studying therapeutic recreation as an undergraduate to begin taking graduate level courses within their undergraduate curriculum and therefore complete an M.S. in Recreation Therapy in a total of 5 years (4 year B.S. + 1 year M.S.).

Recreation therapists use recreation and leisure activities to facilitate recovery, health, and wellness in individuals with disabilities. The primary goal of the undergraduate program is to prepare entry-level recreation therapists to use play and recreation generally, and recreation therapy specifically, as a means of psychosocial adaptation, health promotion, rehabilitation, and life quality for children, adults, and the elderly who have illness and disability. The curriculum is focused on assuring that graduates have proficiency in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains to function as recreation therapists in traditional and emerging service delivery settings. Alumni of Temple’s therapeutic recreation degree programs can be found in a wide range of health and human services agencies. They are employed in diverse settings, including hospitals, rehabilitation centers, nursing homes, assisted-living facilities, schools, and community recreation agencies. According to the U.S. Department of Labor, employment opportunities are expected to increase approximately 17% over the next ten years, as fast as the average for all other occupations. A growth in employment opportunities will be most prevalent in the areas of aging/nursing care facilities, working with students with disabilities in schools, and outpatient medical facilities vs. inpatient care.

Mission of the Program
The Therapeutic Recreation Program strives to be a world-class academic and research unit committed to advancing the role of play, recreation, and leisure opportunities in health promotion, rehabilitation, and disease prevention for diverse individuals with chronic illnesses and disabilities across the life span. The program provides exceptional educational experiences, conducts discipline-expanding research, and contributes to society via programs that explore and test evidenced-based innovations in practice and policy. The program’s mission includes

• instilling knowledge, values, ethics, and skills that will guide students in their future academic pursuits and their professional practice in therapeutic recreation at the local, national, and international levels;
• being a leading contributor to the ever-changing knowledge base in health, leisure, and disability studies through research and other scholarly activities;
• providing innovative and responsive educational opportunities, research, and service in collaboration with local, regional, and national agencies and organizations; and
• fostering interdisciplinary collaborations to promote a better understanding of the importance of physically and socially active lifestyles to health, well-being, and quality of life.

Central to the overall mission of the Therapeutic Recreation Program is a commitment to access and diversity. This is realized through a commitment to ensuring equal access to all qualified applicants and a commitment to promoting equal access to recreation and leisure opportunities for all people regardless of age, economics, race, gender, culture, sexual orientation, religion, or abilities.

Certification
Following satisfactory completion of all coursework and internship requirements, graduates with the Bachelor of Science degree in Therapeutic Recreation are eligible to sit for the national certifying examination in therapeutic recreation administered by the Educational Testing Services (ETS) and the National Council on Therapeutic Recreation Certification (NCTRC).

A Bachelor of Science (B.S.) degree in Therapeutic Recreation is awarded to students upon satisfactory completion of a minimum of 121 semester hours of credit with a minimum GPA of 2.00 overall and a minimum GPA of 2.5 for classes in the major. Students completing this degree are eligible to sit for the national credentialing examination for recreation therapists.

Summary of Requirements

University Requirements

• All students are required to complete the General Education (GenEd (p. 143)) curriculum. Please note that the University GenEd curriculum has specific rules regarding the completion of this university requirement (for example, the number of courses a student may take in one department to satisfy GenEd Requirements), so careful review of the GenEd section of this Bulletin is encouraged.
• MATH 0701 (4 credits) and/or ENG 0701 (4 credits), if required by placement testing.
• All Temple students must take a minimum of two writing-intensive courses as part of the major. Writing Intensive classes in Therapeutic Recreation include:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>THRC 3096</td>
<td>Assessment and Documentation in Therapeutic Recreation</td>
<td>3</td>
</tr>
<tr>
<td>THRC 3196</td>
<td>Research and Evaluation in Therapeutic Recreation</td>
<td>3</td>
</tr>
<tr>
<td>THRC 4196</td>
<td>Therapeutic Recreation Clinical Procedures</td>
<td>3</td>
</tr>
</tbody>
</table>
• Students are also encouraged to review university requirements for successful progression through their academic careers. Knowledge of course repeat policies, including the withdrawal policy, academic standing, and rules on taking courses elsewhere can be found in this Bulletin.

**College Requirement**

All College of Public Health undergraduates must successfully complete the College Core Course, HRPR 1001 Public Health: The Way We Live, Work and Play.

**Clearance Requirements**

Please note the Therapeutic Recreation program requires students to complete clinical/field education experiences at facilities both on and off the University campus. These placements will require criminal background checks, Act 33/34 clearances and perhaps a drug screen. The results of these requirements may limit and potentially eliminate placement options which can, in turn, result in an inability to meet graduation requirements. Additionally, conviction of a misdemeanor, felony, or felonious or illegal act may prevent you from becoming credentialed and/or licensed to practice in therapeutic recreation.

**Therapeutic Recreation Program Requirements**

Students must complete a set of specific courses in the major, including Health Related Professions Core, Cognate Core, Therapeutic Recreation major courses, and two credit-earning field-based clinical internships (THRC 3185 and THRC 4185). Students must also complete other non-credit earning requirements as part of the major, including 70 hours of professional development / volunteer experiences relevant to the major, criminal and child abuse clearances, health immunization and physical documentation, and certification in First-Aid/CPR.

### Health Related Professions Core

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRPR 1001</td>
<td>Public Health: The Way We Live, Work and Play</td>
<td>3</td>
</tr>
<tr>
<td>HRPR 2103</td>
<td>Health Psychology and Human Behavior</td>
<td>3</td>
</tr>
</tbody>
</table>

### Cognate Core

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>KINS 1223</td>
<td>Human Anatomy and Physiology I</td>
<td>3-4</td>
</tr>
<tr>
<td>or KINS 1221</td>
<td>Principles of Anatomy and Physiology I</td>
<td></td>
</tr>
<tr>
<td>KINS 1224</td>
<td>Human Anatomy and Physiology II</td>
<td>3-4</td>
</tr>
<tr>
<td>or KINS 1222</td>
<td>Principles of Anatomy and Physiology II</td>
<td></td>
</tr>
<tr>
<td>KINS 2204</td>
<td>Motor Behavior</td>
<td>3</td>
</tr>
<tr>
<td>PSY 1001</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 1003</td>
<td>Statistics for Psychology</td>
<td>3</td>
</tr>
<tr>
<td>or SOC 1167</td>
<td>Social Statistics</td>
<td></td>
</tr>
<tr>
<td>PSY 2301</td>
<td>Foundations of Developmental Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 2201</td>
<td>Foundations of Psychopathology</td>
<td>3</td>
</tr>
</tbody>
</table>

### Lower-Division Therapeutic Recreation Coursework

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>THRC 1102</td>
<td>Adapted Sport, Recreation and Inclusive Leisure Services</td>
<td>3</td>
</tr>
<tr>
<td>THRC 2103</td>
<td>Foundations of Therapeutic Recreation Practice</td>
<td>3</td>
</tr>
</tbody>
</table>

### Upper-Division Therapeutic Recreation Coursework

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>THRC 2104</td>
<td>Therapeutic Recreation Modalities</td>
<td>3</td>
</tr>
<tr>
<td>THRC 3096</td>
<td>Assessment and Documentation in Therapeutic Recreation</td>
<td>3</td>
</tr>
<tr>
<td>THRC 3103</td>
<td>Professional Seminar II</td>
<td>3</td>
</tr>
<tr>
<td>THRC 3111</td>
<td>Health Promotion through Leisure Education</td>
<td>3</td>
</tr>
<tr>
<td>THRC 3196</td>
<td>Research and Evaluation in Therapeutic Recreation</td>
<td>3</td>
</tr>
<tr>
<td>THRC 4111</td>
<td>Administration of Therapeutic Recreation</td>
<td>3</td>
</tr>
<tr>
<td>THRC 4196</td>
<td>Therapeutic Recreation Clinical Procedures</td>
<td>3</td>
</tr>
</tbody>
</table>

### Internship Experience

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>THRC 3185</td>
<td>Internship I</td>
<td>3</td>
</tr>
<tr>
<td>THRC 4185</td>
<td>Internship II</td>
<td>12</td>
</tr>
</tbody>
</table>

### Therapeutic Recreation Electives

Select four of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>THRC 2201</td>
<td>Therapeutic Recreation and Developmental Disabilities</td>
</tr>
<tr>
<td>THRC 2203</td>
<td>Assistive Technology in Recreation</td>
</tr>
<tr>
<td>THRC 2205</td>
<td>Adventure Challenge/Programming</td>
</tr>
<tr>
<td>THRC 3203</td>
<td>Therapeutic Recreation and Mental Health</td>
</tr>
<tr>
<td>THRC 4205</td>
<td>Therapeutic Recreation in Geriatric Service Settings</td>
</tr>
</tbody>
</table>
THRC 4211  Therapeutic Recreation and Physical Disabilities
THRC 4213  Therapeutic Recreation and Pediatric Healthcare

Total Credit Hours  81-83

1. Students must successfully pass all Health Related Professions courses and Cognate Core courses with a minimum grade of C. Students not demonstrating the ability to meet this academic requirement will not be permitted to progress to the upper-division Therapeutic Recreation Core and related electives in the curriculum.

2. Students should consult with their advisor for information on the distinctions between Anatomy and Physiology selection sequence and its implication for the degree and career goals. Satisfactory completion of KINS 1221 and KINS 1222 sequence or KINS 1223 and KINS 1224 sequence will meet the two-course GenEd Science and Technology requirement. The courses are similar, but not interchangeable, and must be taken in the correct sequence. Students choosing the KINS 1221 and KINS 1222 sequence may need to take an additional 2-credit elective to meet credit hours degree graduation requirement. Please see a departmental advisor for clarification.

All Therapeutic Recreation courses must be completed with a grade of C or higher.

Suggested Academic Plan
Bachelor of Science in Therapeutic Recreation
Requirements for New Students starting in the 2015-2016 Academic Year

The following academic plan displays required courses. Please note that, unless specified otherwise, students may select from a number of university-approved courses in the various areas of the GenEd curriculum.

**Year 1**

**Fall**

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>4</td>
</tr>
<tr>
<td>HRPR 2103</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

**Spring**

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IH 0851 or 0951</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]¹</td>
<td>4</td>
</tr>
<tr>
<td>PSY 1001</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>THRC 1102</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

**Year 2**

**Fall**

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IH 0852 or 0952</td>
<td>3</td>
</tr>
<tr>
<td>KINS 1223 or 1221</td>
<td>3-4</td>
</tr>
<tr>
<td>THRC 2103</td>
<td>3</td>
</tr>
<tr>
<td>HRPR 1001</td>
<td>3</td>
</tr>
<tr>
<td>PSY 2301</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15-16</strong></td>
</tr>
</tbody>
</table>

**Spring**

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>KINS 1224 or 1222</td>
<td>3-4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3-4</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td>PSY 2201</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
</tr>
<tr>
<td>SOC 1167</td>
<td></td>
</tr>
<tr>
<td>PSY 1003</td>
<td></td>
</tr>
<tr>
<td><strong>Select one of the following:</strong></td>
<td><strong>3</strong></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15-17</strong></td>
</tr>
</tbody>
</table>
## Year 3
### Fall
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>THRC 3096</td>
<td>Assessment and Documentation in Therapeutic Recreation [WI]³</td>
<td>3</td>
</tr>
<tr>
<td>THRC 2104</td>
<td>Therapeutic Recreation Modalities</td>
<td>3</td>
</tr>
<tr>
<td>KINS 2204</td>
<td>Motor Behavior</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:⁴</td>
<td>Therapeutic Recreation and Developmental Disabilities⁵</td>
<td>3</td>
</tr>
<tr>
<td>THRC 2201</td>
<td>Therapeutic Recreation and Developmental Disabilities⁵</td>
<td></td>
</tr>
<tr>
<td>THRC 2203</td>
<td>Assistive Technology in Recreation⁵</td>
<td></td>
</tr>
<tr>
<td>THRC 3203</td>
<td>Therapeutic Recreation and Mental Health⁵</td>
<td></td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 15

### Spring
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>THRC 3103</td>
<td>Professional Seminar II</td>
<td>3</td>
</tr>
<tr>
<td>THRC 3111</td>
<td>Health Promotion through Leisure Education</td>
<td>3</td>
</tr>
<tr>
<td>THRC 3185</td>
<td>Internship I</td>
<td>3</td>
</tr>
<tr>
<td>Select two of the following:⁴</td>
<td>Therapeutic Recreation in Geriatric Service Settings⁶</td>
<td>6</td>
</tr>
<tr>
<td>THRC 4205</td>
<td>Therapeutic Recreation in Geriatric Service Settings⁶</td>
<td></td>
</tr>
<tr>
<td>THRC 4211</td>
<td>Therapeutic Recreation and Physical Disabilities⁶</td>
<td></td>
</tr>
<tr>
<td>THRC 4213</td>
<td>Therapeutic Recreation and Pediatric Healthcare</td>
<td></td>
</tr>
<tr>
<td>THRC 2205</td>
<td>Adventure Challenge/Programming</td>
<td></td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 15

## Year 4
### Fall
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>THRC 3196</td>
<td>Research and Evaluation in Therapeutic Recreation [WI]⁷</td>
<td>3</td>
</tr>
<tr>
<td>THRC 4196</td>
<td>Therapeutic Recreation Clinical Procedures [WI]³</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:⁴</td>
<td>Therapeutic Recreation and Mental Health</td>
<td>3</td>
</tr>
<tr>
<td>THRC 3203</td>
<td>Therapeutic Recreation and Mental Health</td>
<td></td>
</tr>
<tr>
<td>THRC 2201</td>
<td>Therapeutic Recreation and Developmental Disabilities⁵</td>
<td></td>
</tr>
<tr>
<td>THRC 2203</td>
<td>Assistive Technology in Recreation⁵</td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td>2-3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 14-15

### Spring
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>THRC 4111</td>
<td>Administration of Therapeutic Recreation</td>
<td>3</td>
</tr>
<tr>
<td>THRC 4185</td>
<td>Internship II</td>
<td>12</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 15

**Total Credit Hours**: 121-125

---

1. MATH 0824 is recommended to meet prerequisite requirements for PSY 1003/SOC 1167
2. You should consult your advisor for information on the distinctions between the anatomy and physiology selection sequence and its implication for your degree and career goals. Satisfactory completion of the KINS 1221 and KINS 1222 sequence or the KINS 1223 and KINS 1224 sequence will meet the two-course GenEd Science & Technology requirement. These courses are similar but not interchangeable. Courses must be taken in the correct sequence. Students choosing KINS 1221 and KINS 1222 should be sure to take a sufficient number of elective credits to meet credit hour degree requirements. Please see a departmental advisor for clarification.
3. Indicates Writing Intensive course for the major.
4. Four Therapeutic Recreation Elective courses (12 credits) are required for graduation.
5. These courses are offered in the fall semester only.
6. These courses are offered in the spring semester only.
7. Indicates Writing Intensive capstone for the major.

**Note**: Students may lighten their academic load in the fall and spring semesters by taking classes during the summer sessions. Please see a departmental advisor to explore summer course offerings and suitable options.
The Bachelor of Science (BS) degree in Public Health is housed within the Department of Social and Behavioral Sciences of the College of Public Health. The undergraduate curriculum prepares students for diverse careers in the public health field that focus on creating, implementing, and evaluating interventions and programs designed to improve the health status and quality of life for all individuals. As one of the few accredited undergraduate public health programs in the country, the department offers a Bachelor of Science degree in public health that serves as a national model in which students study the broad range of public health concerns, including individual disease prevention and injury/harm reduction behaviors, distribution and development of disease through epidemiological assessment and community program development, implementation, and evaluation. Students learn to use educational interventions to provide health information, gain experience in assessing the needs of target populations, clarify program goals and objectives, and develop strategies to motivate and involve their clients/patients in educational interventions. All Public Health majors take a set of common theoretical courses designed to promote an understanding of health, wellness, and disease prevention. After completing university-required General Education courses, Public Health students complete courses in the core disciplines of public health within the Department of Social and Behavioral Sciences as well as courses in other important and related disciplines, such as epidemiology, environmental health, and health services. Students also participate in over 600 hours of fieldwork experience in public health agencies, organizations, or other entities to gain invaluable real-world experience in the field.

The Public Health major trains entry-level public health workers to provide frontline preventive health information, services, and health behavior interventions at the community level, particularly in communities with high-risk populations. Majors receive intensive pre-professional training and direct public health work experience through internship experiences available throughout the city of Philadelphia. There are also opportunities to work alongside faculty members in one of the many research labs and centers in the Department. Graduates typically work in voluntary health agencies, public health departments, hospitals, rehabilitation centers, corporate work sites, community health organizations, family planning clinics, and managed-care facilities. Some graduates also go on to graduate public health programs (Master of Public Health or Master of Science in Epidemiology) or programs in other health-related professions. Eligible students in the Public Health BS Program also can apply for the 4+1 BS-MPH degree, in which they can earn a Master's of Public Health degree at Temple in 5 years.

**Mission of the Department**

The mission of the Department of Social and Behavioral Sciences is to promote healthy communities and train professionals and scholars who will excel in public health practice and research. We are committed to creating, testing and disseminating innovative social and behavioral health promotion and intervention programs that effectively address the unmet health needs of vulnerable and underserved populations. Our mission is achieved by leading and engaging in public health education, and service efforts, often in collaboration with community partners.

The Department of Social and Behavioral Sciences follows the requirements set forth by Temple University regarding General Education. The department has also established additional Core and Cognate requirements for all Public Health majors.

**Programs**

- Bachelor of Science in Public Health (p. 734)
- Certificate in Emergency Management with Special Populations (p. 737)
- Minor in Public Health (p. 738)

**Bachelor of Science in Public Health**

**Summary of Requirements**

**University Requirements**

All students are required to complete the university's General Education (GenEd (p. 143)) curriculum.
All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific writing-intensive courses required for this major are PBHL 3496 and PBHL 3596.

**College Requirement**
All College of Public Health undergraduates must successfully complete the College Core Course, HRPR 1001 Public Health: The Way We Live, Work and Play.

**Clearance Requirements**
Please note the Public Health program requires students to complete clinical/field education experiences at facilities both on and off the University campus. These placements may require criminal background checks, Act 33/34 clearances and perhaps a drug screen. The results of these requirements may limit and potentially eliminate placement options which can, in turn, result in an inability to meet graduation requirements.

**Public Health Program Requirements**
Students must complete a set of specific courses in the major, including a Health-Related Professions Core course, Cognate Core courses, and Public Health Major courses, including two credit-earning internships (PBHL 3185 and PBHL 4185). Also required are two public health electives, one Cognate elective and three general (free) electives. The major requires a minimum of 122 total credits.

All Public Health course work (those courses with a PBHL designation and courses approved as a cognate elective) must be completed with a grade of C or higher.

**Health-Related Professions Core Course**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRPR 2103</td>
<td>Health Psychology and Human Behavior</td>
<td>3</td>
</tr>
</tbody>
</table>

**Cognate Core**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRPR 2103</td>
<td>Health Psychology and Human Behavior</td>
<td>3</td>
</tr>
</tbody>
</table>

**CIS 1055** | Computers and Applications | 4       |

**KINS 1223** | Human Anatomy and Physiology I | 3-4     |
**or KINS 1221** | Principles of Anatomy and Physiology I | 3-4     |

**KINS 1224** | Human Anatomy and Physiology II | 3-4     |
**or KINS 1222** | Principles of Anatomy and Physiology II | 3-4     |

**STRC 1111** | Public Speaking | 3       |
**HCM 3501** | Introduction to Health Services Systems | 3       |

**General Electives**
Three courses are required. These may be the choice of the student.

**Lower-Division Public Health Coursework**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRPR 1001</td>
<td>Public Health: The Way We Live, Work and Play</td>
<td>3</td>
</tr>
<tr>
<td>PBHL 1104</td>
<td>Nutrition and Health</td>
<td>3</td>
</tr>
<tr>
<td>PBHL 1105</td>
<td>Society, Drug, and Alcohol Perspectives</td>
<td>3</td>
</tr>
<tr>
<td>PBHL 1106</td>
<td>Human Sexuality</td>
<td>3</td>
</tr>
<tr>
<td>PBHL 2101</td>
<td>Disease Prevention and Control</td>
<td>3</td>
</tr>
<tr>
<td>PBHL 2102</td>
<td>Environmental Health</td>
<td>3</td>
</tr>
<tr>
<td>PBHL 2216</td>
<td>Ethnicity, Culture and Health</td>
<td>3</td>
</tr>
<tr>
<td>PBHL 2219</td>
<td>Biostatistics and Public Health</td>
<td>3</td>
</tr>
</tbody>
</table>

**Upper-Division Public Health Coursework**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PBHL 3101</td>
<td>Epidemiology</td>
<td>3</td>
</tr>
<tr>
<td>PBHL 3102</td>
<td>Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>PBHL 3104</td>
<td>Professional Seminar in Public Health I</td>
<td>3</td>
</tr>
<tr>
<td>PBHL 3105</td>
<td>The Teaching-Learning Process</td>
<td>3</td>
</tr>
<tr>
<td>PBHL 3496</td>
<td>Introduction to Public Health Programs (WI)</td>
<td>3</td>
</tr>
<tr>
<td>PBHL 3596</td>
<td>Public Health Program Administration (WI)</td>
<td>3</td>
</tr>
<tr>
<td>PBHL 3185</td>
<td>Internship I</td>
<td>4</td>
</tr>
<tr>
<td>PBHL 4185</td>
<td>Internship II</td>
<td>8</td>
</tr>
</tbody>
</table>

**Public Health Electives**
Select two of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PBHL 1103</td>
<td>International Health</td>
</tr>
<tr>
<td>PBHL 1201</td>
<td>Contemporary Health Issues</td>
</tr>
<tr>
<td>PBHL 1903</td>
<td>Honors Global Health</td>
</tr>
</tbody>
</table>
PBHL 2201
Health Communication

PBHL 2202
Man-Made Disasters: Radiological, Chemical & Biological Terrorism

PBHL 2203
AIDS and Society

PBHL 2204
Diet and Weight Management

PBHL 2205
Coping with Life Stress Workshop

PBHL 2206
Holistic Health & Aging

PBHL 2207
Principles of Emergency Management: A Public Health Perspective

PBHL 2208
Natural Disasters: Response & Recovery

PBHL 2209
Violence and Injury Prevention

PBHL 2211
Communication in Health Care Settings

PBHL 2212
Advanced Human Sexuality

PBHL 2213
Trauma and Coping

PBHL 2214
Power, Politics & Payments in U.S. Healthcare

PBHL 2215
Special Populations: Strategic Community Outreach

PBHL 2304
HEART Peer Educator Training

PBHL 3103
Counseling Techniques for Health Professionals

Cognate Elective
Select one course with approval of a departmental academic advisor 3

Total Credit Hours 93

1 Students must successfully pass the Health-Related Professions Core course, the Cognate Core courses, and general electives with a minimum grade of C- or higher. Students not demonstrating the ability to meet this academic requirement will not be permitted to progress to the upper-division Public Health and related electives in the curriculum.

2 Students should consult with their advisor for information on the distinctions between Anatomy and Physiology selection sequence and its implication for the degree and career goals. Satisfactory completion of the KINS 1221 and KINS 1222 sequence or the KINS 1223 and KINS 1224 sequence will meet the two-course GenEd Science and Technology requirement. The courses are similar, but not interchangeable, and must be taken in the correct sequence. Students choosing the KINS 1221 and KINS 1222 sequence may need to take an additional 2-credit elective to meet credit hours degree graduation requirement. Please see a departmental advisor for clarification.

3 Additional listings may be obtained from the academic advisor and approved for elective credit.

Suggested Academic Plan

Bachelor of Science in Public Health

Requirements for New Students starting in the 2015-2016 Academic Year

Year 1

<table>
<thead>
<tr>
<th>Semester</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td></td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>General Elective</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3-4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>HRPR 1001</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td></td>
</tr>
<tr>
<td>KINS 1223 or 1221</td>
<td>3-4</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>3</td>
</tr>
</tbody>
</table>

1 Students must successfully pass the Health-Related Professions Core course, the Cognate Core courses, and general electives with a minimum grade of C- or higher. Students not demonstrating the ability to meet this academic requirement will not be permitted to progress to the upper-division Public Health and related electives in the curriculum.

2 Students should consult with their advisor for information on the distinctions between Anatomy and Physiology selection sequence and its implication for the degree and career goals. Satisfactory completion of the KINS 1221 and KINS 1222 sequence or the KINS 1223 and KINS 1224 sequence will meet the two-course GenEd Science and Technology requirement. The courses are similar, but not interchangeable, and must be taken in the correct sequence. Students choosing the KINS 1221 and KINS 1222 sequence may need to take an additional 2-credit elective to meet credit hours degree graduation requirement. Please see a departmental advisor for clarification.

3 Additional listings may be obtained from the academic advisor and approved for elective credit.
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PBHL 1104</td>
<td>Nutrition and Health</td>
<td>3</td>
</tr>
<tr>
<td>PBHL 1105</td>
<td>Society, Drug, and Alcohol Perspectives</td>
<td>3</td>
</tr>
<tr>
<td>PBHL 1106</td>
<td>Human Sexuality</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

**Spring**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>KINS 1224 or 1222</td>
<td>Human Anatomy and Physiology II¹</td>
<td>3-4</td>
</tr>
<tr>
<td>PBHL 2101</td>
<td>Disease Prevention and Control</td>
<td>3</td>
</tr>
<tr>
<td>PBHL 2102</td>
<td>Environmental Health</td>
<td>3</td>
</tr>
<tr>
<td>PBHL 2216</td>
<td>Ethnicity, Culture and Health</td>
<td>3</td>
</tr>
<tr>
<td>PBHL 2219</td>
<td>Biostatistics and Public Health</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

**Year 3**

**Fall**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>STRC 1111</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>PBHL 3101</td>
<td>Epidemiology</td>
<td>3</td>
</tr>
<tr>
<td>PBHL 3496</td>
<td>Introduction to Public Health Programs [WI]</td>
<td>3</td>
</tr>
<tr>
<td>General Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>HRPR 2103</td>
<td>Health Psychology and Human Behavior</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

**Spring**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PBHL 3104</td>
<td>Professional Seminar in Public Health I</td>
<td>3</td>
</tr>
<tr>
<td>PBHL 3105</td>
<td>The Teaching-Learning Process</td>
<td>3</td>
</tr>
<tr>
<td>PBHL 3596</td>
<td>Public Health Program Administration [WI]</td>
<td>3</td>
</tr>
<tr>
<td>Public Health Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>CIS 1055</td>
<td>Computers and Applications</td>
<td>4</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

**Year 4**

**Fall**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PBHL 3102</td>
<td>Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>PBHL 3185</td>
<td>Internship I</td>
<td>4</td>
</tr>
<tr>
<td>Cognate Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>HCM 3501</td>
<td>Introduction to Health Services Systems</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>13</strong></td>
</tr>
</tbody>
</table>

**Spring**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PBHL 4185</td>
<td>Internship II</td>
<td>8</td>
</tr>
<tr>
<td>Public Health Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>General Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>14</strong></td>
</tr>
</tbody>
</table>

**Total Credit Hours:** 122

¹ Students should consult with their advisor for information on the distinctions between Anatomy and Physiology selection sequence and its implication for the degree and career goals. Satisfactory completion of KINS 1221 and KINS 1222 sequence or KINS 1223 and KINS 1224 sequence will meet the two-course GenEd Science and Technology requirement. Courses are similar, but not interchangeable and must be taken in the correct sequence. Students choosing KINS 1221 and KINS 1222 sequence may need to take an additional 2-credit elective to meet credit hours degree graduation requirement. Please see your advisor for clarification.

**Certificate in Emergency Management with Special Populations**

Sylvia Twersky-Bumgardner, M.P.H.
215-204-9316
sylviatb@temple.edu

Temple University’s Department of Public Health, in collaboration with Temple’s Center for Research Preparedness Education and Practice (C-PREP), is offering classes for preparing the public health workforce and emergency managers to address the needs of special populations in a competency-
based and practice-oriented framework. In emergency management a special population is any group of people that needs extra support to be prepared for an emergency, as well as those needing community support to respond successfully and recover in disasters or emergency situations. These classes are for practitioners in emergency preparedness and response, public health professionals, undergraduate students, and recent graduates with an interest in emergency preparedness and response. This program consists of a four- or five-course sequence, depending on previous coursework. For current Public Health majors and minors at Temple University, two of these courses can be used to fulfill elective requirements. The certificate program can be finished in either one or two years part-time, and most of the courses are offered online so that students from all over the globe and at different stages in their career can take advantage of the program. This certificate will be listed on your transcript upon completion. FEMA Higher Ed calls this program a national first in their April 11, 2008, program report.

**Prerequisite (1 course)**

This course may be waived if the student can demonstrate either NIMS certification or similar coursework taken at a college or university with a grade of B or better.

PBHL 2207 Principles of Emergency Management: A Public Health Perspective 3

**Core (3 courses)**

The Core courses will address the basic competencies in emergency preparedness, response, and mitigation. Within these core competencies the needs of special populations will be addressed.

PBHL 2202 Man-Made Disasters: Radiological, Chemical & Biological Terrorism 3
PBHL 2208 Natural Disasters: Response & Recovery 3
PBHL 2215 Special Populations: Strategic Community Outreach 3

**Elective (1 course)**

The electives will allow the student to customize the certificate program to meet their educational objectives and professional needs within the rubric of emergency preparedness and special populations. This includes the option to take graduate-level electives as appropriate. Recommended electives include:

PBHL 2201 Health Communication (graduate or undergraduate credits; in-person) 3
PBHL 2205 Coping with Life Stress Workshop (graduate or undergraduate credits; online) 3
or PBHL 5004 Understanding Stress and Change
PBHL 5009 Risk Communication & PH (graduate; in-person) 3

**Minor in Public Health**

*Note: The Public Health minor requirements have changed for the 2015-2016 academic year. If you declared the Public Health minor prior to fall 2015, please consult a departmental advisor regarding the minor requirements that you must fulfill.*

**Required Courses**

PBHL 1101 Introduction to Public Health 3
HRPR 2103 Health Psychology and Human Behavior 3
PBHL 2102 Environmental Health 3
PBHL 2219 Biostatistics and Public Health 3
PBHL 3101 Epidemiology (see advisor to register) 3

**Public Health Elective ¹**

Select one of the following: 3

PBHL 1103 International Health
PBHL 1104 Nutrition and Health
PBHL 1105 Society, Drug, and Alcohol Perspectives
PBHL 1106 Human Sexuality
PBHL 1201 Contemporary Health Issues
PBHL 2101 Disease Prevention and Control
PBHL 2201 Health Communication
PBHL 2203 AIDS and Society (Inter-session/Summer)
PBHL 2214 Power, Politics & Payments in U.S. Healthcare

**Total Credit Hours** 18
Other electives may be taken with the advice and permission of a departmental advisor.
School of Social Work

Cheri Carter, Ph.D., M.S.W., Assistant Professor, Undergraduate Program Director
Ritter Hall Annex 581
215-204-1228
cheri.carter@temple.edu

Bernie Newman, Ph.D., Chair
Ritter Hall Annex 505
1301 Cecil B. Moore Avenue
Philadelphia, PA 19122-6091
215-204-1205
bernie.newman@temple.edu
http://cph.temple.edu/ssa/

Mission and Goals

The School of Social Work (SSW) was established in 1969 to prepare individuals for professional practice and for positions of leadership in social work and in the broader human services arena. The distinctive mission of the school, rooted in humanistic and democratic values, is reflected in a broad and vigorous commitment to the elimination of human suffering and social injustice and to the promotion of human rights and social equality. Its educational programs are therefore centered on intervention strategies on behalf of those populations and persons who are underserved, victimized, or denied full access to social opportunities and resources. Poverty, racism, sexism, homophobia, and other forms of discrimination and disenfranchisement are priority concerns of the school, as are those social problems associated with life in the inner city.

The School of Social Work is dedicated to societal transformations to eliminate social, political, and economic injustices for poor and oppressed populations, and advance the quality of life for all through the following:

• Education emphasizing the discovery of knowledge and the use of critical inquiry and professional ethics to guide solution-seeking and action-taking to effect social change among professional social workers in front-line, supervisory, managerial, and other leadership positions.
• Research and scholarship to advance applied knowledge and generate evidence-based strategies to resolve problems occurring between people and their social environments at local, state, national, and global levels.
• Public service that aids the dissemination of knowledge and evidence-based strategies and that aids the responsiveness of the school to the needs of constituents through collaborations and partnerships with communities, agencies, and organizations.

B.S.W. Program Objectives

At the completion of the B.S.W. curriculum, students will demonstrate the ability to do the following:

1. Apply strategies of social change and advocacy that help advance social, political, and economic justice.
2. Use critical inquiry and scientific research methods, both qualitative and quantitative, to evaluate and advance one’s own social work practice and that of the profession.
3. Understand and work to eliminate the forms and mechanisms of oppression and discrimination at all system levels.
4. Practice with knowledge, skills, and respect with regard to age, class, color, culture, ethnicity, family structure, gender, language, marital status, national origin, physical and/or mental disabilities, race, religion, sex, and sexual orientation.
5. Understand and adhere to the values, ethical standards and principles of the social work profession.
6. Use knowledge of the social work profession’s history, concerns, and societal contributions to inform contemporary issues in practice.
7. Practice with the skills and knowledge base of a culturally competent generalist social work practitioner at all system levels.
8. Demonstrate professional use of self in their practice with effective communication skills, self-awareness, inclusion of supervision and consultation, and the creation of positive change within organizations and service delivery systems.
9. Understand, analyze, influence, and formulate social policies.
10. Critically apply theoretical frameworks, supported by empirical evidence, that offer insight into the development and behavior of individuals over the lifespan and the interactions among individuals, families, groups, organizations, and communities.

Accreditation

The Bachelor of Social Work and the Master of Social Work programs are accredited by the Council on Social Work Education. This attests to the educational quality of the curricula and to the qualifications of graduates to assume professional positions that legally require applicants to have these degrees.
Honors/Honor Society

Dean’s List - Each fall and spring semester, those undergraduates who have met the credit hour and academic criteria for their school or college are placed on the Dean’s List. See the Dean's List (p. 92) policy for specific GPA and credit-hour requirements.

Alpha Delta Mu National Social Work Honor Society - Students with a cumulative GPA of 3.50 or above may apply for nomination to Alpha Delta Mu. Juniors and seniors are eligible for membership. Students should discuss this with their advisors.

Student Groups

Students at Temple University’s School of Social Work are part of a diverse community. The school offers an opportunity to be in class with diverse students who have had different life experiences and who represent varied points of view. In addition to classroom learning, SSW offers a number of ways in which students can come together as a community.

SSW Student Collective

The main student organization at SSW is the SSW Student Collective. The collective is the organization of both undergraduate and graduate students matriculated in the SSW Program. The Student Collective sponsors activities each academic year of a social, educational, and professional nature. Student representatives, selected by the collective, sit on various school committees as voting members. The collective was formed to represent a unified student voice that incorporates all the diversity of the student body.

In addition to the SSW Student Collective, students can choose to participate in the following social work organizations at SSW. The activity level of these groups varies from year to year since their existence is dependent on students stepping forward and organizing meetings and events.

National Social Work Honor Society (Beta Rho Chapter, Alpha Delta Mu)

The purpose of this organization is to advance excellence in social work practice and to encourage, stimulate, and maintain scholarship of the individual members in all fields, particularly in social work. For current activities, see the bulletin board in the lobby on the fifth floor of Ritter Hall Annex.

Alumni Association

For more information about SSWs alumni association, contact the General Alumni Association for names and numbers of current officers at 215-204-7521.

National Association of Social Workers, Philadelphia Division (NASW)

NASW is a professional organization that works on behalf of its members and the consumers they serve. Applications are available on the NASW bulletin board in the lobby on the fifth floor of Ritter Hall Annex.

Latino Social Work Organization (LSWO)

LSWO was founded in 1992 by a group of young social workers in Chicago. Temple students involved in LSWO have advocated for quality bilingual/bicultural services to Latinos and other oppressed communities.

Student Association of Black Social Workers (SABSW)

SABSW is a nonprofit organization created to serve African-American students and the community. The SABSW works towards unifying black social work students in the School of Social Work. The SABSW will also work with any student organization on campus or the immediate community to further the educational, political, academic, communal, and social plight of students at large.

Pride in Social Work (PSW)

PSW provides support, education, and advocacy for gay, lesbian, bisexual and transgendered students and their supporters. For additional information on Pride in Social Work at Temple University, contact Professor Bernie Newman at 215-204-1205.

Underground Railroad, Temple Depot (URR)

The URR works together with the Poor People’s Economic Human Rights Campaign focusing on direct actions, such as lobbying, advocacy, demonstrations, and support of grass-roots movements for social justice.

Student Contact Information

Students are asked to call the Office of Enrollment and Student Services (OESS) of the College of Public Health at 215-204-2602 or the below contacts with questions. For contact information in a specific department other than the School of Social Work, visit the web site at http://cph.temple.edu/.

Academic Program and Academic Advising

Cheri Carter, PhD, MSW
BSW Program Director
Office of Enrollment and Student Services Contacts

Erin Brosious, B.A.
Student Services Coordinator for MSW Program
Ritter Annex 521
215-204-1962
erin.brosious@temple.edu

Gradette Willis, M.S.W.
Associate Director for Advisement
215-204-7611
gradette.willis@temple.edu

Academic Policies & Regulations

Please see the Undergraduate Academic Policies (p. 81). Students are responsible for complying with all university-wide academic policies that apply to their individual academic status. Additional and unique policies, or exceptions for the School of Social Work, appear below.

Program Performance

Social work majors are expected to maintain a cumulative GPA of 2.00 or above. Students are expected to attain grades of C- or above in each of the professional and professionally related courses. Students who obtain a D+ or below in any course in the social work major must repeat the course.

Collegial Warning will be issued to students whose GPA falls below 2.00 for one semester. Students should not register for more than 12 credits until they improve their GPA.

Collegial Probation: Students who fall below a 2.00 for their cumulative GPA will be placed on probation. They may register for no more than 12 credits for the next term, in order to optimize the chance of improving their GPA. If their GPA is still below a 2.00 after two semesters of academic probation, students are subject to being dropped from the Social Work program.

Being Dropped from the Program: If a student does not achieve a cumulative average of 2.00 or show evidence of substantive scholastic improvement after two semesters on collegial probation and a 12-credit roster, the student is subject to being dropped from the School of Social Work.

Re-enrollment Request

To re-enter the School of Social Work, students must complete a Re-Enrollment Request and send it to the fax number designated on the last page of the request. Applications of students seeking re-enrollment after an absence of one or more semesters, not including summers, will be reviewed by the Director of the B.S.W. Program. If the student is accepted for re-enrollment, his or her program for completion of degree requirements will be planned in accordance with those currently operative in the program. If courses were taken elsewhere, applicants are responsible for having official transcripts available when submitting the request form.

Transfer from Schools within the University

Students who are in good standing at Temple University may transfer to the School of Social Work at any point during their academic career. Before applying to transfer to Social Work, Temple students must attend a Change of Program session. These are explained on the College of Public Health website under Student Advising. Transfer applications will not be processed until the student attends the Change of Program session. Students will be notified of the decision regarding their request to change majors to Social Work in an e-mail from the university. A minimum GPA of 2.00 is required for admission.

Prior to transferring, students are encouraged to arrange to meet with both the original school advisor and the SSW advisor or BSW Program Director. Because of the professional requirements and the sequential nature of the curriculum, students are encouraged to enter the program as early as possible. Students must be majors in the social work program for a minimum of two years and a summer.

General Graduation Requirements

In order to receive a Bachelor of Social Work degree, a student must complete a minimum of 120 semester hours, which includes the University General Education (GenEd (p. 143)) curriculum, the College of Public Health Core course (HRPR 1001) and the School of Social Work curriculum. A
potential graduate must also hold a cumulative GPA of 2.00 or better (having received a C- or better in all social work courses) and meet any additional requirements, such as completion of a graduation application.

Military Science Courses

Undergraduate students in the School of Social may apply up to 12 credits of military science courses at the 3000 and 4000 levels in Aerospace Studies (Air Force ROTC), Military Science (Army ROTC), and Naval Science (Navy ROTC).

Academic Advising

The College of Public Health has an extensive system of academic advising provided by professional and faculty advisors. In the School of Social Work, when students reach junior or senior standing, they are assigned to faculty advisors who assist with mentoring as students progress in their professional training. Early and regular contact with the advisor can be extremely helpful. The advisor is a knowledgeable person with whom students may discuss issues of concern in relation to university regulations, course selection, and career paths.

Academic advisors are particularly important for social work majors. The Bachelor of Social Work curriculum is organized so that courses scheduled to be taken later in the program build on the knowledge and skill foundation provided in the liberal arts and social work courses taken earlier. For this reason, most social work courses designate successful completion (with a C- or better) of earlier courses as prerequisite to taking later courses. Additionally, SSW requires that three of the social work courses required in each semester of the senior year—the research course, the seminar in social work practice, and the field practicum—be taken concurrently. This program of study for BSW students has been carefully designed and approved by faculty. It is intended to provide students with a coherent, integrated, and high-quality learning experience.

Although students must assume primary responsibility for knowing the requirements for their degree and for acquiring information about their academic status, student advisors can help students if they have any questions. Academic advisors strive to avoid errors when advising students about their program requirements; however, schools and colleges cannot assume liability for errors in advising.

Transfer Students from Schools Outside of Temple

The Offices of Admissions and of the Senior Vice Provost for Undergraduate Studies are responsible for the university's relations with local community colleges and for oversight of curricular policies related to student transfer into Temple. These offices assist in the evaluation and re-evaluation of transfer courses for GenEd, major, and elective credits at Temple, and interpret university transfer policies for students, faculty members, and academic advisors. (See Undergraduate Admissions regarding transfer admissions (p. 23).) Once accepted into the University, transfer students will be invited to an orientation session and encouraged subsequently to set up an appointment with a SSW academic advisor. Transfer students are expected to be majors in the program a minimum of two years and a summer in order to complete curricular requirements.

Administrators

Laura A. Siminoff, Dean, Ph.D., Johns Hopkins University
Bernie Newman, Department Chair, Ph.D., University of Pittsburgh
Cheryl Hyde, Director, M.S.W. Program, Ph.D., University of Michigan
Claudia Dewane, Assistant Chair, Temple Harrisburg, D.Ed., Pennsylvania State University
Cheri Carter, Director, B.S.W. Program, Ph.D., University of Delaware

Faculty

For information on faculty in the department of Social Work, please refer to the College of Public Health faculty page (p. 692).

Bachelor of Social Work (B.S.W.)

Cheri Carter, Ph.D, M.S.W., Assistant Professor, Undergraduate Program Director
Ritter Annex 581
215-204-1228
cheri.carter@temple.edu

Mission Statement

The School of Social Work, which is part of the College of Public Health, is dedicated to societal transformations to eliminate social, political, and economic injustices for poor and oppressed populations, and advance the quality of life for all through the following:

- Education emphasizing the discovery of knowledge, use of critical inquiry, and professional ethics to guide solution-seeking and action-taking to effect social change among professional social workers in front-line, supervisory, managerial, and other leadership positions.
- Research and scholarship to advance applied knowledge and generate evidence-based strategies to resolve problems occurring between people and their social environments at local, state, national, and global levels.
• Public service that aids the dissemination of knowledge and evidence-based strategies through collaborations and partnerships with communities, agencies, and organizations.

Goals
The goals of the School of Social Work are the following:

• preparation of ethical and competent social work practitioners and leaders who are committed to social and economic justice and to the eradication of barriers to the fullest development of human potential,
• provision of educational opportunities to a diverse population of students representative of the constituencies served,
• production of scholarship and research that contributes to the social work knowledge base, and
• engagement in service-related activities with relevant constituencies.

B.S.W. Curricular Objectives
By completion of their undergraduate studies, students will be able to

• apply skills and knowledge of generalist social work practice with systems of all sizes;
• understand human behavior from holistic and developmental perspectives that encompass dynamic interaction among social, political, cultural, economic, psychological, spiritual, and biological factors;
• critically select and apply theories and research findings to social work practice;
• understand and adhere to professional social work values and ethics;
• assess situations using knowledge about the effects of structural injustices based on race, class, gender, culture, sexual orientation, ability, age, and other forms of oppression;
• exercise self-awareness and reflection as part of the development of their professional and personal selves;
• engage in practice that enhances the capabilities of people to transform their lives and communities;
• communicate effectively verbally, non-verbally and in writing with agencies, advocates, legislators, policy makers, and people in client status;
• practice social work with a commitment to social and economic justice and the empowerment of individuals, families, groups, organizations, and communities;
• evaluate the effectiveness of their own practice;
• understand the relationship of historic social patterns, values, and institutional arrangements, recognizing their impact on social welfare policy and services and on the social work profession;
• use supervision and consultation to enhance their professional development and the delivery of services;
• understand the dynamics of human service organizations and know how to engage in productive organizational change; and
• understand how global issues affect local practice.

The B.S.W. Curriculum
The B.S.W. curriculum is organized so that courses scheduled to be taken later in the program assume, and build on, the knowledge and skill foundation provided in the General Education and social work courses taken earlier. For this reason, most social work courses designate successful completion (with a C- or better) of earlier courses as prerequisite to taking later courses. Additionally, the SSW requires that three of the social work courses required in each semester of the senior year—the research course, the seminar in social work practice, and the field practicum—be taken concurrently. This program of study for B.S.W. students has been carefully designed and approved by faculty. It is intended to provide students with a coherent, integrated, and high-quality learning experience.

Requirements for the Degree of Bachelor of Social Work (B.S.W.)

University Requirements
• All students are required to complete the university General Education (GenEd (p. 143)) curriculum.
  (Students who entered prior to fall 2011 should check with their advisor for the appropriate year and program requirements.
• All Temple students must take a minimum of two writing-intensive courses at Temple as part of the major. The specific writing-intensive courses required for this major are SSWU 3096 and SSWU 4396.

College Requirement
• All CPH students, including SSW students, must complete the College Core Course, HRPR 1001.

Clearance Requirements
Please note the Social Work program requires students to complete clinical/field education experiences at facilities both on and off the University campus. These placements will require criminal background checks, Act 33/34 clearances and perhaps a drug screen. The results of these requirements
may limit and potentially eliminate placement options which can, in turn, result in an inability to meet graduation requirements. Additionally, conviction of a misdemeanor, felony, or felonious or illegal act may prevent you from becoming credentialed and/or licensed to practice social work.

### School of Social Work Requirements

- Satisfactory completion of a minimum of 120 semester hours of credit.
- A minimum cumulative GPA of 2.00 overall and in the major.
- A grade of C- or higher is required in all courses satisfying GenEd and Social Work major requirements.

### B.S.W. Program Requirements

#### University and College Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRPR 1001</td>
<td>Public Health: The Way We Live, Work and Play</td>
<td>3</td>
</tr>
<tr>
<td>PSY 1001</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 1176</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>KINS 1223</td>
<td>Human Anatomy and Physiology I</td>
<td>4</td>
</tr>
<tr>
<td>or BIOL 1001</td>
<td>Human Biology</td>
<td></td>
</tr>
</tbody>
</table>

Select one of the following: 3 credits

- ECON 1001 Introduction to the Economy
- ECON 1101 Macroeconomic Principles
- ECON 1102 Microeconomic Principles
- ECON 1103 Global Economics Issues
- ECON 0858 The American Economy

Select one of the following: 3 credits

- POLS 1101 The American Political System
- or POLS 1911 Honors Introduction to American Politics

Select one of the following: 3 credits

- SOC 1167 Social Statistics
- SOC 1967 Honors Social Statistics
- MATH 1013 Elements of Statistics

#### Electives

- Social Work Specific Elective Course: 3 credits
- Free Electives: 9 credits

#### Professional Courses in Social Work

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSWU 1002</td>
<td>Communication in Social Work Practice</td>
<td>3</td>
</tr>
<tr>
<td>SSWU 2003</td>
<td>The History and Values of Social Welfare</td>
<td>3</td>
</tr>
<tr>
<td>SSWU 2004</td>
<td>Social Welfare in the United States</td>
<td>3</td>
</tr>
<tr>
<td>SSWU 3005</td>
<td>Helping Processes in Social Work I</td>
<td>3</td>
</tr>
<tr>
<td>SSWU 3006</td>
<td>Helping Processes in Social Work II</td>
<td>3</td>
</tr>
<tr>
<td>SSWU 3007</td>
<td>Human Behavior in the Social Environment</td>
<td>3</td>
</tr>
<tr>
<td>SSWU 3009</td>
<td>Human Behavior and the Social Environment: Communities and Organizations</td>
<td>3</td>
</tr>
<tr>
<td>SSWU 3011</td>
<td>The Social Worker in the Group</td>
<td>3</td>
</tr>
<tr>
<td>SSWU 3015</td>
<td>Lab for Helping Processes in Social Work I</td>
<td>1</td>
</tr>
<tr>
<td>SSWU 3016</td>
<td>Lab for Helping Processes in Social Work II</td>
<td>1</td>
</tr>
<tr>
<td>SSWU 3096</td>
<td>Institutional Racism</td>
<td>3</td>
</tr>
<tr>
<td>SSWU 4001</td>
<td>Seminar in Social Work Practice</td>
<td>3</td>
</tr>
<tr>
<td>SSWU 4002</td>
<td>Seminar in Social Work Practice</td>
<td>3</td>
</tr>
<tr>
<td>SSWU 4187</td>
<td>Social Work Field Practicum I</td>
<td>5</td>
</tr>
<tr>
<td>SSWU 4287</td>
<td>Social Work Field Practicum II</td>
<td>5</td>
</tr>
<tr>
<td>SSWU 4396</td>
<td>Introduction to Social Research</td>
<td>3</td>
</tr>
<tr>
<td>SSWU 4407</td>
<td>Evaluating Programs and Practice in Social Work</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credit Hours: 85**

### Field Work Practice

A minimum of 400 hours in supervised field settings is required. Students are overseen by an M.S.W. (or B.S.W. with at least two years of experience). They are directly involved in professional tasks in the agency and in the community. This component of the educational program of study facilitates the
integration of classroom learning, particularly in the social work subject areas of human behavior, policy, practice, and research. Students apply what they are learning and receive feedback from both classroom and field instructors on their work. Field work practice consists of 10 credits of the 51 credits of professional social work courses specified above.

Some of the fields of practice in the five-county Philadelphia area in which majors do their field work are these:

- **Aging**: including adult service centers as well as assistance in a variety of public and private organizations with treatment and protective functions;
- **Children and Youth**: child abuse, foster care and adoption agencies, parenting and support services;
- **Community Organization/Planning**: public issues and policies, neighborhood services at settlements, Y’s, community centers;
- **Correctional/Justice**: probation, parole, prison, community rehabilitation organizations;
- **Developmental Disabilities**: community-living arrangements, day programs, other public and private functions;
- **Education**: schools and alternative education programs;
- **Family Services**: material aid, crisis intervention, ongoing counseling;
- **Health/Hospitals**: advising, counseling, direct service with and on behalf of patients; a variety of functions in hospitals and community health centers;
- **Legal**: public agencies assisting low-income population in matters relating to law, housing, and discrimination;
- **Mental Health**: small and large institutions, community-based units, public and private auspices;
- **Substance Abuse**: counseling and other direct service in a variety of settings, both public and private;
- **Violence and Domestic Issues**: domestic violence of all kinds, sexual assault, and child abuse, in a wide variety of settings.

### Suggested Academic Plan

#### Bachelor of Social Work

**Requirements for New Students starting in the 2015-2016 Academic Year**

Note: The symbols (F), (S), (SS1) or (SS2) after the course number indicates that the class is offered ONLY in the semester indicated:

(F) = offered only in fall semester  
(S) = offered only in spring semester  
(SS1) = offered only in first summer session  
(SS2) = offered only in second summer session

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRPR 1001</td>
<td>Public Health: The Way We Live, Work and Play</td>
<td>3</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3-4</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Free Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>16-17</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SPRING</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>SSWU 1002</td>
<td>Communication in Social Work Practice</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>SOC 1176</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>16</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSWU 2003</td>
<td>The History and Values of Social Welfare (F, SS1)</td>
<td>3</td>
</tr>
<tr>
<td>PSY 1001</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>12</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SPRING</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>SSWU 2004</td>
<td>Social Welfare in the United States (S, SS2)</td>
<td>3</td>
</tr>
</tbody>
</table>
Schools, Colleges, and Divisions

| GenEd Breadth Course | 3 |
| GenEd Breadth Course | 3 |
| IH 0852 or 0952 | Mosaic: Humanities Seminar II [GZ] | 3 |
| Select one of the following: | 4 |
| KINS 1223 | Human Anatomy and Physiology 1 |
| BIOL 1001 | Human Biology |

**Term Credit Hours** | 16

### Year 3

#### Fall

- SSWU 3005: Helping Processes in Social Work I (F, SS1) | 3
- SSWU 3015: Lab for Helping Processes in Social Work I (F, SS1) | 1
- SSWU 3007: Human Behavior in the Social Environment (F, S, SS1) | 3
- SSWU 3011: The Social Worker in the Group | 3
- POLS 1101 or 1911: The American Political System | 3
- Free Elective | 3

**Term Credit Hours** | 16

#### Spring

- SSWU 3006: Helping Processes in Social Work II (S, SS2) | 3
- SSWU 3016: Lab for Helping Processes in Social Work II (S, SS2) | 1
- SSWU 3096: Institutional Racism [WI] (F, S, SS1) | 3
- Select one of the following:
  - SOC 1167: Social Statistics
  - SOC 1967: Honors Social Statistics
  - MATH 1013: Elements of Statistics
- Free Elective | 3
- Select one of the following:
  - ECON 1001: Introduction to the Economy (F)
  - ECON 1101: Macroeconomic Principles
  - ECON 1102: Microeconomic Principles
  - ECON 1103: Global Economics Issues
  - ECON 0858: The American Economy [GU] 2

**Term Credit Hours** | 16

### Year 4

#### Fall

- SSWU 3009: Human Behavior and the Social Environment: Communities and Organizations (F) | 3
- SSWU 4001: Seminar in Social Work Practice (F) | 3
- SSWU 4187: Social Work Field Practicum I (F) 3 | 5
- SSWU 4396: Introduction to Social Research [WI] (F) | 3

**Term Credit Hours** | 14

#### Spring

- SSWU 4002: Seminar in Social Work Practice (S) | 3
- SSWU 4287: Social Work Field Practicum II (S) 3 | 5
- SSWU 4407: Evaluating Programs and Practice in Social Work | 3
- Social Work Elective | 3

**Term Credit Hours** | 14

**Total Credit Hours:** 120-121

1. Refer to GenEd Science & Technology (p. 156) for information on a GS Waiver.
2. ECON 0858 satisfies the University GedEd U.S. Society requirement as well as SSW's Economics requirement.
3. 16 hour/week field practicum requirement.
In order to receive a Bachelor of Social Work degree, a student must complete a minimum of 120 semester hours, which includes the University General Education (GenEd (p. 143)) curriculum and the School of Social Work curriculum. A potential graduate must also hold a cumulative GPA of 2.00 or better (having received a C- or better in all social work courses), and meet any additional requirements, such as the Exit Interview.

Social Work Minor

The Social Work Minor is a great complement to majors such as criminal justice, psychology, education, pharmacy, and other allied disciplines.

The Social Work Minor introduces students to the knowledge, values, and skills necessary to

• comprehend the structures and functions of the field of social work;
• develop a more informed position on social policy issues;
• appreciate the economic, social, political, ethical and epistemological challenges that societies and their citizens face in responding to basic human needs;
• grasp the critical importance of social capital to communities and the larger society;
• become actively involved in helping to address social needs; and
• broaden and further enhance their professional career paths.

The Social Work minor consists of nine courses (23 credit hours), all of which are offered at the Main campus. The courses explore the following social work knowledge domains:

• Social policy development in historical, political, and economic context (SSWU 2003);
• Social problems and social policy analysis (SSWU 2004);
• Theories of human behavior within the context of the social environment (SSWU 3007);
• Helping processes across systems of all sizes (SSWU 3005, SSWU 3015, SSWU 3006, SSWU 3016);
• Verbal, non-verbal and written communication skills (SSWU 1002); and
• Institutional racism or group dynamics (SSWU 3096 or SSWU 3011).

Professional and faculty advisors in the school or college in which the student is currently majoring are available to help students interested in adding a social work minor to their program of study.

Requirements

Courses must be taken in the following order:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSWU 1002</td>
<td>Communication in Social Work Practice</td>
<td>3</td>
</tr>
<tr>
<td>SSWU 2003</td>
<td>The History and Values of Social Welfare</td>
<td>3</td>
</tr>
<tr>
<td>SSWU 2004</td>
<td>Social Welfare in the United States</td>
<td>3</td>
</tr>
<tr>
<td>SSWU 3005</td>
<td>Helping Processes in Social Work I</td>
<td>3</td>
</tr>
<tr>
<td>SSWU 3015</td>
<td>Lab for Helping Processes in Social Work I</td>
<td>1</td>
</tr>
<tr>
<td>SSWU 3006</td>
<td>Helping Processes in Social Work II</td>
<td>3</td>
</tr>
<tr>
<td>SSWU 3016</td>
<td>Lab for Helping Processes in Social Work II</td>
<td>1</td>
</tr>
<tr>
<td>SSWU 3007</td>
<td>Human Behavior in the Social Environment</td>
<td>3</td>
</tr>
<tr>
<td>SSWU 3096</td>
<td>Institutional Racism</td>
<td>3</td>
</tr>
<tr>
<td>or SSWU 3011</td>
<td>The Social Worker in the Group</td>
<td></td>
</tr>
</tbody>
</table>

Total Credit Hours 23
College of Liberal Arts

Founded 1884

Office of the Dean
www.cla.temple.edu

12th Floor, Anderson Hall
1114 W. Polett Walk

William Stull, Ph.D.
Interim Dean

Rebecca T. Alpert, Ph.D
Associate Dean for Academic Affairs
215-204-7712
rebecca.alpert@temple.edu

Annette McMenamin Bakley, Ed.D.
Senior Vice Dean
215-204-3625
amb@temple.edu

Amanda Gibson, M.A.
Assistant Director, Undergraduate Affairs
Grievance Officer
215-204-8504
gibson@temple.edu

Center for Academic Advising and Professional Development
www.cla.temple.edu/advising/

1810 Liacouras Walk, Third Floor
215-204-7971
claaac@temple.edu

Christopher Wolfgang, M.A.
Director
cwolfgan@temple.edu

Anar Khandvala, M.Ed.
Associate Director
anar@temple.edu

Introduction

Given the current pace of social and technological change in the world community, a firm grounding in the liberal arts is essential to one's prospects for success. Although recent trends in higher education highlight the proliferation of job-specific training, a well-rounded, liberal arts education is more relevant now than ever before. While highly specialized training and knowledge may prove helpful in landing one's first job, those who will build successful careers and lead us into the future will have a much broader, more transferable set of skills. Our graduates will be able to think critically while analyzing complex issues and developing creative solutions to problems that we have not yet imagined. The written and oral communication skills honed by a liberal arts program will allow our graduates to communicate their ideas concisely and effectively to both specialized and lay audiences. Working across disciplines to evaluate ideas and arguments throughout their college career, liberal arts graduates develop the technological and cultural literacy necessary to thrive in the global marketplace. In short, our leaders of the future will possess the skills and attributes that have long defined a liberal arts education.

In the College of Liberal Arts, our students learn how to learn by exploring a rich diversity of rigorous coursework in the humanities and social sciences, including anthropology, English, history, philosophy, sociology, religion, psychology and foreign languages. Many of our courses are taught in intimate, seminar-style settings that encourage students to engage our world-class faculty in meaningful discourse that expands world views and enhances analytical reasoning skills. Equally important is the flexibility afforded students within the liberal arts curriculum, which provides them with myriad opportunities to supplement their classroom education in meaningful ways by participating in study abroad programs, engaging in directed research, pursuing original scholarship through independent studies, and gaining valuable professional experience in internship programs. Taken together, these liberal arts experiences not only prepare students for rewarding careers, but for fulfilling lives as informed and engaged citizens of the world.
Accreditation

Departments and programs at Temple University are accredited by the Middle States Commission on Higher Education (www.msche.org (http://www.msche.org)). Individual departments and programs may carry additional accreditation by the official accreditation body for that discipline.

Special Programs

Professional Development

Patrick Gordon, Senior Professional Development Advisor
1810 Liacouras Walk, Suite 301
pgordon@temple.edu
(215) 204-7971

Elizabeth Anselmo, Professional Development Advisor
1810 Liacouras Walk, Suite 301
elizabeth.anselmo@temple.edu
(215) 204-7971

Given the rapidly-changing nature of the world economy, a degree in the liberal arts has never been more valuable. Our professional development advisors teach students in the liberal arts how they can best leverage their skills to prepare for careers in a broad array of industries, including government, non-profit, corporate, education, etc. We are committed to enhancing students’ professionalism and empowering students to present themselves successfully as candidates for internships and employment opportunities. We also work with students interested in preparing for graduate or professional school.

We provide an array of services to students in the College of Liberal Arts, including:

• Drafting and editing resumes
• Writing and revising cover letters
• Planning and preparing for graduate and professional school
• Developing effective strategies for finding internships and employment opportunities
• Building your personal brand and managing your online presence

In addition to working individually with students, our professional development advisors collaborate with faculty, administrators, and prospective employers to coordinate and host a number of career-related workshops and events, including:

• Information sessions
• Career fairs
• Employer visits
• Skill-building training workshops
• Alumni networking events

Affiliated Academic Courses

CLA 1002 Professional Development for Liberal Arts Majors (1 s.h.): Designed to guide students as they explore the transferability of the skills they have acquired in the liberal arts with an emphasis on the value of those skills in the marketplace. Students will learn how to search effectively for internship and career opportunities, communicate professionally, develop an application-ready résumé and prepare for networking and professional interviews.

CLA 2685 Internship (1 to 12 s.h.): Provides students with the opportunity to complete an internship for upper-level elective credit in the College of Liberal Arts. Interested students should meet with a professional development advisor and complete an internship contract.

First-Year Writing Program

www.cla.temple.edu/english/fywp/

1046 Anderson Hall

Shannon Walters, Director
215-204-1820
skw145@temple.edu

Rachael Groner, Associate Director
215-204-2212
rgroner@temple.edu
First-Year Writing includes two main 4-credit courses, ENG 0701 Introduction to Academic Discourse and ENG 0802 Analytical Reading and Writing. First-Year Writing also includes ENG 0711 and ENG 0812, which are alternative versions of ENG 0701 and ENG 0802 (respectively) designated especially for English as a Second Language (ESL) students. The ESL sections of all of our courses are equivalent in weight and credit to their direct counterparts.

Entering students are either placed into the 0701-0802 sequence, placed into 0802 only, or exempted from these courses entirely. Placement is based on a formula which takes into account the results of the placement exam, high school rank, and the SAT verbal score.

If a student places into ENG 0701/ENG 0711, he or she may not enroll in ENG 0802/ENG 0812 until ENG 0701/ENG 0711 is completed successfully, with a grade of C- or better. ENG 0802/ENG 0812 may not be taken for credit by students who have successfully completed ENG 0902 Honors Literature/Reading/Writing.

ENG 0802/ENG 0812 is a required course in the General Education program. Students are strongly advised to successfully complete ENG 0802/ENG 0812 before taking IH 0851 and IH 0852, any upper-level course in the College of Liberal Arts (all courses numbered 2000-4999), and all Writing Intensive courses (course numbers ending in -96, -97, and -98).

Students are advised to take the required three-course sequence of Analytical Reading and Writing, Mosaic I, and Mosaic II (IH 0851 and IH 0852) in order and in successive semesters.

**Intellectual Heritage Program (Mosaic Humanities Seminars I & II)**

www.cla.temple.edu/ih/

http://gened.temple.edu/students/courses/mosaic/

214 Anderson Hall

Joseph Schwartz, Director
jschw@temple.edu

Douglas Greenfield, Associate Director
dmg33@temple.edu

Emily Mears, Administrator
215-204-3177
emily.mears@temple.edu

The Intellectual Heritage Program offers a two-course sequence, IH 0851 Mosaic: Humanities Seminar I and IH 0852 Mosaic: Humanities Seminar II, which is part of the university General Education curriculum. Engaging with some of the rich, complex, and historically-significant texts that have shaped our culture, students build strong communication skills and intellectual curiosity. Students become familiar with some of the key concepts and moments in Western and other intellectual traditions.

Students are required to complete the General Education Curriculum. Transfer students should see their academic advisor for more information regarding their IH placement. Satisfactory completion of ENG 0802 is strongly advised prior to taking the Mosaic sequence. Honors versions of the Mosaic sequence are offered as IH 0951 and IH 0952, respectively.

**Study Abroad**

Undergraduates majoring in any liberal arts discipline may pursue a large variety of study abroad options. Temple University has campuses in Rome, Italy, and Tokyo, Japan. We offer programs in London, England, Oviedo, Spain, and exchange programs with universities in England, Germany, and Puerto Rico. Summer programs are offered in a number of countries, such as France, Germany, Ghana, Great Britain, India, Italy, Japan, and South Africa. In addition, CLA undergraduates can choose to study in non-Temple programs around the world.

Four advisors in CLA specialize in assisting students in planning their curriculum to take advantage of the study abroad option(s): Nicole Conley, Dina Malennikova, Jocelyn Tutrani, and Melissa Valdes. Students are urged to see an advisor about one year prior to their anticipated study abroad semester to determine their academic plan.

See the Office of Education Abroad and Overseas Campuses, 200 Tuttleman Learning Center or http://studyabroad.temple.edu/ for more information about study abroad options.

**University Honors Program**

The College of Liberal Arts participates in the university-wide honors program. Go to the University Honors Program (p. 51) section in this Bulletin for more information.
Departmental Honors Programs
Several departments in the College of Liberal Arts offer an Honors track for their majors. Students should consult the Bulletin information listed under the individual majors for eligibility, specific program requirements, and contacts.

Five Year BA/MA 4+1 Programs
Some departments in the College of Liberal Arts offer their high-achieving majors the opportunity to apply to their Master of Arts degree program during their junior year. Students admitted into these programs typically take up to 12 graduate credits that count towards both the BA and the MA degrees, leaving only one year of additional coursework beyond the BA to complete the MA program. In addition, students are not required to take the Graduate Record Examination, the standardized test most students take to gain entry to graduate school. The departments offering this option are: Criminal Justice and English. For more information on this program, consult your faculty advisor.

Temple Law Scholars Program
Paul Crowe, Director
7th floor Anderson Hall
215-204-8591
pcrowe@temple.edu

The Temple Law Scholars Program provides an opportunity for outstanding students to gain provisional admission to the Temple University Beasley School of Law at the same time they are accepted into the College of Liberal Arts. As Temple Law Scholars, students spend their undergraduate years in Temple's Honors Program, after which they enroll in the Beasley School of Law, leading to the JD degree. Scholars will take advantage of special opportunities, including internships, mock trial competitions, attendance at special events and lectures, and sitting in on law school classes.

The Temple Law Scholars Program is highly selective. To be considered, applicants must be accepted into the Honors Program. High class standing, high SAT scores, and superior letters of recommendation are expected, as is an articulate, thoughtful essay. In addition, other criteria used in the decision-making process include above-average maturity, community service, leadership, and a genuine commitment to the legal profession and service to others.

Application to the Temple Law Scholars Program takes place at the same time students apply to the College of Liberal Arts. The application materials include the Temple undergraduate admission application, the Temple Law Scholars application, a letter of recommendation, and an essay on a topic assigned by the Temple Law Scholars admissions committee. An interview may also be required. The deadline for receipt of all application materials is April 1. Applications received before March 1 will receive priority treatment.

Honor Societies and Awards for Achievement

Awards
During the graduation season in May, the Baccalaureate Awards Ceremony is held to honor seniors who have demonstrated outstanding academic performance and/or exceptional service to the college. Junior scholarship recipients are recognized at an annual event in the fall. These prizes are awarded competitively and are a testament to the excellence of the College of Liberal Arts undergraduates. For more information on awards offered for particular majors, see www.cla.temple.edu/awards-and-scholarships/, the web site for your department, or ask your faculty advisor about the awards nomination process.

Phi Beta Kappa
See the Honor Societies (p. 57) section of the Undergraduate Bulletin.

Student Association Information

Majors' Associations
Most of the departments in the College of Liberal Arts support student interest groups, clubs, and majors’ associations. These organizations provide opportunities for students from the individual disciplines of the liberal arts to meet one another and to extend the learning experience beyond the classroom. Some of these associations invite their alumni back to campus to connect with current undergraduates and talk with them about the wide range of career options open to liberal arts graduates.

Participation in the majors' associations has significant benefits. Active involvement cultivates skills in leadership, team work, cultural sensitivity, and public speaking, all of which are highly valued in the workplace. Students are strongly encouraged to participate in these organizations. For more information, see your department's website or faculty advisor.
Special Facilities

College of Liberal Arts - Information Technology (CLA IT)

The College of Liberal Arts offers cutting-edge technology and resources for students, faculty and staff. Our IT staff manages over 100 technology-enabled smart classrooms, more than 560 computer stations in both laboratory, kiosk, and classroom settings, in addition to a wireless network with 100% coverage in all CLA spaces.

www.cla.temple.edu/it/

Anderson Hall, Room 21
215-204-3213

Marc Getty, Director of Information Technology
marc.getty@temple.edu
215-962-5603

Rodney Holloway, Evening Manager, Computer Labs
R.T.Holloway@temple.edu

Crystal Schulz, Daytime Manager, Computer Labs
crystal.schulz@temple.edu

Computer Labs and Computer Classrooms

CLA IT maintains 11 computer classrooms ranging in size from 14 to 70 seats, plus a 100 seat public drop-in lab located in Anderson 21. For complete details, see www.cla.temple.edu/it/labs/.

Hours of Operation:

Fall/Spring Semesters and Study/Exam Days: All facilities are open 7:30 AM to 9:30 PM Monday through Thursday and until 7:30 PM on Fridays. The exceptions are Weiss 640 and both Tuttleman labs. Weiss 640 closes at 7:30 PM daily. For the Tuttleman labs hours, please visit the Writing Center web site (http://www.temple.edu/writingctr). There are no weekend hours.

Summer Sessions, Spring Break, and Winter Break: All facilities are open 8:00 AM to 7:30 PM Monday through Friday with the exception of the Tuttleman labs. For the Tuttleman labs hours, please visit the Writing Center web site (http://www.temple.edu/writingctr). There are no weekend hours.

Media Learning Center (MLC)

The Media Learning Center, a service of the College of Liberal Arts, is located within the Education Technology Center in Anderson Hall, Room AL21. The MLC provides audio, video, 16mm, slide, and printed materials for faculty use in the classroom. The center also provides facilities for students to view course related media.

www.cla.temple.edu/mlc/

Student Contact Information

On the department or academic program pages within this Bulletin, students will find contact information for departmental representatives (department chairs, undergraduate advisors, etc.) Other faculty contact information is available using the Cherry and White directory https://directory.temple.edu/ or by visiting the departmental web sites, located at the College of Liberal Arts home page: www.cla.temple.edu.

Faculty members keep regular office hours each semester, which are posted on syllabi and in the department offices.

Academic Policies & Regulations

University policies and regulations generally apply to all undergraduate students and provide a framework within which schools and colleges may specify further conditions or variations appropriate to students in their courses or programs.

Academic Residency Requirements

Upon transferring into the College of Liberal Arts, all students must complete at least 30 credits of coursework as a degree-seeking student, completing at least half of the courses required for any major, minor, or certificate program at Temple University.

In order to be considered for Latin honors (cum laude, magna cum laude, and summa cum laude), a student must complete a minimum of 60 credits at Temple University and meet the GPA requirements as set out in the University policy.
Course Levels
All College of Liberal Arts undergraduate courses are open to all students who have successfully completed appropriate course prerequisites and are divided into four categories:

- Preparatory courses numbered 0700-0799.
- General Education courses numbered 0800-0999.
- Upper-level courses numbered 2000-4999.

Courses Taken at Other Institutions
Degree-seeking Temple students must always petition for the prior approval of their dean or dean's designee to take courses at another institution. (Refer to Permission to Complete a Course at Another Institution after Matriculation (p. 98).) Petitions are available in the College of Liberal Arts Center for Academic Advising and Professional Development.

Dean's List
Each fall and spring semester, those undergraduates who have met the credit hour and academic criteria for their school or college are placed on the Dean's List. See the Dean's List (p. 92) policy for specific GPA and credit-hour requirements.

Declaration of Major
Students in the College of Liberal Arts must declare their major before completing 60 credits, including credits transferred from other institutions. Undeclared students with 45 or more credits are required to meet with an advisor in the Center for Academic Advising and Professional Development before registering.

Foreign Language Course Placement Policy
Students who have studied a foreign language in the four years prior to admission to Temple must take a placement exam if they wish to continue in that language. If a period of more than four years has elapsed between a student’s graduation from high school and admission to college, s/he is eligible to enroll in the first level of the language s/he studied in high school.

If a student enrolls in a course level lower than the placement score indicates, s/he will not receive graduation credit for the course or will be dropped from the course by the College of Liberal Arts. If a student wishes to receive credit for a course lower than that indicated by the placement exam, s/he must receive permission from the department chair or program coordinator for that language.

Heritage speakers (also known as native speakers) of a foreign language taught by Temple University must meet with the language program coordinator or department chairperson to assess their readiness and course placement in the language skills sequence. Students will not receive credit for courses lower than their placement indicates. A student with pre-existing language skills (family background, travel or study in a foreign country, participation in non-credit summer language institutes, etc.) who then enrolls in lower division courses in that same language will not receive graduation credit for the course and may be dropped from the course by the College of Liberal Arts.

Foreign Language Regression in Coursework Policy
- Students who have completed 4000 level coursework may enroll in courses at the 3000 level, but not at the 1000 or 2000 level.
- Students who have completed the 3000 level may enroll in courses at the 2000 level, but not at the 1000 level.
- Students who have completed a 2000 level course may not enroll at the 1000 level.
- General Education courses at the 0800 and 0900 levels are not language skills courses and are open to all students.

If a student seeks permission for an exception to the Regression policy, he or she should discuss the request with the program coordinator for the language.

Intra-University Transfer
Students who wish to Intra-University Transfer (IUT) into the College of Liberal Arts from other colleges and schools at Temple must have at least a 2.0 GPA in the intended major and overall. Students will not be permitted to IUT as undeclared majors if they have completed, or are in the process of completing, 60 or more credits.

Graduation Application Process
During the semester immediately prior to the semester in which students will complete their degree requirements, they must apply for graduation by completing the on-line graduation application available through Self Service Banner. Students planning to graduate in August or January must apply by April 1 and students planning to graduate in May must apply by November 1.
All applications received by the deadlines noted above will be reviewed by academic advisors in advance of the next semester and students will be notified of any necessary schedule revisions to fulfill remaining requirements.

Students are responsible for ensuring their intended graduation date is up-to-date by contacting their advisor.

Placement Tests
All incoming freshmen must take diagnostic English, mathematics, and foreign language placement tests. Transfer students who have not completed ENG 0802 or a college-level math course are also required to take placement examinations. The results of these tests determine if students are required to enroll in introductory composition and mathematics courses. Students assigned to ENG 0701/ENG 0711 must register each semester for that course until the requirement is completed. Only upon successful completion of ENG 0701/ENG 0711 can such students enroll in ENG 0802/ENG 0812. Students assigned to courses designed to remedy deficiencies in mathematics are required to complete those courses (MATH 0701 or MATH 0702) before enrolling in the mathematics component of the University General Education Program (GenEd (p. 143)). Incoming students must also take a foreign language placement examination if they plan to continue a language previously studied or if they wish to place out of the foreign language requirement.

Plagiarism & Academic Cheating
Plagiarism and academic cheating are unacceptable in College of Liberal Arts courses. The development of independent thought and a respect for the thoughts of others is essential to intellectual growth. The penalty for plagiarism or cheating as a first offense is normally an F in the course in which the offense is committed. In such cases, the instructor will write a report to the dean. The CLA Grievance Committee will adjudicate appeals made by students and serious cases, or repeat offenses, referred to the committee by an instructor or the dean. The dean may recommend suspension or expulsion from the university when warranted. Instructors may also refer the offense to the University Disciplinary Committee (UDC) for adjudication.

The prohibition against plagiarism and cheating is intended to foster this independence and respect. For more information, see Academic Honesty (p. 36) under Student Responsibilities.

Academic Standing, Warning, Probation, Dismissal, & Reinstatement
To maintain academic good standing in the university, a student enrolled in an associate or baccalaureate degree-seeking program must achieve both a semester grade point average and a cumulative grade point average of at least a 2.0. See the University policy on Academic Standing (http://policies.temple.edu/getdoc.asp?policy_no=02.10.11) for details on academic warning, academic probation, academic dismissal and reinstatement. There is a related policy on Academic Forgiveness (http://policies.temple.edu/getdoc.asp?policy_no=02.10.17).

Withdrawal from Classes
During the first two weeks of the fall or spring semester or summer sessions, students may drop one or more courses with no record of the class appearing on the transcript. In weeks three through nine of the fall or spring semester, or during weeks three and four of the summer sessions, students may withdraw with the assistance of an academic advisor—or by using the withdrawal function in Self-Service Banner (SSB). Instructors’ signatures are not required to withdraw. The course will be recorded on the transcript with the notation of “W,” indicating that the student withdrew. After week nine of the fall or spring semester, or week four of summer sessions, students may not withdraw from courses.

For the complete policy, please refer to the Academic Policies (p. 102) section of this Bulletin.

Requirements for the Baccalaureate Degree

Credit Hour Requirements
Bachelor of Arts and Bachelor of Science degrees in the College of Liberal Arts require a minimum of 123 credits, distributed according to the university and college policy outlined below, with at least a 2.0 cumulative grade point average (GPA). A minimum 2.0 GPA must also be maintained in College of Liberal Arts and College of Science and Technology (hereafter “CLA/CST”) coursework and in the major.

To earn a CLA baccalaureate degree, a student must complete a minimum of 123 credits, including: 90 credits in CLA/CST courses, 45 credits of which must be at the upper level (numbered 2000-4999). Of that, 6 credits must be outside the student’s major division (e.g. Social Sciences or Humanities).

A maximum of 9 credits of Independent Study can be applied to the Bachelor's degree. This does not include internship, externship, or research credits.

Degree Eligibility
The College of Liberal Arts does not award baccalaureate degrees to students who have already completed an accredited first Bachelor’s, Master’s, or Ph.D. degree, regardless of when the degree was completed.

University Requirements
All students entering an undergraduate degree program are required to complete the university General Education (GenEd (p. 143)) curriculum.
All students must take a minimum of two writing-intensive courses at Temple University as designated by their major requirements. The specific writing-intensive courses required for each major are listed on the individual program pages and are identified by “WI.”

**Foreign Language/Global Studies Requirement for Bachelor of Arts Students**

**NOTE:** This is *not* required for students majoring in the Bachelor of Science in Neuroscience: Systems, Behavior, & Plasticity program.

1. All B.A. students complete the second level of a foreign language;
2. All B.A. students must complete at least one course from the GenEd Global/World Society category; and
3. All B.A. students must complete one of the following options:

   - Third level of a foreign language;
   - Demonstrated proficiency in a foreign language;
   - A second General Education Global/World Society course;
   - Study Abroad at an approved program; or
   - Take one Global Studies course from the following list:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 2361</td>
<td>Peoples of Latin America</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 2362</td>
<td>Peoples and Cultures of the Caribbean</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 2364</td>
<td>People and Culture of the Middle East</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 2374</td>
<td>The Anthropology of Modern China</td>
<td>3</td>
</tr>
<tr>
<td>ASST 2021</td>
<td>Japanese Literature in Film</td>
<td>3</td>
</tr>
<tr>
<td>ASST 2501</td>
<td>Introduction to East Asia: China</td>
<td>3</td>
</tr>
<tr>
<td>ASST 2502</td>
<td>Introduction to East Asia: Japan</td>
<td>3</td>
</tr>
<tr>
<td>ASST 2503</td>
<td>Introduction to Southeast Asia: Insular</td>
<td>3</td>
</tr>
<tr>
<td>ASST 2504</td>
<td>Introduction to Southeast Asia: Mainland</td>
<td>3</td>
</tr>
<tr>
<td>CHI 2011</td>
<td>Pre-Modern Chinese Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENG 2601</td>
<td>Introduction to Postcolonial Literatures</td>
<td>3</td>
</tr>
<tr>
<td>ENG 2712</td>
<td>International Film</td>
<td>3</td>
</tr>
<tr>
<td>ENG 3112</td>
<td>Masterpieces of European Drama</td>
<td>3</td>
</tr>
<tr>
<td>GUS 2032</td>
<td>Urban Systems in a Global Economy</td>
<td>3</td>
</tr>
<tr>
<td>GUS 2073</td>
<td>African Development</td>
<td>3</td>
</tr>
<tr>
<td>GUS 3073</td>
<td>Geography of Travel and Tourism</td>
<td>3</td>
</tr>
<tr>
<td>GUS 3097</td>
<td>Environment &amp; Development</td>
<td>3</td>
</tr>
<tr>
<td>GRC 1004</td>
<td>Introduction to the Ancient City</td>
<td>3</td>
</tr>
<tr>
<td>GRC 2002</td>
<td>Gender in Classical Antiquity</td>
<td>3</td>
</tr>
<tr>
<td>GRC 2101</td>
<td>The Greeks</td>
<td>3</td>
</tr>
<tr>
<td>GRC 2102</td>
<td>The Romans</td>
<td>3</td>
</tr>
<tr>
<td>HEBR 3711</td>
<td>Israelis and Palestinians</td>
<td>3</td>
</tr>
<tr>
<td>HIST 1501</td>
<td>Third World History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 1702</td>
<td>World History Modern</td>
<td>3</td>
</tr>
<tr>
<td>HIST 2304</td>
<td>20th Century Europe: A Continent in Crisis</td>
<td>3</td>
</tr>
<tr>
<td>HIST 2702</td>
<td>Imperialism, Race, and Empire</td>
<td>3</td>
</tr>
<tr>
<td>ITAL 2221</td>
<td>Italian Culture through Film</td>
<td>3</td>
</tr>
<tr>
<td>ITAL 3201</td>
<td>Italian Culture and Civilization</td>
<td>3</td>
</tr>
<tr>
<td>ITAL 3240</td>
<td>Topics in Italian Cinema and Literature</td>
<td>3</td>
</tr>
<tr>
<td>JPNS 2012</td>
<td>Modern and Contemporary Japanese Literature in Translation</td>
<td>3</td>
</tr>
<tr>
<td>JPNS 2021</td>
<td>Japanese Literature in Film</td>
<td>3</td>
</tr>
<tr>
<td>JPNS 2096</td>
<td>Japanese Popular Culture and Literature</td>
<td>3</td>
</tr>
<tr>
<td>LAS 1001</td>
<td>Perspectives on Latin America</td>
<td>3</td>
</tr>
<tr>
<td>LAS 2232</td>
<td>Politics of Development in Latin America</td>
<td>3</td>
</tr>
<tr>
<td>POLS 1201</td>
<td>Foreign Governments and Politics</td>
<td>3</td>
</tr>
<tr>
<td>POLS 1301</td>
<td>International Politics</td>
<td>3</td>
</tr>
<tr>
<td>REL 2002</td>
<td>Religion and Human Sexuality East &amp; West</td>
<td>3</td>
</tr>
<tr>
<td>REL 2606</td>
<td>Introduction to Islam</td>
<td>3</td>
</tr>
<tr>
<td>Course</td>
<td>Title</td>
<td>Credits</td>
</tr>
<tr>
<td>----------</td>
<td>--------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>REL 3001</td>
<td>Earth Ethics</td>
<td>3</td>
</tr>
<tr>
<td>RUS 1201</td>
<td>Russian Culture</td>
<td>3</td>
</tr>
<tr>
<td>SOC 3219</td>
<td>Globalization: Causes, Promises and Discontents</td>
<td>3</td>
</tr>
<tr>
<td>SOC 3221</td>
<td>Global Development</td>
<td>3</td>
</tr>
<tr>
<td>SOC 3511</td>
<td>Sociology of the Environment</td>
<td>3</td>
</tr>
</tbody>
</table>

*(Please note: The Foreign Language/Global Studies requirement does not pertain to students pursuing the B.S. in Neuroscience. Neuroscience majors under the GenEd program must complete one Global/World Society course.)*

**Major**

Students must also complete the requirements of a major. The minimum acceptable grade in a course taken to fulfill major requirements is a "C-," though students need a 2.0 GPA overall in major coursework in order to graduate. At least half of the coursework required for a major must be taken at Temple University.

Students are permitted to double-major (both inside CLA and across schools and colleges) but Temple University does not permit transcription of a third major.

Students are encouraged to declare their major as soon as possible, and university policy requires that a major must be declared by the time a student has earned 60 credits.

Major requirements are determined by the effective semester of their declaration. The Center for Academic Advising and Professional Development is responsible for making this assignment and informs the student via e-mail.

Students who wish to declare or change their major or minor should consult the Center for Academic Advising and Professional Development at 1810 Liacouras Walk, Suite 301.

**B.A. and B.S. majors are offered in the divisions of the Humanities and the Social Sciences.**

- **Humanities**: English, French, German, Greek and Roman Classics, Italian, Japanese (only available at our Japan campus), Philosophy, Religion, and Spanish (includes tracks in Language, Literature and Linguistics, Professional Studies, Education)
- **Social Sciences**: African American Studies, American Studies, Anthropology (includes tracks in Human Biology and Visual Anthropology), Asian Studies, Criminal Justice, Economics, Environmental Studies, Geography and Urban Studies, Global Studies, History, Jewish Studies, Latin American Studies, Mathematical Economics, Neuroscience: Systems, Behavior and Plasticity (B.S.), Political Science, Psychology, Sociology (includes track in Sociology of Health), and Women's Studies

**Upper-level Distribution Requirements**

All B.A. and B.S. students in the College of Liberal Arts must complete upper-level distribution requirements by taking two upper-level (numbered 2000-4999) CLA courses outside the curriculum division of the major (or upper-level College of Science and Technology courses) as stated above. Students who have double majors in two different divisions automatically satisfy the distribution requirement.

*Note: The Humanities Division has been expanded to include upper-level courses in Art History from the Tyler School of Art.*

**Military Science Courses**

Undergraduate students in the College of Liberal Arts whose degree programs allow for free electives may apply up to 12 credits of military science courses at the 3000 and 4000 levels in Aerospace Studies (Air Force ROTC), Military Science (Army ROTC), and Naval Science (Navy ROTC).

**Courses Inapplicable to Graduation**

Students will not receive credits for lower-level courses after successful completion of higher-level courses in sequenced courses of study. This only applies to the First Year Writing sequence in English (0701-0802), and all courses in Mathematics and Foreign Languages. For example, after passing a SPAN 1002 course, a student will not receive credits for SPAN 1001.

**Credit/No Credit**

During the junior and senior years, any College of Liberal Arts student who is in good standing and taking a minimum of 12 semester hours may elect to take one course each semester on a Credit/No Credit basis, except for courses that count toward major, minor, GenEd, or distributional requirements. Application must be made at the Center for Academic Advising and Professional Development during the first two weeks of a fall or spring semester course and during the first three days of a first or second summer session course.
Special Major & Minor Requirements

Interdisciplinary Major

Rather than major in an existing department or program, students may apply for a major in Interdisciplinary Studies. The proposed major should consist of coursework totaling at least 36 semester hours and be justified in terms of some thematic unit of cohesive rationale. The program must not closely resemble any major currently available in the College of Liberal Arts.

The proposed major program may include courses outside of the College of Liberal Arts, but at least 24 semester hours must be in upper-level liberal arts or science courses. The student's proposal must be sponsored by two faculty members from different departments, at least one of whom must be in the College of Liberal Arts. Approval for the program must be obtained from the College of Liberal Arts’ Center for Academic Advising and Professional Development prior to the initiation of the last 60 semester hours of the degree.

Honors Interdisciplinary Major

Students in the University Honors Program may apply for a College of Liberal Arts Honors Interdisciplinary Major. They must complete the degree requirements of the B.A. in the College of Liberal Arts and the requirements for the Interdisciplinary Major described above as well as the requirements for the University Honors Program. Approval for this program must also be obtained from the University Honors Committee prior to the initiation of the last 60 semester hours of the degree.

In addition, the proposed major program should include submission of an acceptable honors thesis to the University Honors Oversight Committee.

Minor

Students may also choose to complete the requirements for a minor. The minimum acceptable grade in a course taken to fulfill minor requirements is “C-,” though students need a 2.0 GPA in the minor in order to have it awarded at graduation. At least half of the courses taken by a student to fulfill the minor must be taken at Temple. Students may declare a minor at the Center for Academic Advising and Professional Development, 1810 Liacouras Walk, Suite 301. The College of Liberal Arts offers minors in:

- African American Studies
- American Studies
- Ancient Mediterranean Studies (see Classics)
- Anthropology (General)
- Anthropology (Visual)
- Arabic
- Asian-American Studies
- Asian Studies
- Chinese
- Classics
- Clinical and Health Psychology
- Cognitive Neuroscience (see Psychology)
- Criminal Justice
- Economics
- English
- Environmental Studies
- French
- Geography and Urban Studies
- German
- Global Studies
- History
- Italian
- Japanese
- Jewish Studies
- Latin American Studies
- Lesbian, Gay, Bisexual and Transgender Studies (LGBT)
- Neuroscience Research
- Philosophy
- Political Science
- Portuguese
Certificates of Specialization

Students may choose to complete the requirements for an additional certificate of specialization. At least half of the courses taken by a student to fulfill a certificate of specialization must be taken at Temple. Students may declare a certificate in the Center for Academic Advising and Professional Development, 1810 Liacouras Walk, Suite 301. Certificates of specialization are available in the following programs:

- Asian Business and Society (see Asian Studies)
- Foreign Languages: Arabic, Chinese, French, German, Italian, Japanese, Spanish (see departments)
- Geographic Information Systems (see Geography and Urban Studies)
- Health Research (see Sociology)
- Jewish Secular Studies (see Jewish Studies)
- Latin American Studies Semester (see Spanish)
- Management Career (see Economics)
- Political Economy (see Economics and Political Science)
- Spanish and Latin American Studies for Business (see Spanish)
- Spanish and Latino Studies for the Health and Human Services Professions (see Spanish)
- Women's Studies (see Women's Studies)
- Writing (see English)

Academic Advising

Center for Academic Advising and Professional Development
1810 Liacouras Walk, Suite 301
215-204-7971
claaac@temple.edu

www.cia.temple.edu/advising

The Center for Academic Advising and Professional Development in the College of Liberal Arts helps students plan curricula, choose majors, make vocational and post-graduate plans, and resolve a variety of academic matters. Services are provided by a staff of full-time professional advisors. The Center informs students about the results of placement testing and assignment into corresponding courses. Monitoring of academic progress and graduation clearance is also the responsibility of the Advising Center. Through individual appointments and group workshops, the Center offers the following services:

- New Student Orientation.
- Advising and registration assistance for all students in the College of Liberal Arts. Students enrolled in the University Honors Program also receive advising in the Honors Program Office in Tuttleman Learning Center, Suite 201. Students are strongly encouraged to seek faculty advising in their major department.
- It is recommended, and in some cases required, that students consult with an advisor prior to registration. The advisor will review the proposed coursework and inform students of the requirements for graduation. In addition, the advisor helps students achieve breadth in their curriculum and provides other needed assistance.
- Academic advising provides an opportunity for students to develop a meaningful education plan compatible with their life goals. Students can also meet with advisors to discuss a variety of academic concerns and identify solutions. Students on academic probation or experiencing academic difficulty work with advisors to learn strategies for overcoming the obstacles to success.
- Intra-University Transfer (IUT) Advising for students changing programs and moving into the College of Liberal Arts from other schools and colleges within Temple. During mandatory group advising sessions, students transferring to Liberal Arts learn about collegial degree requirements, policies and procedures, and complete the Change of Program form.
- Approving special requests including: leave of absence (p. 97); academic forgiveness (http://policies.temple.edu/getdoc.asp?policy_no=02.10.17); course repeats (http://policies.temple.edu/getdoc.asp?policy_no=02.10.12); re-enrollment at the University (http://www.temple.edu/vpus/documents/request_to_reenroll.pdf); permission to take courses elsewhere (http://www.temple.edu/vpus/documents/permission_courses_elsewhere.pdf); registration overload (p. 82); credit/no-credit (p. 92) option for free electives; and other questions regarding University or College policies (p. 81). (Click the links to be directed to more information on specific policies.)
All academic advisors are trained to evaluate information carefully to give students the best possible advice. **Primary responsibility for course selection and degree completion rests with the student.** Every student must be aware of the requirements of his or her degree and should collaborate with an advisor regularly to ensure timely completion of his or her program.

**Department-Based Advisors**

All departments in the College of Liberal Arts have designated faculty advisors, undergraduate chairs, or embedded professional advisors, with whom students can discuss the requirements of their major, minor, and/or certificate programs. For a listing of CLA faculty advisors, consult: www.cla.temple.edu/advising/departmental/.

**Student Grievance Procedures**

Title IX of the Educational Amendments Act of 1972 requires that each college or university establish due process for the resolution of academic grievances. This is to protect students from prejudiced and capricious academic evaluation. All undergraduate students enrolled in the College of Liberal Arts have a right to appeal grades which they deem unfair and unreasonable. The student must provide evidence indicating a mistake, fraud, or bad faith on the part of an instructor. Students will not be allowed to grieve a grade unless it is accompanied by such evidence.

Students should first contact their instructor to discuss the grade(s) in question, and if the matter cannot be resolved at that level, students are then urged to talk with the chairperson for the department in which this course was given. Chairperson information is available in this publication. A student must initiate the first stage of an academic grievance by the dates in the College of Liberal Arts Grievance Procedure, available at www.cla.temple.edu/students/undergraduate/grievances/.

For more information, students should contact the college’s Grievance Officer, Amanda Gibson, at gibson@temple.edu or 215-204-8504.

**Non Academic Grievances**

Students may have grievances that are not academic in nature. Such grievances should be directed to other offices on campus, which may include the Office of the Dean of Students, the Equal Opportunity Compliance office, Office of University Housing and Residential Life, and other units on campus. Students unsure as to where to proceed with a non-academic grievance should consult either with the Office of the Dean of Students or the college’s Center for Academic Advising and Professional Development.

**Pre-Law Advising**

**Pre Law Advisors**

Elizabeth Reynard  
CLA Academic Advising  
ereynard@temple.edu

Paul Crowe  
Department of Philosophy  
pcrowe@temple.edu

**Preparation for the Study of Law**

All law schools accept the degree of Bachelor of Arts as fulfillment of their requirements for admission. The Pre-Legal Education Committee of the Association of American Law Schools and the Temple University School of Law stress the importance of a well-rounded education. Liberal arts majors are considered excellent preparation for law school. Although Temple University does not have a specific major in Pre-Law, we do offer specialized advising for students interested in applying to law school, as well as majors in challenging disciplines that will help students hone their critical thinking, analytical, and communication skills. Since the legal profession makes extensive use of both the written and spoken English language as professional tools, the law student should have extensive preparation in English in undergraduate courses. Because a large part of a lawyer’s work requires problem solving and sound judgment, students should take courses that help develop creative power in thinking. The study of law, furthermore, rests upon a broad knowledge of western civilization, including its political, economic, and social institutions; hence, the student preparing for law should schedule courses which afford this broad background. Some law schools also recommend two semesters of accounting. After selecting a field of concentration, the student schedules courses in consultation with both the advisor in the area of concentration and with the pre-law advisor in the Center for Academic Advising and Professional Development of the College of Liberal Arts.

**Courses of Special Interest to Pre-Law Students**

While no specific undergraduate courses or majors are required for admission to accredited law schools, pre-law students are advised to select courses and programs of study that are intellectually challenging, while helping to develop necessary skills and knowledge.

To develop the communications skills of reading and comprehension, expository writing, and speaking:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSCD 1108</td>
<td>Introduction to Linguistics</td>
<td>3</td>
</tr>
<tr>
<td>AOD 2214</td>
<td>Conflict and Communication</td>
<td>3</td>
</tr>
</tbody>
</table>
Schools, Colleges, and Divisions

ENG 2006  Introduction to Non-Fiction  3
ENG 2009  Writing the Research Essay  3
English 2000+ Upper-level literature courses  3
STRC 1111  Public Speaking  3
STRC 2112  Strategies and Tactics of Persuasion  3

To develop analytical reasoning skills:

PHIL 1055  Critical Thinking  3
PHIL 1066  Introduction to Logic  3
PHIL 1196  Introduction to Philosophy  3
PHIL 2121  Introduction to Ethical Theory  3
STRC 3336  Argumentation  3

Computer Science and Mathematics

Natural Science

Courses that are "law-related" because they either require reading of law cases or concern the study of particular legal issues are listed below for the convenience of interested students. Law school admissions officials prefer that pre-law students take very few such courses, believing that the teaching of law more appropriately belongs in the province of the law school. It may be useful, however, for students who are uncertain about attending law school to test their level of interest by selecting one or more of the following courses in the College of Liberal Arts:

AMST 3033  Courtroom in American Society  3
CJ 2501  Introduction to Criminal Law  3
CJ 3201  The American Jury System  3
CJ 3502  Criminal Procedure: Prosecution & Adjudication  3
HIST 2105  Race and the U.S. Constitution  3
PHIL 1062  Morality and the Law  3
PHIL 2154  Political Philosophy  3
PHIL 3243  Philosophy of Law  3
POLS 3121  American Constitutional Principles I  3
POLS 3123  American Constitutional Principles II: Civil Rights in America  3
POLS 3411  Classical Political Philosophy  3
SOC 3243  Social Movements and Conflict  3
WMST 4004  Women and Criminal Justice  3

Since most law schools require applicants to submit the score earned on the Law School Aptitude Test, administered periodically by the Law School Admissions Service, students planning to study law should consult the pre-law advisor prior to the senior year to determine whether the school to which they plan to apply will require such a test and to determine the dates when such examinations are given. Prospective law students should consult the pre-law advisor about requirements for admission to law school, law school scholarship assistance, and opportunities in the legal profession. To satisfy statutory requirements, early in their senior year, prospective law students should consult the pre-law advisor concerning the legal requirements for practicing law in the state in which the student desires to study and practice.

Phi Alpha Delta Law Fraternity, International

Students interested in College of Liberal Arts pre-law studies are encouraged to join Phi Alpha Delta. Its pre-law program assists "undergraduate students to make an 'informed choice' in selecting law as a career, deciding which law school to attend, and in preparing for the rigors of law school."

Phi Alpha Delta was formed "to advance the ideals of liberty and equal justice under law; to stimulate excellence in scholarship; to inspire the virtues of compassion and courage; to foster integrity and professional competence; to promote the welfare of its members; and to encourage their moral, intellectual, and cultural advancement." For more information about Phi Alpha Delta and College of Liberal Arts pre-law society, please contact Dr. Paul Crowe, pre-law advisor, at 215-204-8591 or pcrowe@temple.edu.

Faculty

Go to the College of Liberal Arts web site at www.cla.temple.edu and click on the individual department for a list of faculty in that department. See also https://directory.temple.edu/.

Zain Abdullah, Associate Professor, Department of Religion, College of Liberal Arts; Ph.D., The New School for Social Research.

Carolyn T. Adams, Professor Emerita, Department of Geography and Urban Studies, College of Liberal Arts; Ph.D., Washington University.
Howard Addison, Assistant Professor (Teaching/Instructional), Department of Intellectual Heritage, College of Liberal Arts; Ph.D., Graduate Theological Foundation.

Hiram Aldarondo, Associate Professor, Department of Spanish and Portuguese, College of Liberal Arts; Ph.D., University of Chicago.

Joseph D. Alkus, Instructor (Teaching/Instructional), Department of Criminal Justice, College of Liberal Arts; M.S., National Louis University.

David Allen, Associate Professor (Teaching/Instructional), Department of Sociology, College of Liberal Arts; Ph.D., University of California Berkeley.

Lauren B. Alloy, Professor, Department of Psychology, College of Liberal Arts; Ph.D., University of Pennsylvania.

Rebecca T. Alpert, Professor, Department of Religion, College of Liberal Arts; Ph.D., Temple University.

Michael Altimore, Associate Professor (Teaching/Instructional), Department of Sociology, College of Liberal Arts; Ph.D., University of Iowa.

Elizabeth Alvarez, Assistant Professor (Teaching/Instructional), Department of Intellectual Heritage, College of Liberal Arts; Ph.D., University of Chicago Divinity School.

Nilgün Anadolu-Okur, Associate Professor, Department of African American Studies, College of Liberal Arts; Ph.D., Hacettepe University.

Max Andrucki, Assistant Professor (Teaching/Instructional), Department of Geography and Urban Studies, College of Liberal Arts; Ph.D., University of Leeds.

Kevin T. Arceneaux, Associate Professor, Department of Political Science, College of Liberal Arts; Ph.D., Rice University.

Molefi Kete Asante, Professor, Department of African American Studies, College of Liberal Arts; Ph.D., University of California Los Angeles.

Alira Ashvo-Munoz, Assistant Professor (Teaching/Instructional), Department of Spanish and Portuguese, College of Liberal Arts; Ph.D., University of Texas at Austin.

Philip Atkins, Assistant Professor (Teaching/Instructional), Department of Philosophy, College of Liberal Arts; Ph.D., University of California Santa Barbara.

Kathleen Auerhahn, Associate Professor, Department of Criminal Justice, College of Liberal Arts; Ph.D., University of California Riverside.

James D. Bachmeier, Assistant Professor, Department of Sociology, College of Liberal Arts; Ph.D., University of California Irvine.

Marcia B. Bailey, Assistant Professor (Teaching/Instructional), Department of Intellectual Heritage, College of Liberal Arts; Ph.D., Colgate Rochester Crozer Divinity.

Debra Bangasser, Assistant Professor, Department of Psychology, College of Liberal Arts; Ph.D., Rutgers University.

Steven R. Belenko, Professor, Department of Criminal Justice, College of Liberal Arts; Ph.D., Columbia University.

Jamal Benin, Instructor (Teaching/Instructional), Department of Intellectual Heritage, College of Liberal Arts; M.A., Temple University.

Paul Benzon, Assistant Professor (Teaching/Instructional), Department of Writing Program, College of Liberal Arts; Ph.D., Rutgers University.

Daniel W. Berman, Associate Professor, Department of Greek and Roman Classics, College of Liberal Arts; Ph.D., Yale University.

Lila Corwin Berman, Associate Professor, Department of History, College of Liberal Arts; Ph.D., Yale University.

Susan Bertolino, Instructor (Teaching/Instructional), Department of Intellectual Heritage, College of Liberal Arts; M.A., University of Chicago.

Kathleen A. Biddick, Professor Emerita, Department of History, College of Liberal Arts; Ph.D., University of Toronto.

Marcus Bingenheimer, Assistant Professor, Department of Religion, College of Liberal Arts; Dr.Phil., Wurzburg University.

Erwin A. Blackstone, Professor, Department of Economics, College of Liberal Arts; Ph.D., University of Michigan.

Khalid A. Y. Blankinship, Associate Professor, Department of Religion, College of Liberal Arts; Ph.D., University of Washington.

Michael L. Bogmann, Associate Professor, Department of Economics, College of Liberal Arts; Ph.D., Cornell University.

Aryeh I. Botwinick, Professor, Department of Political Science, College of Liberal Arts; Ph.D., Princeton University.

Gary W. Bowman, Associate Professor, Department of Economics, College of Liberal Arts; Ph.D., Carnegie Mellon University.

Lucy Bregman, Professor, Department of Religion, College of Liberal Arts; Ph.D., University of Chicago Divinity School.
Lisa A. Briand, Assistant Professor, Department of Psychology, College of Liberal Arts; Ph.D., University of Michigan.

Sheldon R. Brivic, Professor, Department of English, College of Liberal Arts; Ph.D., University of California Berkeley.

Seth C. Bruggeman, Associate Professor, Department of History, College of Liberal Arts; Ph.D., College of William and Mary.

Andrew Buck, Professor Emeritus, Department of Economics, College of Liberal Arts; Ph.D., University of Illinois.

Sarah Sunn Bush, Assistant Professor, Department of Political Science, College of Liberal Arts; Ph.D., Princeton University.

Gregory Byala, Assistant Professor (Teaching/Instructional), Department of Writing Program, College of Liberal Arts; Ph.D., Yale University.

Michelle D. Byng, Associate Professor, Department of Sociology, College of Liberal Arts; Ph.D., University of Virginia.

Niambi Carter, Assistant Professor, Department of African American Studies, College of Liberal Arts; Ph.D., Duke University.

Sanjoy Chakravorty, Professor, Department of Geography and Urban Studies, College of Liberal Arts; Ph.D., University of Southern California.

Colin Chamberlain, Assistant Professor, Department of Philosophy, College of Liberal Arts; Ph.D., Harvard University.

Isabelle Chang, Assistant Professor (Teaching/Instructional), Department of Psychology, College of Liberal Arts, Temple University.

Linda Chavers, Instructor (Teaching/Instructional), Department of Intellectual Heritage, College of Liberal Arts; Ph.D., Harvard University.

Jason M. Chein, Associate Professor, Department of Psychology, College of Liberal Arts; Ph.D., University of Pittsburgh.

Eunice Y. Chen, Assistant Professor, Department of Psychology, College of Liberal Arts; Ph.D., University of Sydney.

Rujuta P. Chincholkar-Mandelia, Assistant Professor (Teaching/Instructional), Department of Women's Studies, College of Liberal Arts, Temple University.

Fletcher Chmara-Huff, Assistant Professor (Teaching/Instructional), Department of Geography and Urban Studies, College of Liberal Arts; Ph.D., Ohio State University.

Daniel Chomsky, Assistant Professor (Teaching/Instructional), Department of Political Science, College of Liberal Arts; Ph.D., Northwestern University.

Steven E. Cole, Associate Professor, Department of English, College of Liberal Arts; Ph.D., University of Washington.

Bette Collier-Thomas, Professor, Department of History, College of Liberal Arts; Ph.D., George Washington University.

Gretchen A. Condran, Associate Professor, Department of Sociology, College of Liberal Arts; Ph.D., University of Pennsylvania.

Whitley Cooke, Associate Professor (Teaching/Instructional), Department of Writing Program, College of Liberal Arts; Ph.D., University of Oklahoma.

Norma Corrales-Martín, Assistant Professor (Teaching/Instructional), Department of Spanish and Portuguese, College of Liberal Arts; Ph.D., Ohio University.

Lindsay Craig, Assistant Professor (Teaching/Instructional), Department of Philosophy, College of Liberal Arts; Ph.D., University of Cincinnati.

Nyron Crawford, Assistant Professor, Department of Political Science, College of Liberal Arts; Ph.D., Ohio State University.

Paul Crowe, Associate Professor (Teaching/Instructional), Department of Philosophy, College of Liberal Arts; Ph.D., Catholic University of Louvain.

Alicia Aileen Cunningham-Bryant, Assistant Professor (Teaching/Instructional), Department of Intellectual Heritage, College of Liberal Arts; Ph.D., Yale University.

Beth K. Curran, Associate Professor (Teaching/Instructional), Department of French, German, Italian and Slavic, College of Liberal Arts; Ph.D., Rutgers University.

Roman A. Cybriwsky, Professor, Department of Geography and Urban Studies, College of Liberal Arts; Ph.D., Pennsylvania State University.

Amanda Czerniawski, Assistant Professor (Teaching/Instructional), Department of Sociology, College of Liberal Arts; Ph.D., Columbia University.

Tirthatanmoy Das, Associate Professor (Teaching/Instructional), Department of Economics, College of Liberal Arts; Ph.D., State University of New York at Binghamton.

Heath Fogg Davis, Associate Professor, Department of Political Science, College of Liberal Arts; Ph.D., Princeton University.

Barbara A. Day-Hickman, Associate Professor, Department of History, College of Liberal Arts; Ph.D., University of California Irvine.
Richard E. Deeg, Professor, Department of Political Science, College of Liberal Arts; Ph.D., Massachusetts Institute of Technology.

Kevin J. Delaney, Professor, Department of Sociology, College of Liberal Arts; Ph.D., State University of New York Stony Brook.

Samuel R. Delany, Professor, Department of English, College of Liberal Arts; Ph.D., The Bronx High School of Science.

John A. Dern, Associate Professor (Teaching/Instructional), Department of Intellectual Heritage, College of Liberal Arts; Ph.D., Lehigh University.

Dimitrios I. Diamantaras, Associate Professor, Department of Economics, College of Liberal Arts; Ph.D., University of Rochester.

Nguyen Thi Dieu, Associate Professor, Department of History, College of Liberal Arts; Ph.D., Aix-en-Provence.

Kenneth M. Dossar, Assistant Professor (Teaching/Instructional), Department of Intellectual Heritage, College of Liberal Arts; Ph.D., Temple University.

Myrna Douzjian, Assistant Professor (Teaching/Instructional), Department of Intellectual Heritage, College of Liberal Arts; Ph.D., University of California Los Angeles.

Hope N. Doyle, Associate Professor (Teaching/Instructional), Department of Spanish and Portuguese, College of Liberal Arts; Ph.D., University of Texas at Austin.

Deborah A. G. Drabick, Associate Professor, Department of Psychology, College of Liberal Arts; Ph.D., State University of New York Stony Brook.

Jayne Kribbs Drake, Associate Professor, Department of English, College of Liberal Arts; Ph.D., Pennsylvania State University.

Douglas Duckworth, Assistant Professor, Department of Religion, College of Liberal Arts; Ph.D., University of Virginia.

William C. Dunkelberg, Professor Emeritus, Department of Economics, College of Liberal Arts; Ph.D., University of Michigan.

Rachel Blau DuPlessis, Professor Emerita, Department of English, College of Liberal Arts; Ph.D., Columbia University.

Jaime Duran, Assistant Professor (Teaching/Instructional), Department of Spanish and Portuguese, College of Liberal Arts; Ph.D., Temple University.

Michael M. Eisman, Associate Professor, Department of History, College of Liberal Arts; Ph.D., University of Pennsylvania.

David B. Elesh, Associate Professor, Department of Sociology, College of Liberal Arts; Ph.D., Columbia University.

Lauren Ellman, Assistant Professor, Department of Psychology, College of Liberal Arts; Ph.D., University of California Los Angeles.

Eugene Ericksen, Professor Emeritus, Department of Sociology, College of Liberal Arts; Ph.D., University of Michigan.

Julia Ericksen, Professor Emerita, Department of Sociology, College of Liberal Arts; Ph.D., University of Pennsylvania.

Rosario R. Espinal, Professor, Department of Sociology, College of Liberal Arts; Ph.D., Washington University-St. Louis.

Jamie J. Fader, Assistant Professor, Department of Criminal Justice, College of Liberal Arts; Ph.D., University of Pennsylvania.

Mohsen Fardmanesh, Associate Professor, Department of Economics, College of Liberal Arts; Ph.D., Yale University.

Paul Farnsworth, Professor, Department of Anthropology, College of Liberal Arts; Ph.D., University of California Los Angeles.

Robert L. Fauber Jr., Associate Professor, Department of Psychology, College of Liberal Arts; Ph.D.

Daniel Featherston, Assistant Professor (Teaching/Instructional), Department of Writing Program, College of Liberal Arts; Ph.D., University of Arizona.

Barbara Ferman, Professor, Department of Political Science, College of Liberal Arts; Ph.D., Brandeis University.

Kenneth Finkel, Professor (Teaching/Instructional), Department of American Studies, College of Liberal Arts; M.A., Temple University.

K. Orfeo Fioretos, Associate Professor, Department of Political Science, College of Liberal Arts; Ph.D., Columbia University.

Alexa Firat, Assistant Professor (Teaching/Instructional), Department of Asian and Middle Eastern Languages and Studies, College of Liberal Arts; Ph.D., University of Pennsylvania.

Ariane Fischer, Assistant Professor (Teaching/Instructional), Department of Intellectual Heritage, College of Liberal Arts; Ph.D., George Washington University.

Talissa Ford, Assistant Professor, Department of English, College of Liberal Arts; Ph.D., University of California Berkeley.

Joseph S. Foster, Assistant Professor (Teaching/Instructional), Department of Intellectual Heritage, College of Liberal Arts; Ph.D., Temple University.
Sergio R. Franco, Associate Professor, Department of Spanish and Portuguese, College of Liberal Arts; Ph.D., University of Pittsburgh.

Amy L. Friedman, Assistant Professor (Teaching/Instructional), Department of Writing Program, College of Liberal Arts; Ph.D., University of London.

Joseph Friedman, Professor, Department of Economics, College of Liberal Arts; Ph.D., University of California Berkeley.

Yukari Fujisawa, Instructor (Teaching/Instructional), Department of Asian and Middle Eastern Languages and Studies, College of Liberal Arts; M.A., Eastern Michigan University.

Akim Gabriel, Instructor (Teaching/Instructional), Department of French, German, Italian and Slavic, College of Liberal Arts; M.A., Temple University.

Inmaculada M. García-Sánchez, Assistant Professor, Department of Anthropology, College of Liberal Arts; Ph.D., University of California Los Angeles.

Timothy Garelick, Assistant Professor (Teaching/Instructional), Department of Psychology, College of Liberal Arts; Ph.D., Lehigh University.

Paul B. Garrett, Associate Professor, Department of Anthropology, College of Liberal Arts; Ph.D., New York University.

Suzanne Gauch, Associate Professor, Department of English, College of Liberal Arts; Ph.D., State University of New York at Buffalo.

James R. Getz, Assistant Professor (Teaching/Instructional), Department of Intellectual Heritage, College of Liberal Arts; Ph.D., Brandeis University.

Maurizio Giammarco, Assistant Professor (Teaching/Instructional), Department of Intellectual Heritage, College of Liberal Arts; Ph.D., Temple University.

Melissa R. Gilbert, Professor, Department of Geography and Urban Studies, College of Liberal Arts; Ph.D., Clark University.

Tania Giovannetti, Associate Professor, Department of Psychology, College of Liberal Arts; Ph.D., Drexel University.

Joseph Giuffre, Assistant Professor (Teaching/Instructional), Department of Intellectual Heritage, College of Liberal Arts, Rutgers University.

Kristin Gjesdal, Associate Professor, Department of Philosophy, College of Liberal Arts; Ph.D., University of Oslo.

Travis F. Glasson, Associate Professor, Department of History, College of Liberal Arts; Ph.D., Columbia University.

Petra Goedde, Associate Professor, Department of History, College of Liberal Arts; Ph.D., Northwestern University.

Eli C. Goldblatt, Professor, Department of English, College of Liberal Arts; Ph.D., University of Wisconsin-Madison.

Luis T. González del Valle, Professor Emeritus, Department of Spanish and Portuguese, College of Liberal Arts; Ph.D., University of Massachusetts Amherst.

Cynthia M. Gooch, Assistant Professor (Teaching/Instructional), Department of Psychology, College of Liberal Arts; Ph.D., Princeton University.

Judith Goode, Professor Emerita, Department of Anthropology, College of Liberal Arts; Ph.D., Cornell University.

Alex Gottesman, Assistant Professor, Department of Greek and Roman Classics, College of Liberal Arts; Ph.D., University of Chicago.

Thomas J. Gould, Professor, Department of Psychology, College of Liberal Arts; Ph.D., Indiana University.

Kimberly Ann Goyette, Associate Professor, Department of Sociology, College of Liberal Arts; Ph.D., University of Michigan.

Cristina Gragnani, Assistant Professor, Department of French, German, Italian and Slavic, College of Liberal Arts; Ph.D., Harvard University.

Peter Gran, Professor, Department of History, College of Liberal Arts; Ph.D., University of Chicago.

Sherri L. Grasmuck, Professor, Department of Sociology, College of Liberal Arts; Ph.D., University of Texas.

Douglas Greenfield, Associate Professor (Teaching/Instructional), Department of Intellectual Heritage, College of Liberal Arts; Ph.D., Columbia University.

Leonard O. Greenfield, Professor, Department of Anthropology, College of Liberal Arts; Ph.D., University of Michigan.

Elizabeth Groff, Associate Professor, Department of Criminal Justice, College of Liberal Arts; Ph.D., University of Maryland.

Rachael Groner, Associate Professor (Teaching/Instructional), Department of Writing Program, College of Liberal Arts; Ph.D., Purdue University.

Lisa Grunberger, Assistant Professor (Teaching/Instructional), Department of Writing Program, College of Liberal Arts; Ph.D., University of Chicago Divinity School.
Alexandra Guisinger, Assistant Professor, Department of Political Science, College of Liberal Arts; Ph.D., Yale University.

Elizabeth Gunderson, Assistant Professor, Department of Psychology, College of Liberal Arts; Ph.D., University of Chicago.

Michael G. Hagen, Associate Professor, Department of Political Science, College of Liberal Arts; Ph.D., University of California Berkeley.

Simon Hakim, Professor, Department of Economics, College of Liberal Arts; Ph.D., University of Pennsylvania.

Raymond Halnon, Instructor (Teaching/Instructional), Department of Sociology, College of Liberal Arts; B.A., Boston College.

Espen Hammer, Professor, Department of Philosophy, College of Liberal Arts; Ph.D., The New School for Social Research.

Patricia Hansell, Associate Professor (Teaching/Instructional), Department of Anthropology, College of Liberal Arts; Ph.D., Temple University.

Donald A. Hanula, Associate Professor, Department of Liberal Arts; Ph.D., University of Notre Dame.

Carissa M. Harris, Assistant Professor, Department of English, College of Liberal Arts; Ph.D., Northwestern University.

M. Kay Harris, Associate Professor Emerita, Department of Criminal Justice, College of Liberal Arts; M.A., University of Chicago.

Philip W. Harris, Associate Professor Emeritus, Department of Criminal Justice, College of Liberal Arts.

Carol Harris-Shapiro, Assistant Professor (Teaching/Instructional), Department of Intellectual Heritage, College of Liberal Arts; Ph.D., Temple University.

Allison Hayes-Conroy, Assistant Professor, Department of Geography and Urban Studies, College of Liberal Arts; Ph.D., Clark University.

Richard G. Heimberg, Professor, Department of Psychology, College of Liberal Arts; Ph.D., Florida State University.

Katherine Henry, Associate Professor, Department of English, College of Liberal Arts; Ph.D., Rutgers University.

Kevin A. Henry, Assistant Professor, Department of Geography and Urban Studies, College of Liberal Arts; Ph.D., McGill University.

Karen Klaiber Hersch, Associate Professor, Department of Greek and Roman Classics, College of Liberal Arts; Ph.D., Rutgers University.

Michael Hesson, Assistant Professor (Teaching/Instructional), Department of Anthropology, College of Liberal Arts; Ph.D., University of Pennsylvania.

Matthew L. Hiller, Associate Professor, Department of Criminal Justice, College of Liberal Arts; Ph.D., Texas Christian University.

Kathryn A. Hirsh-Pasek, Professor, Department of Psychology, College of Liberal Arts; Ph.D., University of Pennsylvania.

William L. Holmes, Associate Professor, Department of Economics, College of Liberal Arts; Ph.D., University of Illinois at Urbana-Champaign.

Jonathan C. Holmquist, Associate Professor, Department of Spanish and Portuguese, College of Liberal Arts; Ph.D., Princeton University.

Kathy M. Houff, Assistant Professor (Teaching/Instructional), Department of Writing Program, College of Liberal Arts; Ph.D., University of Georgia.

Alistair Q. Howard, Associate Professor (Teaching/Instructional), Department of Political Science, College of Liberal Arts; Ph.D., George Washington University.

Roselyn Hsueh, Assistant Professor, Department of Political Science, College of Liberal Arts; Ph.D., University of California Berkeley.

Shuchen Susan Huang, Assistant Professor (Teaching/Instructional), Department of Asian and Middle Eastern Languages and Studies, College of Liberal Arts; Ph.D., University of Massachusetts.

Richard H. Immerman, Professor, Department of History, College of Liberal Arts; Ph.D., Boston College.

Michael Ingram, Assistant Professor (Teaching/Instructional), Department of Writing Program, College of Liberal Arts; M.F.A., University of Iowa.

Cheryl L. Irons-Guynn, Assistant Professor (Teaching/Instructional), Department of Criminal Justice, College of Liberal Arts; J.D., Temple University.

Andrew C. Isenberg, Professor, Department of History, College of Liberal Arts; Ph.D., Northwestern University.

Jessie B. Iwata, Instructor (Teaching/Instructional), Department of Intellectual Heritage, College of Liberal Arts, Temple University.

Alesha Jackson, Assistant Professor (Teaching/Instructional), Department of Writing Program, College of Liberal Arts; Ph.D., University of Pennsylvania.

Peter James, Associate Professor (Teaching/Instructional), Department of Psychology, College of Liberal Arts; Ph.D., Lehigh University.

Stephen Jankiewicz, Assistant Professor (Teaching/Instructional), Department of Intellectual Heritage, College of Liberal Arts; Ph.D., Rutgers University.
Wilbert L. Jenkins, Associate Professor, Department of History, College of Liberal Arts; Ph.D., Michigan State University.

Jayasinhji Jhala, Associate Professor, Department of Anthropology, College of Liberal Arts; Ph.D., Harvard University.

Kareem J. Johnson, Assistant Professor (Teaching/Instructional), Department of Psychology, College of Liberal Arts; Ph.D., University of Michigan.

Peter R. Jones, Professor, Department of Criminal Justice, College of Liberal Arts; Ph.D., Aberystwyth University.

Priya Joshi, Associate Professor, Department of English, College of Liberal Arts; Ph.D., Columbia University.

Joyce A. Joyce, Professor, Department of English, College of Liberal Arts; Ph.D., University of Georgia.

Nyasha Junior, Assistant Professor, Department of Religion, College of Liberal Arts; Ph.D., Princeton Theological Seminary.

Hana Muzika Kahn, Assistant Professor (Teaching/Instructional), Department of Spanish and Portuguese, College of Liberal Arts; Ph.D., Rutgers University.

Andrew Karpinski, Associate Professor, Department of Psychology, College of Liberal Arts; Ph.D.

Deborah Karr, Assistant Professor (Teaching/Instructional), Department of Writing Program, College of Liberal Arts; Ed.D., Temple University.

Robert L. Kaufman, Professor, Department of Sociology, College of Liberal Arts; Ph.D., University of Wisconsin.

Michael W. Kaufmann, Associate Professor, Department of English, College of Liberal Arts; Ph.D., Columbia University.

Charles Kaylor, Assistant Professor (Teaching/Instructional), Department of Geography and Urban Studies, College of Liberal Arts; M.U.P., University of Michigan.

Gabriella Kecskes, Assistant Professor (Teaching/Instructional), Department of Writing Program, College of Liberal Arts; Ph.D., Temple University.

Philip C. Kendall, Professor, Department of Psychology, College of Liberal Arts; Ph.D., Virginia Commonwealth University.

Dustin Kidd, Associate Professor, Department of Sociology, College of Liberal Arts; Ph.D., University of Virginia.

Han-Kyul Kim, Assistant Professor (Teaching/Instructional), Department of Philosophy, College of Liberal Arts; Ph.D., University of York.

Jacob Kim, Assistant Professor (Teaching/Instructional), Department of Religion, College of Liberal Arts; Ph.D., Temple University.

Sook Kyung Kim, Associate Professor (Teaching/Instructional), Department of Writing Program, College of Liberal Arts; Ed.D., Temple University.

Susan Klepp, Professor Emerita, Department of History, College of Liberal Arts; Ph.D., University of Pennsylvania.

Joshua Klugman, Professor, Department of Sociology, College of Liberal Arts; Ph.D., Indiana University.

Robin A. Kolodny, Professor, Department of Political Science, College of Liberal Arts; Ph.D., Johns Hopkins University.

Kyriakos M. Kontopoulos, Professor, Department of Sociology, College of Liberal Arts; Ph.D., Harvard University.

Rita Krueger, Associate Professor, Department of History, College of Liberal Arts; Ph.D., Harvard University.

Fyodor I. Kushnirsky, Professor, Department of Economics, College of Liberal Arts; Ph.D., Plekhanov Institute of the National Economy.

Kenneth L. Kusmer, Professor, Department of History, College of Liberal Arts; Ph.D., University of Chicago.

George M. Lady, Professor, Department of Economics, College of Liberal Arts; Ph.D., Johns Hopkins University.

Peter Lavelle, Assistant Professor, Department of History, College of Liberal Arts; Ph.D., Cornell University.

Anne Layman-Horn, Assistant Professor (Teaching/Instructional), Department of Writing Program, College of Liberal Arts; Ph.D., New York University.

Mindie Lazarus-Black, Professor, Department of Anthropology, College of Liberal Arts; Ph.D., University of Chicago.

Don Lee, Professor, Department of English, College of Liberal Arts; M.F.A., Emerson College.

Jeffrey Ethan Lee, Assistant Professor (Teaching/Instructional), Department of Intellectual Heritage, College of Liberal Arts; Ph.D., New York University.

Sue-Im Lee, Associate Professor, Department of English, College of Liberal Arts; Ph.D., University of Illinois at Chicago.

Michael A. Leeds, Professor, Department of Economics, College of Liberal Arts; Ph.D., Princeton University.
Frank Leib, Assistant Professor (Teaching/Instructional), Department of Intellectual Heritage, College of Liberal Arts; M.D., Temple University.

Mark A. Leuchter, Associate Professor, Department of Religion, College of Liberal Arts; Ph.D., University of Toronto.

Heather Levi, Assistant Professor (Teaching/Instructional), Department of Anthropology, College of Liberal Arts; Ph.D., New York University.

Judith A. Levine, Assistant Professor, Department of Sociology, College of Liberal Arts; Ph.D., Northwestern University.

Laura S. Levitt, Professor, Department of Religion, College of Liberal Arts; Ph.D., Emory University.

Richard L. Libowitz, Associate Professor (Teaching/Instructional), Department of Intellectual Heritage, College of Liberal Arts; Ph.D., Temple University.

Vasiliki M. Limberis, Professor, Department of Religion, College of Liberal Arts; Th.D., Harvard University.

Jay B. Lockenour, Associate Professor, Department of History, College of Liberal Arts; Ph.D., University of Pennsylvania.

Peter Logan, Professor, Department of English, College of Liberal Arts; Ph.D., University of California Berkeley.

Sheree Logue, Assistant Professor (Teaching/Instructional), Department of Psychology, College of Liberal Arts; Ph.D., Indiana University.

Gerardo Augusto Lorenzino, Associate Professor, Department of Spanish and Portuguese, College of Liberal Arts; Ph.D., Graduate Center, City University of New York.

Hilary Iris Lowe, Assistant Professor (Teaching/Instructional), Department of History, College of Liberal Arts; Ph.D., University of Kansas.

Joshua Lukin, Assistant Professor (Teaching/Instructional), Department of Writing Program, College of Liberal Arts; Ph.D., State University of New York at Buffalo.

Meghan Foster Lynch, Assistant Professor, Department of Political Science, College of Liberal Arts; Ph.D., Yale University.

Johanna Catherine Maclean, Associate Professor, Department of Economics, College of Liberal Arts; Ph.D., Cornell University.

Louis S. Mangione, Associate Professor, Department of Asian and Middle Eastern Languages and Studies, College of Liberal Arts; Ph.D., Cornell University.

Benny C. Marcus, Associate Professor (Teaching/Instructional), Department of Sociology, College of Liberal Arts; Ph.D., University of Texas at Austin.

Joseph Margolis, Professor, Department of Philosophy, College of Liberal Arts; Ph.D., Columbia University.

David L. Margules, Professor, Department of Psychology, College of Liberal Arts; Ph.D., University of Michigan.

Peter J. Marshall, Associate Professor, Department of Psychology, College of Liberal Arts; Ph.D., University of Cambridge.

James Martin, Assistant Professor (Teaching/Instructional), Department of Writing Program, College of Liberal Arts; Ph.D., Binghamton University.

John Masker, Assistant Professor (Teaching/Instructional), Department of Political Science, College of Liberal Arts; Ph.D., Boston College.

Robert J. Mason, Professor, Department of Geography and Urban Studies, College of Liberal Arts; Ph.D., Rutgers University.

Michele Masucci, Professor, Department of Geography and Urban Studies, College of Liberal Arts; Ph.D., Clark University.

Melinda Mattingly, Assistant Professor (Teaching/Instructional), Department of Psychology, College of Liberal Arts; Ph.D., Saint Louis University.

Ama Mazama, Associate Professor, Department of African American Studies, College of Liberal Arts; Ph.D., La Sorbonne Nouvelle, Paris III.

Walter Thomas McAllister, Assistant Professor (Teaching/Instructional), Department of Writing Program, College of Liberal Arts; M.F.A., University of Iowa.

Patricia M. McCarthy, Instructor (Teaching/Instructional), Department of English, College of Liberal Arts; M.A., Temple University.

Michael S. McCloskey, Associate Professor, Department of Psychology, College of Liberal Arts; Ph.D., University of Southern Mississippi.

Stanley McDonald, Assistant Professor (Teaching/Instructional), Department of Writing Program, College of Liberal Arts; M.F.A., Brown University.

Joan Mellen, Professor, Department of English, College of Liberal Arts; Ph.D., City University of New York.

Patricia Melzer, Assistant Professor, Department of French, German, Italian and Slavic, College of Liberal Arts; Ph.D., Clark University.

Ming Meng, Assistant Professor (Teaching/Instructional), Department of Economics, College of Liberal Arts; Ph.D., University of Alabama, Tuscaloosa.
Jeremy Mennis, Associate Professor, Department of Geography and Urban Studies, College of Liberal Arts; Ph.D., Pennsylvania State University.

Joanne C. Metzger, Assistant Professor (Teaching/Instructional), Department of Criminal Justice, College of Liberal Arts; J.D., Widener University School of Law.

Aldona Middlesworth, Instructor (Teaching/Instructional), Department of Intellectual Heritage, College of Liberal Arts; M.A., Temple University.

Marina Mikhailova, Assistant Professor (Teaching/Instructional), Department of Anthropology, College of Liberal Arts; Ph.D., University of Chicago.

Juris M. Milestone, Assistant Professor (Teaching/Instructional), Department of Anthropology, College of Liberal Arts; Ph.D., Temple University.

Nichole E. Miller, Assistant Professor, Department of English, College of Liberal Arts; Ph.D., University of California Irvine.

Robin N. Mitchell-Boyask, Professor, Department of Greek and Roman Classics, College of Liberal Arts; Ph.D., Brown University.

Pamela Beth Monaco, Assistant Professor (Teaching/Instructional), Department of Intellectual Heritage, College of Liberal Arts, Temple University.

Patricia A. Moore-Martinez, Assistant Professor (Teaching/Instructional), Department of Spanish and Portuguese, College of Liberal Arts; Ph.D., Temple University.

Hortensia R. Morell, Professor, Department of Spanish and Portuguese, College of Liberal Arts; Ph.D., University of Wisconsin-Madison.

Thomas Morton, Assistant Professor (Teaching/Instructional), Department of Spanish and Portuguese, College of Liberal Arts; Ph.D., University of Pennsylvania.

Geoffrey Moss, Assistant Professor (Teaching/Instructional), Department of Sociology, College of Liberal Arts; Ph.D., Columbia University.

Andrew R. Mossin, Assistant Professor (Teaching/Instructional), Department of Intellectual Heritage, College of Liberal Arts; Ph.D., Temple University.

Gary A. Mucciaroni, Professor, Department of Political Science, College of Liberal Arts; Ph.D., University of Wisconsin-Madison.

Srimati Mukherjee, Associate Professor (Teaching/Instructional), Department of Writing Program, College of Liberal Arts; Ph.D., University of Louisiana.

Shigenori Nagatomo, Professor, Department of Religion, College of Liberal Arts; Ph.D., University of Hawaii.

Michael Neff, Associate Professor (Teaching/Instructional), Department of Intellectual Heritage, College of Liberal Arts; M.A., University of Pennsylvania.

Harvey R. Neptune, Associate Professor, Department of History, College of Liberal Arts; Ph.D., New York University.

Nora S. Newcombe, Professor, Department of Psychology, College of Liberal Arts; Ph.D., Harvard University.

Steven L. Newman, Associate Professor, Department of English, College of Liberal Arts; Ph.D., Johns Hopkins University.

David Nickerson, Associate Professor, Department of Political Science, College of Liberal Arts; Ph.D., Yale University.

Daniel T. O’Hara, Professor, Department of English, College of Liberal Arts; Ph.D., Temple University.

Thomas Olino, Assistant Professor, Department of Psychology, College of Liberal Arts; Ph.D., Stony Brook University.

Ingrid Olson, Associate Professor, Department of Psychology, College of Liberal Arts; Ph.D., Yale University.

David J. Organ, Assistant Professor (Teaching/Instructional), Department of Geography and Urban Studies, College of Liberal Arts; Ph.D., University of California Berkeley.

Richard Orodenker, Instructor (Teaching/Instructional), Department of Intellectual Heritage, College of Liberal Arts; M.A., Johns Hopkins University.

Miles D. Ornell, Professor, Department of English, College of Liberal Arts; Ph.D., Harvard University.

Jena Osman, Professor, Department of English, College of Liberal Arts; Ph.D., State University of New York at Buffalo.

Lara Ostacic, Assistant Professor, Department of Philosophy, College of Liberal Arts; Ph.D., University of Notre Dame.

Sharon C. Ostrow, Instructor (Teaching/Instructional), Department of Criminal Justice, College of Liberal Arts; Ph.D., Rutgers University.

Willis F. Overton, Professor Emeritus, Department of Psychology, College of Liberal Arts; Ph.D., Clark University.

Randall J. Pabich, Assistant Professor (Teaching/Instructional), Department of Intellectual Heritage, College of Liberal Arts, Temple University.

Christine Palumbo-De Simone, Professor (Teaching/Instructional), Department of Writing Program, College of Liberal Arts; Ph.D., Temple University.
Catherine Panzarella, Associate Professor (Clinical), Department of Psychology, College of Liberal Arts; Ph.D., Temple University.

Marcela Pardes, Assistant Professor (Teaching/Instructional), Department of Spanish and Portuguese, College of Liberal Arts; Ph.D., Temple University.

Vinay Parikh, Assistant Professor, Department of Psychology, College of Liberal Arts; Ph.D., Punjabi University.

Nicolette Parisi, Assistant Professor (Teaching/Instructional), Department of Criminal Justice, College of Liberal Arts; J.D., Temple University.

Ann L. Peak, Assistant Professor (Teaching/Instructional), Department of Intellectual Heritage, College of Liberal Arts; Ph.D., Temple University.

C. Hamil Pearsall, Assistant Professor, Department of Geography and Urban Studies, College of Liberal Arts; Ph.D., Clark University.

Elizabeth W. Pearson, Instructor (Teaching/Instructional), Department of Intellectual Heritage, College of Liberal Arts, Sarah Lawrence College.

José Manuel Pereiro Otero, Associate Professor, Department of Spanish and Portuguese, College of Liberal Arts; Ph.D., University of Colorado Boulder.

Donna Marie Peters, Assistant Professor (Teaching/Instructional), Department of Sociology, College of Liberal Arts; Ph.D., The New School for Social Research.

Sonja Peterson-Lewis, Associate Professor, Department of African American Studies, College of Liberal Arts; Ph.D., University of Florida-Gainesville.

Carolyn Phipps, Assistant Professor (Teaching/Instructional), Department of Spanish and Portuguese, College of Liberal Arts; Ph.D., Princeton University.

Montserrat Piera, Associate Professor, Department of Spanish and Portuguese, College of Liberal Arts; Ph.D., Pennsylvania State University.

Mark A. Pollack, Professor, Department of Political Science, College of Liberal Arts; Ph.D., Harvard University.

Lori Pompa, Instructor (Teaching/Instructional), Department of Criminal Justice, College of Liberal Arts; M.S.W., Rutgers University.

Gary D. Pratt, Assistant Professor (Teaching/Instructional), Department of Intellectual Heritage, College of Liberal Arts; M.A., Brandeis University.

Olia Prokopenko, Instructor (Teaching/Instructional), Department of French, German, Italian and Slavic, College of Liberal Arts; M.A., Karazin National University.

Peter Puchek, Assistant Professor (Teaching/Instructional), Department of Writing Program, College of Liberal Arts; Ph.D., Lehigh University.

Victor M. Pueyo Zoco, Assistant Professor, Department of Spanish and Portuguese, College of Liberal Arts; Ph.D., State University of New York Stony Brook.

David E. Racker, Assistant Professor (Teaching/Instructional), Department of Intellectual Heritage, College of Liberal Arts; Ph.D., Tulane University.

John C. Raines, Professor Emeritus, Department of Religion, College of Liberal Arts; Ph.D.

Anthony Ranere, Professor Emeritus, Department of Anthropology, College of Liberal Arts; Ph.D., University of California Davis.

Jerry H. Ratcliffe, Professor, Department of Criminal Justice, College of Liberal Arts; Ph.D., University of Nottingham (UK).

Elliot A. Ratzman, Assistant Professor (Teaching/Instructional), Department of Religion, College of Liberal Arts; Ph.D., Princeton University.

Aunshul P. Rege, Assistant Professor, Department of Criminal Justice, College of Liberal Arts; Ph.D., Rutgers University.

George F. Rengert, Professor Emeritus, Department of Criminal Justice, College of Liberal Arts; Ph.D., University of North Carolina.

Terry Rey, Associate Professor, Department of Religion, College of Liberal Arts; Ph.D., Temple University.

Eunsook Ha Rhee, Assistant Professor (Teaching/Instructional), Department of Writing Program, College of Liberal Arts; Ed.D., Temple University.

Monica Ricketts, Assistant Professor, Department of History, College of Liberal Arts; Ph.D., Harvard University.

Moritz Ritter, Assistant Professor, Department of Economics, College of Liberal Arts; Ph.D., University of Toronto.

Paula D. Robison, Associate Professor, Department of English, College of Liberal Arts; Ph.D., University of Pennsylvania.

L. Christie Rockwell, Associate Professor, Department of Anthropology, College of Liberal Arts; Ph.D., University of California Davis.

Norman Roessler, Associate Professor (Teaching/Instructional), Department of Intellectual Heritage, College of Liberal Arts; Ph.D., University of Pennsylvania.

Wilbert J. Roget, Associate Professor, Department of French, German, Italian and Slavic, College of Liberal Arts; Ph.D., University of Pittsburgh.
Caterina Gouvis Roman, Assistant Professor, Department of Criminal Justice, College of Liberal Arts; Ph.D., American University.

Jessica Roney, Assistant Professor, Department of History, College of Liberal Arts; Ph.D., Johns Hopkins University.

Christina Rosan, Assistant Professor, Department of Geography and Urban Studies, College of Liberal Arts; Ph.D., Massachusetts Institute of Technology.

Cathryn Jo Rosen, Associate Professor, Department of Criminal Justice, College of Liberal Arts; LL.M., Temple University.

Christopher Roy, Assistant Professor (Teaching/Instructional), Department of Anthropology, College of Liberal Arts; Ph.D., Princeton University.

Eileen Ryan, Assistant Professor, Department of History, College of Liberal Arts; Ph.D., Columbia University.

James Salazar, Associate Professor, Department of English, College of Liberal Arts; Ph.D., University of California Berkeley.

Rickie Sanders, Professor, Department of Geography and Urban Studies, College of Liberal Arts; Ph.D., Ohio State University.

Sheryl Sawin, Assistant Professor (Teaching/Instructional), Department of Intellectual Heritage, College of Liberal Arts, University of Rochester.

Jeremy Schipper, Associate Professor, Department of Religion, College of Liberal Arts; Ph.D., Harvard University.

Kolson Schlosser, Assistant Professor (Teaching/Instructional), Department of Geography and Urban Studies, College of Liberal Arts; Ph.D., Pennsylvania State University.

Joseph M. Schwartz, Professor, Department of Political Science, College of Liberal Arts; Ph.D., Harvard University.

Jordan Shapiro, Instructor (Teaching/Instructional), Department of Intellectual Heritage, College of Liberal Arts, Pacifica Graduate Institute.

Pamela J. Shapiro, Assistant Professor (Teaching/Instructional), Department of Psychology, College of Liberal Arts; Ph.D., Temple University.

Jacob Shell, Assistant Professor, Department of Geography and Urban Studies, College of Liberal Arts; Ph.D., Syracuse University.

Adam Joseph Shellhorse, Assistant Professor, Department of Spanish and Portuguese, College of Liberal Arts; Ph.D., University of California Berkeley.

Thomas F. Shipley, Associate Professor, Department of Psychology, College of Liberal Arts; Ph.D., University of Pennsylvania.

Muffy E. Siegel, Associate Professor, Department of English, College of Liberal Arts; Ph.D., University of Massachusetts.

Jill K. Sigman, Assistant Professor (Teaching/Instructional), Department of Intellectual Heritage, College of Liberal Arts; Ph.D., Brown University.

Marilyn Silberfein, Professor Emerita, Department of Geography and Urban Studies, College of Liberal Arts; Ph.D., Syracuse University.

Pedro Silos, Associate Professor, Department of Economics, College of Liberal Arts; Ph.D., University of Iowa.

Daniel A. Silverman, Assistant Professor (Teaching/Instructional), Department of Criminal Justice, College of Liberal Arts; J.D., Temple University.

Bryant Simon, Professor, Department of History, College of Liberal Arts; Ph.D., University of North Carolina at Chapel Hill.

Alan S. Singer, Professor, Department of English, College of Liberal Arts; Ph.D., University of Washington.

Matthew Smetona, Assistant Professor (Teaching/Instructional), Department of Intellectual Heritage, College of Liberal Arts; Ph.D., Temple University.

Hillel David Soifer, Assistant Professor, Department of Political Science, College of Liberal Arts; Ph.D., Harvard University.

Miriam Solomon, Professor, Department of Philosophy, College of Liberal Arts; Ph.D., Harvard University.

John A. Sorrentino, Associate Professor, Department of Economics, College of Liberal Arts; Ph.D., Purdue University.

C. Christopher Soufas, Professor, Department of Spanish and Portuguese, College of Liberal Arts; Ph.D., Duke University.

Teresa Scott Soufas, Professor, Department of Spanish and Portuguese, College of Liberal Arts; Ph.D., Duke University.

Laura Spagnoli, Associate Professor (Teaching/Instructional), Department of French, German, Italian and Slavic, College of Liberal Arts; Ph.D., University of Pennsylvania.

Howard Spodek, Associate Professor, Department of History, College of Liberal Arts; Ph.D., University of Chicago.

Gerald J. Stahler, Professor, Department of Geography and Urban Studies, College of Liberal Arts; Ph.D., Temple University.

Damien Stankiewicz, Assistant Professor, Department of Anthropology, College of Liberal Arts; Ph.D., New York University.
Laurence D. Steinberg, Professor, Department of Psychology, College of Liberal Arts; Ph.D., Cornell University.

R. Michael Stewart, Professor Emeritus, Department of Anthropology, College of Liberal Arts; Ph.D., Catholic University.

Mary Stricker, Associate Professor (Teaching/Instructional), Department of Sociology, College of Liberal Arts; Ph.D., Temple University.

Dorothy Stringer, Associate Professor (Teaching/Instructional), Department of Writing Program, College of Liberal Arts; Ph.D., University at Albany, State University of New York.

William J. Stull, Professor, Department of Economics, College of Liberal Arts; Ph.D., Massachusetts Institute of Technology.

Sandra L. Suárez, Professor, Department of Political Science, College of Liberal Arts; Ph.D., Yale University.

Charles E. Swanson, Associate Professor, Department of Economics, College of Liberal Arts; Ph.D., University of Minnesota.

Elizabeth Sweet, Assistant Professor (Teaching/Instructional), Department of Geography and Urban Studies, College of Liberal Arts; Ph.D., University of Illinois at Chicago.

Leonard J. Swidler, Professor, Department of Religion, College of Liberal Arts; Ph.D., University of Wisconsin.

Benjamin Talton, Associate Professor, Department of History, College of Liberal Arts; Ph.D., University of Chicago.

Ralph B. Taylor, Professor, Department of Criminal Justice, College of Liberal Arts; Ph.D., Johns Hopkins University.

Ronald D. Taylor, Associate Professor, Department of Psychology, College of Liberal Arts; Ph.D., University of Michigan.

Brian Teare, Assistant Professor, Department of English, College of Liberal Arts; M.F.A., Indiana University.

Rebecca Testai, Professor, Department of Sociology, College of Liberal Arts; Ph.D., University of Pennsylvania.

Kimberly Thomas, Assistant Professor (Teaching/Instructional), Department of Writing Program, College of Liberal Arts; Ph.D., Indiana University of Pennsylvania.

Ruth P. Thomas, Professor, Department of French, German, Italian and Slavic, College of Liberal Arts; Ph.D., Yale University.

Barbara E. Thornbury, Associate Professor, Department of Asian and Middle Eastern Languages and Studies, College of Liberal Arts; Ph.D., University of British Columbia.

Teshale Tibebu, Professor, Department of History, College of Liberal Arts; Ph.D., State University of New York at Binghamton.

Paul D. Toth, Assistant Professor, Department of Spanish and Portuguese, College of Liberal Arts; Ph.D., University of Pittsburgh.

LaTosha Traylor, Assistant Professor, Department of Criminal Justice, College of Liberal Arts; Ph.D., University of Illinois at Chicago.

Tara N. Tripp, Instructor (Teaching/Instructional), Department of Criminal Justice, College of Liberal Arts; M.S., St. Joseph's University.

Kathleen S. Uno, Associate Professor, Department of History, College of Liberal Arts; Ph.D., University of California Berkeley.

Gregory J. W. Urwin, Professor, Department of History, College of Liberal Arts; Ph.D., University of Notre Dame.

Nicole Martorano Van Cleve, Assistant Professor, Department of Criminal Justice, College of Liberal Arts; Ph.D., Northwestern University.

Ryan Vander Wielen, Associate Professor, Department of Political Science, College of Liberal Arts; Ph.D., Washington University-St. Louis.

Lawrence Venuti, Professor, Department of English, College of Liberal Arts; Ph.D., Columbia University.

Pablo S. Vila, Professor, Department of Sociology, College of Liberal Arts; Ph.D., University of Texas Austin.

Gerald A. Vision, Professor, Department of Philosophy, College of Liberal Arts; Ph.D., University of Michigan.

E. Rely Vílcicá, Assistant Professor, Department of Criminal Justice, College of Liberal Arts; Ph.D., Temple University.

Thomas J. Waidzunas, Assistant Professor, Department of Sociology, College of Liberal Arts; Ph.D., University of California San Diego.

David L. Waldestreicher, Professor, Department of History, College of Liberal Arts; Ph.D., Yale University.

Shannon Walters, Assistant Professor, Department of English, College of Liberal Arts; Ph.D., Pennsylvania State University.

Grant H. Ward, Assistant Professor (Teaching/Instructional), Department of Intellectual Heritage, College of Liberal Arts; Ph.D., Temple University.
Jeffrey T. Ward, Assistant Professor, Department of Criminal Justice, College of Liberal Arts; Ph.D., University of Florida.

Owen J. Ware, Assistant Professor, Department of Philosophy, College of Liberal Arts; Ph.D., University of Toronto.

Donald Wargo, Associate Professor (Teaching/Instructional), Department of Economics, College of Liberal Arts; Ph.D., Temple University.

Anthony Waskie, Assistant Professor (Teaching/Instructional), Department of French, German, Italian and Slavic, College of Liberal Arts; Ph.D., New York University.

David Harrington Watt, Professor, Department of History, College of Liberal Arts; Ph.D., Harvard University.

David Waxler, Instructor (Teaching/Instructional), Department of Psychology, College of Liberal Arts, Rutgers University.

Ronald W. Webb, Instructor (Teaching/Instructional), Department of Latin American Studies, College of Liberal Arts; Ph.D., Pennsylvania State University.

Douglas Webber, Assistant Professor, Department of Economics, College of Liberal Arts; Ph.D., Cornell University.

Marsha A. Weinraub, Professor, Department of Psychology, College of Liberal Arts; Ph.D., University of Michigan.

Robert W. Weisberg, Professor, Department of Psychology, College of Liberal Arts; Ph.D., Princeton University.

Charles A. Weitz, Associate Professor, Department of Anthropology, College of Liberal Arts; Ph.D., Pennsylvania State University.

Susan Wells, Professor, Department of English, College of Liberal Arts; Ph.D., University of Texas at Austin.

Wayne N. Welsh, Professor, Department of Criminal Justice, College of Liberal Arts; Ph.D., University of California Irvine.

Sharon White, Assistant Professor (Teaching/Instructional), Department of Writing Program, College of Liberal Arts; Ph.D., University of Denver.

Sydney D. White, Associate Professor, Department of Religion, College of Liberal Arts; Ph.D., University of California Berkeley.

Catherine Wiley, Assistant Professor (Teaching/Instructional), Department of English, College of Liberal Arts; Ph.D., Temple University.

Kimberly D. Williams, Assistant Professor, Department of Anthropology, College of Liberal Arts; Ph.D., Ohio State University.

Roland L. Williams Jr., Associate Professor, Department of English, College of Liberal Arts; Ph.D., University of Pennsylvania.

Gregory Winch, Assistant Professor (Teaching/Instructional), Department of Writing Program, College of Liberal Arts; Ph.D., Southern Illinois University.

Brad Windhauser, Assistant Professor (Teaching/Instructional), Department of Writing Program, College of Liberal Arts; M.F.A., Queens University of Charlotte.

Gordon Witty, Assistant Professor (Teaching/Instructional), Department of Asian and Middle Eastern Languages and Studies, College of Liberal Arts; M.A., University of Pennsylvania.

David Wolfsdorf, Associate Professor, Department of Philosophy, College of Liberal Arts; Ph.D., University of Chicago.

Jennifer D. Wood, Associate Professor, Department of Criminal Justice, College of Liberal Arts; Ph.D., University of Toronto.

Matt Wray, Associate Professor, Department of Sociology, College of Liberal Arts; Ph.D., University of California Berkeley.

Hongling Xie, Associate Professor, Department of Psychology, College of Liberal Arts; Ph.D., University of North Carolina at Chapel Hill.

Philip R. Yannella, Professor, Department of English, College of Liberal Arts; Ph.D., University of Wisconsin-Milwaukee.

Sean Yom, Assistant Professor, Department of Political Science, College of Liberal Arts; Ph.D., Harvard University.

Reiko Yoshida, Instructor (Teaching/Instructional), Department of Asian and Middle Eastern Languages and Studies, College of Liberal Arts; M.A., West Chester University.

Ralph F. Young, Professor (Teaching/Instructional), Department of History, College of Liberal Arts; Ph.D., Michigan State University.

Yuan Yuan, Assistant Professor (Teaching/Instructional), Department of Economics, College of Liberal Arts; Ph.D., University of Wisconsin-Madison.

Lu Zhang, Assistant Professor, Department of Sociology, College of Liberal Arts; Ph.D., Johns Hopkins University.

Shanyang Zhao, Professor, Department of Sociology, College of Liberal Arts; Ph.D., University of Maryland.
Mission

Temple University's Department of African American Studies provides students with a textured intellectual experience through the systematic Afrocentric study of the thought, behavior and practices of African people globally. Inasmuch as our faculty and students pursue knowledge from the perspective of African people as both agents and subjects of experience, we also remain open to plural understandings emanating from the multicultural society in which we live, and the rapidly shrinking world beyond. Students engage in critical discourse about issues of race, ethnicity, gender, sexuality, class and culture across a great expanse of time and geographical space. Our classes interrogate African frames of reference, from the classical to the contemporary periods, tracing continuities and transformations from Africa to numerous diasporic communities worldwide.

We commit ourselves to the shaping and evolution of our discipline, and to positive change in our communities. Through enhanced mentoring and cooperative pedagogy, we cultivate the academic excellence, social responsibility and political engagement necessary for subsequent generations of scholars to carry this work into the future.

Curriculum

The curriculum stresses the skills necessary to think critically, write clearly, argue persuasively, and solve problems effectively. Students are exposed to theory and research in a variety of subject areas and are encouraged to engage in active research and service beyond the classroom.

Career Opportunities

Alumni of the African American Studies program have entered careers in primary and secondary education and administration, social work and administration, research design, law enforcement, city government, and have also worked with museums and other cultural and artistic institutions. Several African American Studies alumni and alumnae are active in local and national entertainment in roles that include music production, film making, acting, and script writing. Many others have earned graduate degrees in a variety of areas, including law, the health-related professions such as medicine and nursing, public administration, and the social sciences, including political science, history, psychology, sociology, and anthropology.

Awards and Honors

The department offers three internal awards for graduating seniors—two privately-sponsored awards for outstanding academic performance and one departmental award for outstanding service. The Department of African American Studies supervises the Temple in Ghana program, which allows students to study for six weeks during the summer at the University of Ghana in Accra.

Programs

- Bachelor of Arts in African American Studies (p. 775)
• Minor in African American Studies (p. 778)

Bachelor of Arts in African American Studies

The curriculum for the Bachelor of Arts in African American Studies stresses the skills necessary to think critically, write clearly, argue persuasively, and solve problems effectively. Students are exposed to theory and research in a variety of subject areas and are encouraged to engage in active research and service beyond the classroom.

Career Opportunities

Alumni of the African American Studies program have entered careers in primary and secondary education and administration, social work and administration, research design, law enforcement, city government, and have also worked with museums and other cultural and artistic institutions. Several African American Studies alumni and alumnae are active in local and national entertainment in roles that include music production, filmmaking, acting, and script writing. Many others have earned graduate degrees in a variety of areas, including law, the health-related professions such as medicine and nursing, public administration, and the social sciences, including political science, history, psychology, sociology, and anthropology.

Summary of Degree Requirements

University Requirements:

• MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
• All Temple students must take a minimum of two writing-intensive courses as part of the major. The African American Studies major requires AAS 1296 and AAS 4096.
• Students must complete requirements of the General Education (GenEd) Program. See the General Education (p. 143) section of the Undergraduate Bulletin for more details.

College of Liberal Arts Requirements:

• Completion of a minimum of 123 credits, including:
  • 90 credits in CLA/CST courses;
  • 45 credits of which must be at the upper level (numbered 2000-4999).
    • For Social Science majors, 6 upper level credits (numbered 2000-4999) must be taken in Humanities Subject Areas: Arabic, Chinese, English, French, German, Greek (Ancient), Greek and Roman Classics, Hebrew, Hindi, Italian, Japanese, Latin, Philosophy, Religion, Russian, and Spanish in the College of Liberal Arts, Art History in the Tyler School of Art, or any department in the College of Science and Technology.
  • A minimum GPA of 2.0, cumulatively, in CLA/CST coursework, and in the major.
  • Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.
  • Foreign Language/Global Studies Requirements:
    • All students must complete or test out of the first and second levels of a foreign language - these courses are numbered 1001 and 1002;
    • All students must complete at least one course from the GenEd Global/World Society category; and
    • All Bachelor of Arts students must complete one of the following options:
      • Third semester of a foreign language;
      • Demonstrated proficiency beyond the third semester in a foreign language (placement exam or certification from the language department);
      • Take one Global Studies course from the list on the CLA College Graduation Requirements (p. 755) page;
      • Study Abroad at an approved program; or
      • Take a second General Education Global/World Society course.
• Notes on Foreign Language Study
  • The third level of language is numbered 1003 in French, German, Italian, Spanish, and Portuguese and numbered 2001 in all other foreign language subjects.
  • Students are strongly encouraged to take the third level of a foreign language as it is the minimum required for election to the prestigious honor society Phi Beta Kappa. (Taking the course does not guarantee admission but not taking it guarantees exclusion.)
  • See the College of Liberal Arts Policies (p. 753) section of this Bulletin for more information on the Foreign Language Placement, Regression in Coursework, and guidelines for students' other experiences with language.

General Electives are typically one-third of a student's program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.
**Major Requirements (33 credits):**

**Specifically Required Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAS 1296</td>
<td>Introduction to African American Studies</td>
<td>3</td>
</tr>
<tr>
<td>AAS 2201</td>
<td>African Civilization</td>
<td>3</td>
</tr>
<tr>
<td>AAS 2255</td>
<td>Introduction to Research Methods (Fall only)</td>
<td>3</td>
</tr>
<tr>
<td>AAS 3215</td>
<td>Languages and Cultures of West Africa</td>
<td>3</td>
</tr>
<tr>
<td>AAS 3268</td>
<td>Critical Readings in African American History</td>
<td>3</td>
</tr>
<tr>
<td>AAS 4096</td>
<td>Senior Seminar (Spring only)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Literature course in the Cultural/Aesthetic category**

Select one of the following: 3

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAS 2134</td>
<td>The Literature of American Slavery</td>
</tr>
<tr>
<td>AAS 2934</td>
<td>Honors Literature of American Slavery</td>
</tr>
<tr>
<td>AAS 2208</td>
<td>Black Folklore: African and African-American</td>
</tr>
<tr>
<td>AAS 3176</td>
<td>Contemporary Black Poets</td>
</tr>
<tr>
<td>AAS 4146</td>
<td>Women Writers in Black Literature</td>
</tr>
</tbody>
</table>

**Additional Cultural/Aesthetic course**

Select one of the following: 3

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAS 1124</td>
<td>Elementary Yoruba</td>
</tr>
<tr>
<td>AAS 1125</td>
<td>Elementary Hausa</td>
</tr>
<tr>
<td>AAS 1152</td>
<td>Introduction to African Aesthetics</td>
</tr>
<tr>
<td>AAS 1252</td>
<td>Afrocentricity</td>
</tr>
<tr>
<td>AAS 2058</td>
<td>African American Music I</td>
</tr>
<tr>
<td>AAS 2131</td>
<td>Creative Writing Workshop</td>
</tr>
<tr>
<td>AAS 2134</td>
<td>The Literature of American Slavery</td>
</tr>
<tr>
<td>AAS 2934</td>
<td>Honors Literature of American Slavery</td>
</tr>
<tr>
<td>AAS 2165</td>
<td>History and Culture of the Caribbean</td>
</tr>
<tr>
<td>AAS 2208</td>
<td>Black Folklore: African and African-American</td>
</tr>
<tr>
<td>AAS 3176</td>
<td>Contemporary Black Poets</td>
</tr>
<tr>
<td>AAS 3271</td>
<td>History of Pan African Thought</td>
</tr>
<tr>
<td>AAS 4115</td>
<td>Black Aesthetics</td>
</tr>
<tr>
<td>AAS 4146</td>
<td>Women Writers in Black Literature</td>
</tr>
</tbody>
</table>

**Socio-Behavioral category courses**

Select two of the following: 6

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAS 1253</td>
<td>Blacks in World History</td>
</tr>
<tr>
<td>AAS 1271</td>
<td>Urban Black Politics</td>
</tr>
<tr>
<td>AAS 2151</td>
<td>History of Blacks in Cinema</td>
</tr>
<tr>
<td>AAS 2211</td>
<td>African Politics</td>
</tr>
<tr>
<td>AAS 2218</td>
<td>Psychology of the African American Experience</td>
</tr>
<tr>
<td>AAS 2248</td>
<td>Public Policy and the Black Community</td>
</tr>
<tr>
<td>AAS 2251</td>
<td>Mass Media and the Black Community</td>
</tr>
<tr>
<td>AAS 3257</td>
<td>Black Social and Political Thought</td>
</tr>
<tr>
<td>AAS 3296</td>
<td>The Black Family</td>
</tr>
<tr>
<td>AAS 4221</td>
<td>The Black Child: Development and Socialization</td>
</tr>
<tr>
<td>AAS 4248</td>
<td>Dimensions of Racism</td>
</tr>
<tr>
<td>AAS 4389</td>
<td>Seminar in Community Service</td>
</tr>
</tbody>
</table>

One additional upper-level elective in African American Studies, numbered 2000-4999 3

**Total Credit Hours** 33

**Distinction in Major**

African American Studies majors may graduate with distinction in the major if they have earned a GPA of 3.3.
# Suggested Academic Plan

## Bachelor of Arts in African American Studies

### Requirements for New Students starting in the 2015-2016 Academic Year

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
</tr>
<tr>
<td></td>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Foreign Language 1001 - first level</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

| Spring | IH 0851 or 0951 | Mosaic: Humanities Seminar I [GY] | 3 |
|        | Foreign Language 1002 - second level | 4 |
|        | GenEd Breadth Course | 3 |
|        | GenEd Breadth Course | 3 |
|        | AAS 1296 | Introduction to African American Studies [WI] | 3 |
|        | **Term Credit Hours** | **16** |

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
</tr>
<tr>
<td></td>
<td>AAS 2201</td>
<td>African Civilization</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>African American Studies 2000-4999 Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>One 0800-4999 Elective in Any School or College</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Select one of the following:</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Foreign Language - third level</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GenEd Global/World Society Course</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Internationally-Focused Course from Approved List</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

| Spring | GenEd Breadth Course | 3-4 |
|        | GenEd Breadth Course | 3 |
|        | GenEd Breadth Course | 3 |
|        | African American Studies 1000+ Cultural Aesthetic Course from Approved List | 3 |
|        | CLA/CST 2000+ Humanities course | 3 |
|        | **Term Credit Hours** | **15** |

<table>
<thead>
<tr>
<th>Year 3</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CLA/CST 2000+ Humanities/CST Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>AAS 3268</td>
<td>Critical Readings in African American History</td>
</tr>
<tr>
<td></td>
<td>African American Studies 1000+ Socio-Behavioral Course from Approved List</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CLA/CST 0800+ Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CLA/CST 2000+ Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

| Spring | AAS 3215 | Languages and Cultures of West Africa | 3 |
|        | African American Studies 1000+ Socio-Behavioral Course from Approved List | 3 |
|        | African American Studies 1000+ Literature-Focused Cultural Aesthetic Course from Approved List | 3 |
|        | CLA/CST 2000+ Course | 3 |
|        | CLA/CST 2000+ Course | 3 |
|        | **Term Credit Hours** | **15** |
Year 4
Fall
AAS 2255 Introduction to Research Methods (offered during fall semester only) 3
CLA/CST 2000+ Course 3
CLA/CST 2000+ Course 3
CLA/CST 0800-4999 Elective 3
CLA/CST 0800-4999 Elective 3

Term Credit Hours 15

Spring
AAS 4096 Senior Seminar [WI] 3
CLA/CST 2000+ Course 3
CLA/CST 2000+ Course 3
CLA/CST 0800-4999 Elective 3
One 0800-4999 Elective in Any School or College 3

Term Credit Hours 15

Total Credit Hours: 123

Minor in African American Studies
Requirements and Suggested Order of Completion

Required Courses
AAS 1296 Introduction to African American Studies 3
AAS 3215 Languages and Cultures of West Africa 3
AAS 2201 African Civilization 3
AAS 3268 Critical Readings in African American History 3
AAS 2255 Introduction to Research Methods (fall semester only) 3

Electives
Select two (2) additional courses, one of which must be at or above the 2000 level. 1 6

Total Credit Hours 21

1 Make these selections based on the content areas in which you desire greater familiarity (e.g., African American Studies literature, African American Studies social issues, African American Studies psychology, etc.). One of these two upper-level courses may be an African American Studies-related course outside the department; however, students must seek written approval from the African American Studies undergraduate director prior to enrolling in outside courses that they want to apply toward the African American Studies minor.

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

American Studies

Katherine Henry, Program Director
1030 Anderson Hall
khenry@temple.edu

Gabriel Wettach, Faculty Advisor
1030 Anderson Hall
215-204-8510
gwettach@temple.edu

Stephanie Morawski, Administrator
1041 Anderson Hall
215-204-8516
morawski@temple.edu

www.cla.temple.edu/american_studies/
American Studies is a broad-based interdisciplinary program that explores the rich complexity of American culture and American lives. Courses focus on national myths and everyday realities, race and ethnicity, work, technology, media and popular culture, architecture and city planning, and the production and consumption of art forms like photography, film, dance, and music. In American Studies, though, we do not treat these topics as discrete categories, but instead explore their relationships to each other. For instance, we look at ideas about race and class embedded in national symbols and ideas. Through a variety of courses and in a mix of different categories, American Studies provides students with a deep understanding of the many forces and ideas shaping America over a long sweep of time in any number of places, the East, the West, in the heartland and at the borders.

The program also offers student internship opportunities and other hands-on kinds of learning at a variety of cultural institutions in Philadelphia and the Delaware Valley. American Studies courses are challenging and thought-provoking and many of them are cross-listed with the Temple University Honors Program. The major program stresses development of reading, writing, and analytical skills that are necessary for successful careers in a range of professional fields.

American Studies majors go on to graduate school in the humanities and social sciences, law school, and medical school. They also may take jobs in schools, non-profit organizations, museums, libraries, business, social services, public relations, and the media.

Programs

- Bachelor of Arts in American Studies (p. 779)
- Minor in American Studies (p. 783)
- Minor in Asian American Studies (p. 782)

Bachelor of Arts in American Studies

Summary of Degree Requirements

University Requirements:

- MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific courses required for this major are: AMST 2098, and AMST 4097 (or AMST 4098 with permission).
- Students must complete requirements of the General Education (GenEd) Program. See the General Education (p. 143) section of the Undergraduate Bulletin for more details.

College of Liberal Arts Requirements:

- Completion of a minimum of 123 credits, including:
  - 90 credits in CLA/CST courses;
  - 45 credits of which must be at the upper level (numbered 2000-4999).
    - For Social Science majors, 6 upper level credits (numbered 2000-4999) must be taken in Humanities Subject Areas: Arabic, Chinese, English, French, German, Greek (Ancient), Greek and Roman Classics, Hebrew, Hindi, Italian, Japanese, Latin, Philosophy, Religion, Russian, and Spanish in the College of Liberal Arts, Art History in the Tyler School of Art, or any department in the College of Science and Technology.
- A minimum GPA of 2.0, cumulatively, in CLA/CST coursework, and in the major.
- Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.
- Foreign Language/Global Studies Requirements:
  - All students must complete or test out of the first and second levels of a foreign language - these courses are numbered 1001 and 1002;
  - All students must complete at least one course from the GenEd Global/World Society category; and
  - All Bachelor of Arts students must complete one of the following options:
    - Third semester of a foreign language;
    - Demonstrated proficiency beyond the third semester in a foreign language (placement exam or certification from the language department);
    - Take one Global Studies course from the list on the CLA College Graduation Requirements (p. 755) page;
    - Study Abroad at an approved program; or
    - Take a second General Education Global/World Society course.
- Notes on Foreign Language Study
  - The third level of language is numbered 1003 in French, German, Italian, Spanish, and Portuguese and numbered 2001 in all other foreign language subjects.
  - Students are strongly encouraged to take the third level of a foreign language as it is the minimum required for election to the prestigious honor society Phi Beta Kappa. (Taking the course does not guarantee admission but not taking it guarantees exclusion.)
General Electives are typically one-third of a student's program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

Major Requirements (39 credits):

<table>
<thead>
<tr>
<th>Introduction</th>
<th>AMST 2098</th>
<th>Reading Culture</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Courses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>American Biography and Work</td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>AMST 1001/1901</td>
<td>AMST 1042</td>
<td>American Lives</td>
<td></td>
</tr>
<tr>
<td>AMST 1002</td>
<td>AMST 2011</td>
<td>Work in America</td>
<td></td>
</tr>
<tr>
<td></td>
<td>AMST 2012</td>
<td>Key Documents in American Culture Before World War I</td>
<td></td>
</tr>
<tr>
<td>American Culture</td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>AMST 2011</td>
<td>AMST 2022</td>
<td>The Arts in America</td>
<td></td>
</tr>
<tr>
<td>AMST 2012</td>
<td>AMST 3012</td>
<td>Museums and American Culture</td>
<td></td>
</tr>
<tr>
<td></td>
<td>AMST 3011</td>
<td>American Things: Introduction to Material Culture</td>
<td></td>
</tr>
<tr>
<td></td>
<td>AMST 3012</td>
<td>Photography in America</td>
<td></td>
</tr>
<tr>
<td></td>
<td>AMST 3013</td>
<td>Film and American Society</td>
<td></td>
</tr>
<tr>
<td></td>
<td>AMST 3061</td>
<td>Media and American Popular Culture</td>
<td></td>
</tr>
<tr>
<td></td>
<td>AMST 3013</td>
<td>The Documentary Mode</td>
<td></td>
</tr>
<tr>
<td></td>
<td>AMST 2120/2900</td>
<td>Topics in American Culture</td>
<td></td>
</tr>
<tr>
<td>Place in American Life</td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>AMST 2051/2951</td>
<td>AMST 2021</td>
<td>American Places: Home, City, Region</td>
<td></td>
</tr>
<tr>
<td>AMST 2021</td>
<td>AMST 3022</td>
<td>Philadelphia Neighborhoods</td>
<td></td>
</tr>
<tr>
<td>AMST 3051/3951</td>
<td>AMST 3021</td>
<td>Architecture, Urban Design, and American Culture</td>
<td></td>
</tr>
<tr>
<td>AMST 2001</td>
<td>AMST 2012</td>
<td>American Frontiers</td>
<td></td>
</tr>
<tr>
<td>AMST 2120/2900</td>
<td>AMST 2001</td>
<td>Tourism in America</td>
<td></td>
</tr>
<tr>
<td></td>
<td>AMST 2120/2900</td>
<td>Topics in American Culture</td>
<td></td>
</tr>
<tr>
<td>Diversity in America</td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>AMST 3096</td>
<td>AMST 2096</td>
<td>The American Woman: Visions and Revisions</td>
<td></td>
</tr>
<tr>
<td>AMST 2097</td>
<td>AMST 3096</td>
<td>Asian Diaspora</td>
<td></td>
</tr>
<tr>
<td></td>
<td>AMST 2097</td>
<td>Asian Women in Transition</td>
<td></td>
</tr>
<tr>
<td>Change in America</td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>AMST 3041</td>
<td>AMST 2041</td>
<td>Contemporary Trends in the American Workplace</td>
<td></td>
</tr>
<tr>
<td>AMST 3041</td>
<td>AMST 3901</td>
<td>Technology and American Culture</td>
<td></td>
</tr>
<tr>
<td>AMST 3032</td>
<td>AMST 3032</td>
<td>Honors Ideal America: Reform, Revolution, and Utopia</td>
<td></td>
</tr>
<tr>
<td>AMST 3033</td>
<td>AMST 3033</td>
<td>Literature and Political Change</td>
<td></td>
</tr>
<tr>
<td>AMST 2064</td>
<td>AMST 2064</td>
<td>Courtroom in American Society</td>
<td></td>
</tr>
<tr>
<td>AMST 2064</td>
<td>AMST 3031</td>
<td>America in the 1950's</td>
<td></td>
</tr>
<tr>
<td>AMST 2065</td>
<td>AMST 3031</td>
<td>Political Protest and Culture in the ’60s</td>
<td></td>
</tr>
<tr>
<td>AMST 2031</td>
<td>AMST 3075</td>
<td>Literature of American Slavery</td>
<td></td>
</tr>
<tr>
<td>AMST 2032</td>
<td>AMST 2031</td>
<td>Radicalism in the United States</td>
<td></td>
</tr>
<tr>
<td>AMST 2032</td>
<td>AMST 2032</td>
<td>Critical Moments in the American Past</td>
<td></td>
</tr>
<tr>
<td>AMST 2065</td>
<td>AMST 2065</td>
<td>Global America</td>
<td></td>
</tr>
<tr>
<td>AMST 2120/2900</td>
<td>AMST 2120/2900</td>
<td>Topics in American Culture</td>
<td></td>
</tr>
<tr>
<td>Additional Courses</td>
<td></td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>Select three American Studies 2000-4999 Electives</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Open Electives - American Studies Focus</td>
<td></td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Capstone Course</td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>AMST 4097</td>
<td>AMST 4097</td>
<td>Senior Seminar in American Studies</td>
<td></td>
</tr>
</tbody>
</table>
or AMST 4098

Senior Independent Study

Total Credit Hours 39

1 Specific subjects change each semester. See class schedule for information on a particular offering. AMST 2120 may meet one or more of the above requirements with permission of the director.

2 These can include choices from the American Studies core courses as well as choices from all other American Studies courses.

3 Students must take at least three courses outside of the major selected in consultation with the American Studies director and congruent with an American Studies focus. We recommend that at least 6 of these credits be in American history or literature.

4 Students must take the Senior Seminar in their final year of study (usually offered in Fall semester). Only in rare circumstances and with special permission can students satisfy the capstone by taking AMST 4098.

Distinction in Major

American Studies majors may graduate with distinction in the major if they have a GPA of at least 3.5 in the major and a cumulative GPA of at least 3.0.

Suggested Academic Plan

Bachelor of Arts in American Studies

Requirements for New Students starting in the 2015-2016 Academic Year

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
</tr>
<tr>
<td>Foreign Language 1001 - first level</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>15</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
</tr>
<tr>
<td>Foreign Language 1002 - second level</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>American Studies 1000+ American Biography and Work Course from approved list</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>16</td>
</tr>
<tr>
<td><strong>Year 2</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>AMST 2098</td>
<td>Reading Culture [WI]</td>
</tr>
<tr>
<td>American Studies 2000+ American Culture Course from approved list</td>
<td>3</td>
</tr>
<tr>
<td>One 0800-4999 Elective in any School or College</td>
<td>2</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3</td>
</tr>
<tr>
<td>Foreign Language - third level</td>
<td></td>
</tr>
<tr>
<td>GenEd Global/World Society course</td>
<td></td>
</tr>
<tr>
<td>Internationally Focused Course from approved list</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>17</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>American Studies 2000+ Diversity in America Course from approved list</td>
<td>3</td>
</tr>
<tr>
<td>American Studies 2000+ Place in American Life Course from approved list</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>15</td>
</tr>
<tr>
<td><strong>Year 3</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
</tbody>
</table>

CLA/CST 2000+ Humanities/CST Course 3
American Studies 2000+ Change in America Course from approved list 3
American Studies 2000-4999 American Studies Elective 3
One 1000+ Focus Elective 1 3
CLA/CST 0800-4999 Elective 3

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
</table>

**Spring**

American Studies 2000-4999 Elective 3
American Studies 2000-4999 Elective 3
CLA/CST 2000+ Course 3
CLA/CST 0800-4999 Elective 3

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
</table>

**Year 4**

**Fall**

One 1000+ Focus Elective 1 3
AMST 4097 or 4098 Senior Seminar in American Studies [WI] 2 3
American Studies 2000-4999 Elective 3
CLA/CST 0800-4999 Elective 3
CLA/CST 0800-4999 Elective 3

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
</table>

**Spring**

One 1000+ Focus Elective 1 3
CLA/CST 2000+ Course 3
CLA/CST 2000+ Course 3
CLA/CST 0800-4999 Elective 3
One 0800-4999 Elective in Any School or College 3

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
</table>

**Total Credit Hours:** 123

1. Choose this course with the American Studies Director.
2. Students must take AMST 4097 (usually offered in fall semester) in their final year of study. Only in rare circumstances and with special permission can students satisfy the capstone by taking AMST 4098.

**Minor in Asian American Studies**

This interdisciplinary minor focuses on Asian American history, culture, and contemporary issues as well as their Asian roots and American context. The Asian American Minor is six courses (18 s.h.), four in Asian American Studies, one in American Studies, and one Asian Studies course under an Asian Studies or cross-listed number, as distributed in the requirements list.

In lieu of taking regular academic courses, students can earn credits through fieldwork and independent study under a professor’s guidance. This minor is a useful credential for majors in education, journalism and communication, social administration, health science, social science, humanities, history, pre-law studies, and business fields such as personnel and marketing.

**Requirements for the Minor**

**Asian American Courses**

Select four of the following: 12

- AMST 2107 Asian American Experiences
- AMST 1901 Honors American Lives
- AMST 3074 Introduction to Asian American Literature
- AMST 2096 Asian Diaspora
- AMST 2097 Asian Women in Transition

**American Studies Course on race or ethnicity**

Select one of the following: 1 3
AMST 2071 Immigrant Experiences in America
AMST 2072 Puerto Ricans in Philadelphia
AMST 3071 African American Experiences
AMST 3101 Latino Identity in the U.S.
ITAL 4161 Italian American Literature and Culture

Asian Studies Course
Select one course under an Asian Studies or cross-listed number ² 3

Total Credit Hours 18

1 or an alternative approved by an Asian Studies faculty advisor
2 Advisors can help choose from a list of over 60 courses.

Minors are awarded only at the time of completion of the bachelor’s degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor’s degree.

Minor in American Studies

Requirements for the American Studies Minor
Select six American Studies courses, at least three of which should be taken from the American Studies Core Areas listed below: 18

American Biography and Work
AMST 1001 American Lives
or AMST 1901 Honors American Lives
AMST 1002 Key Documents in American Culture Before World War I
AMST 1042 Work in America

American Culture
AMST 2011 The Arts in America
AMST 2012 American Things: Introduction to Material Culture
AMST 2022 Museums and American Culture
AMST 3011 Photography in America
AMST 3012 Film and American Society
AMST 3013 The Documentary Mode
AMST 3061 Media and American Popular Culture
AMST 2120 Topics in American Culture ¹
or AMST 2900 Honors Topics in American Culture

Place in American Life
AMST 2051 American Places: Home, City, Region
or AMST 2951 Honors American Places: Home, City, Region
AMST 2021 Philadelphia Neighborhoods
AMST 3022 Architecture, Urban Design, and American Culture
AMST 3051 American Frontiers
or AMST 3951 Honors American Frontiers
AMST 2001 Tourism in America
AMST 2120 Topics in American Culture ¹
or AMST 2900 Honors Topics in American Culture

Diversity in America
AMST 2096 Asian Diaspora
AMST 2097 Asian Women in Transition
AMST 3096 The American Woman: Visions and Revisions

Change in America
AMST 2041 Technology and American Culture
AMST 2064 America in the 1950’s
AMST 3041 Contemporary Trends in the American Workplace
AMST 3032 Literature and Political Change
AMST 3033  Courtroom in American Society
AMST 3901  Honors Ideal America: Reform, Revolution, and Utopia
AMST 3031  Political Protest and Culture in the '60s
or AMST 3931  Honors Political Protest and Culture in the 60's
AMST 3075  Literature of American Slavery
AMST 2031  Radicalism in the United States
AMST 2032  Critical Moments in the American Past
AMST 2065  Global America
AMST 2120  Topics in American Culture
or AMST 2900  Honors Topics in American Culture

1 Specific subjects change each semester. See class schedule for information on a particular offering.

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

**Anthropology**

212 Gladfelter Hall
www.cla.temple.edu/anthro

Paul Farnsworth, Chair
210 Gladfelter Hall
215-204-7775

Charles Weitz, Undergraduate Chair and Faculty Advisor
212 Gladfelter Hall
215-204-7330
weitz@temple.edu

Jessica Brennan, Administrator
2nd Floor, Gladfelter Hall
215-204-7763
jessica.brennan@temple.edu

Anthropology is the study of human origins, development, and diversity. Anthropologists explore the ways in which people understand and adapt to living in a variety of settings, ranging from urban environments to rural villages, all over the world and across time. Anthropologists are interested in investigating such questions as: What does it mean to be human? What are the historical, social, political, economic, and environmental pressures that have helped shape the experiences of particular groups of people? How do human beings interact with the physical environment? Does the language that one speaks affect the ways in which one thinks and experiences the world? Anthropology includes four broad sub-fields, all of which are well represented at Temple University: Cultural Anthropology, Archaeology, Biological Anthropology, and Linguistic Anthropology.

Undergraduate majors in Anthropology pursue one of three courses of study: General Anthropology, the Human Biology concentration, or the Visual Anthropology track. Laboratory facilities, internships, fieldwork, and experiential learning courses provide students with practical experiences in all of Anthropology's sub-fields. A minor can be taken in General Anthropology or in Visual Anthropology.

**Programs**

- Bachelor of Arts in Anthropology (p. 784)
- Bachelor of Arts in Anthropology: Human Biology Concentration (p. 788)
- Bachelor of Arts in Anthropology: Visual Anthropology Track (p. 791)
- Minor in Anthropology (p. 794)
- Minor in Visual Anthropology (p. 794)

**Bachelor of Arts in Anthropology**

**General Anthropology**

The general anthropology major is intended to give students a foundation in all of the four sub-fields associated with the discipline of anthropology. Each of the sub-fields requires the development of a number of skills, including: formulating hypotheses; developing research programs and proposals; applying theories to the interpretation of artifacts and other data; and gathering ethnographic information through participant-observation. There is
sufficient flexibility in the requirements for the general anthropology major so that a student with an interest in a specific sub-field can focus their program of study in that area - or not, if a more general program is of interest.

With its focus on human diversity and its emphasis on cultural relativism, the general anthropology major well prepares students for the issues they are likely to encounter in today’s workplaces. At Temple we offer a number of courses on such topics as the Anthropology of Policy, Medical Anthropology, and Urban Anthropology, which prepare students for careers in public administration, social work, health policy, urban planning, and other aspects of public policy-related work, in addition to professional careers in fields such as business, law, and medicine. Anthropology students are also well-prepared to participate in activities which call for cultural sensitivity and an understanding of cultural differences, such as the teaching of English as a foreign language and other work with immigrant communities or work in the global marketplace. A variety of courses on archaeology prepare students for careers in the field of cultural resources management and historic preservation.

Interested students can contact the faculty advisor for additional information. A brochure describing the General Anthropology major can be obtained in the department.

Summary of Degree Requirements

University Requirements:

• MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
• All Temple students must take a minimum of two writing-intensive courses as part of the major. All General Anthropology majors take ANTH 2396 and one of the following writing-intensive courses for this requirement: ANTH 4196, ANTH 4398, ANTH 4596, or ANTH 4897.
• Students must complete requirements of the General Education (GenEd) Program. See the General Education (p. 143) section of the Undergraduate Bulletin for more details.

College of Liberal Arts Requirements:

• Completion of a minimum of 123 credits, including:
  • 90 credits in CLA/CST courses;
  • 45 credits of which must be at the upper level (numbered 2000-4999).
    • For Social Science majors, 6 upper level credits (numbered 2000-4999) must be taken in Humanities Subject Areas: Arabic, Chinese, English, French, German, Greek (Ancient), Greek and Roman Classics, Hebrew, Hindi, Italian, Japanese, Latin, Philosophy, Religion, Russian, and Spanish in the College of Liberal Arts, Art History in the Tyler School of Art, or any department in the College of Science and Technology.
• A minimum GPA of 2.0, cumulatively, in CLA/CST coursework, and in the major.
• Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.
• Foreign Language/Global Studies Requirements:
  • All students must complete or test out of the first and second levels of a foreign language - these courses are numbered 1001 and 1002;
  • All students must complete at least one course from the GenEd Global/World Society category; and
  • All Bachelor of Arts students must complete one of the following options:
    • Third semester of a foreign language;
    • Demonstrated proficiency beyond the third semester in a foreign language (placement exam or certification from the language department);
    • Take one Global Studies course from the list on the CLA College Graduation Requirements (p. 755) page;
    • Study Abroad at an approved program; or
    • Take a second General Education Global/World Society course.
• Notes on Foreign Language Study
  • The third level of language is numbered 1003 in French, German, Italian, Spanish, and Portuguese and numbered 2001 in all other foreign language subjects.
  • Students are strongly encouraged to take the third level of a foreign language as it is the minimum required for election to the prestigious honor society Phi Beta Kappa. (Taking the course does not guarantee admission but not taking it guarantees exclusion.)
  • See the College of Liberal Arts Policies (p. 753) section of this Bulletin for more information on the Foreign Language Placement, Regression in Coursework, and guidelines for students’ other experiences with language.

General Electives are typically one-third of a student's program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

Major Requirements (37-38 credits):

Fundamentals Courses
ANTH 2104  Fundamentals of Archaeology  
ANTH 2396  Fundamentals of Cultural Anthropology  
ANTH 2507  Fundamentals of Linguistic Anthropology  
ANTH 2705  Fundamentals of Biological Anthropology  

Methods Course
Select one of the following:  3-4
ANTH 3170  Methods in Archaeology  
ANTH 3175  Heritage Management in Archaeology  
ANTH 3189  Field Session in Archaeology  
ANTH 3389  Fieldwork in Ethnography  
ANTH 3444  Advanced Production of Anthropological Media  
ANTH 3509  Language Socialization and Cultural Reproduction  
ANTH 3510  Theory and Method in Linguistic Anthropology  
ANTH 3770  Methods in Physical Anthropology  
ANTH 3771  Quantitative Methods in Anthropology  

Capstone Course
Select one of the following:  3
ANTH 4196  Theory and Practice of Contemporary Archaeology  
ANTH 4398  Research in Socio-Cultural Anthropology  
ANTH 4596  Capstone in Linguistic Anthropology  
ANTH 4897  Research in Biological Anthropology  

Anthropology Electives  6
Select a minimum of three advanced electives in Anthropology numbered between 3000-4999  9
Select three upper-level electives numbered 2000-4999  9

Total Credit Hours  37-38

---

1  Required for all Archaeology courses numbered 3000+.
2  Required for all Cultural & Visual Anthropology courses numbered 3000+.
3  Required for all Linguistic Anthropology courses numbered 3000+.
4  Required for all Biological Anthropology courses numbered 3000+.
5  Additional methods courses can be taken as electives; ANTH 3170 and ANTH 3770 are topics courses and may be taken multiple times for additional credit.
6  Note: Electives may not have been used to satisfy other requirements of the major.

Distinction in Major
Anthropology majors may graduate with distinction in the major if they have earned a GPA of 3.5 or higher.

Suggested Academic Plan
Bachelor of Arts in Anthropology
Requirements for New Students starting in the 2015-2016 Academic Year

Year 1

<table>
<thead>
<tr>
<th>Term</th>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>ENG 0802, 0812, or 0902  Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Foreign Language 1001 - first level</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td>Spring</td>
<td>IH 0851 or 0951  Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Foreign Language 1002 - second level</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
</tbody>
</table>
### Year 2

#### Fall
- **IH 0852 or 0952**
  - Mosaic: Humanities Seminar II [GZ]
  - Term Credit Hours: 3
- **GenEd Breadth Course**
  - Term Credit Hours: 3
- **GenEd Breadth Course**
  - Term Credit Hours: 3
- **ANTH 2396**
  - Fundamentals of Cultural Anthropology [WI]
  - Term Credit Hours: 3
- Select one of the following:
  - Foreign Language - third level
  - GenEd Global/World Society Course
  - Internationally Focused Course From Approved List
  - Term Credit Hours: 3

### Term Credit Hours
16

#### Spring
- **GenEd Breadth Course**
  - Term Credit Hours: 4
- **GenEd Breadth Course**
  - Term Credit Hours: 3
- **CLA/CST 0800+ Elective**
  - Term Credit Hours: 3
- **ANTH 2104**
  - Fundamentals of Archaeology
  - Term Credit Hours: 3
- **ANTH 2705**
  - Fundamentals of Biological Anthropology
  - Term Credit Hours: 4

### Term Credit Hours
15

### Year 3

#### Fall
- **CLA/CST 2000+ Humanities/CST Course**
  - Term Credit Hours: 3
- **ANTH 2507**
  - Fundamentals of Linguistic Anthropology
  - Term Credit Hours: 3
- **Anthropology 2000-4999 Elective**
  - Term Credit Hours: 3
- **CLA/CST 2000+ Course**
  - Term Credit Hours: 3
- **CLA/CST 0800+ Elective**
  - Term Credit Hours: 3

### Term Credit Hours
15

#### Spring
- **CLA/CST 2000+ Humanities/CST Course**
  - Term Credit Hours: 3
- **Anthropology - Select one Methods Course from list**
  - Term Credit Hours: 3
- **Anthropology 2000-4999 Elective**
  - Term Credit Hours: 3
- **CLA/CST 0800+ Elective**
  - Term Credit Hours: 3

### Term Credit Hours
15

### Year 4

#### Fall
- **Anthropology 3000-4999 Elective**
  - Term Credit Hours: 3
- **Anthropology 3000-4999 Elective**
  - Term Credit Hours: 3
- **CLA/CST 0800+ Elective**
  - Term Credit Hours: 3
- **CLA/CST 0800+ Elective**
  - Term Credit Hours: 3
- **CLA/CST 0800+ Elective**
  - Term Credit Hours: 3

### Term Credit Hours
15

#### Spring
- Select one of the following:
  - **ANTH 4196**
    - Theory and Practice of Contemporary Archaeology [WI]
  - **ANTH 4398**
    - Research in Socio-Cultural Anthropology [WI]
  - **ANTH 4596**
    - Capstone in Linguistic Anthropology [WI]
  - **ANTH 4897**
    - Research in Biological Anthropology [WI]
  - **Anthropology 3000-4999 Elective**
  - **CLA/CST 0800+ Elective**
  - **CLA/CST 0800+ Elective**
  - Term Credit Hours: 3

### Term Credit Hours
15
Bachelor of Arts in Anthropology: Human Biology Concentration

The Human Biology concentration in Anthropology prepares students for careers in medicine, dentistry, physical therapy, optometry, podiatry, and other allied health fields. Human Biology students major in Anthropology but take departmental courses primarily in biological anthropology. These courses deal in human genetics, human paleontology, human physiology, and human reproductive biology and behavior. They stress an evolutionary perspective on humans and integrate molecular, whole-organism, population, and species-level data on humans. The Human Biology concentration also includes required courses in biology, and elective options in human anatomy, physiology, and public health. This program also encourages students to take courses in other disciplines to fulfill admission requirements to professional schools in the health sciences. As a result, our students have the broad, liberal arts background that many professional schools find attractive.

Interested students should contact the pre-med advisor at 1810 Liacouras Walk, 1st Floor, or the Human Biology Concentration advisor, Dr. Charles Weitz, at 215-204-7330 or weitz@temple.edu. A brochure describing the Human Biology Concentration can be obtained in the Anthropology Department, room 209, Gladfelter Hall.

Summary of Degree Requirements

University Requirements:

- MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. All students majoring in the Anthropology Human Biology concentration must take ANTH 3796 and ANTH 4897.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education section of the Undergraduate Bulletin for more details.

College of Liberal Arts Requirements:

- Completion of a minimum of 123 credits, including:
  - 90 credits in CLA/CST courses;
  - 45 credits of which must be at the upper level (numbered 2000-4999),
    - For Social Science majors, 6 upper level credits (numbered 2000-4999) must be taken in Humanities Subject Areas: Arabic, Chinese, English, French, German, Greek (Ancient), Greek and Roman Classics, Hebrew, Hindi, Italian, Japanese, Latin, Philosophy, Religion, Russian, and Spanish in the College of Liberal Arts, Art History in the Tyler School of Art, or any department in the College of Science and Technology.
  - A minimum GPA of 2.0, cumulatively, in CLA/CST coursework, and in the major.
  - Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.

- Foreign Language/Global Studies Requirements:
  - All students must complete or test out of the first and second levels of a foreign language - these courses are numbered 1001 and 1002;
  - All students must complete at least one course from the GenEd Global/World Society category; and
  - All Bachelor of Arts students must complete one of the following options:
    - Third semester of a foreign language;
    - Demonstrated proficiency beyond the third semester in a foreign language (placement exam or certification from the language department);
    - Take one Global Studies course from the list on the CLA College Graduation Requirements (p. 755) page;
    - Study Abroad at an approved program; or
    - Take a second General Education Global/World Society course.

- Notes on Foreign Language Study
  - The third level of language is numbered 1003 in French, German, Italian, Spanish, and Portuguese and numbered 2001 in all other foreign language subjects.
  - Students are strongly encouraged to take the third level of a foreign language as it is the minimum required for election to the prestigious honor society Phi Beta Kappa. (Taking the course does not guarantee admission but not taking it guarantees exclusion.)
  - See the College of Liberal Arts Policies (p. 753) section of this Bulletin for more information on the Foreign Language Placement, Regression in Coursework, and guidelines for students’ other experiences with language.
General Electives are typically one-third of a student’s program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

**Major Requirements (39 credits):**

**Required Courses**
- ANTH 2705  
  Fundamentals of Biological Anthropology  
  4 credits
- ANTH 3771  
  Quantitative Methods in Anthropology  
  3 credits
- ANTH 3796  
  Evolutionary Biology  
  3 credits

**Introductory Sequence in Biology**
Select one of the following sets:  
8 credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1011</td>
<td>General Biology I</td>
</tr>
<tr>
<td>&amp; BIOL 1012</td>
<td>General Biology II</td>
</tr>
<tr>
<td>BIOL 1111</td>
<td>Introduction to Biology I</td>
</tr>
<tr>
<td>&amp; BIOL 2112</td>
<td>Introduction to Biology II</td>
</tr>
</tbody>
</table>

**Human Biology Electives**
Select four of the following:  
12 credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 2763</td>
<td>Human Population Genetics</td>
</tr>
<tr>
<td>ANTH 2765</td>
<td>Human Osteology</td>
</tr>
<tr>
<td>ANTH 3742</td>
<td>Human Paleontology</td>
</tr>
<tr>
<td>ANTH 3743</td>
<td>Human Biology of Modern Populations</td>
</tr>
<tr>
<td>ANTH 3744</td>
<td>Human Evolutionary Genetics</td>
</tr>
<tr>
<td>ANTH 3746</td>
<td>Human Reproduction: Evolutionary Perspectives</td>
</tr>
<tr>
<td>ANTH 3747</td>
<td>Human Growth and Development</td>
</tr>
<tr>
<td>BIOL 2233</td>
<td>Mammalian Anatomy 2</td>
</tr>
<tr>
<td>BIOL 3334</td>
<td>Mammalian Physiology 2</td>
</tr>
<tr>
<td>KINS 1223</td>
<td>Human Anatomy and Physiology I 2</td>
</tr>
<tr>
<td>KINS 1224</td>
<td>Human Anatomy and Physiology II (prerequisite: KINS 1223) 2</td>
</tr>
</tbody>
</table>

**Primate and Human Behavior Course**
Select one of the following:  
3 credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 2764</td>
<td>Primate Behavior</td>
</tr>
<tr>
<td>ANTH 3764</td>
<td>Primate Functional Morphology</td>
</tr>
</tbody>
</table>

**Health and Disease Course**
Select one of the following:  
3 credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 2332</td>
<td>Medical Anthropology</td>
</tr>
<tr>
<td>ANTH 3772</td>
<td>Evolutionary Medicine</td>
</tr>
<tr>
<td>ANTH 3774</td>
<td>Environmental Physiology and Health</td>
</tr>
<tr>
<td>PBHL 2102</td>
<td>Environmental Health</td>
</tr>
<tr>
<td>PBHL 3101</td>
<td>Epidemiology</td>
</tr>
<tr>
<td>SOC 2552</td>
<td>Health and Disease in American Society</td>
</tr>
<tr>
<td>SOC 3521</td>
<td>Global Health</td>
</tr>
</tbody>
</table>

**Capstone Course**
- ANTH 4897  
  Research in Biological Anthropology  
  3 credits

**Total Credit Hours**  
39 credits

1. ANTH 2705 is the prerequisite for all courses in Biological Anthropology numbered 3000+.
2. Students may take either BIOL 2233 and BIOL 3334 OR KINS 1223 and KINS 1224.

**Distinction in Major**

Anthropology majors may graduate with distinction in the major if they have earned a GPA of 3.5 or higher.
# Suggested Academic Plan

## Bachelor of Arts in Anthropology: Human Biology Concentration

### Requirements for New Students starting in the 2015-2016 Academic Year

<table>
<thead>
<tr>
<th>Year 1</th>
<th></th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Foreign Language 1001 - first level</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>15</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>Foreign Language 1002 - second level</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>16</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th></th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>BIOL 1011 or 1111</td>
<td>General Biology I (must follow sequence)</td>
<td>4</td>
</tr>
<tr>
<td>CLA/CST 0800+ Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Foreign Language - third level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GenEd Global/World Society Course</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internationally Focused Course From Approved List</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>17</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>CLA/CST 2000+ Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CLA/CST 2000+ Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ANTH 2705</td>
<td>Fundamentals of Biological Anthropology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 1012 or 2112</td>
<td>General Biology II (must follow sequence)</td>
<td>4</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>14</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3</th>
<th></th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>CLA/CST 2000+ Humanities/CST Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ANTH 3771</td>
<td>Quantitative Methods in Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 3796</td>
<td>Evolutionary Biology [WI]</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 2000+ Course</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>CLA/CST 0800+ Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>16</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>CLA/CST 2000+ Humanities/CST Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Human Biology Elective - select from list</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Human Biology Elective - select from list</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Primate and Human Behavior Elective - select from list</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CLA/CST 0800+ Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>16</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 4</th>
<th></th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Fall</strong></td>
<td></td>
</tr>
</tbody>
</table>
Health and Disease Elective - select from list 3
Human Biology Elective - select from list 3
Human Biology Elective - select from list 3
CLA/CST 0800+ Elective 3
CLA/CST 0800+ Elective 3

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td>CLA/CST 2000+ Elective</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 4897 Research in Biological Anthropology [WI]</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 2000+ Course</td>
<td>3</td>
</tr>
<tr>
<td>One 0800+ Elective in Any School or College</td>
<td>3</td>
</tr>
<tr>
<td>One 0800+ Elective in Any School or College</td>
<td>2</td>
</tr>
<tr>
<td>Term Credit Hours:</td>
<td></td>
</tr>
<tr>
<td>Total Credit Hours:</td>
<td>14</td>
</tr>
</tbody>
</table>

 Completion of either Biology sequence fulfills the GenEd Science & Technology requirement.

**Bachelor of Arts in Anthropology: Visual Anthropology Track**

The Visual Anthropology curriculum emphasizes a well-rounded liberal arts background and a comprehensive understanding of the world's varied systems of visual representation. The Visual Anthropology curriculum allows students to combine cultural anthropology with the study and practice of visual communication. Courses in the Visual Anthropology curriculum combine topics and methods familiar to the social sciences, humanities, and media arts. It is well suited to those students interested in popular culture as well as the fine arts; documentary and ethnographic film as well as feature film; all forms of artistic performance, including the folk arts, fine arts, popular arts, and media arts; televisal communication, including both broadcast and narrowcast forms; and home media and alternative media. Additional attention is now dedicated to relationships of globalization and New Media.

In the Visual Anthropology curriculum, literary traditions and criticism find a place alongside pictorial traditions and media criticism. Students may do original research that involves still photography and/or video production. Students apply field methods familiar to cultural anthropology to achieve a better understanding of the processes and products of visual communication. Laboratories are available for both still photography and video production.

There are ongoing field programs in North America, Japan, and India. The summer program in India is intended to investigate Indian civilization through an anthropological and historical approach of its religions and artistic traditions, both ancient and contemporary. For more details on the summer program in India, go to the Temple University in India web site (http://studyabroad.temple.edu/sites/temple-summer-in-india).

Interested students should contact the Visual Anthropology Advisor, Jayasinhji Jhala, at 215-204-7727 or jjhala@temple.edu. A brochure describing the Visual Anthropology curriculum can be obtained in the Anthropology Department, room 209, Gladfelter Hall.

**Summary of Degree Requirements**

**University Requirements:**

- MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.

- All Temple students must take a minimum of two writing-intensive courses as part of the major. All Visual Anthropology majors take ANTH 2396 and ANTH 4496.

- Students must complete requirements of the General Education (GenEd) Program. See the General Education (p. 143) section of the Undergraduate Bulletin for more details.

**College of Liberal Arts Requirements:**

- Completion of a minimum of 123 credits, including:
  - 90 credits in CLA/CST courses;
  - 45 credits of which must be at the upper level (numbered 2000-4999).

  - For Social Science majors, 6 upper level credits (numbered 2000-4999) must be taken in Humanities Subject Areas: Arabic, Chinese, English, French, German, Greek (Ancient), Greek and Roman Classics, Hebrew, Hindi, Italian, Japanese, Latin, Philosophy, Religion, Russian, and Spanish in the College of Liberal Arts, Art History in the Tyler School of Art, or any department in the College of Science and Technology.

  - A minimum GPA of 2.0, cumulatively, in CLA/CST coursework, and in the major.
• Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.

• Foreign Language/Global Studies Requirements:
  • All students must complete or test out of the first and second levels of a foreign language - these courses are numbered 1001 and 1002;
  • All students must complete at least one course from the GenEd Global/World Society category; and
  • All Bachelor of Arts students must complete one of the following options:
    • Third semester of a foreign language;
    • Demonstrated proficiency beyond the third semester in a foreign language (placement exam or certification from the language department);
    • Take one Global Studies course from the list on the CLA College Graduation Requirements (p. 755) page;
    • Study Abroad at an approved program; or
    • Take a second General Education Global/World Society course.

• Notes on Foreign Language Study
  • The third level of language is numbered 1003 in French, German, Italian, Spanish, and Portuguese and numbered 2001 in all other foreign language subjects.
  • Students are strongly encouraged to take the third level of a foreign language as it is the minimum required for election to the prestigious honor society Phi Beta Kappa. (Taking the course does not guarantee admission but not taking it guarantees exclusion.)
  • See the College of Liberal Arts Policies (p. 753) section of this Bulletin for more information on the Foreign Language Placement, Regression in Coursework, and guidelines for students' other experiences with language.

General Electives are typically one-third of a student’s program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

Major Requirements - Visual Anthropology (36-37 credits):

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 2396</td>
<td>Fundamentals of Cultural Anthropology ¹</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 2408</td>
<td>Fundamentals of the Anthropology of Visual Communication</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 2507</td>
<td>Fundamentals of Linguistic Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 3444</td>
<td>Advanced Production of Anthropological Media</td>
<td>3</td>
</tr>
</tbody>
</table>

Course from a different subfield

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 2104</td>
<td>Fundamentals of Archaeology</td>
<td>3-4</td>
</tr>
<tr>
<td>ANTH 2705</td>
<td>Fundamentals of Biological Anthropology</td>
<td></td>
</tr>
</tbody>
</table>

Capstone Course

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 4496</td>
<td>Research in Visual Anthropology</td>
<td>3</td>
</tr>
</tbody>
</table>

Anthropology Electives

Select six of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 2409</td>
<td>Introduction to the Production of Anthropological Media</td>
<td>18</td>
</tr>
<tr>
<td>ANTH 2432</td>
<td>Indigenous Media</td>
<td></td>
</tr>
<tr>
<td>ANTH 2434</td>
<td>Anthropology of Feature Films</td>
<td></td>
</tr>
<tr>
<td>ANTH 3324</td>
<td>Anthropology and Art</td>
<td></td>
</tr>
<tr>
<td>ANTH 3433</td>
<td>Ethnographic Film</td>
<td></td>
</tr>
<tr>
<td>ANTH 3436</td>
<td>Anthropology of New Media</td>
<td></td>
</tr>
<tr>
<td>ANTH 3438</td>
<td>Anthropology of Mass Media</td>
<td></td>
</tr>
<tr>
<td>ANTH 3439</td>
<td>Anthropology of Photography</td>
<td></td>
</tr>
</tbody>
</table>

Total Credit Hours

36-37

¹ Required for all Cultural & Visual Anthropology courses numbered 3000+.

Distinction in Major

Anthropology majors may graduate with distinction in the major if they have earned a GPA of 3.5 or higher.
## Suggested Academic Plan

**Bachelor of Arts in Anthropology: Visual Anthropology Track**

**Requirements for New Students starting in the 2015-2016 Academic Year**

### Year 1

#### Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Foreign Language 1001 - first level</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 15

#### Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>Foreign Language 1002 - second level</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ANTH 2408</td>
<td>Fundamentals of the Anthropology of Visual Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 16

### Year 2

#### Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ANTH 2507</td>
<td>Fundamentals of Linguistic Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>One 0800+ Elective in Any School or College</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Foreign Language - third level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GenEd Global/World Society Course</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internationally Focused Course From Approved List</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 17

#### Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 2000+ Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ANTH 2396</td>
<td>Fundamentals of Cultural Anthropology [WI]</td>
<td>3</td>
</tr>
<tr>
<td>Select one course from a different subfield in Anthropology:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ANTH 2104</td>
<td>Fundamentals of Archaeology</td>
<td></td>
</tr>
<tr>
<td>ANTH 2705</td>
<td>Fundamentals of Biological Anthropology</td>
<td></td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 15

### Year 3

#### Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLA/CST 2000+ Humanities/CST Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Anthropology 3000+ Approved Elective (See List or Faculty Advisor)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Anthropology 3000+ Approved Elective (See List or Faculty Advisor)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 0800+ Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 0800+ Elective</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 15

#### Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLA/CST 2000+ Humanities/CST Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Anthropology 3000+ Approved Elective (See List or Faculty Advisor)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Anthropology 3000+ Approved Elective (See List or Faculty Advisor)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 0800+ Elective</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 15
Minor in Anthropology

Requirements

**Fundamentals**
Select two of the following: 6-7

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 2104</td>
<td>Fundamentals of Archaeology ¹</td>
<td>1</td>
</tr>
<tr>
<td>ANTH 2396</td>
<td>Fundamentals of Cultural Anthropology ²</td>
<td>2</td>
</tr>
<tr>
<td>ANTH 2507</td>
<td>Fundamentals of Linguistic Anthropology ³</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 2705</td>
<td>Fundamentals of Biological Anthropology ⁴</td>
<td>4</td>
</tr>
</tbody>
</table>

**Electives**
Select four additional Anthropology 2000-4999 courses 12

**Total Credit Hours** 18-19

¹ Required for all Archaeology courses numbered 3000+
² Required for all Cultural & Visual Anthropology courses numbered 3000+
³ Required for all Linguistic Anthropology courses listed 3000+
⁴ Required for all Biological Anthropology courses numbered 3000+

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Minor in Visual Anthropology

Requirements

**Fundamentals Course**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 2396</td>
<td>Fundamentals of Cultural Anthropology ¹</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 2408</td>
<td>Fundamentals of the Anthropology of Visual Communication</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 2507</td>
<td>Fundamentals of Linguistic Anthropology</td>
<td>3</td>
</tr>
</tbody>
</table>

**Methods Course**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 3444</td>
<td>Advanced Production of Anthropological Media</td>
<td>3</td>
</tr>
</tbody>
</table>

**Electives**
Select two of the following: 6

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 2409</td>
<td>Introduction to the Production of Anthropological Media</td>
<td>1</td>
</tr>
<tr>
<td>ANTH 2432</td>
<td>Indigenous Media</td>
<td>1</td>
</tr>
</tbody>
</table>
ANTH 2434  Anthropology of Feature Films
ANTH 3324  Anthropology and Art
ANTH 3433  Ethnographic Film
ANTH 3436  Anthropology of New Media
ANTH 3438  Anthropology of Mass Media
ANTH 3439  Anthropology of Photography

Total Credit Hours  18

1 Required for all Cultural & Visual Anthropology courses numbered 3000+

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Arabic

Programs

• Certificate of Specialization in Arabic (p. 795)
• Minor in Arabic (p. 795)

Certificate of Specialization in Arabic

A Certificate of Specialization in Arabic focuses on learning language skills and developing a strong foundation for the effective use of Arabic socially and professionally. This program should be of particular interest to students considering careers in international business, government service, or other professions where foreign language proficiency is important. This program has two tracks: one for students who enter Temple University with little or no previous background in Arabic; and one for students who enter Temple University with a previous background in Arabic.

The curriculum consists of six developmentally-sequenced semesters of instruction in Arabic. Students with no background in Arabic will begin the six-course sequence with ARBC 1001 and will complete the certificate with a total of 20 credits. Students who enter the program with a placement above ARBC 1001 will need to complete the six-course requirement by taking either or both ARBC 4183 and ARBC 4283, and will complete the certificate with 18-19 credits. A grade of C- or higher must be earned in all required courses to qualify for the certificate.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARBC 1001</td>
<td>Arabic Elements I 1</td>
<td>4</td>
</tr>
<tr>
<td>ARBC 1002</td>
<td>Arabic Elements II 1</td>
<td>4</td>
</tr>
<tr>
<td>ARBC 2001</td>
<td>Arabic Intermediate I</td>
<td>3</td>
</tr>
<tr>
<td>ARBC 2002</td>
<td>Arabic Intermediate II</td>
<td>3</td>
</tr>
<tr>
<td>ARBC 3001</td>
<td>Arabic Advanced I</td>
<td>3</td>
</tr>
<tr>
<td>ARBC 3002</td>
<td>Arabic Advanced II</td>
<td>3</td>
</tr>
</tbody>
</table>

1 Students who place above ARBC 1001 will need to complete the six-course requirement by taking either or both ARBC 4183 and ARBC 4283.

Certificates are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Minor in Arabic

The minor in Arabic focuses on intermediate and advanced language skills and an understanding of contemporary Arabic culture. Students who already have a grounding in Arabic and are interested in languages, literature, film, and culture will find this minor of particular interest. This program is ideal for students considering careers in international business, government service, or other professions where foreign language proficiency is important. Students who place out of one or more of the Arabic language courses may replace those requirements with independent study or electives as approved by the Arabic faculty advisor.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARBC 2002</td>
<td>Arabic Intermediate II</td>
<td>3</td>
</tr>
<tr>
<td>ARBC 3001</td>
<td>Arabic Advanced I</td>
<td>3</td>
</tr>
<tr>
<td>ARBC 3002</td>
<td>Arabic Advanced II</td>
<td>3</td>
</tr>
<tr>
<td>Elective - Select in consultation with the Arabic faculty advisor.</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

Select two of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARBC 2012</td>
<td>Modern Arabic Literature in Translation</td>
<td>3</td>
</tr>
<tr>
<td>ARBC 2021</td>
<td>Contemporary Arab Society in Film (in Translation)</td>
<td>3</td>
</tr>
</tbody>
</table>
Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Asian & Middle Eastern Languages & Studies

Asian Studies

Asian Studies draws on the resources of many departments to provide a comprehensive program of study on Asia (especially East Asia). Majors may concentrate on a geographic area, field, or theme(s). By combining language with the study of politics, history, society, art, religion, philosophy, and literature, each student can construct a major tailored to his or her individual interests. The curriculum gives students a foundation for living or working in
Asia, or continuing their studies through developing a knowledge base, cross-cultural sensitivity, analytic thinking, and communication and writing skills in English and Asian languages.

The Asian Studies program will assist students in:

- understanding the broad foundations of at least one major Asian culture, including the history, culture, socio-economic, and political organization;
- recognizing the utility of different humanistic and social science disciplines in understanding a culture;
- understanding the distinction between theory and data and the links between the two components while drawing generalizations from actual social experience;
- recognizing the way language serves as a foundation of culture;
- understanding the issues and requirements of cross-cultural communication; and
- taking more initiative in educating themselves, to make analytical generalizations, to make ethical choices, and to feel confident in these and other exercises of personal responsibility.

Career Opportunities

After graduation, students find employment in a variety of fields, including international business, government, nonprofit organizations, and educational institutions. Some choose to continue their education in law, business, or pursue doctoral degrees in related academic fields, including history, religion, and Asian Studies.

Study Abroad at Temple University Japan

Temple University’s campus in Tokyo, Japan (TUJ) can provide students with experience abroad while taking their coursework. If you have an interest in studying at TUJ consult the Office of Education Abroad and Overseas Campuses (http://studyabroad.temple.edu/sites/temple-japan-semester) and the TUJ web site (https://www.tuj.ac.jp).

Student Organization

The East West Club offers lectures, films, and career development programs, as well as fun and fellowship through extracurricular activities.

Programs

- Bachelor of Arts in Asian Studies (p. 797)
- Certificate in Asian Business & Society (p. 800)
- Minor in Asian American Studies (p. 801)
- Minor in Asian Studies (p. 802)

Bachelor of Arts in Asian Studies

Summary of Degree Requirements

University Requirements:

- MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific courses that will fulfill this requirement are ASST 4096 and one of the following: ASST 2097, ASST 2098, ASST 2696, ASST 3696, ASST 4696.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education (p. 143) section of the Undergraduate Bulletin for more details.

College of Liberal Arts Requirements:

- Completion of a minimum of 123 credits, including:
  - 90 credits in CLA/CST courses;
  - 45 credits of which must be at the upper level (numbered 2000-4999).
  - For Social Science majors, 6 upper level credits (numbered 2000-4999) must be taken in Humanities Subject Areas: Arabic, Chinese, English, French, German, Greek (Ancient), Greek and Roman Classics, Hebrew, Hindi, Italian, Japanese, Latin, Philosophy, Religion, Russian, and Spanish in the College of Liberal Arts, Art History in the Tyler School of Art, or any department in the College of Science and Technology.
- A minimum GPA of 2.0, cumulatively, in CLA/CST coursework, and in the major.
- Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.

Foreign Language/Global Studies Requirements:

- The language proficiency requirement of the Asian Studies major exceeds the minimum requirements of the College of Liberal Arts; no additional coursework is required.
Notes on Foreign Language Study

- The third level of language is numbered 1003 in French, German, Italian, Spanish, and Portuguese and numbered 2001 in all other foreign language subjects.
- Students are strongly encouraged to take the third level of a foreign language as it is the minimum required for election to the prestigious honor society Phi Beta Kappa. (Taking the course does not guarantee admission but not taking it guarantees exclusion.)
- See the College of Liberal Arts Policies (p. 753) section of this Bulletin for more information on the Foreign Language Placement, Regression in Coursework, and guidelines for students' other experiences with language.

General Electives are typically one-third of a student's program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

Major Requirements (minimum 33 credits):

Foundation Courses
Select two of the following: 6

- ASST 1801 Chinese and Japanese Literature in Cultural Context
- ASST 2074 Geography of East and South Asia
- ASST 2501 Introduction to East Asia: China
- ASST 2502 Introduction to East Asia: Japan

Language
Select one of the following (fourth semester): 3

- HIN 2002 Hindi Intermediate II
- CHI 2002 Chinese Intermediate II
- JPNS 2002 Intermediate Japanese II
- KRN 2002 Korean Intermediate II
- VTNM 2002 Second-Year Vietnamese II

Writing-Intensive Elective
Select one of the following: 3

- ASST 2097 Asian Diaspora
- ASST 2098 Japanese Popular Culture and its Literature
- ASST 2696 Introduction to Islam
- ASST 3696 Asian Women in Transition
- ASST 4696 Modern Japan: Empire, War, Society

Asian Studies Electives
Select six electives from three different subject areas: 18

Capstone Course
ASST 4096 Seminar in Asian Studies: 3

Total Credit Hours 33

Asian Language Proficiency Requirement
The language requirement may be satisfied by coursework or proficiency in the language for heritage speakers. The examination tests listening, speaking, and reading comprehension as well as written communications in any Asian language approved by the Asian Studies advisor.

Students who demonstrate proficiency beyond the fourth semester are not required to replace this with an Asian Studies approved elective.

Distinction in the Major
Asian Studies majors may graduate with distinction in the major if they have a GPA of at least 3.5 in the major and a cumulative GPA of at least 3.0.

Suggested Academic Plan
Bachelor of Arts in Asian Studies
Requirements for New Students starting in the 2015-2016 Academic Year

Year 1
Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>4</td>
</tr>
<tr>
<td>Analytical Reading and Writing [GW]</td>
<td></td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
</tr>
</tbody>
</table>
### Schools, Colleges, and Divisions

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY] 3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following (second level):</td>
<td>4</td>
</tr>
<tr>
<td>HIN 1002</td>
<td>Hindi Elements II [LC]</td>
</tr>
<tr>
<td>CHI 1002</td>
<td>Chinese Elements II [LC]</td>
</tr>
<tr>
<td>JPNS 1002</td>
<td>Japanese Elements II [LC]</td>
</tr>
<tr>
<td>KRN 1002</td>
<td>Korean Elements II</td>
</tr>
<tr>
<td>VTNM 1002</td>
<td>Vietnamese Elements II</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3</td>
</tr>
<tr>
<td>ASST 1801</td>
<td>Chinese and Japanese Literature in Cultural Context</td>
</tr>
<tr>
<td>ASST 2074</td>
<td>Geography of East and South Asia</td>
</tr>
<tr>
<td>ASST 2501</td>
<td>Introduction to East Asia: China</td>
</tr>
<tr>
<td>ASST 2502</td>
<td>Introduction to East Asia: Japan</td>
</tr>
</tbody>
</table>

### Year 2

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>16</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ] 3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>One 0800-4999 Elective in Any School or College</td>
<td>2</td>
</tr>
<tr>
<td>Select one of the following (third level):</td>
<td>3</td>
</tr>
<tr>
<td>HIN 2001</td>
<td>Hindi Intermediate I [LC]</td>
</tr>
<tr>
<td>CHI 2001</td>
<td>Chinese Intermediate I [LC]</td>
</tr>
<tr>
<td>JPNS 2001</td>
<td>Intermediate Japanese I [LC]</td>
</tr>
<tr>
<td>KRN 2001</td>
<td>Korean Intermediate I [LC]</td>
</tr>
<tr>
<td>VTNM 2001</td>
<td>Second-Year Vietnamese I</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3</td>
</tr>
<tr>
<td>ASST 1801</td>
<td>Chinese and Japanese Literature in Cultural Context</td>
</tr>
<tr>
<td>ASST 2074</td>
<td>Geography of East and South Asia</td>
</tr>
<tr>
<td>ASST 2501</td>
<td>Introduction to East Asia: China</td>
</tr>
<tr>
<td>ASST 2502</td>
<td>Introduction to East Asia: Japan</td>
</tr>
</tbody>
</table>

### Spring

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>17</th>
</tr>
</thead>
<tbody>
<tr>
<td>GenEd Breadth Course</td>
<td>3-4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>Asian Studies 1000-4999 Elective</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 2000+ Course</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following (fourth level):</td>
<td>3</td>
</tr>
<tr>
<td>HIN 2002</td>
<td>Hindi Intermediate II</td>
</tr>
<tr>
<td>CHI 2002</td>
<td>Chinese Intermediate II</td>
</tr>
<tr>
<td>JPNS 2002</td>
<td>Intermediate Japanese II</td>
</tr>
<tr>
<td>KRN 2002</td>
<td>Korean Intermediate II</td>
</tr>
</tbody>
</table>
VTNM 2002  
Second-Year Vietnamese II

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
</table>

### Year 3

#### Fall

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLA/CST 2000+ Humanities/CST Course</td>
<td>3</td>
</tr>
<tr>
<td>Asian Studies 1000-4999 Elective&lt;sup&gt;1&lt;/sup&gt;</td>
<td>3</td>
</tr>
<tr>
<td>Asian Studies 1000-4999 Elective&lt;sup&gt;1&lt;/sup&gt;</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 2000+ Course</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 2000+ Course</td>
<td>3</td>
</tr>
</tbody>
</table>

### Term Credit Hours | 15

#### Spring

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLA/CST 2000+ Humanities/CST Course</td>
<td>3</td>
</tr>
<tr>
<td>Asian Studies 1000-4999 Elective&lt;sup&gt;1&lt;/sup&gt;</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 2000+ Course</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 2000+ Course</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3</td>
</tr>
<tr>
<td>ASST 2097 Asian Diaspora [WI]</td>
<td></td>
</tr>
<tr>
<td>ASST 2098 Japanese Popular Culture and its Literature [WI]</td>
<td></td>
</tr>
<tr>
<td>ASST 2696 Introduction to Islam [WI]</td>
<td></td>
</tr>
<tr>
<td>ASST 3696 Asian Women in Transition [WI]</td>
<td></td>
</tr>
<tr>
<td>ASST 4696 Modern Japan: Empire, War, Society [WI]</td>
<td></td>
</tr>
</tbody>
</table>

### Term Credit Hours | 15

### Year 4

#### Fall

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian Studies 1000-4999 Elective&lt;sup&gt;1&lt;/sup&gt;</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 2000+ Course</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 2000+ Course</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Elective</td>
<td>3</td>
</tr>
<tr>
<td>One 0800-4999 Elective in Any School or College</td>
<td>3</td>
</tr>
</tbody>
</table>

### Term Credit Hours | 15

#### Spring

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian Studies 1000-4999 Elective&lt;sup&gt;1&lt;/sup&gt;</td>
<td>3</td>
</tr>
<tr>
<td>ASST 4096 Seminar in Asian Studies [WI]</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 2000+ Course</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Elective</td>
<td>3</td>
</tr>
<tr>
<td>One 0800-4999 Elective in Any School or College</td>
<td>3</td>
</tr>
</tbody>
</table>

### Term Credit Hours | 15

### Total Credit Hours: 123

<sup>1</sup> One elective from one of three different subject areas: to be determined with Asian Studies advisor

## Certificate in Asian Business & Society

This certificate requires a minimum of 15 credits, but may require more if the Language requirement is not satisfied by examination of oral/aural and reading skills in any Asian language approved by the Asian Studies head advisor.

### Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASST 2001</td>
<td>Practical Asian Society and Culture</td>
<td>3</td>
</tr>
<tr>
<td>IB 2501</td>
<td>Fundamentals of Asian Business&lt;sup&gt;1&lt;/sup&gt;</td>
<td>3</td>
</tr>
<tr>
<td>or ASST 2511</td>
<td>Introduction to Asian Business</td>
<td></td>
</tr>
</tbody>
</table>

### Economics Course

Select one of the following: 3

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 3563</td>
<td>International Trade</td>
</tr>
</tbody>
</table>
Schools, Colleges, and Divisions

<table>
<thead>
<tr>
<th>ECON 3564</th>
<th>International Monetary Economics</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 3596</td>
<td>Energy, Ecology, and Economy</td>
</tr>
</tbody>
</table>

**Asian Studies Country Elective**

See Academic Advising Center for list of approved electives.  

**Asian Studies Writing Intensive Elective**

See Academic Advising Center for list of approved courses.

**Language**

Select one of the following (second semester):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIN 1002</td>
<td>Hindi Elements II</td>
</tr>
<tr>
<td>CHI 1002</td>
<td>Chinese Elements II</td>
</tr>
<tr>
<td>JPNS 1002</td>
<td>Japanese Elements II</td>
</tr>
<tr>
<td>KRN 1002</td>
<td>Korean Elements II</td>
</tr>
</tbody>
</table>

1. IB 2501 and ASST 2511 are cross-listed.
2. The country of the Asian Studies Country Elective and the Asian Studies Writing-Intensive Elective must match the country of the language studied. For example, if the language requirement is met with Chinese, then courses on China must be chosen for both the Country and Writing-Intensive Electives.
3. The language requirement may also be satisfied by examination of speaking, listening and interpreting, and reading skills in any Asian language approved by the Asian Studies faculty advisor.

Certificates are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

**Minor in Asian American Studies**

This interdisciplinary minor focuses on Asian American history, culture, and contemporary issues as well as their Asian roots and American context. The Asian American Minor is six courses (18 s.h.), four in Asian American Studies, one in American Studies, and one Asian Studies course under an Asian Studies or cross-listed number, as distributed in the requirements list.

In lieu of taking regular academic courses, students can earn credits through fieldwork and independent study under a professor's guidance. This minor is a useful credential for majors in education, journalism and communication, social administration, health science, social science, humanities, history, pre-law studies, and business fields such as personnel and marketing.

**Requirements for the minor**

**Asian American Courses**

Select four of the following:  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMST 2107</td>
<td>Asian American Experiences</td>
</tr>
<tr>
<td>AMST 1901</td>
<td>Honors American Lives</td>
</tr>
<tr>
<td>AMST 3074</td>
<td>Introduction to Asian American Literature</td>
</tr>
<tr>
<td>AMST 2096</td>
<td>Asian Diaspora</td>
</tr>
<tr>
<td>AMST 2097</td>
<td>Asian Women in Transition</td>
</tr>
</tbody>
</table>

**American Studies Course on race or ethnicity**

Select one of the following:  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMST 2071</td>
<td>Immigrant Experiences in America</td>
</tr>
<tr>
<td>AMST 2072</td>
<td>Puerto Ricans in Philadelphia</td>
</tr>
<tr>
<td>AMST 3071</td>
<td>African American Experiences</td>
</tr>
<tr>
<td>AMST 3101</td>
<td>Latino Identity in the U.S.</td>
</tr>
<tr>
<td>ITAL 4161</td>
<td>Italian American Literature and Culture</td>
</tr>
</tbody>
</table>

**Asian Studies Course**

Select one course under an Asian Studies or cross-listed number

**Total Credit Hours** 18

1. or an alternative approved by an Asian Studies faculty advisor
2. Advisors can help choose from a list of over 60 courses.
Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

## Minor in Asian Studies

The Asian Studies minor requires a minimum of 18 credits, but may require more if the Language requirement is not satisfied by examination of oral/aural and reading skills in any Asian language approved by the Asian Studies head advisor.

### Requirements for the Minor

#### Foundation Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASST 1801</td>
<td>Chinese and Japanese Literature in Cultural Context</td>
<td>6</td>
</tr>
<tr>
<td>ASST 2074</td>
<td>Geography of East and South Asia</td>
<td></td>
</tr>
<tr>
<td>ASST 2501</td>
<td>Introduction to East Asia: China</td>
<td></td>
</tr>
<tr>
<td>ASST 2502</td>
<td>Introduction to East Asia: Japan</td>
<td></td>
</tr>
</tbody>
</table>

**Asian Studies Electives**

Select four electives from three different subject areas. 12

<table>
<thead>
<tr>
<th>Language</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HIN 1002</td>
<td>Hindi Elements II</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>CHI 1002</td>
<td>Chinese Elements II</td>
<td></td>
</tr>
<tr>
<td></td>
<td>JPNS 1002</td>
<td>Japanese Elements II</td>
<td></td>
</tr>
<tr>
<td></td>
<td>KRN 1002</td>
<td>Korean Elements II</td>
<td></td>
</tr>
</tbody>
</table>

1. May incorporate the study of South and Southeast Asia, ASST 1051, ASST 1052, if approved by the Asian Studies advisor.

2. The language requirement may be satisfied by examination of oral/aural and reading skills in any Asian language approved by the Asian Studies head advisor.

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

## Chinese

The Chinese area of study is part of the Department of Asian and Middle Eastern Languages and Studies (formerly named the Department of Critical Languages).

### Programs

- Certificate of Specialization in Chinese (p. 802)
- Minor in Chinese (p. 803)

## Certificate of Specialization in Chinese

A certificate of specialization in Chinese focuses on learning language skills and developing a strong foundation for the effective use of Chinese socially and professionally. This program should be of particular interest to students considering careers in international business, government service, or other professions where foreign language proficiency is important. This program also contributes to meeting the diverse language needs of students with personal or academic interests in China and its culture. A grade of C- or higher must be earned in all required courses.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHI 1001</td>
<td>Chinese Elements I</td>
<td>4</td>
</tr>
<tr>
<td>CHI 1002</td>
<td>Chinese Elements II</td>
<td>4</td>
</tr>
<tr>
<td>CHI 2001</td>
<td>Chinese Intermediate I</td>
<td>3</td>
</tr>
<tr>
<td>CHI 2002</td>
<td>Chinese Intermediate II</td>
<td>3</td>
</tr>
<tr>
<td>CHI 3001</td>
<td>Chinese Advanced I</td>
<td>3</td>
</tr>
<tr>
<td>CHI 3002</td>
<td>Chinese Advanced II</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credit Hours** 20
Certificates are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

**Minor in Chinese**

The minor in Chinese focuses on learning Chinese language, literature, film, and culture. This program will be of particular interest to students considering careers in international business, government service, or other professions where Chinese language proficiency is important. This program also contributes to meeting the diverse language needs of students with personal or academic interests in China and its culture.

This minor requires 5 courses taken in Chinese and one course focused on some aspect of Chinese history, politics, or culture taken in another department or program in the College of Liberal Arts. Students should see the faculty in the Department of Asian and Middle Eastern Languages and Studies (formerly Critical Languages Department) for more information on placement and appropriate course selection.

The minor can only be taken as part of an undergraduate degree program. An average of 2.0 in all Chinese courses as well as a minimum grade of C- must be earned in all courses used for the minor. The specific courses required for the program are detailed in the Course List below.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHI 2002</td>
<td>Chinese Intermediate II</td>
<td>3</td>
</tr>
<tr>
<td>CHI 3001</td>
<td>Chinese Advanced I</td>
<td>3</td>
</tr>
<tr>
<td>CHI 3002</td>
<td>Chinese Advanced II</td>
<td>3</td>
</tr>
<tr>
<td>Elective - Selected in consultation with the Chinese faculty advisor</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Select two of the following:</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>CHI 2011</td>
<td>Pre-Modern Chinese Literature</td>
<td></td>
</tr>
<tr>
<td>CHI 2022</td>
<td>Contemporary Chinese Urban Film and Fiction in Translation</td>
<td></td>
</tr>
<tr>
<td>CHI 0868</td>
<td>World Society in Literature &amp; Film</td>
<td></td>
</tr>
</tbody>
</table>

**Total Credit Hours** 18

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

**Classics**

330 Anderson Hall  
215-204-8267  
www.cla.temple.edu/classics

Daniel Berman, Department Chair  
327 Anderson Hall  
215-204-1640  
dwberman@temple.edu

Robin Mitchell-Boyask, Faculty Advisor  
326 Anderson Hall  
215-204-3672  
robin@temple.edu

Michelle Pugliese, Administrator  
429 Anderson Hall  
215-204-5628  
pugliese@temple.edu

Students in the Department of Greek and Roman Classics study the cultures and languages of two major civilizations of the ancient Mediterranean world. Classics is an interdisciplinary field of study which encompasses major disciplines of the liberal arts: languages, history, literature, art, and philosophy. Students select from two different major concentration options: either Classical Languages & Literature or Classical Civilization, depending on their interests and goals.

Classics offers a sound liberal arts background that prepares students for any career. Classics majors have held senior positions in government, law, and public service organizations, have founded and headed companies and organizations, and have worked as correspondents and journalists. Recent Temple Classics majors have gone on to law school, veterinary school, graduate school, and business and teaching careers.

Classics Majors and Minors are encouraged to study a semester at Temple’s Rome Campus.
The organization for majors and minors is the Temple Classics Club, and there is a chapter of the national honorary society for Classics, Eta Sigma Phi, on campus.

Programs

- Bachelor of Arts in Classics with a Concentration in Classical Civilizations (p. 804)
- Bachelor of Arts in Classics with a Concentration in Classical Languages and Literature (p. 807)
- Minor in Ancient Mediterranean Studies (p. 809)
- Minor in Classical Languages and Literature (p. 810)

Bachelor of Arts in Classics with a Concentration in Classical Civilizations

Summary of Degree Requirements

1. **University Requirements:**
   - MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
   - All Temple students must take a minimum of two writing-intensive courses as part of the major. See below for a list of the specific courses required for your major.
   - Students must complete requirements of the General Education (GenEd) Program. See the General Education (p. 143) section of the Undergraduate Bulletin for more details.

2. **College of Liberal Arts Requirements:**
   - Completion of a minimum of 123 credits, including: 90 credits in CLA/CST courses, 45 credits of which must be at the upper level (numbered 2000-4999). For Humanities majors, 6 upper level credits must be earned in the Social Sciences: African American Studies, American Studies, Anthropology, Asian Studies, Criminal Justice, Economics, Environmental Studies, Geography and Urban Studies, History, Jewish Studies, Latin American Studies, Lesbian, Gay, Bisexual and Transgender Studies, Mathematical Economics, Neuroscience: Systems, Behavior and Plasticity, Political Science, Psychology, Sociology, Women's Studies, or any department in the College of Science and Technology.
   - A minimum GPA of 2.0, cumulatively, in CLA/CST coursework, and in the major.
   - Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.

3. **Foreign Language/Global Studies Requirements:**
   - All students must complete the second level of a foreign language;
   - All students must complete at least one course from the GenEd Global/World Society category; and
   - All students must complete one of the following options:
     - Third level of a foreign language;
     - Demonstrated proficiency in a foreign language;
     - A second General Education Global/World Society course;
     - Study Abroad at an approved program; or
     - Take one Global Studies course from the list on the CLA College Graduation Requirements (p. 755) page.

4. **General Electives** are typically one-third of a student's program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

5. **Major Requirements (a minimum of 35 credits in Ancient Greek, Latin, Greek and Roman Classics and related course work):**

   **Required Courses**
   - GRC 2101 The Greeks 3
   - GRC 2102 The Romans 3

   **Language Courses**
   Select two courses in Ancient Greek or two courses in Latin language: 7-8
   - GRKA 1001 Ancient Greek 1
   - GRKA 1002 Ancient Greek 2
   - LAT 1001 Latin 1
   - LAT 1002 Latin 2

   **Writing Intensive Courses**
   Select two of the following: 6
   - GRC 3596 Ancient City: Periclean Athens
Schools, Colleges, and Divisions

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRC 3696</td>
<td>Ancient City: Hellenistic Alexandria</td>
</tr>
<tr>
<td>GRC 3796</td>
<td>Ancient City: Augustan Rome</td>
</tr>
<tr>
<td>GRC 3896</td>
<td>Ancient City: Byzantium</td>
</tr>
<tr>
<td>GRC 3897</td>
<td>Ancient City: Jerusalem</td>
</tr>
</tbody>
</table>

**Art History Course**

Select one of the following: 4

- ARTH 2105 Roman Art and Archaeology
- ARTH 2111 Minoan Art
- ARTH 2135 Art and Archaeology of Ancient Rome and the Mediterranean
- ARTH 2215 Late Antique/Byzantine Art
- ARTH 2129 Greek and Roman Sculpture
- ARTH 2196 Greek and Roman Sculpture
- ARTH 2216 Early Medieval Visual Culture

**Greek & Roman Classic Courses**

Select three of the following: 9

- GRC 1003 Greek Drama and Culture
- GRC 1004 Introduction to the Ancient City
- GRC 2001 Slavery in Antiquity
- GRC 2002 Gender in Classical Antiquity
- GRC 2003 Race: Ancient and Modern
- GRC 2011 Classical Greek and Roman Mythology
- GRC 3000 Topics in Classical Culture
- GRC 3096 Romans and Their Literature
- GRC 3196 Classical Greek and Roman Mythology
- GRC 3296 Comparative Mythology
- GRC 3311 Ancient Greek Historians
- GRC 3312 Ancient Roman Historians
- GRC 3396 Classical Epic
- GRC 3496 Writing Seminar

Select one course in a related department with consultation of your faculty advisor. This elective may be taken in Anthropology, Art History, History, Philosophy or Religion. 3

**Total Credit Hours** 35

1 GRKA 1003 may be substituted for GRKA 1001 and GRKA 1002

**Distinction in Major**

Distinction in Major requires a senior thesis and a minimum GPA of 3.5 in Greek, Latin, or Greek and Roman Classics courses.

**Suggested Academic Plan**

**Bachelor of Arts in Classics: Classical Civilizations Concentration**

**Requirements for New Students starting in the 2015-2016 Academic Year**

**Year 1**

**Fall**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>GRKA 1001</td>
<td>Ancient Greek 1</td>
<td></td>
</tr>
<tr>
<td>LAT 1001</td>
<td>Latin 1 [LA]</td>
<td></td>
</tr>
</tbody>
</table>

**Term Credit Hours** 15

**Spring**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>Year 2</td>
<td>Fall</td>
<td>Term Credit Hours</td>
</tr>
<tr>
<td>-------</td>
<td>------</td>
<td>-------------------</td>
</tr>
<tr>
<td></td>
<td>IH 0852 or 0952</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GRC 2101</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>The Greeks</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Select one of the following:</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Ancient Greek/Latin III</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GenEd Global/World Society Course</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Internationally Focused Course From Approved List</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3</th>
<th>Fall</th>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CLA/CST 2000+ Social Science/CST Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Greek &amp; Roman Classic 1000+ Elective From the Approved List</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Greek &amp; Roman Classic Writing-Intensive 3000+ Course From the Approved List</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Art History 2000+ Course From Approved List</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>CLA/CST 0800+ Elective</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 4</th>
<th>Fall</th>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Greek &amp; Roman Classic Elective (Consult With Faculty Advisor for Approval)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CLA/CST 2000+ Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CLA/CST 2000+ Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CLA/CST 2000+ Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CLA/CST 0800+ Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 4</th>
<th>Spring</th>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CLA/CST 2000+ Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CLA/CST 2000+ Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CLA/CST 2000+ Course</td>
<td>3</td>
</tr>
</tbody>
</table>
Bachelor of Arts in Classics with a Concentration in Classical Languages and Literature

Summary of Degree Requirements

1. University Requirements:
   - MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
   - All Temple students must take a minimum of two writing-intensive courses as part of the major. See below for a list of the specific courses required for your major.
   - Students must complete requirements of the General Education (GenEd) Program. See the General Education (p. 143) section of the Undergraduate Bulletin for more details.

2. College of Liberal Arts Requirements:
   - Completion of a minimum of 123 credits, including: 90 credits in CLA/CST courses, 45 credits of which must be at the upper level (numbered 2000-4999). For Humanities majors, 6 upper level credits must be earned in the Social Sciences: African American Studies, American Studies, Anthropology, Asian Studies, Criminal Justice, Economics, Environmental Studies, Geography and Urban Studies, History, Jewish Studies, Latin American Studies, Lesbian, Gay, Bisexual and Transgender Studies, Mathematical Economics, Neuroscience: Systems, Behavior and Plasticity, Political Science, Psychology, Sociology, Women's Studies, or any department in the College of Science and Technology.
   - A minimum GPA of 2.0, cumulatively, in CLA/CST coursework, and in the major.
   - Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.

3. Foreign Language/Global Studies Requirements:
   a. All students must complete the second level of a foreign language;
   b. All students must complete at least one course from the GenEd Global/World Society category; and
   c. All students must complete one of the following options:
      • Third level of a foreign language;
      • Demonstrated proficiency in a foreign language;
      • A second General Education Global/World Society course;
      • Study Abroad at an approved program; or
      • Take one Global Studies course from the list on the CLA College Graduation Requirements (p. 755) page.

4. General Electives are typically one-third of a student's program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

5. Major Requirements (a minimum of 35 credits in Ancient Greek, Latin, Greek and Roman Classics and related course work):

Required Courses

Select seven of the following:  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRKA 1001</td>
<td>Ancient Greek 1</td>
<td>3</td>
</tr>
<tr>
<td>GRKA 1002</td>
<td>Ancient Greek 2</td>
<td>3</td>
</tr>
<tr>
<td>GRKA 2001</td>
<td>Ancient Greek 3</td>
<td></td>
</tr>
<tr>
<td>GRKA 2002</td>
<td>Ancient Greek 4</td>
<td></td>
</tr>
<tr>
<td>GRKA 3002</td>
<td>Readings in Greek Literature II</td>
<td></td>
</tr>
<tr>
<td>LAT 1001</td>
<td>Latin 1</td>
<td></td>
</tr>
<tr>
<td>LAT 1002</td>
<td>Latin 2</td>
<td></td>
</tr>
<tr>
<td>LAT 2001</td>
<td>Latin 3</td>
<td></td>
</tr>
<tr>
<td>LAT 2002</td>
<td>Latin 4</td>
<td></td>
</tr>
<tr>
<td>LAT 3002</td>
<td>Readings in Latin Literature II</td>
<td></td>
</tr>
</tbody>
</table>

Select one Writing Capstone Seminar  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRKA 3096</td>
<td>Readings in Greek Literature I</td>
<td>3</td>
</tr>
<tr>
<td>LAT 3096</td>
<td>Readings in Latin Literature I</td>
<td></td>
</tr>
</tbody>
</table>

Select one course in Mythology  

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
</tr>
</tbody>
</table>
GRC 2011 Classical Greek and Roman Mythology
GRC 3196 Classical Greek and Roman Mythology
GRC 3296 Comparative Mythology

Electives in Major
Two courses in Greek and Roman Classics, numbered 1003-4999

Total Credit Hours 35

1 Select two courses in Greek (Ancient) and/or Latin languages. If exempt from beginning Greek (Ancient) and/or Latin courses through placement, substitute additional electives until a total of seven language courses is completed.

2 May include advanced courses in Greek (Ancient) and/or Latin. Or may include related courses in other departments, per departmental approval.

3 GRKA 1003 may be substituted for GRKA 1001 and GRKA 1002.

4 Capstone course in major; select Greek (Ancient) or Latin. Two Writing Intensive courses must be selected.

Suggested Academic Plan
Bachelor of Arts in Classics: Classical Languages & Literature Concentration
Requirements for New Students starting in the 2015-2016 Academic Year

Year 1
Fall

ENG 0802, 0812, or 0902 Analytical Reading and Writing [GW] 4
GenEd Quantitative Literacy Course [GQ] 4
GenEd Breadth Course 3
Select one of the following:

GRKA 1001 Ancient Greek 1 4
LAT 1001 Latin 1 [LA]

Term Credit Hours 15

Spring
IH 0851 or 0951 Mosaic: Humanities Seminar I [GY] 3
GenEd Breadth Course 3
GenEd Breadth Course 3
GenEd Breadth Course 3
Select one of the following:

GRKA 1002 Ancient Greek 2 [LA] 4
LAT 1002 Latin 2 [LA]

Term Credit Hours 16

Year 2
Fall
IH 0852 or 0952 Mosaic: Humanities Seminar II [GZ] 3
GenEd Breadth Course 3
GenEd Breadth Course 3
CLA/CST 2000+ Course 3
One 0800-4999 Elective in Any School or College 2
Select one of the following:

GRKA 2001 Ancient Greek 3 [LB] 3
LAT 2001 Latin 3 [LB]

Term Credit Hours 17

Spring
GenEd Breadth Course 3
CLA/CST 0800-4999 Elective 3
CLA/CST 2000+ Course 3
CLA/CST 2000+ Course 3
Select one of the following: 3
### Minor in Ancient Mediterranean Studies

**Requirements**

Students are required to complete 18-20 credits, depending on language proficiency.

Select two courses in Ancient Greek or two courses in Latin or demonstrate proficiency through placement testing.  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRKA 1001</td>
<td>Ancient Greek 1</td>
</tr>
<tr>
<td>GRKA 1002</td>
<td>Ancient Greek 2</td>
</tr>
<tr>
<td>LAT 1001</td>
<td>Latin 1</td>
</tr>
<tr>
<td>LAT 1002</td>
<td>Latin 2</td>
</tr>
</tbody>
</table>

---

Total Credit Hours: **123**
Select one of the following: 3

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRC 2011</td>
<td>Classical Greek and Roman Mythology</td>
</tr>
<tr>
<td>GRC 3296</td>
<td>Comparative Mythology</td>
</tr>
<tr>
<td>GRC 3396</td>
<td>Classical Epic</td>
</tr>
</tbody>
</table>

Select two of the following: 2

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRC 3596</td>
<td>Ancient City: Periclean Athens</td>
</tr>
<tr>
<td>GRC 3696</td>
<td>Ancient City: Hellenistic Alexandria</td>
</tr>
<tr>
<td>GRC 3002</td>
<td>Ancient City: Augustan Rome</td>
</tr>
<tr>
<td>or GRC 3796</td>
<td>Ancient City: Augustan Rome</td>
</tr>
<tr>
<td>GRC 3003</td>
<td>Ancient City: Byzantium</td>
</tr>
<tr>
<td>or GRC 3896</td>
<td>Ancient City: Byzantium</td>
</tr>
<tr>
<td>GRC 3897</td>
<td>Ancient City: Jerusalem</td>
</tr>
</tbody>
</table>

Greek & Roman Classic Elective - One additional course at or above 2000 3

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRC 3002</td>
<td>Ancient City: Augustan Rome</td>
</tr>
<tr>
<td>GRC 3003</td>
<td>Ancient City: Byzantium</td>
</tr>
<tr>
<td>GRC 3897</td>
<td>Ancient City: Jerusalem</td>
</tr>
</tbody>
</table>

Total Credit Hours 18-20

1 Students who demonstrate proficiency in Ancient Greek or Latin will need to take two additional courses. Students may opt to take either advanced courses in the language or additional electives. See faculty advisor for assistance in course selection.

2 Cycle of five cities offered: Jerusalem, Augustan Rome, Byzantium, Periclean Athens, Hellenistic Alexandria.

3 The elective can be from this department or from another department, such as Anthropology, Art History, Religion, History, or Philosophy, as approved by Greek & Roman Classics department advisors.

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

**Minor in Classical Languages and Literature**

**Requirements**

**Classical Language Requirement** 0-14

Select either Ancient Greek 1-4 or Latin 1-4 (or demonstrate proficiency):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRKA 1001</td>
<td>Ancient Greek 1 1</td>
</tr>
<tr>
<td>GRKA 1002</td>
<td>Ancient Greek 2 1</td>
</tr>
<tr>
<td>GRKA 2001</td>
<td>Ancient Greek 3</td>
</tr>
<tr>
<td>GRKA 2002</td>
<td>Ancient Greek 4</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>LAT 1001</td>
<td>Latin 1</td>
</tr>
<tr>
<td>LAT 1002</td>
<td>Latin 2</td>
</tr>
<tr>
<td>LAT 2001</td>
<td>Latin 3</td>
</tr>
<tr>
<td>LAT 2002</td>
<td>Latin 4</td>
</tr>
</tbody>
</table>

Select one Course in Mythology 3

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRC 2011</td>
<td>Classical Greek and Roman Mythology</td>
</tr>
<tr>
<td>GRC 3196</td>
<td>Classical Greek and Roman Mythology</td>
</tr>
</tbody>
</table>

Select four Greek & Roman Classic Electives 12

At least two electives must be at the 2000 level or higher. Courses must be selected from Ancient Greek, Latin, Greek and Roman Classics or courses on aspects of the ancient Greek and Roman world offered in other Temple University departments such as Art History, History, Religion, and Philosophy with approval of the Classics faculty advisor.

Total Credit Hours 15-29

1 GRKA 1003 may be used to substitute for GRKA 1001 and GRKA 1002.

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

**Criminal Justice**

5th Floor Gladfelter Hall
Mission and Goals

The mission of the Bachelor of Arts program in Criminal Justice is to foster a comprehensive understanding of the nature of crime and the effectiveness and fairness of society’s efforts to prevent and control it. Students engage in a multi-disciplinary approach to the study of crime, offenders, and victims, as well as the agencies, goals, laws, policies, and processes of the criminal justice system. Emphasis is upon promoting critical thinking about the kinds of questions and problems that shape developments in research, practice, policy and reform, and the skills utilized by scholars and professionals in the field.

Majoring in criminal justice helps to prepare students for careers as practitioners, researchers, and academics in a variety of public and private sector professions in both adult and juvenile systems of justice, at the federal, state, and local levels of government. It also provides the core liberal arts foundations for students interested in alternative career paths or advanced education in law school and graduate programs in criminal justice, criminology, and related social-science fields.

Internship

Many students opt to take our specialized internship program, earning 3 credits for CJ 4077 Criminal Justice Practicum (which can be used toward the electives in the major) and 3, 6, or 9 credits in the CJ 4087 Criminal Justice Practicum Lab, which count towards the 123 credits required for graduation but may not be used to fulfill any requirements of the Criminal Justice major. This program runs in the Fall, Spring, and Summer (over the two summer sessions).

Criminal Justice Honors Program

The Department has its own Honors Program in which majors who are also University Honors students may tailor their honors experience to include a criminal justice specialization. In addition to the honors-level elective courses offered, an invaluable part of the program is the opportunity for students to develop an honors thesis based upon an undergraduate research project individually mentored by a criminal justice professor.

Criminal Justice 4+1 BA/MA Program

High-achieving undergraduates will be invited by the faculty of the Criminal Justice Department to apply for the BA/MA 5 year program. Students admitted to this program begin taking graduate courses along with their undergraduate curriculum in their last three undergraduate semesters. They then complete the remaining requirements of a MA in Criminal Justice in the subsequent year. Up to 9 credits of graduate work may count for both the Bachelor’s and Master’s degree programs; these are used as Criminal Justice major electives in the undergraduate degree. Eligible students have a minimum 3.5 overall GPA and will have completed 83 credits of their overall program by the time they are admitted to this program in the spring of their Junior year. Students must have completed the following courses to be considered for this program: CJ 1001, CJ 2401, CJ 2601, and CJ 2602.

Eligible students will receive notification at the end of their Sophomore year, and applications will be accepted until September 30th of their Junior year.
Programs
- Bachelor of Arts in Criminal Justice (p. 812)
- Minor in Criminal Justice (p. 814)

Bachelor of Arts in Criminal Justice

Summary of Degree Requirements

University Requirements:
- MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific courses required for this major are CJ 2696, and one of the following: CJ 4096, CJ 4098, or CJ 4196.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education (p. 143) section of the Undergraduate Bulletin for more details.

College of Liberal Arts Requirements:
- Completion of a minimum of 123 credits, including:
  - 90 credits in CLA/CST courses;
  - 45 credits of which must be at the upper level (numbered 2000-4999).
  - For Social Science majors, 6 upper level credits (numbered 2000-4999) must be taken in Humanities Subject Areas: Arabic, Chinese, English, French, German, Greek (Ancient), Greek and Roman Classics, Hebrew, Hindi, Italian, Japanese, Latin, Philosophy, Religion, Russian, and Spanish in the College of Liberal Arts, Art History in the Tyler School of Art, or any department in the College of Science and Technology.
  - A minimum GPA of 2.0, cumulatively, in CLA/CST coursework, and in the major.
  - Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.
- Foreign Language/Global Studies Requirements:
  - All students must complete or test out of the first and second levels of a foreign language - these courses are numbered 1001 and 1002;
  - All students must complete at least one course from the GenEd Global/World Society category and
  - All Bachelor of Arts students must complete one of the following options:
    - Third semester of a foreign language;
    - Demonstrated proficiency beyond the third semester in a foreign language (placement exam or certifcation from the language department);
    - Take one Global Studies course from the list on the CLA College Graduation Requirements (p. 755) page;
    - Study Abroad at an approved program; or
    - Take a second General Education Global/World Society course.
- Notes on Foreign Language Study
  - The third level of language is numbered 1003 in French, German, Italian, Spanish, and Portuguese and numbered 2001 in all other foreign language subjects.
  - Students are strongly encouraged to take the third level of a foreign language as it is the minimum required for election to the prestigious honor society Phi Beta Kappa. (Taking the course does not guarantee admission but not taking it guarantees exclusion.)
  - See the College of Liberal Arts Policies (p. 753) section of this Bulletin for more information on the Foreign Language Placement, Regression in Coursework, and guidelines for students’ other experiences with language.

General Electives are typically one-third of a student's program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

Major Requirements (42 credits):

Specifically Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CJ 1001</td>
<td>Introduction to Criminal Justice</td>
<td>3</td>
</tr>
<tr>
<td>CJ 2401</td>
<td>Nature of Crime</td>
<td>3</td>
</tr>
<tr>
<td>CJ 2501</td>
<td>Introduction to Criminal Law</td>
<td>3</td>
</tr>
<tr>
<td>CJ 2601</td>
<td>Introduction to Criminal Justice Research</td>
<td>3</td>
</tr>
<tr>
<td>CJ 2602</td>
<td>Criminal Justice Research and Analysis</td>
<td>3</td>
</tr>
</tbody>
</table>
### Writing Seminar
Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CJ 4096</td>
<td>Writing Seminar: Crime and Social Policy 1</td>
</tr>
<tr>
<td>CJ 4098</td>
<td>Writing Seminar: Gender and Criminal Justice</td>
</tr>
<tr>
<td>CJ 4196</td>
<td>Writing Seminar: Critical Issues in Law Enforcement 1</td>
</tr>
</tbody>
</table>

### Electives in Major
Select seven Criminal Justice electives numbered 2000-4999 (may not overlap with any of the above-noted courses or their equivalents) 2

Total Credit Hours 42

1 **DUPLICATE CREDIT WARNING:**
   - The following courses have similar content and students may only earn academic credit for one from each set:
     - CJ 4001 Crime and Social Policy OR CJ 4096 Writing Seminar: Crime and Social Policy
     - CJ 4101 Critical Issues in Law Enforcement OR CJ 4196 Writing Seminar: Critical Issues in Law Enforcement

2 A student may count CJ 4077 toward the Criminal Justice major electives. CJ 4087 does not count toward the major requirements.

### Distinction in Major
Criminal Justice majors may graduate with distinction in the major if they have earned a GPA of 3.5 in the major and a cumulative GPA of at least 3.25.

### Suggested Academic Plan
Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

### Bachelor of Arts in Criminal Justice

#### Requirements for New Students starting in the 2015-2016 Academic Year

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ENG 0802, 0812, or 0902</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Foreign Language 1001 - first level</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td></td>
<td>IH 0851 or 0951</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Foreign Language 1002 - second level</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>CJ 1001</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>IH 0852 or 0952</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CJ 2401</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CJ 2601</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>One 0800-4999 Elective in Any School or College</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Select one of the following:</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Foreign Language - third level</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GenEd Global/World Society Course</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Internationally-Focused Course From Approved List</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>17</strong></td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
</tbody>
</table>

| Spring | | |
|--------| | |

*GenEd Breadth Courses must be numbered 2000-4999.*
Minor in Criminal Justice

Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CJ 1001</td>
<td>Introduction to Criminal Justice</td>
<td>3</td>
</tr>
<tr>
<td>CJ 2401</td>
<td>Nature of Crime</td>
<td>3</td>
</tr>
<tr>
<td>CJ 2501</td>
<td>Introduction to Criminal Law</td>
<td>3</td>
</tr>
<tr>
<td>CJ 2696</td>
<td>Planned Change [WI]</td>
<td>3</td>
</tr>
<tr>
<td>Any three Criminal Justice courses above the 2000 level</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Any seminar (4000-level) Criminal Justice course</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

Total Credit Hours: 24
Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Economics

www.cla.temple.edu/economics/

Michael Bognanno, Chair
Ritter Annex 873
215-204-1680
bognanno@temple.edu

William Holmes, Faculty Advisor
Ritter Annex 804
215-204-8175
william.holmes@temple.edu

Belinda Wilson, Administrator
Ritter Annex 821
215-204-0472
bwilson@temple.edu

The major in economics exposes a student to the economist's way of thinking about social problems and behavior. The major helps a student understand the economic aspect of current events and public policy and is good preparation for careers in law and business.

The student honorary fraternity is Omicron Delta Epsilon. Along with the more general student organization, The Economics Society, it provides opportunities for students to network with other students and with practicing economists in learning more about economics and finding internships and employment opportunities.

There is also a Cooperative Education option. Through this program, students may earn income while gaining valuable work experience which can enhance their job market prospects upon graduation. By completing an academic research project under the guidance of a faculty member, Co-op students may earn credit for ECON 3581.

Programs

- Bachelor of Arts in Economics (p. 815)
- Bachelor of Arts in Mathematical Economics (p. 818)
- Certificate in Political Economy (p. 819)
- Management Career Certificate (p. 820)
- Minor in Economics (p. 821)

Bachelor of Arts in Economics

The major in economics exposes a student to the economist's way of thinking about social problems and behavior. The major helps a student understand the economic aspect of current events and public policy and is good preparation for careers in law and business.

Pending approval, students who wish to earn a BA and an MA in Economics may do so in a combined 4+1 program. Students begin graduate study during their undergraduate program and are able to count some electives towards both degrees. This program is only open to students who will complete both degrees in a total of five years. See the Economics faculty advisor if you are considering this option.

The student honorary fraternity is Omicron Delta Epsilon. Along with the more general student organization, The Economics Society, it provides opportunities for students to network with other students and with practicing economists in learning more about economics and finding internships and employment opportunities.

There is also a Cooperative Education option. Through this program, students may earn income while gaining valuable work experience which can enhance their job market prospects upon graduation. By completing an academic research project under the guidance of a faculty member, Co-op students may earn credit for ECON 3581.

Summary of Degree Requirements

University Requirements:

- MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
• All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific courses required for this major are ECON 3598 and one of the following: ECON 3596, ECON 3597, ECON 3696, ECON 3697.
• Students must complete requirements of the General Education (GenEd) Program. See the General Education (p. 143) section of the Undergraduate Bulletin for more details.

College of Liberal Arts Requirements:

• Completion of a minimum of 123 credits, including:
  • 90 credits in CLA/CST courses;
  • 45 credits of which must be at the upper level (numbered 2000-4999).
  • For Social Science majors, 6 upper level credits (numbered 2000-4999) must be taken in Humanities Subject Areas: Arabic, Chinese, English, French, German, Greek (Ancient), Greek and Roman Classics, Hebrew, Hindi, Italian, Japanese, Latin, Philosophy, Religion, Russian, and Spanish in the College of Liberal Arts, Art History in the Tyler School of Art, or any department in the College of Science and Technology.
• A minimum GPA of 2.0, cumulatively, in CLA/CST coursework, and in the major.
• Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.

• Foreign Language/Global Studies Requirements:
  • All students must complete or test out of the first and second levels of a foreign language, these are numbered 1001 and 1002;
  • All students must complete at least one course from the GenEd Global/World Society category; and
  • All Bachelor of Arts students must complete one of the following options:
    • Third semester of a foreign language;
    • Demonstrated proficiency beyond the third semester in a foreign language (placement exam or certification from the language department);
    • Take one Global Studies course from the list on the CLA College Graduation Requirements (p. 755) page;
    • Study Abroad at an approved program; or
    • Take a second General Education Global/World Society course.

• Notes on Foreign Language Study
  • The third level of language is numbered 1003 in French, German, Italian, Spanish, and Portuguese and numbered 2001 in all other foreign language subjects.
• Students are strongly encouraged to take the third level of a foreign language as it is the minimum required for election to the prestigious honors society Phi Beta Kappa. (Taking the course does not guarantee admission but not taking it guarantees exclusion.)
• See the College of Liberal Arts Policies (p. 753) section of this Bulletin for more information on the Foreign Language Placement, Regression in Coursework, and guidelines for students other experiences with language.

General Electives are typically one-third of a student's program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

Major Requirements (37 credits):

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 1101</td>
<td>Macroeconomic Principles ¹</td>
<td>3</td>
</tr>
<tr>
<td>or ECON 1901</td>
<td>Honors Macroeconomic Principles</td>
<td></td>
</tr>
<tr>
<td>ECON 1102</td>
<td>Microeconomic Principles ¹</td>
<td>3</td>
</tr>
<tr>
<td>or ECON 1902</td>
<td>Honors Microeconomic Principles</td>
<td></td>
</tr>
<tr>
<td>STAT 2103</td>
<td>Statistical Business Analytics</td>
<td>4</td>
</tr>
<tr>
<td>ECON 3501</td>
<td>Intermediate Microeconomic Analysis</td>
<td>3</td>
</tr>
<tr>
<td>ECON 3502</td>
<td>Intermediate Macroeconomic Analysis</td>
<td>3</td>
</tr>
<tr>
<td>ECON 3563</td>
<td>International Trade</td>
<td>3</td>
</tr>
<tr>
<td>or ECON 3564</td>
<td>International Monetary Economics</td>
<td></td>
</tr>
</tbody>
</table>

Writing-intensive elective

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 3596</td>
<td>Energy, Ecology, and Economy</td>
</tr>
<tr>
<td>ECON 3597</td>
<td>Health Economics</td>
</tr>
<tr>
<td>ECON 3696</td>
<td>Behavioral Economics</td>
</tr>
<tr>
<td>ECON 3697</td>
<td>The Economics of Sports</td>
</tr>
</tbody>
</table>

Capstone Course
Major Electives
Three electives in Economics at the 3000 level or above 9
One additional elective in Economics at the 3000+ level or related field. 2 3
Total Credit Hours 37

1 These courses are prerequisites for most of the Economics 2000-3999 courses. Check specific course descriptions for details.
2 Course in Economics at the 3000+ level or course in the College of Liberal Arts at the 2000+ level related to the student’s program in Economics. This course is to be chosen in consultation with an Economics faculty advisor.

• Note: Students preparing for graduate study in economics or in an economics-related area are strongly encouraged to take ECON 3504 Mathematical Economics, ECON 3503 Introduction to Econometrics and courses in calculus and linear algebra in the Mathematics department.

Suggested Academic Plan

Bachelor of Arts in Economics

Requirements for New Students starting in the 2015-2016 Academic Year

Year 1

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 0802, 0812, or 0902 Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
</tr>
<tr>
<td>Foreign Language 1001 - first level</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>Term Credit Hours</td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>IH 0851 or 0951 Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>Foreign Language 1002 - second level</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1101 or 1901 Macroeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>Term Credit Hours</td>
<td>17</td>
</tr>
</tbody>
</table>

Year 2

<table>
<thead>
<tr>
<th>Fall</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>IH 0852 or 0952 Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1102 or 1902 Microeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>One 0800+ Elective in Any School or College</td>
<td>2</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3</td>
</tr>
<tr>
<td>Foreign Language - third level</td>
<td></td>
</tr>
<tr>
<td>GenEd Global/World Society Course</td>
<td></td>
</tr>
<tr>
<td>Internationally Focused Course From Approved List</td>
<td></td>
</tr>
<tr>
<td>Term Credit Hours</td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>ECON 3501 Intermediate Microeconomic Analysis</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 2000+ Course</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 2000+ Course</td>
<td>3</td>
</tr>
<tr>
<td>Term Credit Hours</td>
<td>15</td>
</tr>
</tbody>
</table>

Year 3

<table>
<thead>
<tr>
<th>Fall</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>One 2000+ Humanities/CST Course</td>
<td>3</td>
</tr>
<tr>
<td>ECON 3502 Intermediate Macroeconomic Analysis</td>
<td>3</td>
</tr>
</tbody>
</table>
### Bachelor of Arts in Mathematical Economics

Dimitrios Diamantaras, Advisor  
Department of Economics  
Ritter Annex, Room 623  
215-204-8169  
dimitrios.diamantaras@temple.edu

Boris A. Datskovsky, Advisor  
Department of Mathematics  
Wachman Hall, Room 632  
215-204-7847  
boris.datskovsky@temple.edu

The Departments of Economics and Mathematics offer the Mathematical Economics program as a platform for systematic concentration in the mathematical approach to economics. Economics has progressed in the last several decades by making extensive use of mathematical techniques. As a result, students who wish to pursue graduate study in economics, finance, accounting, and other disciplines that make an extensive use of economics need a thorough grounding in both economics and mathematics.
The Mathematical Economics curriculum provides this grounding with a broad selection of courses that cover all important areas of economics and the mathematical tools required for a critical, deep mastery of these areas. This program is especially recommended for those students who intend to pursue graduate studies in economics. The program and its requirements are described in full in the Intercollegial Programs (p. 161) section of this Bulletin.

## Certificate in Political Economy

William Lynn Holmes, Department of Economics  
215-204-8175  
whelmes@temple.edu

Sandra Suarez, Department of Political Science  
215-204-1468  
suarez@temple.edu

This is a joint program offered by the Department of Economics and the Department of Political Science leading to certificate of specialization in political economy.

### Purpose

The purpose of the Political Economy program is to provide undergraduate students with the opportunity to study more intensely the relationship between the political and economic spheres of society. The program is based on the belief that a focused examination of this relationship provides us with a better understanding of several social phenomena. Chief among these is a better understanding of public policy choices and the policy making process, as well as a better understanding of how government actions affect the process of economic change and vice versa.

For these reasons the Political Science and Economics departments offer an interdisciplinary certificate in Political Economy. The program is open to all matriculated undergraduate students. Applicants need not be declared majors in either economics or political science. The Political Economy program provides an excellent preparation for graduate study in the social sciences and for the study of law.

### Program Requirements

The program consists of two components: required core courses at the lower-division level and elective courses at the upper-division level.

#### Core Courses

All students must take the following core courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 1101</td>
<td>Macroeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>or ECON 1901</td>
<td>Honors Macroeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1102</td>
<td>Microeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>or ECON 1902</td>
<td>Honors Microeconomic Principles</td>
<td></td>
</tr>
<tr>
<td>POLS 1101</td>
<td>The American Political System</td>
<td>3</td>
</tr>
<tr>
<td>or POLS 1911</td>
<td>Honors Introduction to American Politics</td>
<td></td>
</tr>
</tbody>
</table>

Select one of the following: (3 credits)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLS 1201</td>
<td>Foreign Governments and Politics</td>
</tr>
<tr>
<td>or POLS 1921</td>
<td>Honors Foreign Governments and Politics</td>
</tr>
<tr>
<td>POLS 1301</td>
<td>International Politics</td>
</tr>
<tr>
<td>or POLS 1931</td>
<td>Honors International Politics</td>
</tr>
</tbody>
</table>

#### Elective Courses

All students must successfully complete (grade of C- or better) four courses from the following list. Two of the four courses must be in economics, and two courses must be in political science. Students should select courses that correspond to their own substantive interests and are encouraged to take cognate areas (e.g., if you choose international politics courses, also choose international economics courses). Students should plan their schedules well in advance, since some courses are not offered each semester.

Select two of the following: (6 credits)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 3531</td>
<td>History of Economic Theory</td>
</tr>
<tr>
<td>ECON 3547</td>
<td>Economics of Development and Growth</td>
</tr>
<tr>
<td>ECON 3511</td>
<td>The Economics and Management of Privatization</td>
</tr>
<tr>
<td>ECON 3512</td>
<td>Public Finance</td>
</tr>
<tr>
<td>ECON 3513</td>
<td>Economics of State and Local Governments</td>
</tr>
<tr>
<td>ECON 3563</td>
<td>International Trade</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------------------------------------</td>
</tr>
<tr>
<td>ECON 3564</td>
<td>International Monetary Economics</td>
</tr>
<tr>
<td>ECON 3596</td>
<td>Energy, Ecology, and Economy</td>
</tr>
<tr>
<td>or ECON 3506</td>
<td>Energy, Ecology, and Economy</td>
</tr>
<tr>
<td>ECON 3597</td>
<td>Health Economics</td>
</tr>
<tr>
<td>or ECON 3507</td>
<td>Health Economics</td>
</tr>
<tr>
<td>ECON 3545</td>
<td>Economics of Labor Markets</td>
</tr>
<tr>
<td>ECON 3546</td>
<td>Women in the Economy</td>
</tr>
<tr>
<td>ECON 3535</td>
<td>Public Control of Business: Antitrust</td>
</tr>
<tr>
<td>ECON 3536</td>
<td>Economics of American Industry</td>
</tr>
</tbody>
</table>

Select two of the following: 6

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLS 3196</td>
<td>Urban Politics &amp; Problems</td>
</tr>
<tr>
<td>or POLS 3131</td>
<td>Urban Politics and Problems</td>
</tr>
<tr>
<td>POLS 3134</td>
<td>The Politics of Inequality</td>
</tr>
<tr>
<td>POLS 2102</td>
<td>American State and Local Politics</td>
</tr>
<tr>
<td>POLS 2103</td>
<td>U.S. Public Policy Making</td>
</tr>
<tr>
<td>POLS 3151</td>
<td>Public Policy Analysis</td>
</tr>
<tr>
<td>POLS 3152</td>
<td>U.S. Environmental Policy</td>
</tr>
<tr>
<td>POLS 3155</td>
<td>Business and Public Policy</td>
</tr>
<tr>
<td>POLS 2201</td>
<td>Comparative Politics: Developing Nations</td>
</tr>
<tr>
<td>POLS 3252</td>
<td>East Asia and the United States</td>
</tr>
<tr>
<td>POLS 3296</td>
<td>Politics of Modern Capitalism</td>
</tr>
<tr>
<td>POLS 2321</td>
<td>Politics of the Global Economy</td>
</tr>
<tr>
<td>POLS 2441</td>
<td>Democracy, Capitalism, and Socialism</td>
</tr>
</tbody>
</table>

1  Writing Intensive courses.

Management Career Certificate

William Holmes, Advisor
215-204-8175
william.holmes@temple.edu

Erwin Blackstone, Advisor
215-204-5027
erwin.blackstone@temple.edu

This certificate program is designed for students who intend to seek employment in the business or nonprofit sectors of the economy. It is designed to provide students with skills that complement those acquired through a traditional liberal arts education and to make the students more appealing to potential employers.

Requirements

Required Courses

Select one of the following: 3

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 1001</td>
<td>Introduction to the Economy</td>
</tr>
<tr>
<td>ECON 1102</td>
<td>Microeconomic Principles</td>
</tr>
<tr>
<td>ECON 1902</td>
<td>Honors Microeconomic Principles</td>
</tr>
<tr>
<td>ACCT 2101</td>
<td>Financial Accounting</td>
</tr>
<tr>
<td>HRM 1101</td>
<td>Leadership and Organizational Management</td>
</tr>
<tr>
<td>PSY 2402</td>
<td>Foundations of Industrial and Organizational Psychology</td>
</tr>
<tr>
<td>or MKTG 2101</td>
<td>Marketing Management</td>
</tr>
</tbody>
</table>

One Statistics course selected in consultation with the certificate advisor. 3

Approved Elective

Select one of the following: 2 3-4

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 2102</td>
<td>Managerial Accounting</td>
</tr>
<tr>
<td>ECON 1101</td>
<td>Macroeconomic Principles</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
</tr>
<tr>
<td>------------</td>
<td>------------------------------------------------</td>
</tr>
<tr>
<td>ECON 3536</td>
<td>Economics of American Industry</td>
</tr>
<tr>
<td>ECON 3541</td>
<td>The Economics of Sports</td>
</tr>
<tr>
<td>MKTG 2101</td>
<td>Marketing Management</td>
</tr>
<tr>
<td>HRM 2501</td>
<td>Introduction to Human Resource Management</td>
</tr>
<tr>
<td>CIS 1055</td>
<td>Computers and Applications</td>
</tr>
<tr>
<td>GUS 2031</td>
<td>Economic Geography</td>
</tr>
<tr>
<td>POLS 2321</td>
<td>Politics of the Global Economy</td>
</tr>
<tr>
<td>POLS 3155</td>
<td>Business and Public Policy</td>
</tr>
<tr>
<td>PSY 2402</td>
<td>Foundations of Industrial and Organizational Psychology</td>
</tr>
</tbody>
</table>

**Total Credit Hours** 18-19

1. Students may not double count either MKTG 2101 or PSY 2402 within this certificate program.

2. An alternative elective or an internship or practicum may be approved to substitute for the elective. Please see the certificate advisor prior to registration for written approval.

Certificates are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

**Minor in Economics**

**Requirements**

*(For Liberal Arts and all other colleges allowing a minor in Economics)*

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 1101</td>
<td>Macroeconomic Principles</td>
</tr>
<tr>
<td>or ECON 1901</td>
<td>Honors Macroeconomic Principles</td>
</tr>
<tr>
<td>ECON 1102</td>
<td>Microeconomic Principles</td>
</tr>
<tr>
<td>or ECON 1902</td>
<td>Honors Microeconomic Principles</td>
</tr>
<tr>
<td>ECON 3501</td>
<td>Intermediate Microeconomic Analysis</td>
</tr>
<tr>
<td>or ECON 3502</td>
<td>Intermediate Macroeconomic Analysis</td>
</tr>
</tbody>
</table>

Three electives in Economics at the 3000-level or above 1

**Total Credit Hours** 18

1. If both ECON 3501 and ECON 3502 are taken, one counts as one of these electives.

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

**English**

10th Floor, Anderson Hall
215-204-7561
www.cla.temple.edu/english

Philip R. Yannella, Department Chair
1042 Anderson Hall
215-204-1756
yannella@temple.edu

Lawrence Venuti, Director of Undergraduate Studies
1030 Anderson Hall
215-204–8509
lvenuti@temple.edu

Gabriel Wettach, Undergraduate Advisor
1030 Anderson Hall
215-204-8510
gwettach@temple.edu

Stephanie Morawski, Administrator
The English department has a distinguished faculty of nationally-known critics, writers, and scholars who will teach you, usually in small classes. You will choose from a range of exciting courses (about forty English courses each semester) and from interdisciplinary programs such as the Five-year Program in English and Education, or a double major in English and any other department throughout the university. Internships are offered with area institutions such as the Temple Press, the University of Pennsylvania Press, the Urban League, WHYY public radio, Philadelphia Magazine, United Way, the Red Cross, Bread and Roses, J. B. Lippincott Publishers, and the Academy of Natural Sciences. The department offers community-based projects, such as the New City Press and our Institute for the Study of Literature, Literacy, and Culture. There is an active program of readings by resident and visiting writers and artists. Students are active in writing and producing our literary magazine: Hyphen.

Programs

- Bachelor of Arts in English (p. 822)
- Bachelor of Arts in English with a Concentration in Creative Writing (p. 825)
- Certificate in Writing (p. 827)
- Minor in English (p. 828)

Bachelor of Arts in English

The English major helps students develop as readers of interesting, complex texts, including literary texts. Majors read writing from a variety of historical contexts and cultures; this experience builds their understanding of the relation between society and language. English majors become critical and reflective readers, aware of the history and development of writing in English. They are also good, inventive writers who are able to analyze problems, do careful and inventive research, argue and evaluate the arguments of others.

The English major is good preparation for a career in writing or editing—of stories, speeches, legal documents, advertising, research projects, poems, grant proposals, essays, or letters. English majors also find careers in publishing and journalism, public relations, business, industry, management, marketing, social services, and government. English is a strong pre-professional major for law, medicine, library science, and teaching, from the elementary to the post-secondary level.

Summary of Degree Requirements

University Requirements:

- MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. For the English major, these courses are ENG 2097 and a 4000 level Capstone Seminar.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education (p. 143) section of the Undergraduate Bulletin for more details.

College of Liberal Arts Requirements:

- Completion of a minimum of 123 credits, including:
  - 90 credits in CLA/CST courses;
  - 45 credits of which must be at the upper level (numbered 2000-4999).
  - For Humanities majors, 6 upper level credits must be earned in the Social Science and interdisciplinary subject areas: African American Studies, American Studies, Anthropology, Asian Studies, Criminal Justice, Economics, Environmental Studies, Geography and Urban Studies, Global Studies, History, Jewish Studies, Latin American Studies, Lesbian, Gay, Bisexual, and Transgender Studies, Liberal Arts, Neuroscience (CLA), Political Science, Psychology, Sociology, Women's Studies, or any department in the College of Science and Technology.
  - A minimum GPA of 2.0, cumulatively, in all CLA/CST coursework, and in the major department.
  - Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.

- Foreign Language/Global Studies Requirements:
  - All students must complete or test out of the first and second levels of a foreign language - these courses are numbered 1001 and 1002;
  - All students must complete at least one course from the GenEd Global/World Society category; and
• All Bachelor of Arts students must complete one of the following options:
  • Third semester of a foreign language;
  • Demonstrated proficiency beyond the third semester in a foreign language (placement exam or certification from the language department);
  • Take one Global Studies course from the list on the CLA College Graduation Requirements (p. 755) page;
  • Study Abroad at an approved program; or
  • Take a second General Education Global/World Society course.

• Notes on Foreign Language Study
  • The third level of language is numbered 1003 in French, German, Italian, Spanish, and Portuguese and numbered 2001 in all other foreign language subjects.
  • Students are strongly encouraged to take the third level of a foreign language as it is the minimum required for election to the prestigious honor society Phi Beta Kappa. (Taking the course does not guarantee admission but not taking it guarantees exclusion.)
  • See the College of Liberal Arts Policies (p. 753) section of this Bulletin for more information on the Foreign Language Placement, Regression in Coursework, and guidelines for students’ other experiences with language.

General Electives are typically one-third of a student's program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

Major Requirements (36 credits/12 courses):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 2097</td>
<td>Introduction to English Studies</td>
<td>3</td>
</tr>
<tr>
<td>ENG 2201</td>
<td>Survey of English Literature: Beginnings to 1660</td>
<td>3</td>
</tr>
<tr>
<td>ENG 2202</td>
<td>Survey of English Literature: 1660-1900</td>
<td>3</td>
</tr>
<tr>
<td>ENG 2301</td>
<td>Survey of American Literature I</td>
<td>3</td>
</tr>
<tr>
<td>ENG 2302</td>
<td>Survey of American Literature II</td>
<td>3</td>
</tr>
<tr>
<td>Three 2000-2999 English Electives</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Three 3000-3999 English Electives</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>English 4000 level course - Senior Capstone Course</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

Total Credit Hours 36

1 Indicates writing capstone for the major

Distinction in Major

Students need at least a 3.65 GPA in English courses to earn distinction in major.

Suggested Academic Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Arts in English

Requirements for New Students starting in the 2015-2016 Academic Year

Year 1

Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Foreign Language 1001 - first level</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

Term Credit Hours 15

Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>Foreign Language 1002 - second level</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

Term Credit Hours 16
### Year 2

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ENG 2097</td>
<td>Introduction to English Studies [WI]</td>
<td>3</td>
</tr>
<tr>
<td>ENG 2201</td>
<td>Survey of English Literature: Beginnings to 1660</td>
<td>3</td>
</tr>
<tr>
<td>One 0800-4999 Elective in Any School or College</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

Select one of the following:
- Foreign Language - third level
- GenEd Global/World Society Course
- Internationally-Focused Course From Approved List

| Term Credit Hours | 17 |

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>English 2000+ Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>English 2000+ Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ENG 2202</td>
<td>Survey of English Literature: 1660-1900</td>
<td>3</td>
</tr>
</tbody>
</table>

| Term Credit Hours | 15 |

### Year 3

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLA/CST 2000+ Social Science/CST Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>English 2000+ Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>English 3000+ Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ENG 2301</td>
<td>Survey of American Literature I</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Elective</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

| Term Credit Hours | 15 |

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLA/CST 2000+ Social Science/CST Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>English 3000+ Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ENG 2302</td>
<td>Survey of American Literature II</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 2000+ Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Elective</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

| Term Credit Hours | 15 |

### Year 4

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>English 3000+ Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Elective</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

| Term Credit Hours | 15 |

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>English 4000+ Capstone Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>One 0800-4999 Elective in Any School or College</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

| Term Credit Hours | 15 |

**Total Credit Hours:** 123

1. Register with the English Department.
Bachelor of Arts in English with a Concentration in Creative Writing

The English major helps students develop as readers of interesting, complex texts, including literary texts. Majors read writing from a variety of historical contexts and cultures; this experience builds their understanding of the relation between society and language. English majors become critical and reflective readers, aware of the history and development of writing in English. They are also good, inventive writers who are able to analyze problems, do careful and inventive research, argue and evaluate the arguments of others.

The English major is good preparation for a career in writing or editing—of stories, speeches, legal documents, advertising, research projects, poems, grant proposals, essays, or letters. English majors also find careers in publishing and journalism, public relations, business, industry, management, marketing, social services, and government. English is a strong pre-professional major for law, medicine, library science, and teaching, from the elementary to the post-secondary level.

Summary of Degree Requirements

University Requirements:

- MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. For the English major, these courses are ENG 2097 and a 4000 level Capstone Seminar.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education (p. 143) section of the Undergraduate Bulletin for more details.

College of Liberal Arts Requirements:

- Completion of a minimum of 123 credits, including:
  - 90 credits in CLA/CST courses;
  - 45 credits of which must be at the upper level (numbered 2000-4999).
    - For Humanities majors, 6 upper level credits must be earned in the Social Science and interdisciplinary subject areas: African American Studies, American Studies, Anthropology, Asian Studies, Criminal Justice, Economics, Environmental Studies, Geography and Urban Studies, Global Studies, History, Jewish Studies, Latin American Studies, Lesbian, Gay, Bisexual, and Transgender Studies, Liberal Arts, Neuroscience (CLA), Political Science, Psychology, Sociology, Women's Studies, or any department in the College of Science and Technology.
  - A minimum GPA of 2.0, cumulatively, in all CLA/CST course work, and in the major department.
  - Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.

- Foreign Language/Global Studies Requirements:
  - All students must complete or test out of the first and second levels of a foreign language - these courses are numbered 1001 and 1002;
  - All students must complete at least one course from the GenEd Global/World Society category; and
  - All Bachelor of Arts students must complete one of the following options:
    - Third semester of a foreign language;
    - Demonstrated proficiency beyond the third semester in a foreign language (placement exam or certification from the language department);
    - Take one Global Studies course from the list on the CLA College Graduation Requirements (p. 755) page;
    - Study Abroad at an approved program; or
    - Take a second General Education Global/World Society course.

- Notes on Foreign Language Study
  - The third level of language is numbered 1003 in French, German, Italian, Spanish, and Portuguese and numbered 2001 in all other foreign language subjects.
  - Students are strongly encouraged to take the third level of a foreign language as it is the minimum required for election to the prestigious honor society Phi Beta Kappa. (Taking the course does not guarantee admission but not taking it guarantees exclusion.)
  - See the College of Liberal Arts Policies (p. 753) section of this Bulletin for more information on the Foreign Language Placement, Regression in Coursework, and guidelines for students’ other experiences with language.

General Electives are typically one-third of a student's program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

Major Requirements (36 credits/12 courses):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 2097</td>
<td>Introduction to English Studies</td>
<td>3</td>
</tr>
<tr>
<td>ENG 2201</td>
<td>Survey of English Literature: Beginnings to 1660</td>
<td>3</td>
</tr>
</tbody>
</table>
ENG 2202  
Survey of English Literature: 1660-1900  
3
ENG 2301  
Survey of American Literature I  
3
ENG 2302  
Survey of American Literature II  
3
Select one of the following sequences:  
6
ENG 2003  
Creative Writing: Poetry
ENG 3003  
and Advanced Creative Writing: Poetry
ENG 2004  
Creative Writing: Fiction
ENG 3004  
and Advanced Creative Writing: Fiction
ENG 2005  
Creative Writing: Plays
ENG 3005  
and Advanced Creative Writing: Plays
Two 2000-2999 English Electives  
6
Two 3000-3999 English Electives  
6
ENG 4096  
Studies in Creative Writing  
1
3
Total Credit Hours  
36

1 Indicates writing capstone for the major

Distinction in Major
Students need at least a 3.65 GPA in English courses to earn distinction in major.

Suggested Academic Plan
Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Arts in English with a Concentration in Creative Writing
Requirements for New Students starting in the 2015-2016 Academic Year

Year 1
Fall  
ENG 0802, 0812, or 0902  
Analytical Reading and Writing [GW]  
4
GenEd Quantitative Literacy Course [GQ]  
4
Foreign Language 1001 - first level  
4
GenEd Breadth Course  
3

Total Credit Hours  
15

Spring
IH 0851 or 0951  
Mosaic: Humanities Seminar I [GY]  
3
Foreign Language 1002 - second level  
4
GenEd Breadth Course  
3
GenEd Breadth Course  
3
GenEd Breadth Course  
3

Total Credit Hours  
16

Year 2
Fall
IH 0852 or 0952  
Mosaic: Humanities Seminar II [GZ]  
3
GenEd Breadth Course  
3
ENG 2097  
Introduction to English Studies [WI]  
3
ENG 2201  
Survey of English Literature: Beginnings to 1660  
3
One 0800-4999 Elective in Any School or College  
2
Select one of the following:
Foreign Language - third level  
GenEd Global/World Society Course  
Internationally-Focused Course From Approved List  
3

Total Credit Hours  
17

Spring
## Certificate in Writing

Select a total of five courses in Writing. At least one of the five should be from each area listed below, and no more than three in any single area. All of the courses must be completed with a grade of B- or higher.

### Advanced Expository and Professional Writing
Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 2006</td>
<td>Introduction to Non-Fiction</td>
</tr>
<tr>
<td>ENG 2007</td>
<td>Writing for Business and Industry</td>
</tr>
<tr>
<td>ENG 2008/2696</td>
<td>Technical Writing</td>
</tr>
<tr>
<td>ENG 2009</td>
<td>Writing the Research Essay</td>
</tr>
<tr>
<td>ENG 3085</td>
<td>Career Internship</td>
</tr>
<tr>
<td>ENG 3813</td>
<td>Writers at Work</td>
</tr>
</tbody>
</table>

1. Register with the English Department.
Creative Writing
Select one of the following: 3

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 2003</td>
<td>Creative Writing: Poetry</td>
</tr>
<tr>
<td>ENG 2004</td>
<td>Creative Writing: Fiction</td>
</tr>
<tr>
<td>ENG 2005</td>
<td>Creative Writing: Plays</td>
</tr>
<tr>
<td>ENG 3003</td>
<td>Advanced Creative Writing: Poetry</td>
</tr>
<tr>
<td>ENG 3004</td>
<td>Advanced Creative Writing: Fiction</td>
</tr>
<tr>
<td>ENG 3005</td>
<td>Advanced Creative Writing: Plays</td>
</tr>
</tbody>
</table>

Writing Theory
Select one of the following: 3

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 2821</td>
<td>Introduction to Linguistics</td>
</tr>
<tr>
<td>ENG 2831</td>
<td>Literacy and Society</td>
</tr>
<tr>
<td>ENG 2832</td>
<td>Texts/Cultures of Science</td>
</tr>
<tr>
<td>ENG 3811</td>
<td>Theories of Language and Literacy</td>
</tr>
<tr>
<td>ENG 3821</td>
<td>Linguistics and Grammar</td>
</tr>
<tr>
<td>ENG 3822</td>
<td>Semantics</td>
</tr>
<tr>
<td>ENG 3823</td>
<td>History of the English Language</td>
</tr>
<tr>
<td>ENG 4196</td>
<td>Studies in Language and Literacy</td>
</tr>
</tbody>
</table>

Electives
Select two additional electives from any courses listed in the three areas above. 6

Total Credit Hours 15

Certificates are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Minor in English

Requirements

Literature Surveys
Select two of the following: 6

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 2201</td>
<td>Survey of English Literature: Beginnings to 1660</td>
</tr>
<tr>
<td>ENG 2202</td>
<td>Survey of English Literature: 1660-1900</td>
</tr>
<tr>
<td>ENG 2301</td>
<td>Survey of American Literature I</td>
</tr>
<tr>
<td>ENG 2302</td>
<td>Survey of American Literature II</td>
</tr>
</tbody>
</table>

Electives in English
Four courses in English numbered 2000-3999. 1 12

Total Credit Hours 18

1 No more than two of which are in writing (creative, technical or business)

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Environmental Studies

www.cla.temple.edu/gus

Melissa Gilbert, Chair of Geography & Urban Studies
309 Gladfelter Hall
215-204-4429
mgilbert@temple.edu

Kolson Schlosser, Director of Environmental Studies
338 Gladfelter Hall
215-204-2185
The Environmental Studies major and minor examine the nature, causes, and consequences of human interactions with the environment. Students in Environmental Studies are equipped with the intellectual and methodological tools to understand and address the crucial environmental issues of our time and the impact on individuals, society, and the planet.

The major and minor focus on the four themes of globalization, sustainability, social justice, and geographic methods that are increasingly central to understanding the serious environmental challenges we face. The Environmental Studies program is housed in the Department of Geography and Urban Studies and Environmental Studies majors and minors learn geographic theory and methods that examine the complexity of human-environmental interactions; the increasing interconnectedness of the global economy, environment, culture and politics; and the importance of place/context in people's daily lives.

Environmental Studies students are introduced to environmental processes, contemporary environmental issues and policies, and geospatial technologies, including GIS, and qualitative and quantitative social science research methods. The Environmental Studies gateway courses are designed to develop the theoretical and methodological frameworks and tools necessary to understand the relationships between people and their environment as they interact through local and global connections. In required courses and electives, students examine environmental policy and the role of political institutions; the geography of natural resources; environmental decision-making; natural hazards and risk assessment; environmental ethics and legal issues; health and the environment; environmental justice; food access; etc. The electives give students the opportunity to develop an area of emphasis around their particular interests. Students focus on an individualized research project in their Senior Research Seminar. Each student’s program is developed with a departmental advisor to suit individual interests and is designed to maximize educational and career opportunities. We encourage our students to incorporate a semester abroad and/or an internship into their plan of study.

**Themes**

The Department has identified several informal areas of concentration to assist students in making course selections. These do not constitute formal tracks but rather provide guidelines for developing a personalized curriculum. Students can focus on the following themes:

- Globalization
- Social Justice
- Urban Sustainability
- Geographic Methods

**Career Preparation**

Environmental Studies graduates are especially competitive in the job market because of their technical and critical thinking skills, a sense of the complexity of interactions between humans and the environment, and their ability to synthesize information at a variety of scales. Students have the opportunity to gain technical skills in spatial statistics, Geographic Information Systems (GIS), cartographic production and design, and qualitative methods that are highly valued by employers. Our graduates find employment with nonprofits (domestic and international), planning or government agencies, consulting firms, and citizens’ organizations. Many also go on to graduate programs in geography, planning, environmental studies, law, and other fields. The Department of Labor expects that employment for geographers, planners, and other geographic professions will grow at a rate of twenty percent or more for the next decade.
Programs Offered

We offer a Bachelor of Arts and a minor in Environmental Studies, and a certificate in Geographic Information Systems (GIS). Many of our students choose to complete a double major, a minor in a complementary discipline, and/or the GIS certificate.

Double-Counting Across Curricula

Many students elect to take a combination of the Environmental Studies major or minor and the Geography and Urban Studies major or minor, as they are complementary programs.

The ONLY courses that can double-count between the Environmental Studies and the Geography and Urban Studies majors are: ENST 3161 Spatial Statistics/GUS 3161 Spatial Statistics; ENST 2097 Research Design in Environmental Studies/ GUS 2197 Research Design in Geography and Urban Studies; ENST 3062 Fundamentals of Geographic Information Systems/GUS 3062 Fundamentals of Geographic Information Systems. When used for the major in either program, these courses may not be used to fulfill the minor elective requirements of the other program. Note GUS 4198 Senior Seminar in Geography and Urban Studies and ENST 4198 Senior Research Seminar are NOT cross-listed seminars. Anyone pursuing a double major in Geography and Urban Studies and Environmental Studies must take both capstone courses.

Students are not permitted to combine a major or minor in Environmental Studies and a major or minor in Environmental Science in the College of Science and Technology.

Internships

We encourage students to apply their skills and knowledge in a credit-bearing internship that utilizes their academic training. Assignments at planning, social service, environmental and other agencies, as well as at firms that specialize in mapping and geographic data analysis, have helped in securing employment opportunities after graduation. The internship is complemented by a seminar in which students reflect on their experiences. Contact Dr. Andrucki (max.andrucki@temple.edu) for more information on this opportunity.

Certificate in Geographic Information Systems (GIS)

This certificate is open to undergraduate students in all majors at Temple University. This four-course certificate introduces students to information technology and spatial analysis. GIS skills are increasingly in demand by employers and according to the Department of Labor, the industry has a high annual growth rate of 35 percent. Fields that use GIS skills include public health, social and natural sciences, journalism, urban and ecological planning, criminal justice, engineering, design, communications, and business, etc. Students interested in the Certificate in GIS should see that section of this Bulletin or contact guses@temple.edu with questions.

Gamma Theta Upsilon

We nominate students for membership in the National Honorary Society in Geography on the basis of GPA. Students, who are initiated annually, can submit articles to the GTU journal and apply for national scholarships.

Programs

- Bachelor of Arts in Environmental Studies (p. 830)
- Minor in Environmental Studies (p. 835)

Bachelor of Arts in Environmental Studies

The Environmental Studies major, offered by the Department of Geography and Urban Studies, examines the nature, causes and consequences of human interactions with the environment. Students in Environmental Studies gain the intellectual and methodological tools to understand and address the crucial environmental issues of our time and the impact on individuals, society, and the planet.

The Environmental Studies gateway courses are designed to develop the theoretical and methodological frameworks and tools necessary to understand the relationships between people and their environment as they interact through local to global connections. Environmental studies majors are introduced to environmental processes, the geography of natural resources, geospatial technologies, and qualitative and quantitative social science research methods. In required courses and electives, students examine environmental policy and the role of political institutions; environmental decision-making; natural hazards and risk assessment; environmental ethics and legal issues; health and the environment, and environmental justice. The electives give students the opportunity to develop an area of emphasis around their particular interests.

Summary of Degree Requirements

University Requirements:

- MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific courses required for this major are ENST 2097 and ENST 4198.
• Students must complete requirements of the General Education (GenEd) Program. See the General Education section (p. 143) of the Undergraduate Bulletin for more details.

**College of Liberal Arts Requirements:**

• Completion of a minimum of 123 credits, including:
  - 90 credits in CLA/CST courses;
  - 45 credits of which must be at the upper level (numbered 2000-4999).
    - For Social Science majors, 6 upper level credits (numbered 2000-4999) must be taken in Humanities Subject Areas: Arabic, Chinese, English, French, German, Greek (Ancient), Greek and Roman Classics, Hebrew, Hindi, Italian, Japanese, Latin, Philosophy, Religion, Russian, and Spanish in the College of Liberal Arts, Art History in the Tyler School of Art, or any department in the College of Science and Technology.
  - A minimum GPA of 2.0, cumulatively, in CLA/CST coursework, and in the major.
  - Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.

• **Foreign Language/Global Studies Requirements:**
  - All students must complete or test out of the first and second levels of a foreign language - these courses are numbered 1001 and 1002;
  - All students must complete at least one course from the GenEd Global/World Society category; and
  - All Bachelor of Arts students must complete one of the following options:
    - Third semester of a foreign language;
    - Demonstrated proficiency beyond the third semester in a foreign language (placement exam or certification from the language department);
    - Take one Global Studies course from the list on the CLA College Graduation Requirements (p. 755) page;
    - Study Abroad at an approved program; or
    - Take a second General Education Global/World Society course.

• **Notes on Foreign Language Study**
  - The third level of language is numbered 1003 in French, German, Italian, Spanish, and Portuguese and numbered 2001 in all other foreign language subjects.
  - Students are strongly encouraged to take the third level of a foreign language as it is the minimum required for election to the prestigious honor society Phi Beta Kappa. (Taking the course does not guarantee admission but not taking it guarantees exclusion.)
  - See the College of Liberal Arts Policies (p. 753) section of this Bulletin for more information on the Foreign Language Placement, Regression in Coursework, and guidelines for students' other experiences with language.

**General Electives** are typically one-third of a student's program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

**Major Requirements (40 credits in Environmental Studies and related coursework):**

**Gateway courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENST 2001</td>
<td>Environment and Society</td>
<td>3</td>
</tr>
<tr>
<td>ENST 2002</td>
<td>Physical Geography</td>
<td>4</td>
</tr>
</tbody>
</table>

**Research Methods courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENST 2097</td>
<td>Research Design in Environmental Studies</td>
<td>3</td>
</tr>
<tr>
<td>ENST 3062</td>
<td>Fundamentals of Geographic Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>ENST 3161</td>
<td>Spatial Statistics</td>
<td>3</td>
</tr>
</tbody>
</table>

**Research Methods elective**

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENST 3061</td>
<td>Fundamentals of Cartography</td>
<td>3</td>
</tr>
<tr>
<td>ENST 3063</td>
<td>Environmental Remote Sensing</td>
<td></td>
</tr>
<tr>
<td>ENST 3064</td>
<td>Qualitative Methods</td>
<td></td>
</tr>
<tr>
<td>ENST 3068</td>
<td>Environmental Impact Assessment</td>
<td></td>
</tr>
<tr>
<td>ENST 4066</td>
<td>Environmental GIS</td>
<td></td>
</tr>
</tbody>
</table>

**Advanced Environmental Studies courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENST 3004</td>
<td>Geography of Natural Resources</td>
<td>3</td>
</tr>
<tr>
<td>ENST 4198</td>
<td>Senior Research Seminar</td>
<td>3</td>
</tr>
</tbody>
</table>

**Electives**
Select three upper-level courses in Environmental Studies from the list of approved electives below. ¹

Select one ENST course numbered 0800-4999 ²

Select one course numbered 2000-4999 in ENST or a related subject area.

**Total Credit Hours** 40

¹ No electives may double-count between the Environmental Studies major and either the Geography & Urban Studies major or minor.

² One General Education course taken in Environmental Studies may count towards the major.

### Double-Counting Across Curricula

Many students elect to take a combination of the Environmental Studies major or minor and the Geography and Urban Studies major or minor as they are complementary programs.

The ONLY courses that can double-count between the Geography and Urban Studies and Environmental Studies majors are: GUS 3161/ENST 3161, GUS 2197/ENST 2097, and ENST 3062/GUS 3062. When used for the major in either program, these courses may not be used to fulfill the minor elective requirements of the other program.

Note GUS 4198 and ENST 4198 are NOT cross-listed seminars. Anyone pursuing a double major in Geography & Urban Studies and Environmental Studies must take both capstone courses.

Students may not combine a major or minor in Environmental Studies and a major or minor in Environmental Science in the College of Science and Technology.

### Environmental Studies Electives List

Note: Upper-level Science and Liberal Arts courses from this list can be used to satisfy the CLA 45 credit upper-level distribution requirement. Please consult with an advisor.

#### Policy Electives

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENST/ANTH 3175</td>
<td>Heritage Management in Archaeology</td>
<td>3</td>
</tr>
<tr>
<td>ECON 3512</td>
<td>Public Finance</td>
<td>3</td>
</tr>
<tr>
<td>ECON 3513</td>
<td>Economics of State and Local Governments</td>
<td>3</td>
</tr>
<tr>
<td>ENVT 4761</td>
<td>Environmental Regulations</td>
<td>3</td>
</tr>
<tr>
<td>ENST 3025</td>
<td>Environmental Law and Regulation</td>
<td>3</td>
</tr>
<tr>
<td>ENST/GUS 3051</td>
<td>Environmental Policy Issues</td>
<td>3</td>
</tr>
<tr>
<td>ENST/POLS 3152</td>
<td>U.S. Environmental Policy</td>
<td>3</td>
</tr>
<tr>
<td>ENST/POLS 3265</td>
<td>International Environmental Policy</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Natural Science Electives

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENST/ANTH 3170</td>
<td>Methods in Archaeology (Soils, Sediments, Stratigraphy topic only)</td>
<td>3</td>
</tr>
<tr>
<td>ENST/ANTH 3189</td>
<td>Field Session in Archaeology</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 3774</td>
<td>Environmental Physiology and Health</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 2227</td>
<td>Principles of Ecology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 3244</td>
<td>Experimental Marine Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 3245</td>
<td>Marine Ecology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 3316</td>
<td>Tropical Marine Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 3336</td>
<td>Freshwater Ecology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 4327</td>
<td>Biological Impacts of Global Climate Change</td>
<td>3</td>
</tr>
<tr>
<td>BOT 1112</td>
<td>Plant Ecology</td>
<td>3</td>
</tr>
<tr>
<td>EES 2096</td>
<td>Climate Change: Oceans To Atmosphere</td>
<td>4</td>
</tr>
<tr>
<td>EES 2021</td>
<td>Facies Models</td>
<td>4</td>
</tr>
<tr>
<td>EES 2061</td>
<td>Introduction to Geochemistry</td>
<td>4</td>
</tr>
<tr>
<td>EES 3011</td>
<td>Remote Sensing and GIS</td>
<td>4</td>
</tr>
<tr>
<td>EES 3021</td>
<td>Introduction to Hydrology</td>
<td>4</td>
</tr>
<tr>
<td>HORT 2114</td>
<td>Soils</td>
<td>3</td>
</tr>
<tr>
<td>LARC 2758</td>
<td>Summer Field Ecology</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Topics

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENST/ANTH 4117</td>
<td>Seminar in Environmental Archaeology</td>
<td>3</td>
</tr>
<tr>
<td>ENST/ANTH 4796</td>
<td>Biocultural Adaptations in Human Populations</td>
<td>3</td>
</tr>
</tbody>
</table>
Distinction in Major

Environmental Studies majors may graduate with distinction in major with a 3.5 in Environmental Studies coursework and a 3.0 GPA overall.

Suggested Academic Plan

Bachelor of Arts in Environmental Studies

Requirements for New Students starting in the 2015-2016 Academic Year

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td></td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902 Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
</tr>
<tr>
<td>Foreign Language 1001 - first level</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td>IH 0851 or 0951 Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>Foreign Language 1002 - second level</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>Gen Ed Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>
### Year 2

#### Fall
- IH 0852 or 0952 Mosaic: Humanities Seminar II [GZ] 3
- CLA/CST 2000+ Course 3
- ENST 2001 Environment and Society 3
- GenEd Breadth Course 3
- Select one of the following: 3
  - Foreign Language - third level
  - GenEd World Society Course
  - Internationally Focused Course From Approved List

| Term Credit Hours | 15 |

#### Spring
- GenEd Breadth Course 3
- ENST 2002 Physical Geography 4
- ENST 2097 Research Design in Environmental Studies [WI] 3
- CLA/CST 0800-4999 Elective 2

| Term Credit Hours | 15 |

### Year 3

#### Fall
- ENST Major Elective 0800-4999 3
- ENST 3161 Spatial Statistics 3
- ENST 3062 Fundamentals of Geographic Information Systems 3
- CLA/CST 2000+ Humanities/CST Course 3
- CLA/CST 0800-4999 Elective 3
- One 0800-4999 Elective in Any School or College 2

| Term Credit Hours | 17 |

#### Spring
- ENST Research Methods Course (from list) 3
- ENST 3004 Geography of Natural Resources 3
- ENST Major Elective 2000-4999 3
- CLA/CST 2000+ Humanities/CST Course 3
- CLA/CST 0800-4999 Elective 3

| Term Credit Hours | 15 |

### Year 4

#### Fall
- CLA/CST 2000+ Electives 6
- ENST Major Electives 2000-4999 6
- One 0800-4999 Elective in Any School or College 3

| Term Credit Hours | 15 |

#### Spring
- ENST 4198 Senior Research Seminar [WI] 3
- ENST Elective 2000-4999 3
- CLA/CST 0800-4999 Electives 6
- One 0800-4999 Elective in Any School or College 3

| Term Credit Hours | 15 |

Total Credit Hours: 123
Minor in Environmental Studies

The minor in Environmental Studies is composed of 18 credits. Students are required to take one of the Gateway courses, either ENST 2001 or ENST 2002. Students also take 5 elective courses: one at any level and four at the upper level 2000+, which they can use to focus on their own particular interests.

Requirements

<table>
<thead>
<tr>
<th>Select one Gateway Course:</th>
<th>3-4</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENST 2001</td>
<td>Environment and Society</td>
</tr>
<tr>
<td>ENST 2002</td>
<td>Physical Geography</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Electives</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select one Environmental Studies elective - any level</td>
<td></td>
</tr>
<tr>
<td>Select four Environmental Studies electives numbered 2000-4999</td>
<td></td>
</tr>
</tbody>
</table>

Total Credit Hours 18-19

1 No electives may double-count between the Environmental Studies minor and either the Geography & Urban Studies major or minor.

French

532 Anderson Hall
215-204-1760
www.cla.temple.edu/fgis

Louis Mangione, Chair
537 Anderson Hall
215-204-8247
mangione@temple.edu

Ruth Thomas, Faculty Advisor
548 Anderson Hall
215-204-1758
RPTThomas@temple.edu

Michelle Pugliese, Administrator
429 Anderson Hall
215-204-5628
pugliese@temple.edu

The French major helps students develop skills in reading, writing and oral communication while providing them with a rich understanding of the literature, cinema, history, and traditions of one or more Francophone cultures. In all classes, students focus on communication and communities, comparisons and connection, and culture. As they improve their linguistic skills and study various forms of cultural production from other nations, French majors also strengthen their ability to analyze and interpret in a way that contributes to their education above and beyond courses they take for the major. Through study at Temple, often enhanced by study abroad, French majors gain insight into their own identities and assumptions in relation to others. Majors complete the program with an ability to communicate, a grounding in literary tradition, and an awareness of cultural differences that has become increasingly important in the contemporary world.

The French major is a good preparation for a career that requires analytical thinking and communication skills in general, which includes the domains of education, business, government service, travel, and tourism. It is a good major or a second major for students planning to attend law or medical school. Studies have shown that learning a foreign language helps raise scores on the LSAT, GRE, and MCAT exams. This course of study also proves valuable to anyone who plans to work for a multinational corporation.

The French courses are often small, allowing students to get to know each other and their professors well. The program helps prepare students enrolled in the School of Education for careers teaching French and provides the opportunity to students enrolled in the Fox School of Business to acquire a certificate in French with a special course on French in the business world.

Study Abroad

Students declaring a major or minor in the department are encouraged to study abroad. Temple University has a summer program at the Sorbonne in Paris. Credits earned through the Temple Sorbonne Program (http://studyabroad.temple.edu/sites/temple-summer-in-france) may be used toward the French major, minor, certificate and for satisfaction of the GenEd World Society requirement.
Programs

- Bachelor of Arts in French (p. 836)
- Certificate in French (p. 838)
- Minor in French (p. 838)

Bachelor of Arts in French

Summary of Degree Requirements

University Requirements:

- MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific courses required for this major are FREN 2096 and FREN 3096.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education (p. 143) section of the Undergraduate Bulletin for more details.

College of Liberal Arts Requirements:

- Completion of a minimum of 123 credits, including:
  - 90 credits in CLA/CST courses;
  - 45 credits of which must be at the upper level (numbered 2000-4999).  
    - For Humanities majors, 6 upper level credits must be earned in the Social Science and interdisciplinary subject areas: African American Studies, American Studies, Anthropology, Asian Studies, Criminal Justice, Economics, Environmental Studies, Geography and Urban Studies, Global Studies, History, Jewish Studies, Latin American Studies, Lesbian, Gay, Bisexual, and Transgender Studies, Liberal Arts, Neuroscience (CLA), Political Science, Psychology, Sociology, Women's Studies, or any department in the College of Science and Technology.
  - A minimum GPA of 2.0, cumulatively, in all CLA/CST coursework, and in the major department.
  - Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.

- Foreign Language/Global Studies Requirements:
  - The requirements for the major in French exceed the CLA minimum for this requirement.

- Notes on Foreign Language Study
  - The third level of language is numbered 1003 in French, German, Italian, Spanish, and Portuguese and numbered 2001 in all other foreign language subjects.
  - Students are strongly encouraged to take the third level of a foreign language as it is the minimum required for election to the prestigious honor society Phi Beta Kappa. (Taking the course does not guarantee admission but not taking it guarantees exclusion.)
  - See the College of Liberal Arts Policies (p. 753) section of this Bulletin for more information on the Foreign Language Placement, Regression in Coursework, and guidelines for students' other experiences with language.

General Electives are typically one-third of a student's program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

Major Requirements: Ten courses in French (30 credits)

Prerequisites: FREN 1001, FREN 1002, and FREN 1003 with a minimum grade of C or equivalent placement.

Course levels are incremental in skills and content. Courses must be taken sequentially or in some instances may be taken concurrently. Students who initially place beyond FREN 1003 may begin with FREN 2001 or a course beyond 2001, as appropriate.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREN 2001</td>
<td>Intermediate</td>
<td>3</td>
</tr>
<tr>
<td>FREN 2041</td>
<td>Reading I</td>
<td>3</td>
</tr>
<tr>
<td>FREN 2096</td>
<td>Composition I (WI)</td>
<td>3</td>
</tr>
<tr>
<td>FREN 3096</td>
<td>Composition II (WI)</td>
<td>3</td>
</tr>
<tr>
<td>FREN 3101</td>
<td>Survey of French Literature I</td>
<td>3</td>
</tr>
<tr>
<td>FREN 3102</td>
<td>Survey of French Literature II</td>
<td>3</td>
</tr>
<tr>
<td>Two French 4000-level courses</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>One French elective numbered 2002-4999</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>
One French elective numbered 3000-4999

Total Credit Hours

**Distinction in Major**

To be considered for Distinction in Major, students must:

- Complete the requirements for the concentration in French with a GPA of at least 3.50;
- Be recommended to the chair of the department by the French faculty advisor after consultation with the French faculty;
- Have an overall GPA of at least 3.25.

**Suggested Academic Plan**

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

**Bachelor of Arts in French**

**Requirements for New Students starting in the 2015-2016 Academic Year**

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>FREN 1001</td>
<td>Introduction to French I [LA]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Term Credit Hours**

| 15 |

<table>
<thead>
<tr>
<th>Spring</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
</tr>
<tr>
<td>FREN 1002</td>
<td>Introduction to French II [LA]</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

| 16 |

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Fall</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>FREN 1003</td>
<td>Introduction to French III [LB]</td>
<td>3</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>One 0800-4999 Elective in Any School or College</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

**Term Credit Hours**

| 17 |

<table>
<thead>
<tr>
<th>Spring</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>FREN 2001</td>
<td>Intermediate</td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Elective</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 2000+ Course</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 2000+ Course</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

| 15 |

<table>
<thead>
<tr>
<th>Year 3</th>
<th>Fall</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CLA/CST 2000+ Social Science/CST Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>FREN 2041</td>
<td>Reading I</td>
<td>3</td>
</tr>
<tr>
<td>FREN 2096</td>
<td>Composition I [WI]</td>
<td>3</td>
</tr>
<tr>
<td>One 2002-4999 French Elective</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>
CLA/CST 0800-4999 Elective 3

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
</table>

**Spring**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLA/CST 2000+ Social Science/CST Course</td>
<td>3</td>
</tr>
<tr>
<td>FREN 3096 Composition II [WI]</td>
<td>3</td>
</tr>
<tr>
<td>FREN 3101 Survey of French Literature I</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Elective</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
</table>

**Year 4**

**Fall**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>One French course at the 3000 level or higher</td>
<td>3</td>
</tr>
<tr>
<td>FREN 3102 Survey of French Literature II</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Course</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Elective</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
</table>

**Spring**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>One French course at the 4000 level</td>
<td>3</td>
</tr>
<tr>
<td>One French course at the 4000 level</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Elective</td>
<td>3</td>
</tr>
<tr>
<td>One 0800-4999 Elective in Any School or College</td>
<td>3</td>
</tr>
<tr>
<td>One 0800-4999 Elective in Any School or College</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
</table>

**Total Credit Hours:** 123

## Certificate in French

### Requirements for the Special Foreign Language Certificate in French

Six courses beginning with FREN 1001, including FREN 2501 and an upper-level course (beyond FREN 2001).

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREN 1001 Introduction to French I</td>
<td>4</td>
</tr>
<tr>
<td>FREN 1002 Introduction to French II</td>
<td>4</td>
</tr>
<tr>
<td>FREN 1003 Introduction to French III</td>
<td>3</td>
</tr>
<tr>
<td>FREN 2001 Intermediate</td>
<td>3</td>
</tr>
<tr>
<td>FREN 2501 French for Business I</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3</td>
</tr>
<tr>
<td>FREN 2021 Conversation I</td>
<td></td>
</tr>
<tr>
<td>FREN 2041 Reading I</td>
<td></td>
</tr>
<tr>
<td>FREN 2096 Composition I</td>
<td></td>
</tr>
</tbody>
</table>

| Total Credit Hours | 20 |

Certificates are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

## Minor in French

### Requirements

Prerequisites: FREN 1001 with a minimum grade of C or equivalent placement.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREN 1002 Introduction to French II</td>
<td>4</td>
</tr>
<tr>
<td>FREN 1003 Introduction to French III</td>
<td>3</td>
</tr>
<tr>
<td>FREN 2001 Intermediate</td>
<td>3</td>
</tr>
</tbody>
</table>
Select a minimum of two of the following:  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREN 2021</td>
<td>Conversation I</td>
</tr>
<tr>
<td>FREN 2041</td>
<td>Reading I</td>
</tr>
<tr>
<td>FREN 2096</td>
<td>Composition I</td>
</tr>
<tr>
<td>FREN 2501</td>
<td>French for Business I</td>
</tr>
</tbody>
</table>

Select a minimum of one of the following:  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREN 3001</td>
<td>Advanced Grammar</td>
</tr>
<tr>
<td>FREN 3021</td>
<td>Conversation II</td>
</tr>
<tr>
<td>FREN 3096</td>
<td>Composition II</td>
</tr>
<tr>
<td>FREN 3101</td>
<td>Survey of French Literature I</td>
</tr>
<tr>
<td>FREN 3102</td>
<td>Survey of French Literature II</td>
</tr>
<tr>
<td>FREN 3201</td>
<td>Culture and Civilization I</td>
</tr>
</tbody>
</table>

**Total Credit Hours** 19

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

**Geography & Urban Studies**

www.cla.temple.edu/gus

Melissa Gilbert, Chair of Geography and Urban Studies  
309 Gladfelter Hall  
215-204-4429  
mgilbert@temple.edu

Gerald Stahler, Undergraduate Chair  
337 Gladfelter Hall  
(215) 204-6939  
jstahler@temple.edu

Anne Eckert, Administrator  
1008A Gladfelter Hall  
215-204–9209  
ake@temple.edu

Julia Falcon, Student Services Coordinator  
338A Gladfelter Hall  
215-204-3386  
guses@temple.edu

Max Andrucki, Internship Coordinator  
325B Gladfelter Hall  
215-204-1233  
max.andrucki@temple.edu

Tycina Cousin, Coordinator  
215-204-7692  
tcousin@temple.edu

The Geography and Urban Studies major and minor combines the discipline of geography and the field of urban studies to offer a program that emphasizes geographic theory and methods to the study of urban and regional processes and problems in the U.S. and international settings. Students in Geography and Urban Studies are equipped with the intellectual and methodological tools necessary to understand and address a wide range of environmental, economic, social, and political challenges that are central to the well-being of billions of people in an urbanizing world.

The major and minor focus on the four themes of globalization, sustainability, social justice, and geographic methods that are increasingly central to understanding and addressing global challenges. There is a resurgence of interest in geographic theory and methods that examine the complexity of human-environmental interactions; the increasing interconnectedness of the global economy, environment, culture and politics; and the importance of place/context in people’s daily lives.

Geography and Urban Studies students are introduced to urban processes, spatial relations, geospatial technologies, including GIS, and qualitative and quantitative social science research methods. In required courses and electives, students examine urban issues; the role of political institutions; policy-
making; and human interactions with the environment. The Geography and Urban Studies gateway courses are designed to develop the theoretical and methodological frameworks and tools necessary to understand the relationships among people, places, and the environment as they interact through local and global connections. The electives give students the opportunity to develop an area of emphasis around their particular interests. Students focus on an individualized research project in their Senior Research Seminar. Each student’s program is developed with a departmental advisor to suit individual interests and is designed to maximize educational and career opportunities. We encourage our students to incorporate a semester abroad and/or an internship into their plan of study.

Themes
The department has identified several informal areas of concentration to assist students in making course selections. These do not constitute formal requirements but rather provide guidelines for developing a personalized curriculum. Students can focus on the following themes:

- Globalization
- Social Justice
- Urban Sustainability
- Geographical Methods

Career Preparation
Geography and Urban Studies graduates are especially competitive in the job market because of their technical and critical thinking skills, a sense of the complexity of interactions between humans and the environment, and their ability to synthesize information at a variety of scales. Students have the opportunity to gain technical skills in spatial statistics, Geographic Information Systems (GIS), cartographic production and design, and qualitative methods that are highly valued by employers. Our graduates find employment with nonprofits (domestic and international), planning or government agencies, consulting firms, and citizens’ organizations. Many also go on to graduate programs in geography, planning, environmental studies, law and other fields. The Department of Labor expects that employment for geographers, planners and other geographic professions is expected to grow at a rate of twenty percent or more for the next decade.

Programs Offered
We offer a Bachelor of Arts and a minor in Geography and Urban Studies, and a certificate in Geographic Information Systems. Many of our students choose to complete a double major, a minor in a complementary discipline, or the GIS certificate.

Double-Counting Across Curricula Policy
Many students elect to take a combination of the Geography and Urban Studies major or minor and the Environmental Studies major or minor and/or the Environmental Science major or minor as they are complementary programs, but there are limits in terms of which courses may count for the two curricula:

The ONLY courses that can double-count between the Geography and Urban Studies and Environmental Studies majors are: GUS 3161 Spatial Statistics/ENST 3161 Spatial Statistics; GUS 2197 Research Design in Geography and Urban Studies/ENST 2097 Research Design in Environmental Studies; GUS 3062 Fundamentals of Geographic Information Systems /ENST 3062 Fundamentals of Geographic Information Systems. When used for the major in either program, these courses may not be used to fulfill the minor elective requirements of the other program.

Note GUS 4198 Senior Seminar in Geography and Urban Studies and ENST 4198 Senior Research Seminar are NOT cross-listed seminars. Anyone pursuing a double major in Geography & Urban Studies and Environmental Studies must take both capstone courses.

Gamma Theta Upsilon
We nominate students for membership in the National Honorary Society in Geography on the basis of GPA. Students, who are initiated annually, can submit articles to the GTU journal and apply for national scholarships.

Internships
We encourage students to apply their skills and knowledge in a credit-bearing internship that utilizes their academic training. Assignments at planning, social service, environmental and other agencies, as well as at firms that specialize in mapping and geographic data analysis, have helped our graduates in securing employment opportunities. The internship is complemented by a seminar in which students discuss their experiences. Contact Dr. Andrucki (max.andrucki@temple.edu) for more information on this opportunity.

Double Major with the College of Education
Students may elect to earn certification in secondary school social studies by combining a major in Geography and Urban Studies with a major in Social Studies Education. Students may also earn certification through a Geography and Urban Studies major by following the 5-year B.A./M.A. program. For more information on this opportunity, please contact the CLA Center for Academic Advising and Professional Development.
Certificates of Specialization in Travel & Tourism

Students may take a series of courses that examine the rapidly growing fields of tourism and recreation from an urban/geographical perspective.

Certificate of Specialization in the Geography of Tourism

The courses in this certification program examine all the world's culture regions and the linkages among them. Students can elect courses relevant to either domestic or international tourism. Additional courses would then be chosen to help the student acquire a sense of place as well as strategies for learning about new locations.

Certificate in the Geography of Sports, Recreation & Tourism Planning

Students in this program who are interested in urban recreation and sports can take courses related to urban social and policy issues, while those interested in outdoor/rural recreation can take courses on environmental issues. The course on geographical information systems (GIS) is particularly relevant to tourism planning.

Programs

- Bachelor of Arts in Geography and Urban Studies (p. 841)
- Certificate in Geographic Information Systems (p. 844)
- Minor in Geography and Urban Studies (p. 844)

Bachelor of Arts in Geography and Urban Studies

The objective of the Bachelor of Arts program in Geography and Urban Studies is to provide students with an understanding of:

- How space, place, and scale shape the interaction between environment and society;
- Critical thinking skills developed through examining a range of analytical approaches to investigate geographic, urban, and environmental processes;
- Contemporary explanatory frameworks in Geography and Urban Studies such as: political ecology, feminist and poststructuralist theory, and development theory;
- The application of information technology skills to analyze spatial and temporal information, processes, and patterns through integrative research experiences;
- Practical considerations of community and environmental organizational settings at the local and regional scales.

Summary of Degree Requirements

University Requirements:

- MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific courses required for this major are GUS 2197 and GUS 4198.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education (p. 143) section of the Undergraduate Bulletin for more details.

College of Liberal Arts Requirements:

- Completion of a minimum of 123 credits, including:
  - 90 credits in CLA/CST courses;
  - 45 credits of which must be at the upper level (numbered 2000-4999).
    - For Social Science majors, 6 upper level credits (numbered 2000-4999) must be taken in Humanities Subject Areas: Arabic, Chinese, English, French, German, Greek (Ancient), Greek and Roman Classics, Hebrew, Hindi, Italian, Japanese, Latin, Philosophy, Religion, Russian, and Spanish in the College of Liberal Arts, Art History in the Tyler School of Art, or any department in the College of Science and Technology.
  - A minimum GPA of 2.0, cumulatively, in CLA/CST coursework, and in the major.
  - Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.

Foreign Language/Global Studies Requirements:

- All students must complete or test out of the first and second levels of a foreign language - these courses are numbered 1001 and 1002;
- All students must complete at least one course from the GenEd Global/World Society category; and
- All Bachelor of Arts students must complete one of the following options:
  - Third semester of a foreign language;
• Demonstrated proficiency beyond the third semester in a foreign language (placement exam or certification from the language department);
• Take one Global Studies course from the list on the CLA College Graduation Requirements (p. 755) page;
• Study Abroad at an approved program; or
• Take a second General Education Global/World Society course.

• Notes on Foreign Language Study
  • The third level of language is numbered 1003 in French, German, Italian, Spanish, and Portuguese and numbered 2001 in all other foreign language subjects.
  • Students are strongly encouraged to take the third level of a foreign language as it is the minimum required for election to the prestigious honor society Phi Beta Kappa. (Taking the course does not guarantee admission but not taking it guarantees exclusion.)
  • See the College of Liberal Arts Policies (p. 753) section of this Bulletin for more information on the Foreign Language Placement, Regression in Coursework, and guidelines for students' other experiences with language.

General Electives are typically one-third of a student's program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

Major Requirements (39 credits):

Gateway Courses
GUS 2001 Cities 3
GUS 2002 Space and Place 3

Research Methods courses
GUS 2197 Research Design in Geography and Urban Studies 3
GUS 3062 Fundamentals of Geographic Information Systems 3
GUS 3161 Spatial Statistics 3

Research Methods elective
Select one of the following: 3
- GUS 3001 Images of the City in Popular Culture
- GUS 3061 Fundamentals of Cartography
- GUS 3063 Environmental Remote Sensing
- GUS 3064 Qualitative Methods
- GUS 4065 Urban Geographic Information Systems

International Course
Select one of the following: 3
- GUS 2032 Urban Systems in a Global Economy
- GUS 2073 African Development
- GUS 2074 East and South Asia
- GUS 2121 Russian Cities
- GUS 3052 Environmental Problems in Asia
- GUS 3073 Geography of Travel and Tourism
- GUS 3076 Metropolitan Tokyo
- GUS 4000 Special Topics in Geography and Urban Studies
- GUS 4021 International Urbanization
- GUS 4075 Comparative Regional Development

Geography and Urban Studies electives
Select 1 GUS course numbered 0800-4999 3
Select 4 GUS courses numbered 2000-4999 12

Capstone Course
GUS 4198 Senior Seminar in Geography and Urban Studies 3

Total Credit Hours 39

1 No electives may double-count between the Geography & Urban Studies major and either the Environmental Studies major or minor.
### Distinction in the Major

Geography and Urban Studies students can graduate with distinction if they have, at the time of graduation, a 3.5 GPA in the major and a 3.0 cumulative GPA.

### Suggested Academic Plan

**Bachelor of Arts in Geography and Urban Studies**

**Requirements for New Students starting in the 2015-2016 Academic Year**

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
</tr>
<tr>
<td></td>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Foreign Language 1001 - first level</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td>15</td>
</tr>
<tr>
<td></td>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
</tr>
<tr>
<td></td>
<td>Foreign Language 1002 - second level</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td>16</td>
</tr>
<tr>
<td>Year 2</td>
<td>Fall</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GUS 2001</td>
<td>Cities</td>
</tr>
<tr>
<td></td>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CLA/CST 0800-4999 Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Select one of the following:</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Foreign Language - third level</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Internationally Focused Course From Approved List</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td>15</td>
</tr>
<tr>
<td></td>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>GUS 2002</td>
<td>Space and Place</td>
</tr>
<tr>
<td></td>
<td>GUS 0800-4999 Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CLA/CST 0800-4999 Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td>15</td>
</tr>
<tr>
<td>Year 3</td>
<td>Fall</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GUS 2197</td>
<td>Research Design in Geography and Urban Studies [WI]</td>
</tr>
<tr>
<td></td>
<td>GUS 3062</td>
<td>Fundamentals of Geographic Information Systems</td>
</tr>
<tr>
<td></td>
<td>One International Geography &amp; Urban Studies Course From Approved List</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CLA/CST 2000+ Humanities/CST Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CLA/CST 0800-4999 Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>One 0800-4999 Elective in Any School or College</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td>17</td>
</tr>
<tr>
<td></td>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>GUS 3161</td>
<td>Spatial Statistics</td>
</tr>
<tr>
<td></td>
<td>GUS Methods Course From Approved List</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GUS 2000+ Elective</td>
<td>3</td>
</tr>
</tbody>
</table>
Certificate in Geographic Information Systems

Geographic information has become one of the lynchpins of the Information Age and this explosion in interest in Geographic Information Systems (GIS) is fueling demand for well-trained professional practitioners. The undergraduate Certificate in Geographic Information Systems will provide students with the necessary knowledge base to embark on careers as GIS professionals. Students who complete this program will be competitive for entry-level jobs in GIS and GIS-related jobs in industry, government, and non-profit organizations based on their conceptual understanding and practical skills in GIS.

The Certificate in Geographic Information Systems requires four courses (12 credits) for students in any major other than Geography and Urban Studies or Environmental Studies. This program is open to undergraduate students in any major.

Students majoring in Geography and Urban Studies or Environmental Studies may double count GUS 3161/ENST 3161 and GUS 3062/ENST 3062 for their major and the certificate. GUS and Environmental Studies majors need only two electives from the approved list below that are unique to the certificate (they cannot double-count with the major requirements).

Certificates are awarded only at the time of completion of the bachelor’s degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor’s degree.

**Required Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GUS/ENST 3161</td>
<td>Spatial Statistics</td>
<td>3</td>
</tr>
<tr>
<td>GUS/ENST 3062</td>
<td>Fundamentals of Geographic Information Systems</td>
<td>3</td>
</tr>
</tbody>
</table>

**Electives**

Select two of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>GUS/ENST 3061</td>
<td>Fundamentals of Cartography</td>
</tr>
<tr>
<td>GUS/ENST 3063</td>
<td>Environmental Remote Sensing</td>
</tr>
<tr>
<td>GUS/ENST 4061</td>
<td>Cartographic Production</td>
</tr>
<tr>
<td>GUS/ENST 4065</td>
<td>Urban Geographic Information Systems</td>
</tr>
<tr>
<td>ENST 4066</td>
<td>Environmental GIS</td>
</tr>
</tbody>
</table>

**Total Credit Hours**: 12

Minor in Geography and Urban Studies

The minor in Geography and Urban Studies is composed of 18 credits. Students are required to take one of the Gateway courses, either GUS 2001 or GUS 2002. Students also take 5 elective courses: one at any level and four at the upper level 2000+, which they can use to focus on their own particular interests.

**Requirements**

**Introductory course**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>
Select one of the following:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>GUS 2001</td>
<td>Cities</td>
</tr>
<tr>
<td>GUS 2002</td>
<td>Space and Place</td>
</tr>
</tbody>
</table>

**Electives**

15

Select one Geography & Urban Studies elective - any level

Select four Geography & Urban Studies electives numbered 2000+

**Total Credit Hours**

18

1 No electives may double-count between the Geography & Urban Studies minor and the Environmental Studies major or minor.

2 One cognate course can substitute for an elective with written permission from the faculty advisor.

---

**German**

532 Anderson Hall  
215-204-1760  
www.cla.temple.edu/fgis

Louis Mangione, Chair  
537 Anderson Hall  
215-204-8247  
mangione@temple.edu

Anthony Waskie, Faculty Advisor  
215-204–5452  
awaskie@temple.edu

Michelle Pugliese, Administrator  
429 Anderson Hall  
215-204-5628  
pugliese@temple.edu

German is a major world language spoken in Germany, Austria, and Switzerland, as well as in some communities in the United States. Whether you are interested in literature, music, theater, film, or art, German culture is a rich and exciting tradition. Temple’s German program provides broad linguistic, cultural, and practical experiences to prepare students to participate meaningfully in the German-speaking world.

The German major and minor help students achieve their learning goals, whether they want to go on to use German to communicate with friends in Germany, Austria, or Switzerland; to engage in business with German partners; to work in government or in the media; or to participate in German culture. They develop skills in reading, writing, and oral communication while acquiring a rich understanding of the literature, cinema, history and culture of the German-speaking world.

Students who study German at Temple find that the program prepares them to do well in whatever they choose upon graduation; the German major is a good preparation for a career that requires analytical thinking and communication skills in general, which includes the domains of education, business, government service, travel, and tourism. It is a good major or second major for students planning to attend law school or medical school. Studies have shown that learning a foreign language helps raise scores on the LSAT, GRE, and MCAT examinations. This course of study also proves valuable to anyone who plans to work for a multinational corporation.

The German courses are often small, allowing students to get to know one another and their professors well. The program helps prepare students enrolled in the Fox School of Business and Management to acquire a special language certificate including a special course on German in the business world. Outside of class, students can share conversations and activities informally or with the Temple University German Society.

**Study Abroad**

Students declaring a major or minor in the department are strongly encouraged to study abroad. Temple University has programs at the universities of Hamburg, Tübingen, and Leipzig in Germany. Courses completed in these programs may be credited toward the German major or minor and in partial satisfaction of the CLA Global Studies requirement.

Students interested in Study Abroad should discuss their plans with the faculty advisor in German early in their academic program.

**Programs**

- Bachelor of Arts in German (p. 846)
- Certificate in German (p. 848)
Bachelor of Arts in German

Summary of Degree Requirements

University Requirements:

• MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
• All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific courses required for this major are GER 3096 and GER 4296.
• Students must complete requirements of the General Education (GenEd) Program. See the General Education section (p. 143) of the Undergraduate Bulletin for more details.

College of Liberal Arts Requirements:

• Completion of a minimum of 123 credits, including:
  • 90 credits in CLA/CST courses;
  • 45 credits of which must be at the upper level (numbered 2000-4999).
  • For Humanities majors, 6 upper level credits must be earned in the Social Science and interdisciplinary subject areas: African American Studies, American Studies, Anthropology, Asian Studies, Criminal Justice, Economics, Environmental Studies, Geography and Urban Studies, Global Studies, History, Jewish Studies, Latin American Studies, Lesbian, Gay, Bisexual, and Transgender Studies, Liberal Arts, Neuroscience (CLA), Political Science, Psychology, Sociology, Women's Studies, or any department in the College of Science and Technology.
  • A minimum GPA of 2.0, cumulatively, in all CLA/CST coursework, and in the major department.
  • Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.
• Foreign Language/Global Studies Requirements:
  • The language requirements of the German major exceed the minimum College of Liberal Arts requirements; no additional coursework is necessary for this requirement.
  • Notes on Foreign Language Study
    • The third level of language is numbered 1003 in French, German, Italian, Spanish, and Portuguese and numbered 2001 in all other foreign language subjects.
    • Students are strongly encouraged to take the third level of a foreign language as it is the minimum required for election to the prestigious honor society Phi Beta Kappa. (Taking the course does not guarantee admission but not taking it guarantees exclusion.)
    • See the College of Liberal Arts Policies (p. 753) section of this Bulletin for more information on the Foreign Language Placement, Regression in Coursework, and guidelines for students' other experiences with language.

General Electives are typically one-third of a student's program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

Major Requirements: Ten courses in German (30 credits/10 Courses)

Prerequisites: GER 1001 and GER 1002, with a minimum grade of C or equivalent placement.

Course levels are incremental in skills and content. Courses must be taken sequentially or in some instances may be taken concurrently. Students who initially place beyond GER 1003 may begin with GER 2001 or at the 2000-level, as appropriate.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GER 1003</td>
<td>Introduction to German III ^</td>
<td>3</td>
</tr>
<tr>
<td>GER 2001</td>
<td>Intermediate ^</td>
<td>3</td>
</tr>
<tr>
<td>GER 3096</td>
<td>Composition I ^</td>
<td>3</td>
</tr>
<tr>
<td>GER 3201</td>
<td>Culture and Civilization I</td>
<td>3</td>
</tr>
<tr>
<td>GER 4296</td>
<td>Composition II</td>
<td>3</td>
</tr>
<tr>
<td>Select five German electives from 2000-, 3000-, and 4000-level courses (in addition to those noted above). ^</td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

Total Credit Hours 30

^ Students who place out of GER 1003 will need one additional elective; those who place out of GER 2001 will need two additional electives.

Indicates writing capstone for the major.
Up to two upper-level courses outside of the department will count as electives if they relate to the major as approved in writing by the department advisor.

**Distinction in Major**

To be considered for Distinction in the German Major, students must:

- Complete the requirements for the concentration in German with a GPA of at least 3.50;
- Have an overall GPA of at least 3.25;
- Be recommended to the chair of the department by the German faculty advisor after consultation with the German department faculty.

**Suggested Academic Plan**

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

**Bachelor of Arts in German**

**Requirements for New Students starting in the 2015-2016 Academic Year**

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
</tr>
<tr>
<td>GER 1001</td>
<td>Introduction to German I [LA]</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>15</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
</tr>
<tr>
<td>GER 1002</td>
<td>Introduction to German II [LA]</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>16</td>
</tr>
<tr>
<td><strong>Year 2</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>GER 1003</td>
<td>Introduction to German III [LB]</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Elective</td>
<td>3</td>
</tr>
<tr>
<td>One 0800-4999 Elective in Any School or College</td>
<td>2</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>17</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>One 0800-4999 Elective in Any School or College</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 2000+ Course</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 2000+ Course</td>
<td>3</td>
</tr>
<tr>
<td>GER 2001</td>
<td>Intermediate</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>15</td>
</tr>
<tr>
<td><strong>Year 3</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>CLA/CST 2000+ Social Science/CST Course</td>
<td>3</td>
</tr>
<tr>
<td>GER 3096</td>
<td>Composition I [WI]</td>
</tr>
<tr>
<td>One 2000+ German Elective</td>
<td>3</td>
</tr>
<tr>
<td>One 2000+ German Elective</td>
<td>3</td>
</tr>
</tbody>
</table>
CLA/CST 0800-4999 Elective  

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
</table>

**Spring**  
CLA/CST 2000+ Social Science/CST Course  
GER 3201  
One 2000+ German Elective  
One 2000+ German Elective  
CLA/CST 0800-4999 Elective  

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
</table>

**Year 4**  
**Fall**  
One 2000+ German Elective  
CLA/CST 2000+ Course  
CLA/CST 2000+ Course  
CLA/CST 0800-4999 Elective  
CLA/CST 0800-4999 Elective  

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
</table>

**Spring**  
GER 4296  
CLA/CST 0800-4999 Elective  
CLA/CST 0800-4999 Elective  
CLA/CST 0800-4999 Elective  
One 0800-4999 Elective in Any School or College  

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
</table>

**Total Credit Hours:** 123

**Certificate in German**

**Requirements for the Special Foreign Language Certificate in German**

| GER 1001 | Introduction to German I | 4 |
| GER 1002 | Introduction to German II | 4 |
| GER 1003 | Introduction to German III | 3 |
| GER 2001 | Intermediate | 3 |
| GER 2501 | German for Business I | 3 |

Select one from:  
| GER 3096 | Composition I | 3 |
| GER 3201 | Culture and Civilization I | 3 |

**Total Credit Hours:** 20

Certificates are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

**Minor in German**

**Requirements**

Prerequisites: GER 1001 or equivalent placement with a minimum grade of C.

| GER 1002 | Introduction to German II ¹ | 4 |
| GER 1003 | Introduction to German III | 3 |
| GER 2001 | Intermediate | 3 |
| GER 3096 | Composition I ² | 3 |
| GER 3201 | Culture and Civilization I | 3 |
Select one German Elective from 2000-, 3000-, and 4000-level courses  

| Credit Hours | 3 |

Students who place out of GER 1002 will meet the requirement for the minor with 18 credits.

Indicates writing capstone

Note: Up to two upper-level courses outside of the department will count as electives if they relate to the major and are approved by the faculty advisor in German.

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Global Studies

www.cla.temple.edu/globalstudies/

Mark Pollack, Program Director
4th Floor Gladfelter Hall
mark.pollack@temple.edu

Danielle Scherer, Advisor
4th Floor, Gladfelter Hall
danielle.scherer@temple.edu

Jessica Brennan, Administrator
208 Gladfelter Hall
215-204-7577

Students gain advanced knowledge about international cultures and perspectives as well as essential skills like critical thinking and effective communication that are prized by every professional industry.

Foreign language proficiency and study abroad experience will also make Global Studies graduates attractive job candidates in a variety of industries, including business, civil service, government, education, law, medicine and health.

The Global Studies curriculum includes courses from a number of liberal arts disciplines, all focused on how societies interact with one another in a variety of contexts.

A bachelor's degree in Global Studies prepares students to:

• Understand complex global problems using tools from multiple disciplines, including economic analysis, social science and historical methods.
• Communicate ideas about global issues effectively, through written work, oral expression and digital communication tools.
• Look beyond local and national boundaries to see themselves as part of a global network, the sustainability of which requires ethical and moral forthrightness.
• Experience other cultures, by studying a world language and participating in a regional enrichment experience such as study abroad.
• Thrive professionally in a variety of careers in an increasingly global marketplace.

Careers

Students with a degree in Global Studies thrive in a variety of industries, including local and national government, advocacy, policy development, the business sector and diplomacy.

Programs

• Bachelor of Arts in Global Studies (p. 849)
• Minor in Global Studies (p. 857)

Bachelor of Arts in Global Studies

We live in a time of ever-faster global integration. People, goods, services, and ideas now move with astonishing speed across national boundaries. Many of the major issues that shape our lives are global in scope: war and terrorism, climate change, migration, human rights, public health, economic growth and decline, religion and ideologies, fashion and music, media and technology. This interdisciplinary program invites students to reach across disciplines and learn from a wide array of knowledge and methods in order to be better prepared for a global world.
The Global Studies curriculum offers a foundation through a set of four introductory courses, as well as specialization in one of three concentrations: Global Security, Global Economy, and Global Cultures. The introductory courses will prepare you for the concentrations by studying alternative disciplinary and problem-based approaches to global studies. Within this general framework, the three concentrations will allow the students to identify a specialized program of study drawing from a structured set of concentration-specific requirements and electives, culminating in a research-based and writing-intensive capstone seminar.

In order to develop a world perspective, students in Global Studies will take two full years (through 4th semester) of a foreign language and will either participate in an approved study abroad program or take additional area studies courses. Students will work with their advisor and the Education Abroad office to identify the best fit with their language skills, disciplinary interests, career plans, and financial capabilities.

**Career Potential**

Global Studies is not a major with a limiting, predefined career destination. Today, a large and growing number of careers can and do feature international or global components. The major in Global Studies will offer students a broad but rigorous course of study that will combine the development of a sophisticated understanding of global changes, cultures, and perspectives while building critical analytical, communication, and intellectual skills they will need in any professional career.

This major is an obvious choice for students aiming specifically for an international career in government, business, or the non-profit sector, and its interdisciplinary and multidisciplinary nature will provide an appropriate foundation for work or graduate study in any field affected by global change.

**Summary of Degree Requirements**

**University Requirements:**

- MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific courses required for this major are GBST 2096 and GBST 4096.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education (p. 143) section of the Undergraduate Bulletin for more details.

**College of Liberal Arts Requirements:**

- Completion of a minimum of 123 credits, including:
  - 90 credits in CLA/CST courses;
  - 45 credits of which must be at the upper level (numbered 2000-4999).
  - For Social Science majors, 6 upper level credits (numbered 2000-4999) must be taken in Humanities Subject Areas: Arabic, Chinese, English, French, German, Greek (Ancient), Greek and Roman Classics, Hebrew, Hindi, Italian, Japanese, Latin, Philosophy, Religion, Russian, and Spanish in the College of Liberal Arts, Art History in the Tyler School of Art, or any department in the College of Science and Technology.
  - A minimum GPA of 2.0, cumulatively, in CLA/CST coursework, and in the major.
  - Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.
  - Foreign Language/Global Studies Requirements:
    - Global Studies majors are required to complete the fourth level of a foreign language, which exceeds the CLA minimum requirement. No additional coursework is required.
    - Notes on Foreign Language Study
      - The third level of language is numbered 1003 in French, German, Italian, Spanish, and Portuguese and numbered 2001 in all other foreign language subjects.
      - Students are strongly encouraged to take the third level of a foreign language as it is the minimum required for election to the prestigious honor society Phi Beta Kappa. (Taking the course does not guarantee admission but not taking it guarantees exclusion.)
      - See the College of Liberal Arts Policies (p. 753) section of this Bulletin for more information on the Foreign Language Placement, Regression in Coursework, and guidelines for students' other experiences with language.

**General Electives** are typically one-third of a student’s program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

**Major Requirements (33-55 credits - varies according to foreign language placement and regional enrichment options):**

**Foundation courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GBST 2096</td>
<td>Introduction to Global Studies</td>
<td>3</td>
</tr>
<tr>
<td>POLS 1301</td>
<td>International Politics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1101</td>
<td>Macroeconomic Principles</td>
<td>3</td>
</tr>
</tbody>
</table>
**Concentration Requirements**

Select a concentration and choose 6 courses from its list (below):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 2819</td>
<td>Global Connections</td>
<td>3</td>
</tr>
</tbody>
</table>

- **Global Security Concentration**
- **Global Economy Concentration**
- **Global Cultures Concentration**

**Senior Capstone Seminar**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GBST 4096</td>
<td>Capstone Seminar in Global Studies</td>
<td>3</td>
</tr>
</tbody>
</table>

**Regional Enrichment**

Select one of the following:

- Study abroad at a TU-approved program
- Two area studies courses from one region as outlined below:

**Africa and the Middle East**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAS 2201</td>
<td>African Civilization</td>
<td></td>
</tr>
<tr>
<td>ARBC 2012</td>
<td>Modern Arabic Literature in Translation</td>
<td></td>
</tr>
<tr>
<td>ARBC 2021</td>
<td>Contemporary Arab Society in Film (in Translation)</td>
<td></td>
</tr>
<tr>
<td>GUS 2073</td>
<td>African Development</td>
<td></td>
</tr>
<tr>
<td>HEBR 3711</td>
<td>Israelis and Palestinians</td>
<td></td>
</tr>
<tr>
<td>HIST 1501</td>
<td>Third World History</td>
<td></td>
</tr>
<tr>
<td>HIST 2511</td>
<td>Introduction to African History</td>
<td></td>
</tr>
<tr>
<td>HIST 2513</td>
<td>Cold War Africa</td>
<td></td>
</tr>
<tr>
<td>HIST 2516</td>
<td>Modern Islamic History</td>
<td></td>
</tr>
<tr>
<td>HIST 2702</td>
<td>Imperialism, Race, and Empire</td>
<td></td>
</tr>
<tr>
<td>HIST 2703</td>
<td>African Diaspora</td>
<td></td>
</tr>
<tr>
<td>HIST 3511</td>
<td>Southern Africa: A History</td>
<td></td>
</tr>
<tr>
<td>HIST 3531</td>
<td>Modern India</td>
<td></td>
</tr>
<tr>
<td>HIST 3571</td>
<td>Israel: History, Politics and Society</td>
<td></td>
</tr>
<tr>
<td>HIST 3572</td>
<td>Modern Middle East</td>
<td></td>
</tr>
<tr>
<td>HIST 3751</td>
<td>Colonialism and Decolonization</td>
<td></td>
</tr>
<tr>
<td>POLS 3241</td>
<td>Mideast Politics</td>
<td></td>
</tr>
<tr>
<td>SOC 3231</td>
<td>Jerusalem: The Politics of Space</td>
<td></td>
</tr>
</tbody>
</table>

**Asia**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 2367</td>
<td>Peoples of South Asia</td>
<td></td>
</tr>
<tr>
<td>ASST 1052</td>
<td>Modern Asia</td>
<td></td>
</tr>
<tr>
<td>ASST 2001</td>
<td>Practical Asian Society and Culture</td>
<td></td>
</tr>
<tr>
<td>ASST 2367</td>
<td>South Asia: Peoples, Culture, Experiences</td>
<td></td>
</tr>
<tr>
<td>CHI 2013</td>
<td>Modern and Contemporary Chinese Literature in Translation</td>
<td></td>
</tr>
<tr>
<td>CHI 2022</td>
<td>Contemporary Chinese Urban Film and Fiction in Translation</td>
<td></td>
</tr>
<tr>
<td>GUS 2074</td>
<td>East and South Asia</td>
<td></td>
</tr>
<tr>
<td>GUS 3052</td>
<td>Environmental Problems in Asia</td>
<td></td>
</tr>
<tr>
<td>HIST 1501</td>
<td>Third World History</td>
<td></td>
</tr>
<tr>
<td>HIST 2217</td>
<td>Vietnam War</td>
<td></td>
</tr>
<tr>
<td>HIST 2501</td>
<td>Introduction to East Asia: China</td>
<td></td>
</tr>
<tr>
<td>HIST 2502</td>
<td>Introduction to East Asia: Japan</td>
<td></td>
</tr>
<tr>
<td>HIST 2503</td>
<td>Introduction to Southeast Asia: Insular</td>
<td></td>
</tr>
<tr>
<td>HIST 2504</td>
<td>Introduction to Southeast Asia: Mainland</td>
<td></td>
</tr>
<tr>
<td>HIST 2516</td>
<td>Modern Islamic History</td>
<td></td>
</tr>
<tr>
<td>HIST 2702</td>
<td>Imperialism, Race, and Empire</td>
<td></td>
</tr>
<tr>
<td>HIST 3521</td>
<td>The Chinese Revolution</td>
<td></td>
</tr>
<tr>
<td>HIST 3522</td>
<td>Contemporary China</td>
<td></td>
</tr>
<tr>
<td>HIST 3531</td>
<td>Modern India</td>
<td></td>
</tr>
<tr>
<td>HIST 3551</td>
<td>History of Vietnam</td>
<td></td>
</tr>
</tbody>
</table>
### Global Security Concentration (6 courses)

The quest for security, and the seemingly endless recurrence of interstate war are fundamental features of an anarchical world of sovereign states. Historically, this led students of security to focus on state power, military strategy, geopolitics, diplomacy and conflict in the international arena. In the 21st century, interstate wars have been joined by both increasingly destructive civil wars within countries, and by international and global terrorism perpetrated by non-state actors. In this concentration, students will draw on disciplines as diverse as history, political science, anthropology, geography and criminal justice to understand the causes of war, the security strategies of states, and the rise of new and challenging security threats in the 21st century.

**Gateway 1**

Select one of the following: 3
- POLS 2311 Post-Cold War Security
- POLS 2341 U.S. Foreign Policy

**Gateway 2**

Select one of the following: 3
- HIST 2304 20th Century Europe: A Continent in Crisis
- HIST 3229 Superpower America

### Foreign Language

Fourth-semester proficiency in one foreign language

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-16</td>
</tr>
</tbody>
</table>

### Total Credit Hours

33-55
Select four additional courses from the following options:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 3337</td>
<td>Violence, War, and Revolution</td>
</tr>
<tr>
<td>ANTH 3366</td>
<td>Violence: An Anthropological Approach</td>
</tr>
<tr>
<td>CJ 3403</td>
<td>Organized Crime</td>
</tr>
<tr>
<td>CJ 3405</td>
<td>Terrorism, Transnational Crime and Global Security</td>
</tr>
<tr>
<td>GUS 4051</td>
<td>Geography of Hazards ¹</td>
</tr>
<tr>
<td>GUS 4071</td>
<td>Medical Geography ¹</td>
</tr>
<tr>
<td>HIST 2217</td>
<td>Vietnam War</td>
</tr>
<tr>
<td>HIST 2304</td>
<td>20th Century Europe: A Continent in Crisis</td>
</tr>
<tr>
<td>HIST 2307</td>
<td>Europe Divided and United, 1939-1995</td>
</tr>
<tr>
<td>HIST 2317</td>
<td>Central Europe Through Wars and Revolution, 1848-1989</td>
</tr>
<tr>
<td>HIST 2513</td>
<td>Cold War Africa</td>
</tr>
<tr>
<td>HIST 2702</td>
<td>Imperialism, Race, and Empire</td>
</tr>
<tr>
<td>HIST 2804</td>
<td>Peace, Conflict, and Social Change</td>
</tr>
<tr>
<td>HIST 2811</td>
<td>World War I</td>
</tr>
<tr>
<td>HIST 2812</td>
<td>World War II</td>
</tr>
<tr>
<td>HIST 2817</td>
<td>Gender, War, and Society</td>
</tr>
<tr>
<td>HIST 3228</td>
<td>America's Rise to Globalism</td>
</tr>
<tr>
<td>HIST 3229</td>
<td>Superpower America</td>
</tr>
<tr>
<td>HIST 3433</td>
<td>Blood and Iron: 19th Century European Diplomacy</td>
</tr>
<tr>
<td>HIST 3572</td>
<td>Modern Middle East</td>
</tr>
<tr>
<td>POLS 2301</td>
<td>Theories of War and Peace</td>
</tr>
<tr>
<td>POLS 2311</td>
<td>Post-Cold War Security</td>
</tr>
<tr>
<td>POLS 2321</td>
<td>Politics of the Global Economy</td>
</tr>
<tr>
<td>POLS 2331</td>
<td>International Organization</td>
</tr>
<tr>
<td>POLS 2341</td>
<td>U.S. Foreign Policy</td>
</tr>
<tr>
<td>POLS 3332</td>
<td>Globalization: Politics and Political Economy ¹</td>
</tr>
</tbody>
</table>

¹ These courses require prerequisites beyond those covered in the Global Studies Foundation courses; students wishing to take these courses should plan accordingly.

**Global Economy Concentration (6 courses)**

Economic globalization is one of the defining features of the contemporary world. This concentration introduces students to fundamental features of the global economy from multiple disciplinary perspectives, including in the areas of trade, finance, and development. It studies the origins and consequences of globalization for development and growth, income and poverty, literacy and health, as well as political, demographic, environmental, and cultural changes. Students examine the evolution of cooperation among states in managing the global economy, and the role of history, politics, and technology in shaping international, national, and local relations.

**Gateway 1**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 1102</td>
<td>Microeconomic Principles ¹</td>
</tr>
</tbody>
</table>

**Gateway 2**

Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 3547</td>
<td>Economics of Development and Growth ²</td>
</tr>
<tr>
<td>ECON 3563</td>
<td>International Trade ²</td>
</tr>
<tr>
<td>ECON 3564</td>
<td>International Monetary Economics ²</td>
</tr>
</tbody>
</table>

**Gateway 3**

Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>GUS 2032</td>
<td>Urban Systems in a Global Economy</td>
</tr>
<tr>
<td>POLS 2321</td>
<td>Politics of the Global Economy</td>
</tr>
</tbody>
</table>

**Electives**

Select 3 additional courses from the following options:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 3327</td>
<td>Globalization and Localization</td>
</tr>
<tr>
<td>ECON 3547</td>
<td>Economics of Development and Growth ²</td>
</tr>
<tr>
<td>ECON 3563</td>
<td>International Trade ²</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
</tr>
<tr>
<td>------------</td>
<td>----------------------------------------------</td>
</tr>
<tr>
<td>ECON 3564</td>
<td>International Monetary Economics</td>
</tr>
<tr>
<td>GUS 2031</td>
<td>Economic Geography</td>
</tr>
<tr>
<td>GUS 2032</td>
<td>Urban Systems in a Global Economy</td>
</tr>
<tr>
<td>GUS 2073</td>
<td>African Development</td>
</tr>
<tr>
<td>GUS 3073</td>
<td>Geography of Travel and Tourism</td>
</tr>
<tr>
<td>GUS 3097</td>
<td>Environment &amp; Development</td>
</tr>
<tr>
<td>GUS 4021</td>
<td>International Urbanization</td>
</tr>
<tr>
<td>HIST 3811</td>
<td>World Economy Since 1945</td>
</tr>
<tr>
<td>POLS 2201</td>
<td>Comparative Politics: Developing Nations</td>
</tr>
<tr>
<td>POLS 2321</td>
<td>Politics of the Global Economy</td>
</tr>
<tr>
<td>POLS 3296</td>
<td>Politics of Modern Capitalism</td>
</tr>
<tr>
<td>POLS 3332</td>
<td>Globalization: Politics and Political Economy</td>
</tr>
<tr>
<td>SOC 3219</td>
<td>Globalization: Causes, Promises and Discontents</td>
</tr>
<tr>
<td>SOC 3221</td>
<td>Global Development</td>
</tr>
<tr>
<td>SOC 3521</td>
<td>Global Health</td>
</tr>
</tbody>
</table>

1 ECON 1102 is, together with ECON 1101 (a Foundation course for all Global Studies majors), the basic requirement for all upper-division Economics courses. Both courses should therefore be taken as soon as possible in the course sequence for all students in the Global Economy concentration.

2 These courses require prerequisites beyond those covered in the Global Studies Foundation courses; students wishing to take these courses should plan accordingly.

### Global Cultures Concentration (6 courses)

The Global Cultures concentration studies cultural formation, cultural change, and cultural interaction among peoples across the world. "Culture" is defined as learned systems of values, beliefs, and practices that bind a group of people together and give common meaning to their lived experiences. These groups can be local, regional, national or international; they are shaped by various structures of power and are continuously migrating. Students in the Global Cultures concentration will examine the interaction of global and local cultures and study aspects of cultural circulation, transaction, and mobility through courses in Literature, Film, Religion, History, Anthropology, and Sociology.

#### Gateway courses

Select two of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 2396</td>
<td>Fundamentals of Cultural Anthropology</td>
</tr>
<tr>
<td>ENG 2601</td>
<td>Introduction to Postcolonial Literatures</td>
</tr>
<tr>
<td>HIST 2702</td>
<td>Imperialism, Race, and Empire</td>
</tr>
<tr>
<td>REL 1001</td>
<td>Religion and Society</td>
</tr>
<tr>
<td>SOC 3219</td>
<td>Globalization: Causes, Promises and Discontents</td>
</tr>
</tbody>
</table>

#### Electives

Select four of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAS 2201</td>
<td>African Civilization</td>
</tr>
<tr>
<td>AAS 3215</td>
<td>Languages and Cultures of West Africa</td>
</tr>
<tr>
<td>ANTH 2396</td>
<td>Fundamentals of Cultural Anthropology</td>
</tr>
<tr>
<td>ANTH 3327</td>
<td>Globalization and Localization</td>
</tr>
<tr>
<td>ANTH 3331</td>
<td>Anthropology and Culture Change</td>
</tr>
<tr>
<td>ANTH 3333</td>
<td>The Anthropology of Tourism</td>
</tr>
<tr>
<td>ARBC 2012</td>
<td>Modern Arabic Literature in Translation</td>
</tr>
<tr>
<td>ARBC 2021</td>
<td>Contemporary Arab Society in Film (in Translation)</td>
</tr>
<tr>
<td>ASST 1052</td>
<td>Modern Asia</td>
</tr>
<tr>
<td>ASST 2001</td>
<td>Practical Asian Society and Culture</td>
</tr>
<tr>
<td>ASST 2107</td>
<td>Asian American Experiences</td>
</tr>
<tr>
<td>ASST 2367</td>
<td>South Asia: Peoples, Culture, Experiences</td>
</tr>
<tr>
<td>ENG 2512</td>
<td>The Modern Novel</td>
</tr>
<tr>
<td>ENG 2601</td>
<td>Introduction to Postcolonial Literatures</td>
</tr>
<tr>
<td>ENG 2712</td>
<td>International Film</td>
</tr>
<tr>
<td>ENG 3513</td>
<td>Modern World Fiction</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
</tr>
<tr>
<td>------------</td>
<td>------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>ENG 3522</td>
<td>Contemporary World Fiction in English 1</td>
</tr>
<tr>
<td>ENG 3610</td>
<td>Topics in Postcolonial Literature 1</td>
</tr>
<tr>
<td>ENG 3611</td>
<td>Postcolonial Theory</td>
</tr>
<tr>
<td>GUS 3001</td>
<td>Images of the City in Popular Culture</td>
</tr>
<tr>
<td>GUS 3307</td>
<td>Transportation &amp; Culture</td>
</tr>
<tr>
<td>HIST 2513</td>
<td>Cold War Africa</td>
</tr>
<tr>
<td>HIST 2515</td>
<td>Civilization and Modernity in the Caribbean</td>
</tr>
<tr>
<td>HIST 2516</td>
<td>Modern Islamic History</td>
</tr>
<tr>
<td>HIST 2611</td>
<td>Third World Issues through Film</td>
</tr>
<tr>
<td>HIST 2702</td>
<td>Imperialism, Race, and Empire</td>
</tr>
<tr>
<td>HIST 2703</td>
<td>African Diaspora</td>
</tr>
<tr>
<td>HIST 2705</td>
<td>Anti-Semitism/Holocaust/Racism</td>
</tr>
<tr>
<td>HIST 2816</td>
<td>Gender, Class, Nation</td>
</tr>
<tr>
<td>HIST 2817</td>
<td>Gender, War, and Society</td>
</tr>
<tr>
<td>HIST 2818</td>
<td>American Icons</td>
</tr>
<tr>
<td>HIST 3431</td>
<td>Women's Lives in Modern Europe</td>
</tr>
<tr>
<td>HIST 3564</td>
<td>Caliban's World: Cultural Politics in the 20th Century Americas</td>
</tr>
<tr>
<td>HIST 3572</td>
<td>Modern Middle East</td>
</tr>
<tr>
<td>HIST 3711</td>
<td>The City in History</td>
</tr>
<tr>
<td>LAS 1001</td>
<td>Perspectives on Latin America</td>
</tr>
<tr>
<td>LAS 2101</td>
<td>Latin America through Film and Fiction</td>
</tr>
<tr>
<td>LAS 3602</td>
<td>Caribbean Literature and Culture</td>
</tr>
<tr>
<td>REL 1001</td>
<td>Religion and Society</td>
</tr>
<tr>
<td>REL 2001</td>
<td>Women in Religion and Society</td>
</tr>
<tr>
<td>REL 2101</td>
<td>Indian Philosophies and Religions</td>
</tr>
<tr>
<td>REL 2102</td>
<td>Introduction to Buddhism</td>
</tr>
<tr>
<td>REL 2596</td>
<td>What Is Christianity?</td>
</tr>
<tr>
<td>REL 2606</td>
<td>Introduction to Islam</td>
</tr>
<tr>
<td>REL 2702</td>
<td>Religion in Contemporary Africa</td>
</tr>
<tr>
<td>REL 3011</td>
<td>Monks, Masters, and Magicians: Religion in Premodern Chinese Literature</td>
</tr>
<tr>
<td>REL 3101</td>
<td>Yoga &amp; Tantric Mysticism</td>
</tr>
<tr>
<td>REL 3701</td>
<td>Traditional Religions of Africa</td>
</tr>
<tr>
<td>REL 3702</td>
<td>African Religions and New World Culture</td>
</tr>
<tr>
<td>PHIL 4278</td>
<td>Philosophy of Culture</td>
</tr>
<tr>
<td>SOC 3209</td>
<td>Immigrant America: Belonging and Integration</td>
</tr>
<tr>
<td>SOC 3221</td>
<td>Global Development</td>
</tr>
<tr>
<td>SOC 3245</td>
<td>Comparative Family Studies</td>
</tr>
<tr>
<td>SOC 3267</td>
<td>Sociology of Music: Nation, Race, Class and Gender in Argentina and Brazil</td>
</tr>
<tr>
<td>SOC 3546</td>
<td>Sexuality and Gender</td>
</tr>
</tbody>
</table>

1 These courses require prerequisites beyond those covered in the Global Studies Foundation courses; students wishing to take these courses should plan accordingly.

**Suggested Academic Plan**

**Bachelor of Arts in Global Studies**

**Requirements for New Students starting in the 2015-2016 Academic Year**

**Year 1**

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Foreign Language 1001 - first level</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>---------------------</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>15</td>
<td></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1101</td>
<td>Macroeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>Foreign Language - second level</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>POLS 1301</td>
<td>International Politics</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>16</td>
<td></td>
</tr>
<tr>
<td><strong>Year 2</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>Foreign Language - third level</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GBST 2096</td>
<td>Introduction to Global Studies [WI]</td>
<td>3</td>
</tr>
<tr>
<td>CLA 2000+ Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>15</td>
<td></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIST 2819</td>
<td>Global Connections</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Foreign Language - fourth level</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>15</td>
<td></td>
</tr>
<tr>
<td><strong>Year 3</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Global Studies Concentration 2000+ Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Global Studies Concentration 2000+ Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CLA/CST 2000+ Humanities/CST Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>One 0800-4999 Elective in Any School or College</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Global Studies Concentration Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>17</td>
<td></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Global Studies Area Requirement¹</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Global Studies Area Requirement¹</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CLA/CST 2000+ Humanities/CST Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CLA 2000+ Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>15</td>
<td></td>
</tr>
<tr>
<td><strong>Year 4</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Global Studies Concentration 2000+ Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Global Studies Concentration 2000+ Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CLA 2000+ Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CLA 2000+ Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>One 0800-4999 Elective in Any School or College</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>15</td>
<td></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GBST 4096</td>
<td>Capstone Seminar in Global Studies [WI]</td>
<td>3</td>
</tr>
<tr>
<td>Global Studies Concentration Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CLA 2000+ Elective</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>
Terms Credit Hours: 15
Total Credit Hours: 123

Students are encouraged to study abroad, but if not possible, can replace with the area studies requirements as noted in this grid.

**Minor in Global Studies**

Students interested in enhancing their degree program with a firm grounding in the understanding of globalization and its impact on national and international security, the globalized economy, and global cultures may opt to declare a minor in Global Studies. The minor includes the primary features of the major coursework, without the requirements for foreign language and regional enrichment.

**Requirements**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GBST 2096</td>
<td>Introduction to Global Studies</td>
<td>3</td>
</tr>
<tr>
<td>POLS 1301</td>
<td>International Politics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1101</td>
<td>Macroeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>HIST 2819</td>
<td>Global Connections</td>
<td>3</td>
</tr>
</tbody>
</table>

Select three courses from one of the following Global Studies tracks (see course lists below):

- Global Security track
- Global Economy track
- Global Cultures track

**Total Credit Hours:** 21

**Global Security**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 3337</td>
<td>Violence, War, and Revolution</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 3366</td>
<td>Violence: An Anthropological Approach</td>
<td>3</td>
</tr>
<tr>
<td>CJ 3403</td>
<td>Organized Crime</td>
<td>3</td>
</tr>
<tr>
<td>CJ 3405</td>
<td>Terrorism, Transnational Crime and Global Security</td>
<td>3</td>
</tr>
<tr>
<td>GUS 4051</td>
<td>Geography of Hazards</td>
<td>3</td>
</tr>
<tr>
<td>GUS 4071</td>
<td>Medical Geography</td>
<td>3</td>
</tr>
<tr>
<td>HIST 2217</td>
<td>Vietnam War</td>
<td>3</td>
</tr>
<tr>
<td>HIST 2304</td>
<td>20th Century Europe: A Continent in Crisis</td>
<td>3</td>
</tr>
<tr>
<td>HIST 2307</td>
<td>Europe Divided and United, 1939-1995</td>
<td>3</td>
</tr>
<tr>
<td>HIST 2317</td>
<td>Central Europe Through Wars and Revolution, 1848-1989</td>
<td>3</td>
</tr>
<tr>
<td>HIST 2513</td>
<td>Cold War Africa</td>
<td>3</td>
</tr>
<tr>
<td>HIST 2702</td>
<td>Imperialism, Race, and Empire</td>
<td>3</td>
</tr>
<tr>
<td>HIST 2804</td>
<td>Peace, Conflict, and Social Change</td>
<td>3</td>
</tr>
<tr>
<td>HIST 2811</td>
<td>World War I</td>
<td>3</td>
</tr>
<tr>
<td>HIST 2812</td>
<td>World War II</td>
<td>3</td>
</tr>
<tr>
<td>HIST 2817</td>
<td>Gender, War, and Society</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3228</td>
<td>America's Rise to Globalism</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3229</td>
<td>Superpower America</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3433</td>
<td>Blood and Iron: 19th Century European Diplomacy</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3572</td>
<td>Modern Middle East</td>
<td>3</td>
</tr>
<tr>
<td>POLS 2301</td>
<td>Theories of War and Peace</td>
<td>3</td>
</tr>
<tr>
<td>POLS 2311</td>
<td>Post-Cold War Security</td>
<td>3</td>
</tr>
<tr>
<td>POLS 2321</td>
<td>Politics of the Global Economy</td>
<td>3</td>
</tr>
<tr>
<td>POLS 2331</td>
<td>International Organization</td>
<td>3</td>
</tr>
<tr>
<td>POLS 2341</td>
<td>U.S. Foreign Policy</td>
<td>3</td>
</tr>
<tr>
<td>POLS 3332</td>
<td>Globalization: Politics and Political Economy 1</td>
<td>3</td>
</tr>
</tbody>
</table>
These courses require prerequisites beyond those covered in the Global Studies Foundation courses; students wishing to take these courses should plan accordingly.

### Global Economy

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 3327</td>
<td>Globalization and Localization</td>
<td>3</td>
</tr>
<tr>
<td>ECON 3547</td>
<td>Economics of Development and Growth</td>
<td>3</td>
</tr>
<tr>
<td>ECON 3563</td>
<td>International Trade</td>
<td>3</td>
</tr>
<tr>
<td>ECON 3564</td>
<td>International Monetary Economics</td>
<td>3</td>
</tr>
<tr>
<td>GUS 2031</td>
<td>Economic Geography</td>
<td>3</td>
</tr>
<tr>
<td>GUS 2032</td>
<td>Urban Systems in a Global Economy</td>
<td>3</td>
</tr>
<tr>
<td>GUS 2073</td>
<td>African Development</td>
<td>3</td>
</tr>
<tr>
<td>GUS 3073</td>
<td>Geography of Travel and Tourism</td>
<td>3</td>
</tr>
<tr>
<td>GUS 3097</td>
<td>Environment &amp; Development</td>
<td>3</td>
</tr>
<tr>
<td>GUS 4021</td>
<td>International Urbanization</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3811</td>
<td>World Economy Since 1945</td>
<td>3</td>
</tr>
<tr>
<td>POLS 2201</td>
<td>Comparative Politics: Developing Nations</td>
<td>3</td>
</tr>
<tr>
<td>POLS 2321</td>
<td>Politics of the Global Economy</td>
<td>3</td>
</tr>
<tr>
<td>POLS 3296</td>
<td>Politics of Modern Capitalism</td>
<td>3</td>
</tr>
<tr>
<td>POLS 3332</td>
<td>Globalization: Politics and Political Economy</td>
<td>3</td>
</tr>
<tr>
<td>SOC 3219</td>
<td>Globalization: Causes, Promises and Discontents</td>
<td>3</td>
</tr>
<tr>
<td>SOC 3221</td>
<td>Global Development</td>
<td>3</td>
</tr>
<tr>
<td>SOC 3521</td>
<td>Global Health</td>
<td>3</td>
</tr>
</tbody>
</table>

### Global Cultures

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAS 2201</td>
<td>African Civilization</td>
<td>3</td>
</tr>
<tr>
<td>AAS 3215</td>
<td>Languages and Cultures of West Africa</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 2396</td>
<td>Fundamentals of Cultural Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 3327</td>
<td>Globalization and Localization</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 3331</td>
<td>Anthropology and Culture Change</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 3333</td>
<td>The Anthropology of Tourism</td>
<td>3</td>
</tr>
<tr>
<td>ARBC 2012</td>
<td>Modern Arabic Literature in Translation</td>
<td>3</td>
</tr>
<tr>
<td>ARBC 2021</td>
<td>Contemporary Arab Society in Film (in Translation)</td>
<td>3</td>
</tr>
<tr>
<td>ASST 1052</td>
<td>Modern Asia</td>
<td>3</td>
</tr>
<tr>
<td>ASST 2001</td>
<td>Practical Asian Society and Culture</td>
<td>3</td>
</tr>
<tr>
<td>ASST 2107</td>
<td>Asian American Experiences</td>
<td>3</td>
</tr>
<tr>
<td>ASST 2367</td>
<td>South Asia: Peoples, Culture, Experiences</td>
<td>3</td>
</tr>
<tr>
<td>ENG 2512</td>
<td>The Modern Novel</td>
<td>3</td>
</tr>
<tr>
<td>ENG 2601</td>
<td>Introduction to Postcolonial Literatures</td>
<td>3</td>
</tr>
<tr>
<td>ENG 2712</td>
<td>International Film</td>
<td>3</td>
</tr>
<tr>
<td>ENG 3513</td>
<td>Modern World Fiction</td>
<td>3</td>
</tr>
<tr>
<td>ENG 3522</td>
<td>Contemporary World Fiction in English</td>
<td>3</td>
</tr>
<tr>
<td>ENG 3610</td>
<td>Topics in Postcolonial Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENG 3611</td>
<td>Postcolonial Theory</td>
<td>3</td>
</tr>
<tr>
<td>GUS 3001</td>
<td>Images of the City in Popular Culture</td>
<td>3</td>
</tr>
<tr>
<td>GUS 3307</td>
<td>Transportation &amp; Culture</td>
<td>3</td>
</tr>
<tr>
<td>HIST 2513</td>
<td>Cold War Africa</td>
<td>3</td>
</tr>
<tr>
<td>HIST 2515</td>
<td>Civilization and Modernity in the Caribbean</td>
<td>3</td>
</tr>
<tr>
<td>HIST 2516</td>
<td>Modern Islamic History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 2611</td>
<td>Third World Issues through Film</td>
<td>3</td>
</tr>
<tr>
<td>HIST 2702</td>
<td>Imperialism, Race, and Empire</td>
<td>3</td>
</tr>
</tbody>
</table>
HIST 2703  African Diaspora  3
HIST 2705  Anti-Semitism/Holocaust/Racism  3
HIST 2816  Gender, Class, Nation  3
HIST 2817  Gender, War, and Society  3
HIST 2818  American Icons  3
HIST 3431  Women's Lives in Modern Europe  3
HIST 3564  Caliban's World: Cultural Politics in the 20th Century Americas  3
HIST 3572  Modern Middle East  3
HIST 3711  The City in History  3
LAS 1001  Perspectives on Latin America  3
LAS 2101  Latin America through Film and Fiction  3
LAS 3602  Caribbean Literature and Culture  3
REL 1001  Religion and Society  3
REL 2001  Women in Religion and Society  3
REL 2101  Indian Philosophies and Religions  3
REL 2102  Introduction to Buddhism  3
REL 2596  What Is Christianity?  3
REL 2606  Introduction to Islam  3
REL 2702  Religion in Contemporary Africa  3
REL 3011  Monks, Masters, and Magicians: Religion in Premodern Chinese Literature  3
REL 3101  Yoga & Tantric Mysticism  3
REL 3701  Traditional Religions of Africa  3
REL 3702  African Religions and New World Culture  3
PHIL 4278  Philosophy of Culture  3
SOC 3209  Immigrant America: Belonging and Integration  3
SOC 3221  Global Development  3
SOC 3245  Comparative Family Studies  3
SOC 3267  Sociology of Music: Nation, Race, Class and Gender in Argentina and Brazil  3
SOC 3546  Sexuality and Gender  3

1 These courses require prerequisites beyond those covered in the Global Studies Foundation courses; students wishing to take these courses should plan accordingly.

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

History

www.cla.temple.edu/history

Dr. Jay Lockenour
Chairperson
jay.lockenour@temple.edu

Dr. Benjamin Talton
Director of Undergraduate Studies
923 Gladfelter Hall
talton@temple.edu

Dr. Travis Glasson
Honors Advisor
842 Gladfelter Hall
travis.glasson@temple.edu

Anne K. Eckert, Administrator
1008A Gladfelter Hall
215-204–9209
The faster our lives change, the more we need to understand our past, reflect on our present, and make decisions for our future. History helps us to understand who we are and where we came from. It provides unique insights and perspectives for our personal and professional pursuits.

The History Department divides its courses between American History, European History, and non-Western History. Within each division, one can choose history courses in political, diplomatic, social, cultural, economic, gender, and ethnic history. Students should concentrate in one field of history and also be well-versed in the three main divisions.

Temple History graduates have gone into a wide range of careers; business, law, politics, education, historical preservation, and information resources are just a few of the many areas. History arms the student for a maximum amount of flexibility for career choices.

Temple students regularly participate in the intellectual life of the region through their connections to such organizations and institutions as the McNeil Center for Early American Studies, the Balch Institute for Ethnic Studies, the Pennsylvania Historical Society, the Atwater Kent Museum, and the American Philosophical Society.

The Department of History offers an Honors Program for majors with outstanding academic records. Qualified majors are invited to join Phi Alpha Theta, the History honor society. Both minors and majors participate in the Undergraduate History Association. Special Programs allow undergraduates to major in History and earn teaching certification, or to major in History and earn a Master's in Education in five years (program administered through the School of Education).

Programs

- Bachelor of Arts in History (p. 860)
- Minor in History (p. 863)

Bachelor of Arts in History

The history major consists of a step approach. Courses numbered 1000-1999 are introductory level; courses numbered 2000-2999 are intermediate level, and courses numbered 3000–4999 are advanced level. Courses with "9" as a second digit are honors courses and are usually restricted to honors students.

The history major requires twelve courses (36 credits). Students must take two introductory level courses, of which one is selected from courses numbered 1000–1099 and one from courses numbered 1100–1999. Three courses (9 credits) are required at the 2000 level. Three elective courses (9 credits) are required at the 3000 level. All history majors take two required writing seminars: in the Junior year, students take a 3000 level writing course and in the Senior year, they take a complimentary Capstone course at the 4000 level. All writing intensive courses end in -96, -97 or -98. Finally, students may select two history courses (6 credits) at any level.

- Within these broad requirements, students must complete a minimum of two courses in U.S. history, two courses in European history, and three courses in Asian, African, Latin American or Global/Comparative history.
- Two of the courses in any category or level must be predominantly pre-1900 in content.
- Students should take four courses that represent an area of concentration based on some geographic or thematic intellectual rationale. The area of concentration should be defined in writing and approved by a departmental advisor ideally at the start of the junior year and no later than the start of the senior year.

History Honors Program

To participate in the History Honors Scholar Program, you must first apply to the University Honors office. Any History major who has earned or is in the process of earning 60 credits and has roughly a 3.7 cumulative GPA can apply for the program. The application form is available on the Honors web site: http://honors.temple.edu/. Students in the program take six courses (18 credits), including HIST 4934 Honors Historiography and Research Methods, HIST 4997 Honors Thesis Seminar and four upper-level Honors electives (any department). With careful planning, these Honors courses can ALSO fulfill the requirements for the History major so that students need not delay graduation. For example, the Honors Thesis Seminar (HIST 4997 Honors Thesis Seminar) fulfills the normal “capstone/writing” requirement, and the electives, if chosen from History offerings, will also fulfill major
requirements. Students must maintain a 3.4 GPA in History and a 3.4 GPA overall. Make an appointment to meet with the Honors Advisor, Travis Glasson (travis.glasson@temple.edu), for advice on completing the application and to discuss your intellectual interests.

**Summary of Degree Requirements**

**University Requirements:**
- MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education section (p. 143) of the Undergraduate Bulletin for more details.

**College of Liberal Arts Requirements:**
- Completion of a minimum of 123 credits, including:
  - 90 credits in CLA/CST courses;
  - 45 credits of which must be at the upper level (numbered 2000-4999).
- For **Social Science majors**, 6 upper level credits (numbered 2000-4999) must be taken in Humanities Subject Areas: Arabic, Chinese, English, French, German, Greek (Ancient), Greek and Roman Classics, Hebrew, Hindi, Italian, Japanese, Latin, Philosophy, Religion, Russian, and Spanish in the College of Liberal Arts, Art History in the Tyler School of Art, or any department in the College of Science and Technology.
- A minimum GPA of 2.0, cumulatively, in CLA/CST coursework, and in the major.
- Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.
- **Foreign Language/Global Studies Requirements:**
  - All students must complete or test out of the first and second levels of a foreign language - these courses are numbered 1001 and 1002;
  - All students must complete at least one course from the GenEd Global/World Society category; and
  - All Bachelor of Arts students must complete one of the following options:
    - Third semester of a foreign language;
    - Demonstrated proficiency beyond the third semester in a foreign language (placement exam or certification from the language department);
    - Take one Global Studies course from the list on the CLA College Graduation Requirements (p. 755) page;
    - Study Abroad at an approved program; or
    - Take a second General Education Global/World Society course.
- **Notes on Foreign Language Study**
  - The third level of language is numbered 1003 in French, German, Italian, Spanish, and Portuguese and numbered 2001 in all other foreign language subjects.
  - Students are strongly encouraged to take the third level of a foreign language as it is the minimum required for election to the prestigious honor society *Phi Beta Kappa*. (Taking the course does not guarantee admission but not taking it guarantees exclusion.)
  - See the College of Liberal Arts Policies (p. 753) section of this Bulletin for more information on the Foreign Language Placement, Regression in Coursework, and guidelines for students' other experiences with language.

**General Electives** are typically one-third of a student's program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

**Major Requirements (36 credits):**

NOTE: **These twelve** courses have both level and subject matter distributions. Any given course may count in both Category A (level) and Category B (content area) and possibly Category C (time period) as well. Please see the course descriptions for more information on which category/categories are applicable.

Select a minimum of 12 courses in History, distributed as follows:

<table>
<thead>
<tr>
<th>Category A (Level Requirements)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Select one Introductory History 1000-1099 course</td>
<td>3</td>
</tr>
<tr>
<td>Select one Introductory History 1100-1899 course</td>
<td>3</td>
</tr>
<tr>
<td>Select three Intermediate History 2000-2999 courses</td>
<td>9</td>
</tr>
<tr>
<td>Select three Advanced History 3000-3999 courses</td>
<td>9</td>
</tr>
<tr>
<td>Select two History electives at any level</td>
<td>6</td>
</tr>
<tr>
<td>Select one Junior Writing Seminar at the 3000-level (ends in -96, -97, -98)</td>
<td>3</td>
</tr>
</tbody>
</table>
Select one Capstone Writing Seminar at the 4000-level (ends in -96, -97, -98)

Category B (Content Area)
- Two courses from Category A must be in American history.
- Two courses from Category A must be in European history.
- Three courses from Category A must be in Global/Comparative History, Asian, African, or Latin American history.

Category C (Time Period)
- Two courses from Category A must focus on a period pre-1900.

Total Credit Hours 36

Distinction in Major

To receive Distinction in Major, students must complete HIST 4934 Honors Historiography and Research Methods and HIST 4997 Honors Thesis Seminar. The end product of the *Honors Thesis Seminar* is an Honors Thesis, which the student will present at a scholarly conference sponsored by the department. The Honors Thesis will also fulfill the History major’s thesis/capstone requirement. Students must maintain a 3.4 GPA in all history courses and a 3.4 GPA in Temple courses overall. Students who are not in the University Honors Program will require special permission from the History Honors Scholar Program Director, Travis Glasson (travis.glasson@temple.edu) to enroll in HIST 4934 and HIST 4997.

Suggested Academic Plan

Bachelor of Arts in History

Requirements for New Students starting in the 2015-2016 Academic Year

### Year 1

#### Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 0802, 0812, or 0902 Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
</tr>
<tr>
<td>Foreign Language 1001 - first level</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours** 15

#### Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IH 0851 or 0951 Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>Foreign Language 1002 - second level</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>One Introductory History 1000-1099 Course - United States/Concentration¹</td>
<td>3</td>
</tr>
<tr>
<td>One Introductory History 1100-1899 Course - Global</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours** 16

#### Year 2

#### Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IH 0852 or 0952 Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>One Intermediate History 2000-2999 Course - European</td>
<td>3</td>
</tr>
<tr>
<td>One 0800-4999 Elective in Any School or College</td>
<td>2</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
</tr>
<tr>
<td>Foreign Language - third level</td>
<td></td>
</tr>
<tr>
<td>GenEd Global/World Society Course</td>
<td></td>
</tr>
<tr>
<td>Internationally-Focused Course From Approved List</td>
<td></td>
</tr>
</tbody>
</table>

**Term Credit Hours** 17

#### Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>One Intermediate History 2000-2999 Course - Pre-1900</td>
<td>3</td>
</tr>
<tr>
<td>One Intermediate History 2000-2999 Course - United States/Concentration</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours** 15
Schools, Colleges, and Divisions

Year 3

Fall
CLA/CST 2000+ Humanities/CST Course 3
One Intermediate History 3000-3999 Course - Global 3
One Intermediate History 3000-3999 Course - European 3
CLA/CST 2000+ Course 3
CLA/CST 0800-4999 Elective 3

| Term Credit Hours | 15 |

Spring
CLA/CST 2000+ Humanities/CST Course 3
One History 3000-3999 Junior Writing Seminar - Concentration [WI] 3
One Intermediate History 4000-4999 Course - Pre-1900 3
CLA/CST 2000+ Course 3
CLA/CST 0800-4999 Elective 3

| Term Credit Hours | 15 |

Total Credit Hours: 123

Minor in History

Requirements

A History minor is an ideal complement to other majors and programs at Temple, from medicine to journalism, from computer science to finance, from film to marketing. Students with a minor in history are required to take six courses totaling eighteen credit hours. Of the six courses, at least two must be numbered 2000 or above and at least one course must be numbered 3000 or above.

Select two Introductory History courses numbered 1000-1999 6
Select at least two 2000-2999 Intermediate History Courses 6
Select at least one 3000-3999 Advanced History Course 3
Select one History 1000-4999 course 3

Total Credit Hours 18

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Italian

532 Anderson Hall
Why study Italian?

Apart from being the number one study abroad destination among university students, Italy's importance in the corporate world and its complimentary pairing with humanities studies make Italian the fourth most studied foreign language in the United States. The Italian Major at Temple University is an interdisciplinary course of study that, in addition to being built on requirements of language proficiency and core knowledge of Italian literary history, places strong emphasis on cultural, global, and national identity studies. An additional learning goal for students of Italian is to demonstrate understanding and appreciation of cultural perspectives and practices in the Italian-speaking world. The program's methodology is based on a communicative approach coupled with technology–based student engagement practice to enhance the students' language retention, level of competency, and proficiency, as well as to provide a window into Italian culture. The transferable communication and critical thinking skills acquired by the program prove invaluable to employers of liberal arts graduates.

Study Abroad

Students declaring a major or minor in Italian are encouraged to study abroad. Temple has its own campus in Rome, Italy, which offers courses in a variety of fields, including language, art, art history, architecture, and international business. Students interested in studying in Italy should discuss their plans with the Italian faculty advisor as early as possible.

Programs

- Bachelor of Arts in Italian (p. 864)
- Certificate in Italian (p. 867)
- Minor in Italian (p. 867)

Bachelor of Arts in Italian

Why Study Italian?

Apart from being the number one study abroad destination among university students, Italy's importance in the corporate world and its complimentary pairing with humanities studies make Italian the fourth most studied foreign language in the United States. The Italian Major at Temple University is an interdisciplinary course of study that, in addition to being built on requirements of language proficiency and core knowledge of Italian literary history, places strong emphasis on cultural, global, and national identity studies. An additional learning goal for students of Italian is to demonstrate understanding and appreciation of cultural perspectives and practices in the Italian-speaking world. The program's methodology is based on a communicative approach coupled with technology–based student engagement practice to enhance the students' language retention, level of competency, and proficiency, as well as to provide a window into Italian culture. The transferable communication and critical thinking skills acquired by the program prove invaluable to employers of liberal arts graduates.

Study Abroad

Students declaring a major or minor in Italian are encouraged to study abroad. Temple has its own campus in Rome, Italy, which offers courses in a variety of fields, including language, art, art history, architecture, and international business. Students interested in studying in Italy should discuss their plans with the Italian faculty advisor as early as possible.

Summary of Degree Requirements

University Requirements:
• MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.

• All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific courses required for this major are ITAL 3096, and either ITAL 2096 or ITAL 4096.

• Students must complete requirements of the General Education (GenEd) Program. See the General Education section (p. 143) of the Undergraduate Bulletin for more details.

College of Liberal Arts Requirements:

• Completion of a minimum of 123 credits, including:
  • 90 credits in CLA/CST courses;
  • 45 credits of which must be at the upper level (numbered 2000-4999).
    • For Humanities majors, 6 upper level credits must be earned in the Social Science and interdisciplinary subject areas: African American Studies, American Studies, Anthropology, Asian Studies, Criminal Justice, Economics, Environmental Studies, Geography and Urban Studies, Global Studies, History, Jewish Studies, Latin American Studies, Lesbian, Gay, Bisexual, and Transgender Studies, Liberal Arts, Neuroscience (CLA), Political Science, Psychology, Sociology, Women's Studies, or any department in the College of Science and Technology.
  • A minimum GPA of 2.0, cumulatively, in all CLA/CST coursework, and in the major department.
  • Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.

• Foreign Language/Global Studies Requirements:
  • The requirements of the Italian major exceed the minimum requirements of the College of Liberal Arts; no additional coursework is required.

  Notes on Foreign Language Study
  • The third level of language is numbered 1003 in French, German, Italian, Spanish, and Portuguese and numbered 2001 in all other foreign language subjects.
  • Students are strongly encouraged to take the third level of a foreign language as it is the minimum required for election to the prestigious honor society Phi Beta Kappa. (Taking the course does not guarantee admission but not taking it guarantees exclusion.)
  • See the College of Liberal Arts Policies (p. 753) section of this Bulletin for more information on the Foreign Language Placement, Regression in Coursework, and guidelines for students' other experiences with language.

General Electives are typically one-third of a student's program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

Major Requirements (30 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITAL 1003</td>
<td>Italian Language III</td>
<td>3</td>
</tr>
<tr>
<td>ITAL 2001</td>
<td>Intermediate Italian</td>
<td>3</td>
</tr>
<tr>
<td>ITAL 3096</td>
<td>Composition II: Advanced Writing Skills 2</td>
<td>3</td>
</tr>
<tr>
<td>Select six Italian Electives numbered 2000+</td>
<td></td>
<td>18</td>
</tr>
<tr>
<td>Select one of the following writing-intensive Italian courses:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ITAL 2096</td>
<td>Composition I: Italian Composition and Conversation</td>
<td></td>
</tr>
<tr>
<td>ITAL 4096</td>
<td>Creative Writing Through Reading</td>
<td></td>
</tr>
</tbody>
</table>

Total Credit Hours                              30

1 Students who place out of ITAL 1003 will need one additional elective; those who place out of ITAL 2001 will need two additional electives.
2 Indicates writing capstone for the major.
3 Up to two cognate courses in English may be accepted (with written permission of the Italian advisor) as part of the required elective courses.

Distinction in Major

To be considered for Distinction in Major in Italian, students must:

• Complete the requirements for the concentration in Italian with a GPA of at least 3.50;
• Have an overall GPA of at least 3.25;
• Be recommended to the chair of the department by the Italian faculty advisor.
### Suggested Academic Plan

**Bachelor of Arts in Italian**

**Requirements for New Students starting in the 2015-2016 Academic Year**

#### Year 1

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>ITAL 1001</td>
<td>Italian Language I [LA]</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ITAL 1002</td>
<td>Italian Language II [LA]</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td></td>
<td>16</td>
</tr>
</tbody>
</table>

#### Year 2

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td>ITAL 1003</td>
<td>Italian Language III [LB]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CLA/CST 0800-4999 Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>One 0800-4999 Elective in Any School or College</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td></td>
<td>17</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td>ITAL 2001</td>
<td>Intermediate Italian</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CLA/CST 0800-4999 Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CLA/CST 2000+ Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Italian 2000+ Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

#### Year 3

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td>CLA/CST 2000+ Social Science/CST Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Italian 2000+ Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Italian 2000+ Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CLA/CST 2000+ Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CLA/CST 0800-4999 Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td>CLA/CST 2000+ Social Science/CST Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ITAL 2096 or 4096</td>
<td>Composition I: Italian Composition and Conversation [WI]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Italian 2000+ Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CLA/CST 0800-4999 Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CLA/CST 0800-4999 Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

#### Year 4

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td>Italian 2000+ Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>
### Certificate in Italian

**Requirements for the Special Foreign Language Certificate in Italian**

Six courses beginning with ITAL 1001 and including ITAL 2501.

Students who place out of any course will need additional electives.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITAL 1001</td>
<td>Italian Language I</td>
<td>4</td>
</tr>
<tr>
<td>ITAL 1002</td>
<td>Italian Language II</td>
<td>4</td>
</tr>
<tr>
<td>ITAL 1003</td>
<td>Italian Language III</td>
<td>3</td>
</tr>
<tr>
<td>ITAL 2001</td>
<td>Intermediate Italian</td>
<td>3</td>
</tr>
<tr>
<td>ITAL 2501</td>
<td>Italian for Business</td>
<td>3</td>
</tr>
<tr>
<td>Select one Italian Elective numbered 2000+</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credit Hours:** 20

All courses must be taught in Italian.

Certificates are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

### Minor in Italian

**Requirements**

Six courses required (18 credit minimum)\(^1\)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITAL 1002</td>
<td>Italian Language II (^1)</td>
<td>4</td>
</tr>
<tr>
<td>ITAL 1003</td>
<td>Italian Language III (^1)</td>
<td>3</td>
</tr>
<tr>
<td>ITAL 2001</td>
<td>Intermediate Italian</td>
<td>3</td>
</tr>
<tr>
<td>Select three Italian courses numbered 2000-4999 (taught in Italian)</td>
<td></td>
<td>9</td>
</tr>
</tbody>
</table>

**Total Credit Hours:** 19

\(^1\) Students with proficiency in Italian may replace ITAL 1002 and ITAL 1003 with upper level courses taught in Italian. See the faculty advisor for more information.

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

### Japanese

The College of Liberal Arts offers a major in Japanese (at the Temple University Japan campus only) as well as a minor and a certificate. For information about the Japanese major, visit the Japanese (p. 171) program page.
Programs

- Certificate of Specialization in Japanese (p. 868)
- Minor in Japanese (p. 868)

Certificate of Specialization in Japanese

The Certificate of Specialization in Japanese focuses on learning language skills and developing a strong foundation for the effective use of Japanese socially and professionally. This program will be of particular interest to students considering careers in international business, government service, or other professions where foreign language proficiency is important. This program also contributes to meeting the diverse language needs of students with personal or academic interests in Japan and its culture.

This certificate can only be taken as part of an undergraduate degree program and is awarded at the time of graduation. It requires an average of 2.0 in Japanese and a minimum grade of C- or higher must be earned in all required courses listed below.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>JPNS 1001</td>
<td>Japanese Elements I</td>
<td>4</td>
</tr>
<tr>
<td>JPNS 1002</td>
<td>Japanese Elements II</td>
<td>4</td>
</tr>
<tr>
<td>JPNS 2001</td>
<td>Intermediate Japanese I</td>
<td>3</td>
</tr>
<tr>
<td>JPNS 2002</td>
<td>Intermediate Japanese II</td>
<td>3</td>
</tr>
<tr>
<td>JPNS 3001</td>
<td>Advanced Japanese I</td>
<td>3</td>
</tr>
<tr>
<td>JPNS 3002</td>
<td>Advanced Japanese II</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credit Hours 20

Certificates are awarded only at the time of completion of the bachelor’s degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor’s degree.

Minor in Japanese

The Minor in Japanese emphasizes language study while also recognizing the importance of learning about Japan through work in fields such as literature, history, anthropology, and religion. This program will be of particular interest to students interested in careers in academia, business, government, or other professions where Japanese language proficiency is important.

This minor requires a minimum of 12 credits in Japanese and 6 credits in Japanese-related courses. The minor can only be taken as part of an undergraduate degree program and is awarded at the time of graduation. An average of 2.0 in all Japanese courses as well as a minimum grade of C- must be earned in all courses used for the minor. The specific courses required for the program are detailed in the list below.

Students who place out of JPNS 2002, JPNS 3001, and/or JPNS 3002 may substitute Japanese electives. See the department of Asian and Middle Eastern Languages and Studies (formerly Critical Languages Department) for more information on placement and appropriate substitutions.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>JPNS 2002</td>
<td>Intermediate Japanese II</td>
<td>3</td>
</tr>
<tr>
<td>JPNS 3001</td>
<td>Advanced Japanese I</td>
<td>3</td>
</tr>
<tr>
<td>JPNS 3002</td>
<td>Advanced Japanese II</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>JPNS 2996</td>
<td>Japanese Popular Culture and Literature</td>
<td>3</td>
</tr>
<tr>
<td>or JPNS 2996</td>
<td>Honors Japanese Popular Culture and Literature</td>
<td></td>
</tr>
<tr>
<td>ASST 2998</td>
<td>Japanese Popular Culture and its Literature</td>
<td></td>
</tr>
<tr>
<td>JPNS/ASST 2021</td>
<td>Japanese Literature in Film</td>
<td></td>
</tr>
<tr>
<td>JPNS/ASST 2011</td>
<td>Survey of Japanese Literature: Pre-Modern</td>
<td></td>
</tr>
<tr>
<td>JPNS/ASST 2012</td>
<td>Modern and Contemporary Japanese Literature in Translation</td>
<td></td>
</tr>
</tbody>
</table>

Select any two CLA courses that focus exclusively on Japan 6

Total Credit Hours 18

Minors are awarded only at the time of completion of the bachelor’s degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor’s degree.

Jewish Studies

Mark Leuchter, Faculty Advisor
mleuchte@temple.edu
Jewish Studies is an interdisciplinary field that allows students to sample courses across the liberal arts curriculum at Temple University. Central to Jewish Studies is an examination of the history, culture, beliefs, customs, practices, texts, and languages of the Jewish people. It addresses the legacy of over 2,000 years of Jewish life as it has been lived in Jewish communities across the globe. At Temple we pay particular attention to contemporary issues of Jewish culture, identity, and practice. Students can either major or minor in Jewish Studies or do a certificate program in Jewish Secular Studies.

Programs

- Bachelor of Arts in Jewish Studies (p. 869)
- Certificate in Jewish Secular Studies (p. 872)
- Minor in Jewish Studies (p. 872)

Bachelor of Arts in Jewish Studies

Summary of Degree Requirements

University Requirements:

- MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific courses required for this major are JST 4096 and one additional Jewish Studies elective that is writing-intensive.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education section (p. 143) of the Undergraduate Bulletin for more details.

College of Liberal Arts Requirements:

- Completion of a minimum of 123 credits, including:
  - 90 credits in CLA/CST courses;
  - 45 credits of which must be at the upper level (numbered 2000-4999).
    - For Social Science majors, 6 upper level credits (numbered 2000-4999) must be taken in Humanities Subject Areas: Arabic, Chinese, English, French, German, Greek (Ancient), Greek and Roman Classics, Hebrew, Hindi, Italian, Japanese, Latin, Philosophy, Religion, Russian, and Spanish in the College of Liberal Arts, Art History in the Tyler School of Art, or any department in the College of Science and Technology.
- A minimum GPA of 2.0, cumulatively, in CLA/CST coursework, and in the major.
- Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.
- Foreign Language/Global Studies Requirements:
  - All students must complete or test out of the first and second levels of a foreign language - these courses are numbered 1001 and 1002;
  - All students must complete at least one course from the GenEd Global/World Society category; and
  - All Bachelor of Arts students must complete one of the following options:
    - Third semester of a foreign language;
    - Demonstrated proficiency beyond the third semester in a foreign language (placement exam or certification from the language department);
    - Take one Global Studies course from the list on the CLA College Graduation Requirements (p. 755) page;
    - Study Abroad at an approved program; or
    - Take a second General Education Global/World Society course.

Notes on Foreign Language Study

- The third level of language is numbered 1003 in French, German, Italian, Spanish, and Portuguese and numbered 2001 in all other foreign language subjects.
- Students are strongly encouraged to take the third level of a foreign language as it is the minimum required for election to the prestigious honor society Phi Beta Kappa. (Taking the course does not guarantee admission but not taking it guarantees exclusion.)
- See the College of Liberal Arts Policies (p. 753) section of this Bulletin for more information on the Foreign Language Placement, Regression in Coursework, and guidelines for students' other experiences with language.
**General Electives** are typically one-third of a student's program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

**Major Requirements (33 credits):**

**Language Requirement**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEBR 2001</td>
<td>Intermediate I</td>
<td>3</td>
</tr>
<tr>
<td>HEBR 2002</td>
<td>Intermediate II (or equivalent approved by a faculty advisor)</td>
<td>3</td>
</tr>
<tr>
<td>Jewish Studies course at the 2000 level</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Jewish Religion**

Select two of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>JST/REL 3404</td>
<td>Dead Sea Scrolls</td>
<td>3</td>
</tr>
<tr>
<td>REL 3405</td>
<td>Judaism and Literature</td>
<td></td>
</tr>
<tr>
<td>JST 3406</td>
<td>Women in Judaism</td>
<td></td>
</tr>
<tr>
<td>JST/REL 3407</td>
<td>Jews, America and Sports</td>
<td></td>
</tr>
<tr>
<td>JST/REL 3411</td>
<td>The Philosophies of Judaism</td>
<td></td>
</tr>
<tr>
<td>POLS 3411</td>
<td>Classical Political Philosophy</td>
<td></td>
</tr>
<tr>
<td>JST/REL 4406</td>
<td>Secular Study of Ancient Jewish History: Between the Torah and the Talmud</td>
<td>3</td>
</tr>
</tbody>
</table>

**Jewish History**

Select two of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>JST/HIST 2705</td>
<td>Anti-Semitism/Holocaust/Racism</td>
<td></td>
</tr>
<tr>
<td>JST 2706</td>
<td>Jewish Diaspora/Survey of Jewish History</td>
<td></td>
</tr>
<tr>
<td>HIST 2706</td>
<td>Jewish Diaspora</td>
<td></td>
</tr>
<tr>
<td>JST/HIST 3221</td>
<td>Jewish Experience in America</td>
<td></td>
</tr>
<tr>
<td>REL 3401</td>
<td>Modern Trends in Judaism</td>
<td></td>
</tr>
<tr>
<td>JST 3406</td>
<td>Women in Judaism</td>
<td></td>
</tr>
<tr>
<td>JST 3571</td>
<td>Israel, History, Politics and Society</td>
<td></td>
</tr>
<tr>
<td>HIST 3571</td>
<td>Israel: History, Politics and Society</td>
<td></td>
</tr>
<tr>
<td>JST 3408</td>
<td>Israel in the Middle East</td>
<td></td>
</tr>
<tr>
<td>JST/REL 4406</td>
<td>Secular Study of Ancient Jewish History: Between the Torah and the Talmud</td>
<td>3</td>
</tr>
<tr>
<td>JST 4896</td>
<td>Modern Jewish History</td>
<td></td>
</tr>
<tr>
<td>HIST 4896</td>
<td>Jews, Judaism, and the Modern World</td>
<td></td>
</tr>
</tbody>
</table>

**Hebrew language, literature or culture**

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>JST/HEBR 2797</td>
<td>Jewish Humor Past and Present</td>
<td>3</td>
</tr>
<tr>
<td>JST/HEBR 2779</td>
<td>Love Themes in Hebrew Literature</td>
<td></td>
</tr>
<tr>
<td>REL 3405</td>
<td>Judaism and Literature</td>
<td></td>
</tr>
<tr>
<td>JST 3406</td>
<td>Women in Judaism</td>
<td></td>
</tr>
<tr>
<td>JST/REL 3407</td>
<td>Jews, America and Sports</td>
<td></td>
</tr>
<tr>
<td>JST 3408</td>
<td>Israel in the Middle East</td>
<td></td>
</tr>
<tr>
<td>JST/HEBR 3711</td>
<td>Israelis and Palestinians</td>
<td></td>
</tr>
<tr>
<td>JST 3250</td>
<td>Topics: Jews &amp; Film</td>
<td></td>
</tr>
<tr>
<td>JST/REL 3411</td>
<td>The Philosophies of Judaism</td>
<td></td>
</tr>
<tr>
<td>POLS 3411</td>
<td>Classical Political Philosophy</td>
<td></td>
</tr>
<tr>
<td>Any Hebrew language course above 2002</td>
<td></td>
<td></td>
</tr>
<tr>
<td>JST/HEBR 3797</td>
<td>Literature and Art of the Holocaust</td>
<td></td>
</tr>
</tbody>
</table>

Select two Jewish Studies Electives numbered 2000+

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>JST 4096</td>
<td>Independent Study in Jewish Studies</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credit Hours**

33

---

1 All students must take two writing-intensive courses in their major. In addition to JST 4096, students must select one Jewish Studies elective that is writing-intensive.

Students interested in a history or religion focus should consult with a Jewish Studies advisor to plan an individual program of study.
**Distinction in Major**

Jewish Studies majors may graduate with distinction if they have a GPA of 3.5 or better in the major, a cumulative GPA of 3.0 or better, and a grade of 3.5 or better in the capstone course (JST 4096, an individual research project with a specific faculty member, intended for majors in the final semester of coursework).

**Suggested Academic Plan**

Please note that this is a *suggested* academic plan. Depending on your situation, your academic plan may look different.

**Bachelor of Arts in Jewish Studies**

**Requirements for New Students starting in the 2015-2016 Academic Year**

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
</tr>
<tr>
<td>HEBR 1001</td>
<td>Elements I [LA]</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>15</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
</tr>
<tr>
<td>HEBR 1002</td>
<td>Elements II [LA]</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>16</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>HEBR 2001</td>
<td>Intermediate I [LB]</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Elective</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Elective</td>
<td>3</td>
</tr>
<tr>
<td>One 0800-4999 Elective in Any School or College</td>
<td>2</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>17</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>HEBR 2002</td>
<td>Intermediate II [LA]</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 2000+ Course</td>
<td>3</td>
</tr>
<tr>
<td>One 2000-2999 Jewish Studies Course</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>CLA/CST 2000+ Course</td>
<td>3</td>
</tr>
<tr>
<td>One 2000+ Jewish Studies Course</td>
<td>3</td>
</tr>
<tr>
<td>One Jewish Religion Course From Approved List</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Elective</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Elective</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>15</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>CLA/CST 2000+ Course</td>
<td>3</td>
</tr>
<tr>
<td>One Jewish History Course From Approved List</td>
<td>3</td>
</tr>
<tr>
<td>One Jewish Religion Course From Approved List</td>
<td>3</td>
</tr>
</tbody>
</table>
Certificate in Jewish Secular Studies

Requirements

Select one course from:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>JST 2408</td>
<td>Jewish Secular Thought and Culture from Spinoza to Seinfeld: A History of Jewish Secularism</td>
</tr>
<tr>
<td>JST 2409</td>
<td>Secular Jewish Utopian Politics / Jewtopias: The Jewish Romance with Communism, Zionism, and America</td>
</tr>
</tbody>
</table>

Select four of the following electives:  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>JST 2705</td>
<td>Anti-Semitism/Holocaust/Racism</td>
</tr>
<tr>
<td>JST 3000</td>
<td>Topics in Jewish Studies</td>
</tr>
<tr>
<td>JST 3085</td>
<td>Jewish Studies Internship</td>
</tr>
<tr>
<td>JST 3221</td>
<td>Jewish Experience in America</td>
</tr>
<tr>
<td>JST 3250</td>
<td>Topics: Jews &amp; Film</td>
</tr>
<tr>
<td>JST 3406</td>
<td>Women in Judaism</td>
</tr>
<tr>
<td>JST 3411</td>
<td>The Philosophies of Judaism</td>
</tr>
<tr>
<td>JST 3711</td>
<td>Israelis and Palestinians</td>
</tr>
<tr>
<td>JST 4096</td>
<td>Independent Study in Jewish Studies</td>
</tr>
<tr>
<td>JST 4896</td>
<td>Modern Jewish History</td>
</tr>
<tr>
<td>HIST 4896</td>
<td>Jews, Judaism, and the Modern World</td>
</tr>
</tbody>
</table>

Total Credit Hours

If a student takes JST 2408 AND JST 2409, one may count as an elective in this category.

Certificates are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Minor in Jewish Studies
## Requirements

### Language Requirement

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEBR 2001</td>
<td>Intermediate I (or equivalent approved by a faculty advisor)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>One Jewish Studies course at the 2000 level</td>
<td>3</td>
</tr>
</tbody>
</table>

### Jewish Religion

Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>JST/REL 3404</td>
<td>Dead Sea Scrolls</td>
<td>3</td>
</tr>
<tr>
<td>REL 3405</td>
<td>Judaism and Literature</td>
<td></td>
</tr>
<tr>
<td>JST 3406</td>
<td>Women in Judaism</td>
<td></td>
</tr>
<tr>
<td>JST/REL 3407</td>
<td>Jews, America and Sports</td>
<td></td>
</tr>
<tr>
<td>JST/REL 3411</td>
<td>The Philosophies of Judaism</td>
<td></td>
</tr>
<tr>
<td>POLS 3411</td>
<td>Classical Political Philosophy</td>
<td></td>
</tr>
<tr>
<td>JST/REL 4406</td>
<td>Secular Study of Ancient Jewish History: Between the Torah and the Talmud</td>
<td></td>
</tr>
</tbody>
</table>

### Jewish History

Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>JST/HIST 2705</td>
<td>Anti-Semitism/Holocaust/Racism</td>
<td>3</td>
</tr>
<tr>
<td>JST 2706</td>
<td>Jewish Diaspora/Survey of Jewish History</td>
<td></td>
</tr>
<tr>
<td>HIST 2706</td>
<td>Jewish Diaspora</td>
<td></td>
</tr>
<tr>
<td>JST/HIST 3221</td>
<td>Jewish Experience in America</td>
<td></td>
</tr>
<tr>
<td>JST 3406</td>
<td>Women in Judaism</td>
<td></td>
</tr>
<tr>
<td>JST 3571</td>
<td>Israel, History, Politics and Society</td>
<td></td>
</tr>
<tr>
<td>HIST 3571</td>
<td>Israel: History, Politics and Society</td>
<td></td>
</tr>
<tr>
<td>JST 3408</td>
<td>Israel in the Middle East</td>
<td></td>
</tr>
<tr>
<td>JST/REL 4406</td>
<td>Secular Study of Ancient Jewish History: Between the Torah and the Talmud</td>
<td></td>
</tr>
<tr>
<td>JST 4896</td>
<td>Modern Jewish History</td>
<td></td>
</tr>
<tr>
<td>HIST 4896</td>
<td>Jews, Judaism, and the Modern World</td>
<td></td>
</tr>
</tbody>
</table>

### Hebrew Language, Literature or Culture

Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>JST/HEBR 2797</td>
<td>Jewish Humor Past and Present</td>
<td>3</td>
</tr>
<tr>
<td>JST/HEBR 2779</td>
<td>Love Themes in Hebrew Literature</td>
<td></td>
</tr>
<tr>
<td>REL 3405</td>
<td>Judaism and Literature</td>
<td></td>
</tr>
<tr>
<td>JST 3406</td>
<td>Women in Judaism</td>
<td></td>
</tr>
<tr>
<td>JST/REL 3407</td>
<td>Jews, America and Sports</td>
<td></td>
</tr>
<tr>
<td>JST 3408</td>
<td>Israel in the Middle East</td>
<td></td>
</tr>
<tr>
<td>JST/HEBR 3711</td>
<td>Israelis and Palestinians</td>
<td></td>
</tr>
<tr>
<td>JST 3250</td>
<td>Topics: Jews &amp; Film</td>
<td></td>
</tr>
<tr>
<td>JST/REL 3411</td>
<td>The Philosophies of Judaism</td>
<td></td>
</tr>
<tr>
<td>POLS 3411</td>
<td>Classical Political Philosophy</td>
<td></td>
</tr>
<tr>
<td>JST/HEBR 3797</td>
<td>Literature and Art of the Holocaust</td>
<td></td>
</tr>
</tbody>
</table>

Any Hebrew language course above 2002

Two upper-level Jewish Studies Electives (2000-4999) 6

### Total Credit Hours

21

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

## Latin American Studies

www.cla.temple.edu/fas

Hiram Aldarondo, Chair, Spanish & Portuguese
427 Anderson Hall
215-204-1706
Latin American Studies is a diverse, interdisciplinary curriculum that includes a major, a minor and an opportunity for students to participate in the Latin American Studies Semester.

Latin American Studies Semester (LASS)

The Latin American Studies Semester (LASS) has been offered every spring semester since 1973. It is a program designed to provide an intensive experience in the study of the Spanish language in combination with an interdisciplinary study of life and contemporary issues in Latin America.

LASS is an integration of several courses, totaling 17 semester hours credit, and must be taken as a package. Because of the credit-hour load and because the objective is to concentrate on Spanish and Latin American Studies, no other courses may be taken without prior approval.

The prerequisite for participation in LASS is two semesters of university-level Spanish or the equivalent. Students with more advanced levels of course background are encouraged to participate in the program as well. All participants in the program may expect to achieve marked improvement in Spanish fluency in only one semester.

- Morning sessions held from 9:00 to 11:50 on Mondays, Wednesdays and Fridays offer language instruction and conversation practice at intermediate and advanced levels guided by native or near native speakers.
- Morning sessions held from 9:30 to 10:50 and from 11:00 to 12:20 on Tuesdays and Thursdays focus on Latin American culture and economic development.
- A LASS Seminar held on Tuesdays and Thursdays from 1:10 to 3:00 highlights a series of topics in Latin American and Latino studies, includes presentations by guest speakers, and also provides for personal contact with the Latino community of Philadelphia.

An integral part of the LASS program is a three-week trip to Costa Rica. The trip is akin to a laboratory in which students can practice their developing language skills. They experience firsthand a Latin American country's culture, history, and social development.

Programs

- Bachelor of Arts in Latin American Studies (p. 874)
- Minor in Latin American Studies (p. 877)

Bachelor of Arts in Latin American Studies

The Latin American Studies major is an interdisciplinary program with a focus on the study of social problems of Latin America. Latin America's art, literature, and religious thought have been universally recognized for their high quality and contribution to world civilization. At the same time, extreme social inequality persists in Latin America in addition to rapid urban growth, dramatic ecological change, and political upheavals with powerful local and global implications. The Latin American Studies major offers a variety of courses that examine these issues. To complete the major, students must take twelve 3-credit courses in Latin American Studies and demonstrate a reading and speaking knowledge of Spanish or Portuguese.

Summary of Degree Requirements

University Requirements:

- MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific courses required for this major are LAS 4097 and one of the following: LAS 2097, LAS 2098, LAS 4698.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education (p. 143) section of the Undergraduate Bulletin for more details.

College of Liberal Arts Requirements:

- Completion of a minimum of 123 credits, including:
  - 90 credits in CLA/CST courses;
  - 45 credits of which must be at the upper level (numbered 2000-4999).
For Social Science majors, 6 upper level credits (numbered 2000-4999) must be taken in Humanities Subject Areas: Arabic, Chinese, English, French, German, Greek (Ancient), Greek and Roman Classics, Hebrew, Hindi, Italian, Japanese, Latin, Philosophy, Religion, Russian, and Spanish in the College of Liberal Arts, Art History in the Tyler School of Art, or any department in the College of Science and Technology.

A minimum GPA of 2.0, cumulatively, in CLA/CST coursework, and in the major.

Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.

Foreign Language/Global Studies Requirements:
- All students must complete or test out of the first and second levels of a foreign language - these courses are numbered 1001 and 1002;
- All students must complete at least one course from the GenEd Global/World Society category; and
- All Bachelor of Arts students must complete one of the following options:
  - Third semester of a foreign language;
  - Demonstrated proficiency beyond the third semester in a foreign language (placement exam or certification from the language department);
  - Take one Global Studies course from the list on the CLA College Graduation Requirements (p. 755) page;
  - Study Abroad at an approved program; or
  - Take a second General Education Global/World Society course.

Notes on Foreign Language Study
- The third level of language is numbered 1003 in French, German, Italian, Spanish, and Portuguese and numbered 2001 in all other foreign language subjects.
- Students are strongly encouraged to take the third level of a foreign language as it is the minimum required for election to the prestigious honor society Phi Beta Kappa. (Taking the course does not guarantee admission but not taking it guarantees exclusion.)
- See the College of Liberal Arts Policies (p. 753) section of this Bulletin for more information on the Foreign Language Placement, Regression in Coursework, and guidelines for students' other experiences with language.

General Electives are typically one-third of a student's program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

Major Requirements (36 credits):

Introduction to Latin American Studies

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAS 1001</td>
<td>Perspectives on Latin America</td>
<td>1</td>
</tr>
</tbody>
</table>

Writing Intensive Course

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAS 2097</td>
<td>Writing Seminar I</td>
<td></td>
</tr>
<tr>
<td>LAS 2098</td>
<td>The Legacy of Mesoamerica</td>
<td></td>
</tr>
<tr>
<td>LAS 4698</td>
<td>Revolutionary Mexico</td>
<td></td>
</tr>
</tbody>
</table>

Latin American Studies Electives

Select eight Latin American Studies Electives numbered 1000-4999

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 3241</td>
<td>The Cultures of Latin America</td>
<td></td>
</tr>
<tr>
<td>SPAN 3243</td>
<td>The Culture of Puerto Rico</td>
<td></td>
</tr>
<tr>
<td>Any 4000+ level Spanish-American literature course taught in Spanish</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Capstone

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAS 4097</td>
<td>Latin American Studies Seminar (offered only one time per year)</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credit Hours: 36

---

1. Students who have completed the Latin American Studies Semester (p. 873) may waive this course.
2. Excluding courses used for another part of the major. Select from the approved list of undergraduate courses in Latin American Studies. See advisor for this list.
3. From the approved list of undergraduate courses in Latin American Studies.
4. Indicates Writing Capstone for the Major.
Distinction in Major
Latin American Studies majors may graduate with distinction in the major if they have a GPA of at least 3.5 in the major and a cumulative GPA of at least 3.0.

Suggested Academic Plan
Bachelor of Arts in Latin American Studies
Requirements for New Students starting in the 2015-2016 Academic Year

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
</tr>
<tr>
<td>SPAN 1001</td>
<td>Basic I [LA]</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>15</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
</tr>
<tr>
<td>SPAN 1002</td>
<td>Basic II [LA]</td>
</tr>
<tr>
<td>LAS 1001</td>
<td>Perspectives on Latin America</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>16</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>SPAN 1003</td>
<td>Intermediate [LB]</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>One 0800-4999 Elective in Any School or College</td>
<td>2</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>17</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>SPAN 2001</td>
<td>Conversational Review</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Elective</td>
<td>3</td>
</tr>
<tr>
<td>Latin American Studies 2000+ Course From Approved List</td>
<td>3</td>
</tr>
<tr>
<td>Latin American Studies 2000+ Course From Approved List</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>SPAN 2002</td>
<td>Hispanic Readings</td>
</tr>
<tr>
<td>SPAN 2096</td>
<td>Composition [WI]</td>
</tr>
<tr>
<td>Latin American Studies 2000+ Course From Approved List</td>
<td>3</td>
</tr>
<tr>
<td>Latin American Studies 2000+ Course From Approved List</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Elective</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>15</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>SPAN 3001</td>
<td>Advanced Composition Conversation</td>
</tr>
<tr>
<td>Latin American Studies 2000+ Course From Approved List</td>
<td>3</td>
</tr>
<tr>
<td>Latin American Studies 2000+ Course From Approved List</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Elective</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3</td>
</tr>
</tbody>
</table>
### Minor in Latin American Studies

#### Requirements

The Latin American Studies Minor enables students to combine the requirements of their majors with the study of Latin America. It is designed to be of particular value to students who intend to engage in technical, professional, business, or government work involving Latin America. To earn the minor, students must complete six 3-credit courses in subjects with a Latin American emphasis and demonstrate a reading knowledge and speaking facility of Spanish or Portuguese.

**Introductory course**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAS 1001</td>
<td>Perspectives on Latin America</td>
<td>3</td>
</tr>
</tbody>
</table>

**Electives**

Select five Latin American Studies Electives numbered 1000-4999

**Language Proficiency Requirement**

Select one of the following:

- Spanish or Portuguese 2000+
- Latin American Studies Semester (LASS) Proficiency examination

**Total Credit Hours**

1. Students who successfully complete the Latin American Studies Semester (LASS Program) need only four additional LAS electives. They are waived LAS 1001, one elective course, and the language proficiency requirement.

2. Students also must demonstrate reading knowledge and speaking facility of Spanish or Portuguese.

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.
Lesbian, Gay, Bisexual & Transgender (LGBT)

Rujuta Mandelia, Faculty Advisor  
816 Anderson Hall  
215-204-6953  
rujuta@temple.edu

Stephanie Morawski, Administrator  
1041 Anderson Hall  
215-204-8516  
morawski@temple.edu

www.cla.temple.edu/womenstu/lgbt/minor/

Lesbian Gay Bisexual and Transgender Studies analyzes gender, sexuality, and sexual orientation as they are understood by various disciplines and in cross-cultural perspectives. The minor enables students to become familiar with concepts, theories, history, literature, and socio-political issues concerning the LGBT community. It also gives students an opportunity to examine and think critically about the intersections of sexuality, sex, and gender and become aware of the diversity of attitudes about sexuality in different cultures and historical eras.

Requirements for the Minor

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LGBT 2405</td>
<td>Gay and Lesbian Lives</td>
<td>3</td>
</tr>
<tr>
<td>LGBT 4489</td>
<td>Field Work in LGBT Studies</td>
<td>3</td>
</tr>
<tr>
<td>Four electives are required. Among those courses, minors must take either two LGBT themed courses and two gender themed courses or three LGBT themed courses and one gender themed course. See advisor for options, some of which are listed below:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WMST 0832</td>
<td>Politics of Identity in America</td>
<td></td>
</tr>
<tr>
<td>or WMST 0932</td>
<td>Honors Politics of Identity in America</td>
<td></td>
</tr>
<tr>
<td>WMST 3097</td>
<td>Feminist Theory</td>
<td></td>
</tr>
<tr>
<td>or ENG 3097</td>
<td>Feminist Theory</td>
<td></td>
</tr>
<tr>
<td>SOC 3546</td>
<td>Sexuality and Gender</td>
<td></td>
</tr>
<tr>
<td>or WMST 3546</td>
<td>Sexuality and Gender</td>
<td></td>
</tr>
<tr>
<td>HIST 2109</td>
<td>Sexuality and Gender in American History</td>
<td></td>
</tr>
<tr>
<td>or WMST 2109</td>
<td>Sexuality and Gender in American History</td>
<td></td>
</tr>
</tbody>
</table>

Total Credit Hours 18

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Liberal Studies

www.cla.temple.edu/liberalstudies

The College of Liberal Arts offers a general degree in Liberal Studies for students who are not able to select a single discipline that would meet their professional goals and interests. This major program offers two tracks: Humanities and Social Sciences. The major in Liberal Studies is essentially self-designed, other than some common writing intensive coursework and a course that emphasizes critical thinking. It is purposely flexible so students can develop a program of study that will help them achieve a specific personal or professional goal that might be unrelated to a traditional discipline.

The Liberal Studies major was designed to meet the unique needs of working adults who may have delayed college or who are returning after a long absence from school. Courses are offered year-round at Main Campus, Ambler Campus, Online, and at Temple Center City. Students may combine locations as their schedule dictates.

Program

• Bachelor of Arts in Liberal Studies (p. 878)

Bachelor of Arts in Liberal Studies

The primary goal of the Liberal Studies curriculum is to assist students in developing their analytical, critical thinking, reading, writing and research skills, as they progress through a challenging curriculum that is primarily of their own design. This program is primarily designed to meet the needs of working
adults who have stopped out of college, or who have difficulty finding a major in one of the other disciplines in the College of Liberal Arts that meets their scheduling needs. This program will be offered at Main, Ambler, and Temple Center City campuses. Select courses will be offered online.

The curriculum is a broad-based liberal arts degree, primarily focused on upper division coursework selected by the student in keeping with his/her professional and academic goals.

All students in the Liberal Studies major begin their studies in CLA 2096, Introduction to Liberal Studies. This writing intensive, interdisciplinary course brings students together and (re)introduces the idea of academic research, writing, and participation in the academic enterprise. Instructors will select a topic of their choice and examine it from a variety of perspectives and viewpoints in the various disciplines of the liberal arts.

Later in their program of study, all Liberal Studies majors will take AMST 2098 Reading Culture to complete the second required writing intensive course for the General Education Curriculum.

Critical Thinking (either PHIL 1055 or PSY 1004) is the foundations-level course for this major.

Students must select a track, either Humanities or Social Sciences, and follow the requirements of that track. Within their track, students select a “concentration” of five courses all taken in a single department in their chosen track, all of which are numbered 2000-4999. If a particular course requires a lower-level prerequisite, this prerequisite is taken in addition to the required upper level courses of their program. Four upper level “breadth” courses numbered 2000+ are selected from other cognate departments within their chosen track. In lieu of the CLA Distribution requirement, students in the Bachelor of Liberal Studies major will take four courses numbered 2000-4999 in the “other” track (Humanities or Social Sciences).

Life Experience Portfolio Review

Students in the Liberal Studies major will have the opportunity to submit a portfolio for review to earn up to 6 credits of professional “life experience.” See your faculty advisor for more information.

For more information, contact Dr. Annette Bakley (amb@temple.edu), Senior Vice Dean of the College of Liberal Arts.

Summary of Degree Requirements

University Requirements:

• MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
• All Temple students must take a minimum of two writing-intensive courses as part of the major. The writing-intensive courses required for this major are CLA 2096 and AMST 2098.
• Students must complete requirements of the General Education (GenEd) Program. See the General Education (p. 143) section of the Undergraduate Bulletin for more details

College of Liberal Arts Requirements:

• Completion of a minimum of 123 credits, including:
  • 90 credits in CLA/CST courses;
  • 45 credits of which must be at the upper level (numbered 2000-4999).
    • The distribution requirement is built into this major.
  • A minimum GPA of 2.0, cumulatively, in CLA/CST coursework, and in the major.
  • Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.

• Foreign Language/Global Studies Requirements:
  • All students must complete or test out of the first and second levels of a foreign language - these courses are numbered 1001 and 1002;
  • All students must complete at least one course from the GenEd Global/World Society category; and
  • All Bachelor of Arts students must complete one of the following options:
    • Third semester of a foreign language;
    • Demonstrated proficiency beyond the third semester in a foreign language (placement exam or certification from the language department);
    • Take one Global Studies course from the list on the CLA College Graduation Requirements (p. 755) page;
    • Study Abroad at an approved program; or
    • Take a second General Education Global/World Society course.

• Notes on Foreign Language Study
  • The third level of language is numbered 1003 in French, German, Italian, Spanish, and Portuguese and numbered 2001 in all other foreign language subjects.
  • Students are strongly encouraged to take the third level of a foreign language as it is the minimum required for election to the prestigious honor society Phi Beta Kappa. (Taking the course does not guarantee admission but not taking it guarantees exclusion.)
• See the College of Liberal Arts Policies (p. 753) section of this Bulletin for more information on the Foreign Language Placement, Regression in Coursework, and guidelines for students other experiences with language.

**General Electives** are typically one-third of a student's program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

**Major Requirements - 16 courses/48 credits, distributed as follows:**

<table>
<thead>
<tr>
<th>Course Type</th>
<th>Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Required Courses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSY 1004</td>
<td>Critical Thinking in Psychology</td>
<td>3</td>
</tr>
<tr>
<td>or PHIL 1055</td>
<td>Critical Thinking</td>
<td></td>
</tr>
<tr>
<td>CLA 2096</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>AMST 2098</td>
<td>Reading Culture</td>
<td>3</td>
</tr>
</tbody>
</table>

**Concentration Courses**

Five courses from a single subject area (cannot overlap with other major courses) 15

**Humanities Courses**

Four Humanities courses (may not overlap with concentration area) 12

**Social Science Courses**

Four Social Science courses (may not overlap with concentration area) 12

**Total Credit Hours** 48

**Suggested Academic Plans**

**Bachelor of Arts in Liberal Studies - Humanities Track**

**Requirements for New Students starting in the 2015-2016 Academic Year**

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ENG 0802, 0812, or 0902</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Analytical Reading and Writing [GW]</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Foreign Language 1001 - first level</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>IH 0851 or 0951</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Foreign Language 1002 - second level</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td>16</td>
</tr>
</tbody>
</table>

**Year 2**

**Spring**

|                 | Mosaic: Humanities Seminar II [GZ]                                     | 3            |
|                 | GenEd Breadth Course                                                  | 3            |
|                 | Elective in Any School or College                                     | 3            |
|                 | **Term Credit Hours**                                                 | 16           |

**Select one of the following:**

- Foreign Language - third level
- GenEd Global/World Society Course
- Internationally Focused Course From Approved List
PSY 1004  Critical Thinking in Psychology
PHIL 1055  Critical Thinking
Breadth - Any Social Science 2000-4999 Course
CLA Elective

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
</tr>
</tbody>
</table>

**Year 3**

**Fall**
- CLA Elective
- CLA 2096
- Concentration 2000-4999
- Breadth - Any Social Science 2000-4999 Course
- Cognate in Humanities Track 2000-4999

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
</tr>
</tbody>
</table>

**Spring**
- CLA Elective
- Breadth - Any Social Science 2000-4999 Course
- Concentration 2000-4999
- Concentration 2000-4999
- Cognate in Humanities Track 2000-4999

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
</tr>
</tbody>
</table>

**Year 4**

**Fall**
- Concentration 2000-4999
- Concentration 2000-4999
- AMST 2098  Reading Culture [WI]
- Cognate in Humanities Track 2000-4999
- Elective in any School or College

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
</tr>
</tbody>
</table>

**Spring**
- CLA Elective
- Cognate in Humanities Track 2000-4999
- Breadth - Any Social Science 2000-4999 Course
- Elective in any School or College
- Elective in any School or College

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
</tr>
</tbody>
</table>

**Total Credit Hours:** 123

---

**Bachelor of Arts in Liberal Studies - Social Science Track**

**Requirements for New Students starting in the 2015-2016 Academic Year**

**Year 1**

**Fall**
- ENG 0802, 0812, or 0902  Analytical Reading and Writing [GW]
- GenEd Quantitative Literacy Course [GQ]
- Foreign Language 1001 - first level
- GenEd Breadth Course

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
</tr>
</tbody>
</table>

**Spring**
- IH 0851 or 0951  Mosaic: Humanities Seminar I [GY]
- Foreign Language 1002 - second level
- GenEd Breadth Course
- GenEd Breadth Course

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
</tr>
<tr>
<td>Year 2</td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td><strong>Fall</strong></td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
</tr>
<tr>
<td>Elective in Any School or College</td>
</tr>
<tr>
<td>Elective in Any School or College</td>
</tr>
<tr>
<td>Select one of the following:</td>
</tr>
<tr>
<td>Foreign Language - third level</td>
</tr>
<tr>
<td>GenEd Global/World Society Course</td>
</tr>
<tr>
<td>Internationally Focused Course From Approved List</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
</tr>
</tbody>
</table>
A major in Neuroscience enables students to pursue a curriculum in several departments, colleges, and schools at Temple University in one of the most dynamic areas of science. Neuroscience is an interdisciplinary field addressing neural and brain function at multiple levels. It encompasses a broad domain that ranges from molecular genetics and neural development, to brain processes involved in cognition and emotion, to mechanisms and consequences of neurodegenerative disease. The field of neuroscience also includes mathematical and physical principles involved in modeling neural systems and in brain imaging.

The undergraduate, interdisciplinary Neuroscience Major will culminate in a Bachelor of Science degree. Many high-level career options within and outside of the field of neuroscience are open to students with this major. This is a popular major with students aiming for professional careers in the health sciences such as in medicine, dentistry, pharmacy, physical and occupational therapy, and veterinary science.

Students interested in graduate school in biology, chemistry, communications science, neuroscience, or psychology are also likely to find the Neuroscience Major attractive.

Programs

- Bachelor of Science in Neuroscience: Systems, Behavior & Plasticity (p. 883)
- Minor in Neuroscience Research (p. 887)

Bachelor of Science in Neuroscience: Systems, Behavior & Plasticity

The Bachelor of Science degree in Neuroscience includes 52-54 required credits: 25 credits in Neuroscience, 6-8 credits in electives on neuroscience topics from a variety of participating departments, and 21 credits of co-requisite courses in Biology, Chemistry, and Psychology. Students majoring in Neuroscience will be strongly encouraged to participate in research by taking courses in independent study as part of their elective credits for the major. Independent study opportunities will be offered in many of the laboratories of the more than 130 neuroscientist faculty members in the various colleges and schools participating in Temple University’s Neuroscience Program.

Summary of Degree Requirements

University Requirements:

- MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific courses required for this major are NSCI 3096 and NSCI 4197.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education section (p. 143) of the Undergraduate Bulletin for more details.

College of Liberal Arts Requirements:

- Completion of a minimum of 123 credits, including:
• 90 credits in CLA/CST courses;
• 45 credits of which must be at the upper level (numbered 2000-4999).
  - For Social Science majors, 6 upper level credits (numbered 2000-4999) must be taken in Humanities Subject Areas: Arabic, Chinese, English, French, German, Greek (Ancient), Greek and Roman Classics, Hebrew, Hindi, Italian, Japanese, Latin, Philosophy, Religion, Russian, and Spanish in the College of Liberal Arts, Art History in the Tyler School of Art, or any department in the College of Science and Technology.
• A minimum GPA of 2.0, cumulatively, in CLA/CST coursework, and in the major.
• Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, or minor requirements.
• Note: For Neuroscience majors, there is no CLA Foreign Language/Global Studies Requirement because it is a Bachelor of Science program. However, students are strongly encouraged to take the third level of a foreign language as it is the minimum required for election to the prestigious honor society Phi Beta Kappa. (Taking the course does not guarantee admission but not taking it guarantees exclusion.)

General Electives are typically one-third of a student's program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

Major Requirements (52-54 credits):

**Required Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1012</td>
<td>General Biology II</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1031</td>
<td>General Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 1033</td>
<td>and General Chemistry Laboratory I</td>
<td></td>
</tr>
<tr>
<td>CHEM 1032</td>
<td>General Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 1034</td>
<td>and General Chemistry Laboratory II</td>
<td></td>
</tr>
<tr>
<td>PSY 1001</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 1003</td>
<td>Statistics for Psychology</td>
<td>3</td>
</tr>
<tr>
<td>NSCI 1051</td>
<td>Fundamentals of Neuroscience</td>
<td>3</td>
</tr>
<tr>
<td>NSCI 2001</td>
<td>Functional Neuroanatomy</td>
<td>3</td>
</tr>
<tr>
<td>NSCI 2121</td>
<td>Development/Plasticity/Repair</td>
<td>3</td>
</tr>
<tr>
<td>NSCI 2122</td>
<td>Cellular Neuroscience</td>
<td>3</td>
</tr>
<tr>
<td>NSCI 2222</td>
<td>The Neurobiology of Disease</td>
<td>3</td>
</tr>
<tr>
<td>NSCI 3087</td>
<td>Techniques in Neuroscience</td>
<td>3</td>
</tr>
<tr>
<td>NSCI 3096</td>
<td>Conducting Neuroscience Research</td>
<td>3</td>
</tr>
<tr>
<td>NSCI 4197</td>
<td>Capstone in Neuroscience</td>
<td>4</td>
</tr>
</tbody>
</table>

**Foundations Courses:**

Select one of the following:

- PSY 2501 Foundations of Behavioral Neuroscience
- PSY 2502 Foundations of Cognitive Neuroscience

**Electives**

Select two of the following: 6-8 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSCD 3235</td>
<td>Human Neuroscience</td>
</tr>
<tr>
<td>CSCD 3382</td>
<td>Independent Study in Communication Sciences</td>
</tr>
<tr>
<td>PHIL 2144</td>
<td>Introduction to the Philosophy of Mind</td>
</tr>
<tr>
<td>NSCI 3000</td>
<td>Current Topics in Neuroscience</td>
</tr>
<tr>
<td>NSCI 4182</td>
<td>Independent Study in Neuroscience 1</td>
</tr>
<tr>
<td>NSCI 4282</td>
<td>Independent Study in Neuroscience 2</td>
</tr>
<tr>
<td>NSCI 4191</td>
<td>Collaborative Research I</td>
</tr>
<tr>
<td>NSCI 4291</td>
<td>Collaborative Research II</td>
</tr>
<tr>
<td>PSY 2102</td>
<td>Foundations of Evolutionary and Comparative Psychology</td>
</tr>
<tr>
<td>PSY 3306</td>
<td>Neuroscience of Development and Aging</td>
</tr>
<tr>
<td>PSY 3561</td>
<td>Psychopharmacology</td>
</tr>
<tr>
<td>PSY 3566</td>
<td>Neurobiology of Learning and Memory</td>
</tr>
<tr>
<td>PSY 4182</td>
<td>Independent Study in Cognitive Neuroscience I</td>
</tr>
<tr>
<td>PSY 4282</td>
<td>Independent Study in Cognitive Neuroscience II</td>
</tr>
<tr>
<td>BIOL 3082</td>
<td>Independent Research II</td>
</tr>
<tr>
<td>BIOL 3096</td>
<td>Cell Structure and Function</td>
</tr>
</tbody>
</table>
Schools, Colleges, and Divisions

BIOL 3352 Systems Neuroscience
BIOL 3354 Neural Basis of Animal Behavior
BIOL 3356 Organization and Development of the Nervous System
CHEM 3881 Cooperative Research
CHEM 4107 Drug Analysis
PHYS 3301 Electricity and Magnetism

Total Credit Hours 52-54

Students should check prerequisites for all courses.

Combining the Major in Neuroscience with Major or Minor Programs in Psychology

Students who choose to double-major in Neuroscience and Psychology may count the following courses towards both majors without taking replacement coursework:

- PSY 1001 Introduction to Psychology
- PSY 1003 Statistics for Psychology
- NSCI 3096 Conducting Neuroscience Research
- BIOL 1012 General Biology II
- CHEM 1031 General Chemistry I & CHEM 1033 General Chemistry Laboratory I
- CHEM 1032 General Chemistry II & CHEM 1034 General Chemistry Laboratory II

For students who major in Neuroscience and minor in Psychology, the following courses may count towards both programs without taking replacement coursework:

- PSY 1001 Introduction to Psychology
- PSY 1003 Statistics for Psychology
- NSCI 3096 Conducting Neuroscience Research

Distinction in Neuroscience Major

Majors in Neuroscience: Systems, Behavior and Plasticity have the opportunity to be awarded departmental distinction upon graduation. Graduation with Distinction can be achieved by maintaining a Grade Point Average of 3.0 or better in all Neuroscience Courses, completing two semesters of Independent Study in Neuroscience (NSCI 4182 & NSCI 4282) with an A- or better, and successfully completing a neuroscience research project based on the independent study work and described in a research paper and poster presented to Neuroscience Program faculty and students.

Suggested Academic Plan

Bachelor of Science in Neuroscience: Systems, Behavior & Plasticity

Requirements for New Students starting in the 2015-2016 Academic Year

Year 1

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>14</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IH 0851 or 0951</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>NSCI 1051</td>
<td>3</td>
</tr>
<tr>
<td>PSY 1001</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 1012</td>
<td>4</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

Year 2

<table>
<thead>
<tr>
<th>Fall</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSCI 2001</td>
</tr>
<tr>
<td>Term</td>
</tr>
<tr>
<td>------</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

CHEM 1031/CHEM 1033 and CHEM 1032/CHEM 1034 fulfill the GenEd Science & Technology requirement. Prerequisite for CHEM 1031 is MATH 1021 with a C or better or placement into MATH 1022.
Minor in Neuroscience Research

The Neuroscience Research Minor expands opportunities for Temple students to get research experience and to become more competitive in their applications to graduate and professional schools. The required courses in the Neuroscience Research Minor focus on basic neuroscience, cellular and molecular neuroscience, and techniques.

In addition to formal coursework, independent study resulting in a research project is required. The Neuroscience Research Project is a unique project developed over two semesters of independent study. The project is submitted in written form (research article format) and is presented to Neuroscience faculty members and graduate students as a poster. This project may not overlap with projects for other programs (e.g., Honors).

Because of some overlap in coursework, the students must choose to minor in either the Neuroscience Research or the Cognitive Neuroscience minor.

Requirements

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSCI 1051</td>
<td>Fundamentals of Neuroscience</td>
<td>3</td>
</tr>
<tr>
<td>NSCI 2122</td>
<td>Cellular Neuroscience</td>
<td>3</td>
</tr>
<tr>
<td>NSCI 2001</td>
<td>Functional Neuroanatomy</td>
<td>3</td>
</tr>
<tr>
<td>NSCI 3096</td>
<td>Conducting Neuroscience Research</td>
<td>3</td>
</tr>
</tbody>
</table>

Electives

Select two of the following: 6-7

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSCI 2121</td>
<td>Development/Plasticity/Repair</td>
</tr>
<tr>
<td>NSCI 2222</td>
<td>The Neurobiology of Disease</td>
</tr>
<tr>
<td>NSCI 3000</td>
<td>Current Topics in Neuroscience</td>
</tr>
<tr>
<td>NSCI 3087</td>
<td>Techniques in Neuroscience</td>
</tr>
<tr>
<td>NSCI 4182</td>
<td>Independent Study in Neuroscience 1</td>
</tr>
<tr>
<td>NSCI 4282</td>
<td>Independent Study in Neuroscience 2</td>
</tr>
<tr>
<td>PSY 2501</td>
<td>Foundations of Behavioral Neuroscience</td>
</tr>
<tr>
<td>PSY 2502</td>
<td>Foundations of Cognitive Neuroscience</td>
</tr>
<tr>
<td>PSY 3141</td>
<td>Neurobiology and Evolution of Social Behavior</td>
</tr>
<tr>
<td>PSY 3306</td>
<td>Neuroscience of Development and Aging</td>
</tr>
<tr>
<td>PSY 3561</td>
<td>Psychopharmacology</td>
</tr>
</tbody>
</table>

Total Credit Hours 18-19

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Major in Psychology with a Neuroscience Research Minor

Students who major in Psychology and take the Neuroscience Research Minor may double count one elective and NSCI 3096 Conducting Neuroscience Research for both programs without taking any replacement coursework.

Philosophy

www.cla.temple.edu/philosophy

Miriam Solomon, Chair
728 Anderson Hall
215-204-9629
msolomon@temple.edu

Paul Crowe, Undergraduate Advisor
747 Anderson Hall
215-204–8591
pcrowe@temple.edu

Belinda Wilson, Administrator
bwilson@temple.edu
The Philosophy Department offers a B.A. degree program as well as a minor. The B.A. program is designed to provide a solid foundation for various professions in business, government, and professional schools (such as law and medicine), as well as an excellent background for the further study of philosophy. The department makes special provisions for students who have chosen the major as preparation for entry into law school. These students should follow a path slightly different from that of traditional majors, as indicated under the BA requirements (p. 889). The Philosophy Department always has many majors who are transfer students. Students should be sure to see the departmental advisor to make the necessary adjustments for their progress through the major.

**Programs**
- Bachelor of Arts in Philosophy (p. 888)
- Minor in Philosophy (p. 892)

**Bachelor of Arts in Philosophy**

**Summary of Degree Requirements**

**University Requirements:**
- MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific courses required for this major are PHIL 1196, and either PHIL 4297 or PHIL 4298.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education section (p. 143) of the Undergraduate Bulletin for more details.

**College of Liberal Arts Requirements:**
- Completion of a minimum of 123 credits, including:
  - 90 credits in CLA/CST courses;
  - 45 credits of which must be at the upper level (numbered 2000-4999).
    - For Humanities majors, 6 upper level credits must be earned in the Social Science and interdisciplinary subject areas: African American Studies, American Studies, Anthropology, Asian Studies, Criminal Justice, Economics, Environmental Studies, Geography and Urban Studies, Global Studies, History, Jewish Studies, Latin American Studies, Lesbian, Gay, Bisexual, and Transgender Studies, Liberal Arts, Neuroscience (CLA), Political Science, Psychology, Sociology, Women's Studies, or any department in the College of Science and Technology.
- A minimum GPA of 2.0, cumulatively, in all CLA/CST coursework, and in the major department.
- Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.
- **Foreign Language/Global Studies Requirements:**
  - All students must complete or test out of the first and second levels of a foreign language - these courses are numbered 1001 and 1002;
  - All students must complete at least one course from the GenEd Global/World Society category; and
  - All Bachelor of Arts students must complete one of the following options:
    - Third semester of a foreign language;
    - Demonstrated proficiency beyond the third semester in a foreign language (placement exam or certification from the language department);
    - Take one Global Studies course from the list on the CLA College Graduation Requirements (p. 755) page;
    - Study Abroad at an approved program; or
    - Take a second General Education Global/World Society course.

**Notes on Foreign Language Study**
- The third level of language is numbered 1003 in French, German, Italian, Spanish, and Portuguese and numbered 2001 in all other foreign language subjects.
- Students are strongly encouraged to take the third level of a foreign language as it is the minimum required for election to the prestigious honor society Phi Beta Kappa. (Taking the course does not guarantee admission but not taking it guarantees exclusion.)
- See the College of Liberal Arts Policies (p. 753) section of this Bulletin for more information on the Foreign Language Placement, Regression in Coursework, and guidelines for students’ other experiences with language.

**General Electives** are typically one-third of a student's program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

**Major Requirements:** 12 courses in Philosophy (36 credits):
PHIL 1066  Introduction to Logic  3
PHIL 2161  History of Philosophy: Greek  3
PHIL 2172  History of Philosophy: Modern  3
PHIL 1196  Introduction to Philosophy  3

**Ethics**
Select one of the following:  3
- PHIL 3222  Contemporary Ethical Theory
- PHIL 3226  Classics in Moral Philosophy
- PHIL 4225  Metaethics

**Senior Seminar**
PHIL 4298  Senior Seminar  3
or PHIL 4297  Pre-Law Tutorial

Six additional Philosophy courses at the 2000+ level  18

**Total Credit Hours**  36

---

1  For scheduling reasons, especially for transfer students, another ethics-related course is often substituted.
2  PHIL 2196 does NOT count as an elective for the Philosophy major.

**Suggested Requirements for the Philosophy Major with a Pre-Law Emphasis:**

PHIL 1196  Introduction to Philosophy  3
PHIL 1055  Critical Thinking  3
PHIL 2161  History of Philosophy: Greek  3
PHIL 2172  History of Philosophy: Modern  3
PHIL 3243  Philosophy of Law  3
PHIL 4297  Pre-Law Tutorial  3
PHIL 3085  Pre-Law Internship  3
Five additional Philosophy courses at the 2000+ level  15

**Total Credit Hours**  36

---

**Distinction in Major**
Successful completion of PHIL 4999.

**Suggested Academic Plans**

**Bachelor of Arts in Philosophy**

**Requirements for New Students starting in the 2015-2016 Academic Year**

**Year 1**

**Fall**

- ENG 0802, 0812, or 0902  Analytical Reading and Writing [GW]  4
- GenEd Quantitative Literacy Course [GQ]  4
- Foreign Language 1001 - first level  4
- GenEd Breadth Course  3

**Term Credit Hours**  15

**Spring**

- IH 0851 or 0951  Mosaic: Humanities Seminar I [GY]  3
- Foreign Language 1002 - second level  4
- GenEd Breadth Course  3
- PHIL 1066  Introduction to Logic  3
- PHIL 1196  Introduction to Philosophy [WI]  3

**Term Credit Hours**  16

**Year 2**

**Fall**
IH 0852 or 0952 Mosaic: Humanities Seminar II [GZ] 3
GenEd Breadth Course 3
GenEd Breadth Course 3
PHIL 2161 History of Philosophy: Greek 3
One 0800-4999 Elective in Any School or College 2
Select one of the following:
   Foreign Language - third level
   GenEd Global/World Society course
   Internationally Focused Course From Approved List

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 2172 History of Philosophy: Modern</td>
<td>3</td>
</tr>
<tr>
<td>One 2000+ Philosophy Course</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 3</td>
<td></td>
</tr>
<tr>
<td>Fall</td>
<td></td>
</tr>
<tr>
<td>CLA/CST 2000+ Social Science/CST Course</td>
<td>3</td>
</tr>
<tr>
<td>One 2000+ Philosophy Course</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Elective</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Elective</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 3222 Contemporary Ethical Theory</td>
<td></td>
</tr>
<tr>
<td>PHIL 3226 Classics in Moral Philosophy</td>
<td></td>
</tr>
<tr>
<td>PHIL 4225 Metaethics</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td>CLA/CST 2000+ Social Science/CST Course</td>
<td>3</td>
</tr>
<tr>
<td>One 2000+ Philosophy Course</td>
<td>3</td>
</tr>
<tr>
<td>One 2000+ Philosophy Course</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 2000+ Course</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Elective in Any School or College</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 4</td>
<td></td>
</tr>
<tr>
<td>Fall</td>
<td></td>
</tr>
<tr>
<td>One 2000+ Philosophy Course</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 2000+ Course</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 4298 or 4297 Senior Seminar [WI]</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Elective</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td>One 2000+ Philosophy Course</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 2000+ Course</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Elective</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Elective</td>
<td>3</td>
</tr>
<tr>
<td>One 0800-4999 Elective in Any School or College</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credit Hours: 123
PHIL 4298/PHIL 4297 may not be offered every semester. Check with advisor for offerings.

**Bachelor of Arts in Philosophy with a Pre-Law Emphasis**

**Requirements for New Students starting in the 2015-2016 Academic Year**

<table>
<thead>
<tr>
<th>Year 1</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign Language 1001 - first level</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Foreign Language 1002 - second level</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHIL 1055</td>
<td>Critical Thinking</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PHIL 1196</td>
<td>Introduction to Philosophy [WI]</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>16</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHIL 2161</td>
<td>History of Philosophy: Greek</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>One 0800-4999 Elective in Any School or College</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign Language - third level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GenEd Global/World Society course</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internationally Focused Course From Approved List</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>17</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHIL 2172</td>
<td>History of Philosophy: Modern</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>One 2000+ Philosophy Course</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>15</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CLA/CST 2000+ Social Science/CST Course</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>One 2000+ Philosophy Course</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CLA/CST 2000+ Course</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Elective</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Elective</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CLA/CST 2000+ Social Science/CST Course</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHIL 3243</td>
<td>Philosophy of Law</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>One 2000+ Philosophy Course</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CLA/CST 2000+ Course</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Elective</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>15</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Minor in Philosophy

Requirements

Introductory Philosophy

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL 1196</td>
<td>Introduction to Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>or PHIL 1001</td>
<td>Philosophical Challenges to the Individual</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 1066</td>
<td>Introduction to Logic</td>
<td>3</td>
</tr>
<tr>
<td>or PHIL 1055</td>
<td>Critical Thinking</td>
<td>3</td>
</tr>
</tbody>
</table>

History of Philosophy

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL 2161</td>
<td>History of Philosophy: Greek</td>
<td>3</td>
</tr>
<tr>
<td>or PHIL 2172</td>
<td>History of Philosophy: Modern</td>
<td>3</td>
</tr>
</tbody>
</table>

Ethics

Select one of the following: 3

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL 3222</td>
<td>Contemporary Ethical Theory</td>
<td></td>
</tr>
<tr>
<td>PHIL 3226</td>
<td>Classics in Moral Philosophy</td>
<td></td>
</tr>
<tr>
<td>PHIL 4225</td>
<td>Metaethics</td>
<td></td>
</tr>
</tbody>
</table>

Three Philosophy electives numbered 2000-4999 2 9

Total Credit Hours 21

1 For scheduling reasons, especially for transfer students, another ethics-related course is often substituted.
2 PHIL 2196 does NOT count as an elective for the Philosophy minor.

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Political Science

408 Gladfelter Hall
215-204-7796
www.cla.temple.edu/politicalscience/

Gary Mucciaroni, Chair
409 Gladfelter Hall
215-204-6195
The Political Science major and minor provide students with access to a wide range of courses in American politics at the local, state, and federal levels, as well as courses focused on countries around the world, international relations, and classical and modern political thought.

The key educational goal of the political science program is to help students acquire a strong foundation in communications skills while learning about political behavior, governments, political processes, and public policies. Through a curriculum that includes coursework in American, comparative, and international politics, and political theory, students develop analytical, research, and writing skills in step-wise fashion from introductory to upper-level courses. Students gain experience in how to develop sophisticated analytical arguments, strong written and oral presentation skills, and the capacity to conduct empirical research.

Political Science graduates pursue a wide range of careers. They may work in government offices (at local, state, and federal levels); political campaigns; private voluntary organizations; unions, advocacy and community organizations; foundations, social services, and educational institutions. A degree in Political Science is excellent preparation for law school, public policy programs, and graduate studies in international affairs.

The department can arrange internships, which are typically linked to academic study. In addition, the Experiential Learning Program offers internships combined with academic seminars.

The department works closely with several student organizations, including the Political Science Majors Association, the Political Science Society, and the Political Science Honor Society - Pi Sigma Alpha, Temple Chapter.

**Special Programs**

**Political Science Honors Program**

The Political Science Honors Program is designed to give highly motivated Political Science students the opportunity to take academically rigorous honors seminars with other honors students, and to acquire the skills necessary to undertake in-depth independent research on topics of interest. The Department's Honors Program is excellent preparation for graduate school.

**Distinction in Major:** Political Science majors who have completed their sophomore year with a 3.6 GPA or above are eligible to be a member of the Departmental Honors Program in Political Science. Departmental Honors students are allowed to take a two course writing-intensive sequence (POLS 3996 Junior Honors Capstone Seminar and POLS 4996 Senior Honors Capstone Seminar) in their junior and senior years. Students who pass both courses with a B or better will graduate with Distinction in Major. This is noted on the transcript. Note: POLS 3996 counts as an upper-level elective and writing intensive course and POLS 4996 counts as the senior capstone requirement.

**Admission into the Departmental Honors Program:** Eligible students will be contacted via e-mail in the spring semester. Students who believe they are eligible for the program but who were not notified are encouraged to contact the Undergraduate Chair, Dr. Orfeo Fioretos, kof@temple.edu for more information.

**Funding and Support**

- Honors Program students may apply for financial support to cover research-related activities, such as visits to archives, travel to present a scholarly paper, etc., through the Creative Arts, Research and Scholarship (CARAS) Program (http://www.temple.edu/vpus/opportunities/CARAS.htm).
- Funding is also available through the Diamond Research Scholars Program (http://www.temple.edu/vpus/opportunities/ResearchScholars.htm).
- Honors students are also encouraged to submit their completed senior thesis to the Library Prize for Undergraduate Research (http://guides.temple.edu/libraryprize).

**Internship/Experiential Learning**

The internship experience provides students the opportunity to learn more about the discipline and potential career paths through a workplace experience. Students may count up to 6 credits towards the requirements of the major (major electives) in approved internship placements. (Additional credits may count toward free electives; check with your academic advisor.) Interested students should contact Dr. Alistair Howard alistair@temple.edu for more information.
The Political Economy Certificate Program

The Department of Political Science and the Department of Economics offer an interdisciplinary program leading to a Certificate in Political Economy. The program focuses on the interaction between government and the economy and is ideal preparation for students planning careers in either the public or private sector. It also provides an excellent foundation for graduate studies in law, the social sciences, and public administration. The program is open to all matriculated students in the university. Contact Dr. Richard Deeg, rdeeg@temple.edu, for specific details and requirements.

Pre-Law Studies

Political Science is one of the most popular majors for pre-law students. Although law schools neither give preference to any particular major nor require any specific undergraduate courses, they do make some general recommendations about getting a sound Liberal Arts education. For more information, students should visit CLA Pre-Law (http://www.cla.temple.edu/prelaw).

In general, pre-law students should develop skills in communicating ideas in both written and spoken form. In addition, pre-law students should sharpen their analytical abilities and ability to think logically. Law schools also recommend that pre-law students acquire in-depth understanding of at least one social science (such as Political Science). Finally, some knowledge of business structure and terminology may be useful in law school. For further information, students interested in pre-law studies should contact Dr. Paul Crowe in the Philosophy Department, pcrowe@temple.edu or Ms. Elizabeth Reynard, ereynard@temple.edu in the Academic Advising Center.

Study Away Opportunities

The Pennsylvania Capital Semester

The Institute for Public Affairs sponsors an internship semester each fall and spring in Harrisburg in association with Temple’s Harrisburg campus. Students have the opportunity to explore government affairs, policymaking and implementation first-hand while being full-time students and staying on track to graduation. If accepted, students are guaranteed an internship, as Temple makes the initial contacts, and gears placements toward student interests. Internships are with the legislature, executive branch, media, advocacy organizations, non-profits, and lobbying and development firms. All majors are encouraged to apply.

For further information, refer to The Pennsylvania Capital Semester site (http://www.cla.temple.edu/ipa/about/the-pennsylvania-capital-semester).

Contact: Michelle J. Atherton, Associate Director, Institute for Public Affairs, 840 Anderson Hall, 215-204-9074, mjather@temple.edu.

The Washington Semester

The Washington Semester allows Temple students to gain valuable career experience in the nation’s capital, while remaining full-time students. If accepted into the program, students register for three courses for a 15-credit semester in the fall and spring, 9 credits for the internship and 3 each for a leadership seminar and academic course. Summer programs are also available for 12 credits with a 6-credit internship. The Institute for Public Affairs serves as liaison to The Washington Center, a well-established and well-regarded provider of educational programs in Washington, DC through which Temple students receive internships and take classes. Programs range from service and the arts, to business and global trade, to media and communications, and politics and more.

For further information refer to The Washington Semester site (http://www.cla.temple.edu/ipa/the-washington-semester).

Contact: Michelle J. Atherton, Associate Director, Institute for Public Affairs, 840 Anderson Hall, 215-204-9074, mjather@temple.edu.

Study Abroad

Temple provides a number of opportunities for students to study abroad; and the experience of living in, and meeting people from, other cultures; seeing different countries; and learning a foreign language can greatly enrich the undergraduate experience. The Office of Education Abroad and Overseas Campuses (200 Tuttleman Learning Center; phone: 215-204-0720; http://studyabroad.temple.edu/) has information on a variety of programs abroad. Temple study abroad locations include Tokyo, Rome, London, Paris, Germany, and Mexico.

Student Organizations

The Political Science Majors Association is the organization of all Political Science majors at Temple University. The primary purpose of the association is to represent the opinions and interests of undergraduate majors within the Political Science Department. The association sponsors activities for undergraduate majors, including career forums, lectures, student and faculty mixers, law and graduate forums, seminars on popular topics, and trips to Harrisburg.

Pi Sigma Alpha is the national Political Science Honor Society, into which students who have distinguished themselves in the field of political science are inducted. Inquiries about membership should be directed to the faculty advisor of Pi Sigma Alpha, Dr. Robin Kolodny, rkolsony@temple.edu.

Programs

• Bachelor of Arts in Political Science (p. 895)
• Minor in Political Science (p. 897)
Bachelor of Arts in Political Science

Course Sequencing for Political Science Majors

Students begin the major by taking four introductory courses: POLS 1101, POLS 1201, POLS 1301, and POLS 2496.

Courses should be sequenced so that students take the introductory courses before the upper-level courses. POLS 1101 is an introduction to U.S. politics and should be taken before upper-level courses in this area. Similarly, POLS 1201 introduces foreign governments and precedes upper-level courses in this field. POLS 1301 introduces international politics and is a prerequisite for upper-level courses in this subject matter. POLS 2496 introduces political theory and should be taken after a student has had several Political Science courses and should precede upper-level theory courses.

Once the introductory courses are completed, students can move on to the electives at the upper level (numbered 2000-4999), of which 3 are needed. Students should pay particular attention to the order in which they take the research methods-capstone sequence (which is taken concurrent with the electives; see notes below). The first course in this sequence is POLS 2503 Evidence and Knowledge, a research design course that teaches students how to conduct empirical research, an essential skill for successfully completing the upper-level courses.

Evidence and Knowledge will lay the foundation for the next two capstone preparation courses (numbered 3501 through 3599). These research-intensive courses focus on an advanced topic, like other upper level courses, but they also place an emphasis on sharpening the research skills covered in the first course. Once two capstone prep/research intensive courses are completed, the student enrolls in a capstone seminar, the culminating experience of the Political Science major.

Summary of Degree Requirements

University Requirements:

- MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific courses required for this major are POLS 2496 and POLS 4896.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education (p. 143) section of the Undergraduate Bulletin for more details.

College of Liberal Arts Requirements:

- Completion of a minimum of 123 credits, including:
  - 90 credits in CLA/CST courses;
  - 45 credits of which must be at the upper level (numbered 2000-4999).
  - For Social Science majors, 6 upper level credits (numbered 2000-4999) must be taken in Humanities Subject Areas: Arabic, Chinese, English, French, German, Greek (Ancient), Greek and Roman Classics, Hebrew, Hindi, Italian, Japanese, Latin, Philosophy, Religion, Russian, and Spanish in the College of Liberal Arts, Art History in the Tyler School of Art, or any department in the College of Science and Technology.
  - A minimum GPA of 2.0, cumulatively, in CLA/CST coursework, and in the major.
  - Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.
  - Foreign Language/Global Studies Requirements:
    - All students must complete or test out of the first and second levels of a foreign language - these courses are numbered 1001 and 1002;
    - All students must complete at least one course from the GenEd Global/World Society category; and
    - All Bachelor of Arts students must complete one of the following options:
      - Third semester of a foreign language;
      - Demonstrated proficiency beyond the third semester in a foreign language (placement exam or certification from the language department);
      - Take one Global Studies course from the list on the CLA College Graduation Requirements (p. 755) page;
      - Study Abroad at an approved program; or
      - Take a second General Education Global/World Society course.
  - Notes on Foreign Language Study
    - The third level of language is numbered 1003 in French, German, Italian, Spanish, and Portuguese and numbered 2001 in all other foreign language subjects.
    - Students are strongly encouraged to take the third level of a foreign language as it is the minimum required for election to the prestigious honor society Phi Beta Kappa. (Taking the course does not guarantee admission but not taking it guarantees exclusion.)
• See the College of Liberal Arts Policies (p. 753) section of this Bulletin for more information on the Foreign Language Placement, Regression in Coursework, and guidelines for students’ other experiences with language.

**General Electives** are typically one-third of a student’s program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

**Major Requirements - 11 Courses in Political Science (33 credits):**

**Required Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLS 1101</td>
<td>The American Political System</td>
<td>3</td>
</tr>
<tr>
<td>POLS 1201</td>
<td>Foreign Governments and Politics</td>
<td>3</td>
</tr>
<tr>
<td>POLS 1301</td>
<td>International Politics</td>
<td>3</td>
</tr>
<tr>
<td>POLS 2496</td>
<td>Introduction to Political Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>POLS 2503</td>
<td>Evidence and Knowledge</td>
<td>3</td>
</tr>
</tbody>
</table>

**Electives**

Select 2 Research Preparatory courses numbered 3501-3599

Select 3 upper-level Political Science courses numbered 2000-4999

**Capstone**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLS 4896</td>
<td>Capstone Seminar in Political Science</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credit Hours 33

1 With the exception of POLS 2496.
2 POLS 4896 is the capstone course for the major and should be taken in the senior year after the completion of POLS 1101, POLS 1201, POLS 1301, POLS 2496, POLS 2503, two Research Preparatory courses (numbered 3501-3599), and three additional Political Science courses (numbered 2000-4999).

Not all courses are offered every semester. Please check the Class Schedule for actual course offerings each semester.

**Suggested Academic Plan**

**Bachelor of Arts in Political Science**

**Requirements for New Students starting in the 2015-2016 Academic Year**

**Year 1**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Foreign Language 1001 - first level</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15</strong></td>
<td></td>
</tr>
<tr>
<td>Spring</td>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GZ]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Foreign Language 1002 - second level</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>POLS 1101</td>
<td>The American Political System</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>POLS 1201</td>
<td>Foreign Governments and Politics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>16</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Year 2**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>POLS 1301</td>
<td>International Politics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>One 0800-4999 Elective in Any School or College</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Select one of the following:</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Foreign Language - third level</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>
GenEd Global/World Society Course
Internationally Focused Course From Approved List

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>17</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>One 2000+ Political Science Course</td>
<td>3</td>
</tr>
<tr>
<td>POLS 2496</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Year 3</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>CLA/CST 2000+ Humanities/CST Course</td>
<td>3</td>
</tr>
<tr>
<td>POLS 2503</td>
<td>3</td>
</tr>
<tr>
<td>One 2000+ Political Science Course</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 2000+ Course</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>CLA/CST 2000+ Humanities Course</td>
<td>3</td>
</tr>
<tr>
<td>Political Science 3501-3599 Capstone Preparation Course</td>
<td>3</td>
</tr>
<tr>
<td>One 2000+ Political Science Course</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 2000+ Course</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Year 4</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>Political Science 3501-3599 Capstone Preparation Course</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 2000+ Course</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Elective</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>POLS 4896</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 2000+ Course</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 2000+ Course</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Elective</td>
<td>3</td>
</tr>
<tr>
<td>One 0800-4999 Elective in Any School or College</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Credit Hours:</strong></td>
<td>123</td>
</tr>
</tbody>
</table>

**Minor in Political Science**

**Requirements**

**Introduction**

Select two of the following: 6

- POLS 1101 The American Political System
- POLS 1201 Foreign Governments and Politics
- POLS 1301 International Politics
- POLS 2496 Introduction to Political Philosophy

**Electives**
Select 4 upper-level courses numbered 2000-4999 \(^1\)

**Total Credit Hours**

18

\(^1\) With the exception of POLS 2496

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

**Psychology**

Marsha Weinraub, Chair
658 Weiss Hall
215-204-7360
mweinrau@temple.edu

Tania Giovannetti, Undergraduate Chairperson
475 Weiss Hall
215-204-4296
tgio@temple.edu

Peter James, Associate Chair
606 Weiss Hall
215-204-3409
pjames@temple.edu

Nicole Pileggi, Advisor
605 Weiss Hall
215-204-3403
nicole.pileggi@temple.edu

Paula Kittrell, Administrator
654 Weiss Hall
215-204-2644
paula.kittrell@temple.edu

The Temple University Undergraduate Psychology program provides a modern curriculum covering a breadth of content, ranging from biological bases of cognition and behavior to sociocultural influences on human interactions and psychological disorders. The curriculum is designed to develop students' critical thinking skills through emphasis of the scientific basis of Psychology and courses in statistics and research methodology. The program also emphasizes the integration and synthesis of information across courses and activities through the stepwise progression of the curriculum from the introductory, foundational, and advanced classes up to the final capstone course that is taken in the senior year. Students are strongly encouraged to develop applied skills through rigorous and highly focused experiential learning in research laboratories and community-based internships. The curriculum is designed to be sufficiently flexible to satisfy the diversity of needs among undergraduates. An individually tailored curriculum may be selected for the purpose of preparing students for employment or further study in psychology, neuroscience, medicine, law, business, or other fields.

Psychology identifies several learning goals for each level of instruction in the program. At the introductory level (PSY 1001, PSY 1002, PSY 1003, PSY 1004), goals include familiarity with the scientific grounding of the discipline (PSY 1001), basic statistics (PSY 1003) and scientific methods (PSY 1004), as well as information on how to prepare for a career in psychology or a related discipline (PSY 1002). At the Foundation level (2000-level courses), students develop deeper knowledge of the fascinating content areas in the discipline, which are broadly organized in two groups:

1. Developmental/Clinical/Social (DCS); and

Students are required to choose at least two courses from each of these two general areas, and this ensures familiarity with the breadth of the discipline. These courses cover a wide range of topics from the functions of the neuron to the development of moral thought. At the Advanced level (3000-3620), students continue to develop critical thinking skills to dispassionately examine conflicting claims, analyze data, organize research papers, and become more proficient with the scientific process in a writing intensive course (PSY 3096). Students also are required to select four courses with the option of continuing to develop breadth or choosing to delve into greater depth in one area, such as clinical psychology. Finally, at the 4000 level, Capstone is the only course offered. This writing-intensive course is designed to help students integrate their knowledge base, to refine their critical and writing skills, and generally to synthesize their knowledge of the discipline.

**Collaborative Research**

Up to four terms of Collaborative Research (PSY 3791, PSY 3891, PSY 4791, and PSY 4891) may be taken as free electives that count toward the CLA upper-level course requirement. Enrolling in Collaborative Research allows students to work alongside faculty members and their graduate students.
in a research laboratory setting. Through these experiences, students learn how studies are designed and conducted. They also learn how data are collected, analyzed, and interpreted. Research experiences are very important for students interested in applying to graduate school in psychology. To find information on research labs, visit the Collaborative Research site (http://www.cla.temple.edu/psychology/research-opportunities/faculty-sponsors-for-collaborative-research).

**Internship/Practicum**

With permission, students may obtain course credit for psychology experiences in the workplace (PSY 3785 and PSY 3787). These courses count as upper level electives for the BA degree, but may not be used as electives for the major requirements in Psychology. Internships allow students to apply psychological theories that are learned in the classroom to real-life situations. Internships also help to build an employment record and may complement applications for graduate work in psychology, social work, or another field. Internships are available in a number of different applications in psychology, including, but not limited to: organizational; applied behavior analysis; education; clinical and counseling psychology; autism research; probation officers; and a variety of other placements.

For more information, visit the Internship & Practicum site (http://www.cla.temple.edu/psychology/undergraduate/psychology-internship-and-practicum) or e-mail Dr. Peter James at pjames@temple.edu.

**Policies Regarding Curricular Overlaps**

There are several related majors and minors offered from the Psychology Department, including the major and minor in Psychology, the Cognitive Neuroscience minor in Psychology, the Clinical and Health Psychology minor, the major in Neuroscience (see Neuroscience Section for details) and the Neuroscience Research minor.

Students majoring in Psychology may take a minor in Cognitive Neuroscience, a second major in Neuroscience, or a minor in Neuroscience Research. Psychology majors are not permitted to take the minor in Clinical and Health Psychology but are permitted to take those courses as electives in their major.

Students who opt to double major in Psychology and Neuroscience may double-count the following required courses without taking additional electives in their major to replace the credits:

- PSY 1001 Introduction to Psychology
- PSY 1003 Statistics for Psychology
- PSY 3096 Conducting Psychological Research or NSCI 3096 Conducting Neuroscience Research
- BIOL 1012 General Biology II
- CHEM 1031 General Chemistry I/CHEM 1033 General Chemistry Laboratory I
- CHEM 1032 General Chemistry II/CHEM 1034 General Chemistry Laboratory II

Students who major in Psychology and minor in Cognitive Neuroscience may double count a maximum of two courses.

Students who major in Psychology and minor in Neuroscience Research may double count one elective course and

- PSY 3096 Conducting Psychological Research or NSCI 3096 Conducting Neuroscience Research

**Programs**

- Bachelor of Arts in Psychology (p. 899)
- Minor in Clinical and Health Psychology (p. 904)
- Minor in Cognitive Neuroscience (p. 905)
- Minor in Psychology (p. 905)

**Bachelor of Arts in Psychology**

Students who major in Psychology are encouraged to participate in the Psychology Honors Program, Psychology Majors Association, and Honor Societies for Psychology majors, including Psi Chi and Phi Beta Kappa.

**The Psychology Honors Program**

A main goal of the Psychology Honors program is to provide each student with an individualized experience that will prepare them for psychological research in the future. This program is designed as a two-year study that begins with critical thinking, writing, and the study of methodology. Grade requirement is a 3.5 GPA across all courses. Upon completion of this program, students will have produced a senior thesis and presented their work at a student poster session. Some students present research at regional or national meetings.

Students earn Distinction in Major upon completion of the Psychology Honors program.
For more information, refer to the Psychology Honors Program section of the Psychology Undergraduate site (http://www.cla.temple.edu/psychology/undergraduate).

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 2991</td>
<td>Honors Research I</td>
<td>4</td>
</tr>
<tr>
<td>PSY 3991</td>
<td>Honors Research II</td>
<td>3</td>
</tr>
<tr>
<td>PSY 4991</td>
<td>Honors Research III</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Select one from:</td>
<td></td>
</tr>
<tr>
<td>PSY 4996</td>
<td>Honors Capstone</td>
<td>4</td>
</tr>
<tr>
<td>PSY 4998</td>
<td>Honors Research Problems</td>
<td></td>
</tr>
</tbody>
</table>

## The Undergraduate Psychology Majors’ Association

The goal of the Psychology Majors’ Association (PMA) is to provide opportunities for students to apply their appreciation of psychology through activities outside of the classroom. PMA also promotes networking between students and faculty members within the psychology department. PMA members participate in a variety of opportunities including volunteer work, field trips, workshops on graduate school, and current topics in psychology, and career development. More information is available at Psychology Majors Association (http://www.cla.temple.edu/psychology/psychology-majors-association).

## Psi Chi - The National Honor Society in Psychology

Psi Chi, the National Honor Society in Psychology, has an active chapter at Temple University. The minimum requirements for membership in Psi Chi are a 3.20 cumulative GPA and a 3.50 GPA in Psychology courses. Psi Chi members are given opportunities for growth and development within the field of psychology. Psi Chi encourages students to engage in research opportunities within psychology as well as continue their education in graduate studies. For more information, contact psichi@temple.edu.

## Phi Beta Kappa

Phi Beta Kappa is the oldest honor society in the United States. It was developed to foster and recognize excellence in the humanities and sciences. More information about Phi Beta Kappa requirements and activities is available at Honor Societies (p. 57).

## Summary of Degree Requirements

### University Requirements:

- MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific courses required for this major are PSY 3096 Conducting Psychological Research and one of the following capstone courses: PSY 4496, PSY 4596, PSY 4696, PSY 4796, PSY 4996.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education section (p. 143) of the Undergraduate Bulletin for more details.

### College of Liberal Arts Requirements:

- Completion of a minimum of 123 credits, including:
  - 90 credits in CLA/CST courses;
  - 45 credits of which must be at the upper level (numbered 2000-4999).
    - For Social Science majors, 6 upper level credits (numbered 2000-4999) must be taken in Humanities Subject Areas: Arabic, Chinese, English, French, German, Greek (Ancient), Greek and Roman Classics, Hebrew, Hindi, Italian, Japanese, Latin, Philosophy, Religion, Russian, and Spanish in the College of Liberal Arts, Art History in the Tyler School of Art, or any department in the College of Science and Technology.
  - A minimum GPA of 2.0, cumulatively, in CLA/CST coursework, and in the major.
  - Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.
  - Foreign Language/Global Studies Requirements:
    - All students must complete or test out of the first and second levels of a foreign language - these courses are numbered 1001 and 1002;
    - All students must complete at least one course from the GenEd Global/World Society category; and
    - All Bachelor of Arts students must complete one of the following options:
      - Third semester of a foreign language;
      - Demonstrated proficiency beyond the third semester in a foreign language (placement exam or certification from the language department);
      - Take one Global Studies course from the list on the CLA College Graduation Requirements (p. 755) page;
      - Study Abroad at an approved program; or
      - Take a second General Education Global/World Society course.
• **Notes on Foreign Language Study**
  - The third level of language is numbered 1003 in French, German, Italian, Spanish, and Portuguese and numbered 2001 in all other foreign language subjects.
  - Students are strongly encouraged to take the third level of a foreign language as it is the minimum required for election to the prestigious honor society Phi Beta Kappa. (Taking the course does not guarantee admission but not taking it guarantees exclusion.)
  - See the College of Liberal Arts Policies (p. 753) section of this Bulletin for more information on the Foreign Language Placement, Regression in Coursework, and guidelines for students' other experiences with language.

General Electives are typically one-third of a student's program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

**Major Requirements (minimum 44 credits; 40 credits in Psychology plus 4 credits in a designated science area):**

<table>
<thead>
<tr>
<th><strong>Introductory Courses Required</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 1001 Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>or PSY 1901 Honors: Introduction to Psychology</td>
<td></td>
</tr>
<tr>
<td>PSY 1002 Careers in Psychology</td>
<td>1</td>
</tr>
<tr>
<td>PSY 1003 Statistics for Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 1004 Critical Thinking in Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

**Psychology Science Requirement**

- Select one of the following:
  - 4
  - BIOL 1001 Human Biology
  - BIOL 1011 General Biology I
  - CHEM 1021 Introduction to Chemistry I
  - CHEM 1023 and Introduction to Chemistry Laboratory I
  - CHEM 1027 Applications of Chemistry
  - CHEM 1031 General Chemistry I
  - CHEM 1033 and General Chemistry Laboratory I
  - PHYS 1021 Introduction to General Physics I
  - EES 1001 Introductory Geology
  - EES 2001 Physical Geology

**Developmental/Clinical/Social (DCS) Foundation Courses**

- Select two of the following:
  - 6
  - PSY 2201 Foundations of Psychopathology
  - PSY 2301 Foundations of Developmental Psychology
  - PSY 2401 Foundations of Social Psychology
  - PSY 2402 Foundations of Industrial and Organizational Psychology
  - PSY 2601 Foundations of Health Psychology

**Brain and Cognitive Sciences (BCS) Foundation Courses**

- Select two of the following:
  - 6
  - PSY 2101 Foundations of Cognitive Psychology
  - PSY 2103 Foundations of Learning and Behavior Analysis
  - PSY 2104 Foundations of Sensation and Perception
  - PSY 2501 Foundations of Behavioral Neuroscience
  - PSY 2502 Foundations of Cognitive Neuroscience

**Required Methods Course**

- PSY 3096 Conducting Psychological Research | 3  |

**Advanced Courses (3000-3620)**

- Select three of the following:
  - 9
  - PSY 3003 Advanced Undergraduate Statistics
  - PSY 3005 Affective Neuroscience
  - PSY 3141 Neurobiology and Evolution of Social Behavior
  - PSY 3151 Direct Applications of Behavioral Principles
  - PSY 3152 Experimental Psychopathology
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 3161</td>
<td>Research Methods in Perception</td>
</tr>
<tr>
<td>PSY 3162</td>
<td>Visual Recognition</td>
</tr>
<tr>
<td>PSY 3221</td>
<td>Clinical Psychology: Research and Practice</td>
</tr>
<tr>
<td>PSY 3223</td>
<td>Child Psychopathology and Treatment</td>
</tr>
<tr>
<td>PSY 3301</td>
<td>Phases of Development: Infancy</td>
</tr>
<tr>
<td>PSY 3303</td>
<td>Psychological Testing: Measuring IQ, Thoughts, Feelings, and Attitudes</td>
</tr>
<tr>
<td>PSY 3304</td>
<td>Personality, Social and Emotional Development</td>
</tr>
<tr>
<td>PSY 3305</td>
<td>Cognitive and Language Development</td>
</tr>
<tr>
<td>PSY 3306</td>
<td>Neuroscience of Development and Aging</td>
</tr>
<tr>
<td>PSY 3307</td>
<td>Theories of Development</td>
</tr>
<tr>
<td>PSY 3411</td>
<td>Social Cognition</td>
</tr>
<tr>
<td>PSY 3412</td>
<td>Psychological Studies of Social Issues</td>
</tr>
<tr>
<td>PSY 3417</td>
<td>Personnel Psychology</td>
</tr>
<tr>
<td>PSY 3418</td>
<td>Human Performance Improvement</td>
</tr>
<tr>
<td>PSY 3561</td>
<td>Psychopharmacology</td>
</tr>
<tr>
<td>PSY 3566</td>
<td>Neurobiology of Learning and Memory</td>
</tr>
<tr>
<td>PSY 3600</td>
<td>Advanced Topics in Health Psychology</td>
</tr>
<tr>
<td>PSY 3601</td>
<td>Social Health Psychology</td>
</tr>
<tr>
<td>PSY 3602</td>
<td>Clinical Neuropsychology</td>
</tr>
<tr>
<td>PSY 3603</td>
<td>Clinical Applications of Health Psychology</td>
</tr>
</tbody>
</table>

**Psychology Elective**

One additional course at the Foundation Level or the Advanced Level (2000-3620).

**Capstone Course**  
Select one of the following:
- PSY 4496 Capstone: History of Psychology  
- PSY 4596 Capstone: Fields of Psychology  
- PSY 4696 Capstone in Psychology  
- PSY 4796 Capstone: Research  
- PSY 4996 Honors Capstone

**Total Credit Hours**  
44-45

---

1. Foundation courses are prerequisites for the advanced (3000-level) areas.
2. Select three from any of the advanced courses (3000-3620) for which you have completed the prerequisite foundation course. These courses cover specialty areas within particular fields of psychology.  
   Note: PSY 3096 does not count toward the requirement.  
   Seniors only - minimum of 90 credits completed and completion PSY 3096.

See the "About" tab for more information on combining the various programs offered by Psychology and Neuroscience. Some programs cannot be combined; others permit a degree of overlap. All restrictions are listed in detail on that page.

**Individual Study Courses**

Permission of the instructor is required to register for these courses. For all Psychology majors and minors.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 4182 &amp; PSY 4282</td>
<td>Independent Study in Cognitive Neuroscience I and Independent Study in Cognitive Neuroscience II</td>
</tr>
</tbody>
</table>

Select one of the following:
- PSY 3791 Collaborative Research I  
- PSY 3891 Collaborative Research II  
- PSY 4791 Collaborative Research III  
- PSY 4891 Collaborative Research IV  
- PSY 3785 Psychology Internship  
- PSY 3787 Practicum
## Distinction in Major

Students earn Distinction in Major upon completion of the Psychology Honors program.

## Suggested Academic Plan

### Bachelor of Arts in Psychology

#### Requirements for New Students starting in the 2015-2016 Academic Year

<table>
<thead>
<tr>
<th>Year 1</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Foreign Language 1001 - first level</td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Foreign Language 1002 - second level</td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PSY 1001 or 1901</td>
<td>Introduction to Psychology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>16</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Elective</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PSY 1002</td>
<td>Careers in Psychology</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>PSY 1003</td>
<td>Statistics for Psychology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Foreign Language - third level</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Global/World Society course</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Internationally Focused Course From Approved List</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>16</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CLA/CST 2000+ Course</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PSY 1004</td>
<td>Critical Thinking in Psychology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CLA/CST 2000+ Humanities/CST Course</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>One Psychology Science course from approved list</td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>One Psychology 2000-level BCS Area Foundation Course</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>One Psychology 2000-level DCS Area Foundation Course</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>One Psychology 2000-level DCS or BCS Area Foundation Course</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>16</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CLA/CST 2000+ Humanities/CST Course</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PSY 3096</td>
<td>Conducting Psychological Research [WI]</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>One Psychology 2000-level DCS or BCS Area Foundation Course</td>
<td></td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>
Minor in Clinical and Health Psychology

The minor in Clinical and Health Psychology from the Temple Psychology Department consists of 21 credits. The minor will introduce students to the specialties in psychology that focus on understanding health and illness through the study of the interplay among psychology, biology, and environment. This minor is designed for students who do not major in psychology but have interests in psychology, public health, and other health-related careers (e.g., nursing, speech therapy). Pre-med students will find that this minor will help to prepare for the new MCAT exam, which has been modified to include psychology topics.

Students outside Psychology majors may declare this minor. Seven courses are required.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 1001</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 1003</td>
<td>Statistics for Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 1004</td>
<td>Critical Thinking in Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 2201</td>
<td>Foundations of Psychopathology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 2601</td>
<td>Foundations of Health Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

Select two of the following advanced-level courses: 6

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 3600</td>
<td>Advanced Topics in Health Psychology</td>
</tr>
<tr>
<td>PSY 3601</td>
<td>Social Health Psychology</td>
</tr>
<tr>
<td>PSY 3602</td>
<td>Clinical Neuropsychology</td>
</tr>
<tr>
<td>PSY 3603</td>
<td>Clinical Applications of Health Psychology</td>
</tr>
<tr>
<td>PSY 3303</td>
<td>Psychological Testing: Measuring IQ, Thoughts, Feelings, and Attitudes</td>
</tr>
<tr>
<td>PSY 3223</td>
<td>Child Psychopathology and Treatment</td>
</tr>
<tr>
<td>PSY 3221</td>
<td>Clinical Psychology: Research and Practice</td>
</tr>
<tr>
<td>PSY 3200</td>
<td>Topics: Clinical</td>
</tr>
<tr>
<td>PSY 3561</td>
<td>Psychopharmacology</td>
</tr>
<tr>
<td>PSY 3306</td>
<td>Neuroscience of Development and Aging</td>
</tr>
</tbody>
</table>
Minor in Cognitive Neuroscience

Cognitive Neuroscience is an interdisciplinary field with a focus on a fundamental mystery of science: how the mind arises from the brain. A minor in Cognitive Neuroscience will strengthen the academic record of students who plan to apply for graduate programs. For example, in Psychology this minor will strengthen applicants' records for specializations such as Behavioral Neuroscience, Clinical Neuropsychology, Cognitive Psychology, or Psychophysiology. Students might also go into General Neuroscience or Cognitive Science. Pre-med students with a Cognitive Neuroscience minor would present distinctive profiles to medical school admissions offices.

Students in the College of Liberal Arts (including Psychology majors) as well as students in other colleges, schools, and departments may choose to minor in Cognitive Neuroscience. No more than two courses can be double-counted for the Psychology major and the Cognitive Neuroscience minor.

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Students must complete successfully the following courses with a grade of C- or better:

**Required Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 2101</td>
<td>Foundations of Cognitive Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 2502</td>
<td>Foundations of Cognitive Neuroscience</td>
<td>3</td>
</tr>
<tr>
<td>CSCD 3235</td>
<td>Human Neuroscience</td>
<td>4</td>
</tr>
</tbody>
</table>

**Cognitive Neuroscience Elective Courses**

Select three of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 3352</td>
<td>Systems Neuroscience</td>
</tr>
<tr>
<td>BIOL 3356</td>
<td>Organization and Development of the Nervous System</td>
</tr>
<tr>
<td>CSCD 2049</td>
<td>Language and the Brain</td>
</tr>
<tr>
<td>NSCI 1051</td>
<td>Fundamentals of Neuroscience</td>
</tr>
<tr>
<td>NSCI 2121</td>
<td>Development/Plasticity/Repair</td>
</tr>
<tr>
<td>NSCI 2122</td>
<td>Cellular Neuroscience</td>
</tr>
<tr>
<td>NSCI 2222</td>
<td>The Neurobiology of Disease</td>
</tr>
<tr>
<td>PHIL 2144</td>
<td>Introduction to the Philosophy of Mind</td>
</tr>
<tr>
<td>or PHIL 4244</td>
<td>Philosophy of Mind</td>
</tr>
<tr>
<td>PSY 2501</td>
<td>Foundations of Behavioral Neuroscience</td>
</tr>
<tr>
<td>PSY 3141</td>
<td>Neurobiology and Evolution of Social Behavior</td>
</tr>
<tr>
<td>PSY 3305</td>
<td>Cognitive and Language Development</td>
</tr>
<tr>
<td>PSY 3306</td>
<td>Neuroscience of Development and Aging</td>
</tr>
<tr>
<td>PSY 3561</td>
<td>Psychopharmacology</td>
</tr>
<tr>
<td>PSY 3566</td>
<td>Neurobiology of Learning and Memory</td>
</tr>
<tr>
<td>PSY 4182/4282</td>
<td>Independent Study in Cognitive Neuroscience</td>
</tr>
</tbody>
</table>

**Total Credit Hours** 19

1 Check for prerequisites

Minor in Psychology

The Minor in Psychology introduces the student to a representative array of Psychology courses, prepares the student for the minimal course requirements for acceptance to most Psychology graduate schools, and results in formal university recognition on the student's official transcript.

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

**Required Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 1001</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>or PSY 1901</td>
<td>Honors: Introduction to Psychology</td>
<td></td>
</tr>
<tr>
<td>PSY 1003</td>
<td>Statistics for Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 1004</td>
<td>Critical Thinking in Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

**Brain and Cognitive Sciences**

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
</table>
Religion

Khalid Blankinship, Chair
617 Anderson Hall
kblankin@temple.edu
215-204-4745

Vasiliki Limberis, Undergraduate Chair and Faculty Advisor
631 Anderson Hall
limberis@temple.edu
215-204-5543

Belinda Wilson, Administrator
belinda.wilson@temple.edu
215-204-0472

Anderson Hall, Room 615
215-204-7973
www.cla.temple.edu/religion

Religion is a pervasive, powerful, multifaceted, and enduring dimension of human experience. Religions have shaped complex cultures and countless individual lives. Religions are influential in the world today and will continue to be so in the future.

The academic study of religion is multidisciplinary, drawing upon approaches from history, literary studies, philosophy, and the social sciences. It is multicultural, exploring the beliefs, practices, and development of particular religious communities in many different cultures. The Religion Department provides a wide array of courses introducing students to the major religions of the world, with an emphasis upon the comparison of traditions and their encounter with one another. Instruction is offered in African and African American religions, Buddhism, Christianity, Confucianism, Hinduism, Judaism, and Daoism.

The major in Religion is very flexible by design; it easily accommodates study abroad plans, internship opportunities, or a second major or minor in a related discipline. Consult your academic advisor to develop a plan of study that meets your professional goals.

Career Preparation

Students who major in Religion develop a useful skill set that is in demand in a number of professions. Cultural sensitivity, analytical thinking, and excellent writing and verbal communications are the necessary training for careers related to public service, diplomacy, journalism, counseling, research, social work, health and human services, conflict resolution, and government. Some students go on to further study in doctoral programs, law school, medical school, or prepare for the ministry.

Programs

• Bachelor of Arts in Religion (p. 907)
• Minor in Religion (p. 910)
Bachelor of Arts in Religion

The Bachelor of Arts in Religion is a solid Liberal Arts degree, providing graduates with the knowledge base and the intellectual, analytical, communication, and interpersonal skills essential to succeed in any career. The faculty and course offerings provide an introduction to the major religions of the world, with an emphasis upon the comparison of traditions and their encounter with one another. Instruction is offered in African and African American religions, Buddhism, Christianity, Confucianism, Hinduism, Judaism, and Daoism.

Employment Prospects after graduation with the Bachelor's degree include the fields of Journalism and Communications, Social Work, Ministry/Chaplaincy, Pre-Law, Pre-Med/Health Services, Government/FBI, NGO's, Hospice/End-of-Life Care, International Enterprise, Education, Academic Research, Human Resources, Tourism and Hospitality.

Summary of Degree Requirements

University Requirements:

- MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific courses required for this major are REL 4096, and either REL 2496 or REL 2596.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education section (p. 143) of the Undergraduate Bulletin for more details.

College of Liberal Arts Requirements:

- Completion of a minimum of 123 credits, including:
  - 90 credits in CLA/CST courses;
  - 45 credits of which must be at the upper level (numbered 2000-4999).
    - For Humanities majors, 6 upper level credits must be earned in the Social Science and interdisciplinary subject areas: African American Studies, American Studies, Anthropology, Asian Studies, Criminal Justice, Economics, Environmental Studies, Geography and Urban Studies, Global Studies, History, Jewish Studies, Latin American Studies, Lesbian, Gay, Bisexual, and Transgender Studies, Liberal Arts, Neuroscience (CLA), Political Science, Psychology, Sociology, Women's Studies, or any department in the College of Science and Technology.
  - A minimum GPA of 2.0, cumulatively, in all CLA/CST coursework, and in the major department.
  - Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.

- Foreign Language/Global Studies Requirements:
  - All students must complete or test out of the first and second levels of a foreign language - these courses are numbered 1001 and 1002;
  - All students must complete at least one course from the GenEd Global/World Society category; and
  - All Bachelor of Arts students must complete one of the following options:
    - Third semester of a foreign language;
    - Demonstrated proficiency beyond the third semester in a foreign language (placement exam or certification from the language department);
    - Take one Global Studies course from the list on the CLA College Graduation Requirements (p. 755) page;
    - Study Abroad at an approved program; or
    - Take a second General Education Global/World Society course.

- Notes on Foreign Language Study
  - The third level of language is numbered 1003 in French, German, Italian, Spanish, and Portuguese and numbered 2001 in all other foreign language subjects.
  - Students are strongly encouraged to take the third level of a foreign language as it is the minimum required for election to the prestigious honor society Phi Beta Kappa. (Taking the course does not guarantee admission but not taking it guarantees exclusion.)
  - See the College of Liberal Arts Policies (p. 753) section of this Bulletin for more information on the Foreign Language Placement, Regression in Coursework, and guidelines for students' other experiences with language.

General Electives are typically one-third of a student's program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

Major Requirements: Ten courses in Religion (30 credits):

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>REL 1001</td>
<td>Religion and Society</td>
<td>3</td>
</tr>
</tbody>
</table>
Writing-Intensive Course
REL 2496  Introduction to the Bible  3
or REL 2596  What Is Christianity?

Non-Western Courses
Select two of the following:  6
REL 2101  Indian Philosophies and Religions
REL 2102  Introduction to Buddhism
REL 2201  Chinese Religions - Confucius to Mao
REL 2702  Religion in Contemporary Africa
REL 3101  Yoga & Tantric Mysticism
REL 3201  I-Ching, Tao, and Ch'an/Zen
REL 3301  Japanese Religions
REL 3302  Japanese Buddhism
REL 3701  Traditional Religions of Africa
REL 3702  African Religions and New World Culture

Electives
Select five additional Religion courses  1  15

Capstone
REL 4096  Capstone Seminar in Religion  2  3

Total Credit Hours  30

1  Up to two may be from courses numbered 0800-1999, and at least three must be from courses numbered 2000 and above.
2  Restricted to Religion majors only and minors with permission of instructor. Students must have completed at least five courses in the major prior to taking the capstone.

Transfer students: No more than five religion courses taken at other institutions may be accepted for the major. The director of undergraduate studies must determine that these meet the standards of the Religion major.

Distinction in Major in Religion
For graduation with Distinction in Major, an overall GPA of 3.25 is required with 3.5 in Religion courses.

Suggested Academic Plan
Bachelor of Arts in Religion
Requirements for New Students starting in the 2015-2016 Academic Year

Year 1
Fall  Credit Hours
ENG 0802, 0812, or 0902  Analytical Reading and Writing [GW]  4
GenEd Quantitative Literacy Course [GQ]  4
Foreign Language 1001 - first level  4
GenEd Breadth Course  3

Term Credit Hours  15

Spring
IH 0851 or 0951  Mosaic: Humanities Seminar I [GY]  3
Foreign Language 1002 - second level  4
GenEd Breadth Course  3
GenEd Breadth Course  3
REL 1001  Religion and Society  3

Term Credit Hours  16

Year 2
Fall
IH 0852 or 0952  Mosaic: Humanities Seminar II [GZ]  3
GenEd Breadth Course  3
GenEd Breadth Course 3
CLA/CST 0800-4999 Elective 3
One 0800-4999 Elective in Any School or College 2
Select one of the following: 3
- Foreign Language - third level
- GenEd Global/World Society course
- Internationally Focused Course From Approved List

**Term Credit Hours:** 17

<table>
<thead>
<tr>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>GenEd Breadth Course 3</td>
</tr>
<tr>
<td>GenEd Breadth Course 3</td>
</tr>
<tr>
<td>One Religion 2000+ Writing Intensive Course From Approved List [WI] 3</td>
</tr>
<tr>
<td>CLA/CST 2000+ Course 3</td>
</tr>
<tr>
<td>CLA/CST 2000+ Course 3</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 15

**Year 3**

<table>
<thead>
<tr>
<th>Fall</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLA/CST 2000+ Social Science/CST Course 3</td>
</tr>
<tr>
<td>Religion 2000+ Non-Western Course From Approved List 3</td>
</tr>
<tr>
<td>Religion 0800-4999 Course at Any Level 3</td>
</tr>
<tr>
<td>Religion 2000+ Course 3</td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Elective 3</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 15

<table>
<thead>
<tr>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLA/CST 2000+ Social Science/CST Course 3</td>
</tr>
<tr>
<td>Religion 2000+ Non-Western Course From Approved List 3</td>
</tr>
<tr>
<td>Religion 0800-4999 Course at Any Level 3</td>
</tr>
<tr>
<td>Religion 2000+ Course 3</td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Elective 3</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 15

**Year 4**

<table>
<thead>
<tr>
<th>Fall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion 2000+ Course 3</td>
</tr>
<tr>
<td>CLA/CST 2000+ Course 3</td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Elective 3</td>
</tr>
<tr>
<td>One 0800-4999 Elective in Any School or College 3</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 15

<table>
<thead>
<tr>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>REL 4096 Capstone Seminar in Religion [WI] 3</td>
</tr>
<tr>
<td>CLA/CST 2000+ Course 3</td>
</tr>
<tr>
<td>CLA/CST 2000+ Course 3</td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Elective 3</td>
</tr>
<tr>
<td>One 0800-4999 Elective in Any School or College 3</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 15

**Total Credit Hours:** 123

1 Typically offered only in the spring semester.
Minor in Religion

The minor in Religion is an excellent addition to the degree programs in the College of Liberal Arts or other colleges throughout Temple University. Students who have an interest in world history and providing sensitive patient care will find this program of study especially helpful.

Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>REL 1001</td>
<td>Religion and Society</td>
<td>3</td>
</tr>
<tr>
<td>Additional lower-level Religion course (numbered below 2000)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Four Religion courses (no more than one below 2000)</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td><strong>Total Credit Hours</strong></td>
<td></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Sociology

713 Gladfelter Hall  
215-204-1494  
www.cla.temple.edu/sociology

Kimberly Goyette, Chair  
709 Gladfelter Hall  
215-204-0134  
kimberly.ann.goyette@temple.edu

Matt Wray, Undergraduate Chair  
751 Gladfelter Hall  
215-204-1445  
mwray@temple.edu

Jessica Brennan, Administrator  
208 Gladfelter Hall  
215-204-7577  
jessica.brennan@temple.edu

Sociology is the study of human behavior in the context of the groups, organizations, institutions, and societies in which it occurs. The sociology department offers courses covering a wide range of topics, including: contemporary social issues, race and racism, sexuality and gender, health and health care, education, urban life, housing, organizations, family, political life, popular culture, immigration, law, international development and globalization. The sociological perspective pays close attention to diversity in culture, values, and human experience.

Careers Related to Sociology

Majoring in sociology prepares students for many careers and graduate programs by providing both a broad sociological perspective and specific research, statistical and analytic skills. Students gain experience in fieldwork and interviewing; they develop, administer and analyze surveys and statistics; and they write research reports. Sociology provides an excellent background for students planning to begin their careers upon graduation as well as those planning to pursue graduate education. Recent graduates have gone to work and graduate school in the areas of law, medicine, business, non-profits, community planning, social work, market research, and education. Students who are interested in a career in the health field can pursue a special sociology major focused on health-related coursework. The Health Track in Sociology prepares students for graduate studies in leading medical, dental, nursing, public health, and physical and occupational therapy programs as well as graduate programs in sociology and related fields.

Student Organizations and Opportunities

Sociology majors and minors are encouraged to participate in the Sociology Undergraduate Majors and Minors Association (SUMMA), which hosts academic, community service, and social events throughout the year. The department sponsors the Annual Student Research Conference in which students can present their work.

Awards

Awards available to sociology majors include the Robert K. Merton Award, the Sociology Prize, the Benjamin and Irma Robboy Award, the Othella Vaughn Award, and the Nelsi Beato Award.
Programs

- Bachelor of Arts in Sociology (p. 911)
- Bachelor of Arts in Sociology: Health Track (p. 913)
- Certificate in Health Research (p. 916)
- Minor in Sociology (p. 917)
- Minor in Sociology of Health (p. 917)

Bachelor of Arts in Sociology

Summary of Degree Requirements

- **University Requirements:**
  - MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
  - All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific courses required for this major are SOC 3396 and SOC 4096.
  - Students must complete requirements of the General Education (GenEd) Program. See the General Education (p. 143) section of the Undergraduate Bulletin for more details.
- **College of Liberal Arts Requirements:**
  - Completion of a minimum of 123 credits, including:
    - 90 credits in CLA/CST courses;
    - 45 credits of which must be at the upper level (numbered 2000-4999).
    - For Social Science majors, 6 upper level credits (numbered 2000-4999) must be taken in Humanities Subject Areas: Arabic, Chinese, English, French, German, Greek (Ancient), Greek and Roman Classics, Hebrew, Hindi, Italian, Japanese, Latin, Philosophy, Religion, Russian, and Spanish in the College of Liberal Arts, Art History in the Tyler School of Art, or any department in the College of Science and Technology.
  - A minimum GPA of 2.0, cumulatively, in CLA/CST coursework, and in the major.
  - Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.
- **Foreign Language/Global Studies Requirements:**
  - All students must complete or test out of the first and second levels of a foreign language - these courses are numbered 1001 and 1002;
  - All students must complete at least one course from the GenEd Global/World Society category; and
  - All Bachelor of Arts students must complete one of the following options:
    - Third semester of a foreign language;
    - Demonstrated proficiency beyond the third semester in a foreign language (placement exam or certification from the language department);
    - Take one Global Studies course from the list on the CLA College Graduation Requirements page;
    - Study Abroad at an approved program; or
    - Take a second General Education Global/World Society course.
- **Notes on Foreign Language Study**
  - The third level of language is numbered 1003 in French, German, Italian, Spanish, and Portuguese and numbered 2001 in all other foreign language subjects.
  - Students are strongly encouraged to take the third level of a foreign language as it is the minimum required for election to the prestigious honor society Phi Beta Kappa. (Taking the course does not guarantee admission but not taking it guarantees exclusion.)
  - See the College of Liberal Arts Policies section of this Bulletin for more information on the Foreign Language Placement, Regression in Coursework, and guidelines for students’ other experiences with language.

General Electives are typically one-third of a student's program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

Major Requirements (42 credits):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC 1176</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 3201</td>
<td>Statistical Methods in Sociology</td>
<td>4</td>
</tr>
<tr>
<td>SOC 3396</td>
<td>Development of Sociological Thought</td>
<td>3</td>
</tr>
<tr>
<td>SOC 3261</td>
<td>Research Design and Methods</td>
<td>4</td>
</tr>
<tr>
<td>SOC 4096</td>
<td>Senior Seminar</td>
<td>3</td>
</tr>
</tbody>
</table>
Two Sociology electives at the 2000 level or above 6
Three Sociology electives at the 3000 level or above 9
Two Social Science cognate courses at the 2000+ level 6
SOC 4001 Qualitative Research 4
or SOC 4002 Data Analysis

Total Credit Hours 42

1 Students must take SOC 3201 prior to (or concurrently with) SOC 3261.
2 Indicates writing capstone for the major.
4 Students must complete SOC 3201 and SOC 3261 before taking either of the advanced methods courses, SOC 4001 or SOC 4002.

Distinction in the Major
Sociology majors graduate with distinction in the major if they have a GPA of 3.5 or higher in the major and a minimum cumulative GPA of 3.25.

Suggested Academic Plan
Bachelor of Arts in Sociology

Requirements for New Students starting in the 2015-2016 Academic Year

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 0802, 0812, or 0902 Analytical Reading and Writing [GW]</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Foreign Language 1001 - first level</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>IH 0851 or 0951 Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>Foreign Language 1002 - second level</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>SOC 1176 Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Fall</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>IH 0852 or 0952 Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Sociology 2000+ Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Foreign Language - third level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GenEd Global/World Society Course [GG]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internationally Focused Course From Approved List</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>SOC 3201 Statistical Methods in Sociology</td>
<td>4</td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Elective</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 2000+ Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
</tr>
</tbody>
</table>
### Bachelor of Arts in Sociology: Health Track

#### Summary of Degree Requirements

**University Requirements:**

- MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. SOC 3396 and SOC 4096 fulfill this requirement for this major.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education section (p. 143) of the Undergraduate Bulletin for more details.

**College of Liberal Arts Requirements:**

- Completion of a minimum of 123 credits, including:
  - 90 credits in CLA/CST courses;
  - 45 credits of which must be at the upper level (numbered 2000-4999).
  - For **Social Science majors**, 6 upper level credits (numbered 2000-4999) must be taken in Humanities Subject Areas: Arabic, Chinese, English, French, German, Greek (Ancient), Greek and Roman Classics, Hebrew, Hindi, Italian, Japanese, Latin, Philosophy, Religion, 

---

### Year 3

#### Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLA/CST 2000+ Humanities/CST Course</td>
<td>3</td>
</tr>
<tr>
<td>SOC 3396 Development of Sociological Thought [WI]</td>
<td>3</td>
</tr>
<tr>
<td>SOC 3261 Research Design and Methods</td>
<td>4</td>
</tr>
<tr>
<td>Sociology 2000+ Course</td>
<td>3</td>
</tr>
<tr>
<td>Social Science 2000+ Cognate Course</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 16

#### Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLA/CST 2000+ Humanities/CST Course</td>
<td>3</td>
</tr>
<tr>
<td>Sociology 3000+ Course</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Elective</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Elective</td>
<td>3</td>
</tr>
<tr>
<td>Sociology 3000+ Course</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 15

---

### Year 4

#### Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sociology 3000+ Course</td>
<td>3</td>
</tr>
<tr>
<td>Social Science 2000+ Cognate Course</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Elective</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Elective</td>
<td>3</td>
</tr>
<tr>
<td>Select one Advanced Methods course from: 1</td>
<td>4</td>
</tr>
<tr>
<td>SOC 4001 Qualitative Research</td>
<td></td>
</tr>
<tr>
<td>SOC 4002 Data Analysis</td>
<td></td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 16

#### Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC 4096 Senior Seminar [WI]</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Elective</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Elective</td>
<td>3</td>
</tr>
<tr>
<td>One 0800-4999 Elective in Any School or College</td>
<td>3</td>
</tr>
<tr>
<td>One 0800-4999 Elective in Any School or College</td>
<td>2</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 14

**Total Credit Hours:** 123

---

1. SOC 4001 is only offered in the spring and SOC 4002 only in the fall; plan to take prior to SOC 4096. See advisor for course selection.

**Please check prerequisites for all Sociology courses.**
Russian, and Spanish in the College of Liberal Arts, Art History in the Tyler School of Art, or any department in the College of Science and Technology.

- A minimum GPA of 2.0, cumulatively, in CLA/CST coursework, and in the major.
- Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.

**Foreign Language/Global Studies Requirements:**
- All students must complete or test out of the first and second levels of a foreign language - these courses are numbered 1001 and 1002;
- All students must complete at least one course from the GenEd Global/World Society category; and
- All Bachelor of Arts students must complete one of the following options:
  - Third semester of a foreign language;
  - Demonstrated proficiency beyond the third semester in a foreign language (placement exam or certification from the language department);
  - Take one Global Studies course from the list on the CLA College Graduation Requirements (p. 755) page;
  - Study Abroad at an approved program; or
  - Take a second General Education Global/World Society course.

**Notes on Foreign Language Study**
- The third level of language is numbered 1003 in French, German, Italian, Spanish, and Portuguese and numbered 2001 in all other foreign language subjects.
- Students are strongly encouraged to take the third level of a foreign language as it is the minimum required for election to the prestigious honor society Phi Beta Kappa. (Taking the course does not guarantee admission but not taking it guarantees exclusion.)
- See the College of Liberal Arts Policies (p. 753) section of this Bulletin for more information on the Foreign Language Placement, Regression in Coursework, and guidelines for students' other experiences with language.

**General Electives** are typically one-third of a student's program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

**Major Options: Health Track in Sociology (42 credits):**

**Required Courses**
- **SOC 1176**  
  Introduction to Sociology  
  \[3\]
- **SOC 3201**  
  Statistical Methods in Sociology \[^1\]  
  \[4\]
- **SOC 3396**  
  Development of Sociological Thought  
  \[3\]
- **SOC 3261**  
  Research Design and Methods \[^1\]  
  \[4\]
- **SOC 4096**  
  Senior Seminar  
  \[2\]  
  \[3\]

Two Sociology electives at the 2000 level or higher (one must be selected from the Health-related list below)  
\[6\]

Three Sociology electives at the 3000 level or higher (two must be selected from the Health-related list below)  
\[9\]

**Health-Related Cognate Courses**
- Two health-related 2000+ electives. See advisor for approved list.  
  \[6\]

**Advanced Methods Course**
- **SOC 4001**  
  Qualitative Research \[^3\]  
  \[4\]

  or **SOC 4002**  
  Data Analysis  
  \[4\]

**Health-related Courses**
- **SOC 2552**  
  Health and Disease in American Society
- **SOC 2530**  
  Selected Topics in Medical Sociology
- **SOC 2522**  
  The Sociology of Self
- **SOC 2553**  
  Sociology of Aging
- **SOC 2572**  
  Sex & Society
- **SOC 3511**  
  Sociology of the Environment
- **SOC 3521**  
  Global Health
- **SOC 3525**  
  Urban Health
- **SOC 3530**  
  Selected Topics in Medical Sociology
- **SOC 3546**  
  Sexuality and Gender
- **SOC 3559**  
  Health and Reproduction
- **SOC 3565**  
  Sociology of the Body
- **SOC 3575**  
  Population Studies
**SOC 3582  Independent Study in Medical Sociology**

**Total Credit Hours**  
42

1. Students must take SOC 3201 prior to or concurrently with SOC 3261.
2. Indicates writing capstone for major.
3. Students must complete SOC 3201 and SOC 3261 before taking either of the advanced methods courses, SOC 4001 or SOC 4002.

**Distinction in the Major**

Sociology majors graduate with distinction in the major if they have a GPA of 3.5 or higher in the major and a minimum cumulative GPA of 3.25.

**Suggested Academic Plan**

**Bachelor of Arts in Sociology: Health Track**

**Requirements for New Students starting in the 2015-2016 Academic Year**

<table>
<thead>
<tr>
<th>Year 1</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td><strong>Credit Hours</strong></td>
<td></td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Quantitative literacy Course [GQ]</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Foreign Language 1001 - first level</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>Foreign Language 1001 - second level</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>SOC 1176</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Sociology 2000+ Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Foreign Language - third level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GenEd Global/World Society Course [GG]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internationally Focused Course From Approved List</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>SOC 3201</td>
<td>Statistical Methods in Sociology</td>
<td>4</td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CLA/CST 2000+ Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CLA/CST 2000+ Humanities/CST Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>SOC 3396</td>
<td>Development of Sociological Thought [WI]</td>
<td>3</td>
</tr>
<tr>
<td>2000-Level Health-Related Sociology Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>SOC 3261</td>
<td>Research Design and Methods</td>
<td>4</td>
</tr>
</tbody>
</table>
Certificate in Health Research

Requirements

The Certificate in Health Research requires five courses, including a health-related sequence and research methods.

This program is designed for students outside Sociology and is not open to Sociology majors or students pursuing the Health Track in Sociology.

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC 2552</td>
<td>Health and Disease in American Society</td>
<td>3</td>
</tr>
<tr>
<td>SOC 3201</td>
<td>Statistical Methods in Sociology</td>
<td>4</td>
</tr>
<tr>
<td>SOC 3261</td>
<td>Research Design and Methods</td>
<td>4</td>
</tr>
</tbody>
</table>

Required Advanced Methods Course

Select one from:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC 4001</td>
<td>Qualitative Research</td>
<td>2</td>
</tr>
<tr>
<td>SOC 4002</td>
<td>Data Analysis</td>
<td>2</td>
</tr>
</tbody>
</table>

Health-related Courses

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC 2522</td>
<td>The Sociology of Self</td>
</tr>
<tr>
<td>SOC 2530</td>
<td>Selected Topics in Medical Sociology</td>
</tr>
<tr>
<td>SOC 2553</td>
<td>Sociology of Aging</td>
</tr>
<tr>
<td>SOC 2572</td>
<td>Sex &amp; Society</td>
</tr>
</tbody>
</table>
SOC 3511 Sociology of the Environment
SOC 3521 Global Health
SOC 3525 Urban Health
SOC 3530 Selected Topics in Medical Sociology
SOC 3546 Sexuality and Gender
SOC 3559 Health and Reproduction
SOC 3565 Sociology of the Body
SOC 3575 Population Studies
SOC 3582 Independent Study in Medical Sociology

Total Credit Hours 18

1 Students must take SOC 3201 prior to, or concurrently with, SOC 3261.
2 Students must complete SOC 3201 and SOC 3261 before taking either of the advanced methods courses, SOC 4001 or SOC 4002.

Certificates are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

**Minor in Sociology**

The minor in sociology requires a minimum of six courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC 1176</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>Two Sociology courses at the 2000 level or above</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Three Sociology courses at the 3000 level or above</td>
<td>9</td>
<td></td>
</tr>
</tbody>
</table>

Total Credit Hours 18

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

**Minor in Sociology of Health**

The minor in the sociology of health requires a minimum of six courses, three of which are health-related. This program is not open to Sociology majors or Health Track in Sociology majors.

**Required Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC 1176</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>Two Sociology courses at the 2000 level or above</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Three Sociology courses at the 3000 level or above</td>
<td>9</td>
<td></td>
</tr>
</tbody>
</table>

**Health-related Courses**

Select three as part of the above requirements:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC 2522</td>
<td>The Sociology of Self</td>
</tr>
<tr>
<td>SOC 2530</td>
<td>Selected Topics in Medical Sociology</td>
</tr>
<tr>
<td>SOC 2552</td>
<td>Health and Disease in American Society</td>
</tr>
<tr>
<td>SOC 2553</td>
<td>Sociology of Aging</td>
</tr>
<tr>
<td>SOC 2572</td>
<td>Sex &amp; Society</td>
</tr>
<tr>
<td>SOC 3511</td>
<td>Sociology of the Environment</td>
</tr>
<tr>
<td>SOC 3521</td>
<td>Global Health</td>
</tr>
<tr>
<td>SOC 3525</td>
<td>Urban Health</td>
</tr>
<tr>
<td>SOC 3530</td>
<td>Selected Topics in Medical Sociology</td>
</tr>
<tr>
<td>SOC 3546</td>
<td>Sexuality and Gender</td>
</tr>
<tr>
<td>SOC 3559</td>
<td>Health and Reproduction</td>
</tr>
<tr>
<td>SOC 3565</td>
<td>Sociology of the Body</td>
</tr>
<tr>
<td>SOC 3575</td>
<td>Population Studies</td>
</tr>
<tr>
<td>SOC 3582</td>
<td>Independent Study in Medical Sociology</td>
</tr>
</tbody>
</table>

Total Credit Hours 18
Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

**Spanish & Portuguese**

4th Floor, Anderson Hall  
215-204-8285  
www.cia.temple.edu/spanpor/

Hiram Aldarondo, Department Chair  
427 Anderson Hall  
215-204-1706  
haldaron@temple.edu

Víctor Pueyo-Zoco, Associate Chair for Undergraduate Studies (Majors)  
435 Anderson Hall  
215-204-6035  
vpueyozo@temple.edu

Patricia Moore-Martinez, Associate Chair for Undergraduate Studies (Minors, Certificates, Lower Division courses)  
426 Anderson Hall  
215-204-1707  
pmoore04@temple.edu

Adam J. Shellhorse, Portuguese Minor and Brazilian Studies Coordinator  
440 Anderson Hall  
215-204-2877  
aj.shellhorse@temple.edu

Paul Toth, Study Abroad Coordinator  
441 Anderson Hall  
215-204-8285  
ptoth@temple.edu

Michelle Pugliese, Administrator  
429 Anderson Hall  
215-204-5628  
pugliese@temple.edu

The Department of Spanish and Portuguese provides instruction in the languages, cultures, and literatures of Spain, Spanish America, and the Luso-Brazilian world. It also teaches specialized courses in Business, Legal and Medical Spanish, including their translation. Coursework at the undergraduate level in Spanish, Portuguese, or Catalan develops proficiency of the four basic skills: speaking, listening, reading, and writing. Opportunities are also available for the in-depth study of Hispanic and Luso-Brazilian culture. Students may participate in special programs, including an intensive immersion program in Spanish and Latin American Studies; service learning and internships in areas of business, social service, and education in Philadelphia; and diverse programs abroad. Temple's computer language center, the special learning environment for the foreign languages, is available to students of all proficiency levels.

Spanish and Portuguese organizations and activities include, for instance, the recognition of outstanding students as they are inducted into Sigma Delta Pi, the National Hispanic Honor Society and the scholarly publications of the Society of Spanish and Spanish-American Studies. Further activities include the Spanish and Portuguese Clubs and Film Series.

Graduates of the Department of Spanish and Portuguese find careers in a wide range of areas, including education, business, government, and social service.

Students selecting the Spanish major must achieve competence in Spanish language skills in conjunction with qualifications outlined in one of three major options:

- Language, Literature, and/or Linguistics
- Language and Professional Studies
- Spanish for Education

Distinction in Major is awarded to Spanish majors in any of the three options who graduate with a 3.75 GPA in Spanish courses and a cumulative GPA of at least 3.25.
Opportunities

Latin American Studies Semester Certificate and Program

Each spring semester, the Spanish and Portuguese Department offers a 17-credit immersion program in Latin American Studies and Spanish. The LASS program (http://www.cla.temple.edu/spanpor/study-abroad/lass) combines 9 hours of intensive Spanish with 6 hours of study focusing on geography, history, and culture in Latin America, 2 hours of the LASS Seminar, and a three-week trip to Costa Rica. Successful completion of the program is awarded with a certificate of participation. Applications for LASS are received during October and November for the following spring. For more information, contact Dr. Hiram Aldarondo (haldaron@temple.edu), Program Director at 215-204-1706 or Dr. Patricia Moore-Martinez (pmoore04@temple.edu) at 215-204-1707.

Spring in Spain Program

The Temple Semester in Spain Program takes place over the spring semester in Oviedo, Spain. The 15-credit program combines coursework with faculty from the International Program at the University of Oviedo and with a Temple faculty member who directs the program. All courses are pre-approved for Temple University credit. Courses focus on aspects of Spanish language, culture, and literature. The program develops Spanish skills over a semester of intensive study in a Spanish-speaking environment; it also provides the opportunity to complete a number of Spanish courses that may be used to satisfy the requirements for the Temple major or minor in Spanish. The program begins with an initial orientation week in Madrid prior to the start of the semester. In Oviedo, lodging and meals are with Spanish families. For further information, contact the program director Dr. Jaime Duran (jduran@temple.edu) in the Department of Spanish and Portuguese or the Office of Education Abroad and Overseas Campuses (http://studyabroad.temple.edu).

Summer Abroad in Spain: Spanish Language and Culture

Temple University's summer program in Oviedo, Spain, provides students with the opportunity to learn the Spanish language while being immersed in that country's unique and diverse culture. The duration of the program is five weeks; students may enroll for a total of 6 credits. For further information, contact the program director Dr. Jaime Duran (jduran@temple.edu) in the Department of Spanish and Portuguese or the Office of Education Abroad and Overseas Campuses (http://studyabroad.temple.edu).

Summer Abroad in Brazil: Portuguese Language and Brazilian Culture

Temple University offers a six-week summer program in Salvador, Bahia, Brazil; students may enroll for a total of 6 credits. The program offers Portuguese language studied both at the elementary and more advanced levels. It also offers an intensive examination of culture in the state of Bahia; this aspect of the program focuses on history, politics, music, and dance, and it spotlights African origins and Afro-Brazilian influences on regional culture. For further information, contact the Office of Education Abroad and Overseas Campuses (http://studyabroad.temple.edu).

Junior Year and/or Summer School Abroad

Students declaring a concentration in the department may, under certain conditions, spend their junior year studying abroad. Application for permission to study abroad may be made during the second semester of the sophomore year. Only well-qualified students may be granted credit from Temple University after submitting proper credentials for established foreign study programs at institutions approved by the department. Students interested in a junior year abroad, or a summer school abroad, should discuss their plans early with their faculty advisor and the chair of the department.

Service Learning and Internships

Students of Spanish and Portuguese may participate in courses providing service learning opportunities through through organizations such as ‘Puentes Hacia El Futuro’ or SHINE (Students Helping in the Naturalization of Elders) as a part of their coursework. For students of Business Spanish, service learning opportunities are available through the Small Business Development Center at Temple. Spanish majors are encouraged to participate in a Spanish internship combining study and work opportunities in a variety of contexts in the Philadelphia area.

Programs

- Bachelor of Arts in Spanish: Language, Literature, & Linguistics Option (p. 920)
- Bachelor of Arts in Spanish: Language and Professional Studies Option (p. 922)
- Bachelor of Arts in Spanish: Spanish for Education Option (p. 924)
- Minor in Spanish (p. 927)
- Minor in Portuguese (p. 928)
- Certificate of Specialization in Spanish (p. 928)
- Certificate of Specialization in Spanish and Latin American Studies for Business (p. 928)
- Certificate of Specialization in Spanish and Latino Studies for the Health and Human Services Professions (p. 929)
- Latin American Studies Semester Certificate and Program (p. 930)
Bachelor of Arts in Spanish: Language, Literature, Linguistics Option

The Language, Literature and/or Linguistics option is designed for students who wish to develop advanced language skills in the study of Latin American Literature; Peninsular Literature; and/or Linguistics.

Summary of Degree Requirements

1. **University Requirements:**
   - MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
   - All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific courses required for this major are SPAN 2096 and SPAN 3096.
   - Students must complete requirements of the General Education (GenEd) Program. See the General Education section (p. 143) of the Undergraduate Bulletin for more details.

2. **College of Liberal Arts Requirements:**
   - Completion of a minimum of 123 credits, including: 90 credits in CLA/CST courses, 45 credits of which must be at the upper level (numbered 2000-4999). For Humanities majors, 6 upper level credits must be earned in the Social Sciences: African American Studies, American Studies, Anthropology, Asian Studies, Criminal Justice, Economics, Environmental Studies, Geography and Urban Studies, History, Jewish Studies, Latin American Studies, Lesbian, Gay, Bisexual and Transgender Studies, Mathematical Economics, Neuroscience: Systems, Behavior and Plasticity, Political Science, Psychology, Sociology, Women's Studies, or any department in the College of Science and Technology.
   - A minimum GPA of 2.0, cumulatively, in all CLA/CST coursework, and in the major.
   - Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.

3. **Foreign Language/Global Studies Requirements:**
   - The requirements for the major in Spanish exceed the CLA minimum for this requirement.
   - **Notes on Foreign Language Study**
     - The third level of language is numbered 1003 in French, German, Italian, Spanish, and Portuguese and numbered 2001 in all other foreign language subjects.
     - Students are strongly encouraged to take the third level of a foreign language as it is the minimum required for election to the prestigious honor society Phi Beta Kappa. (Taking the course does not guarantee admission but not taking it guarantees exclusion.)
     - See the College of Liberal Arts Policies (p. 753) section of this Bulletin for more information on the Foreign Language Placement, Regression in Coursework, and guidelines for students' other experiences with language.

4. **General Electives** are typically one-third of a student's program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

5. **Major Requirements (30 credits):**
   - Prerequisites: SPAN 1001, SPAN 1002, and SPAN 1003.
   - After completion of prerequisite courses, a total of ten courses are required for the major:

   **Writing Intensive Courses**
   - SPAN 2096 Composition (prerequisite for most 3000-level courses)
   - SPAN 3096 Advanced Analysis and Writing Skills

   **Electives**
   - A maximum of two electives may be selected at the 2000 level
   - A maximum of three electives may be selected at the 3000 level
   - A minimum of three electives must be selected at the 4000 level

   **Total Credit Hours**

   Total: 30

   1 Indicates writing capstone for the major.

Note: Up to two Catalan or Portuguese courses may be taken in place of two Spanish 2000/3000 level courses.
# Suggested Academic Plan

## Bachelor of Arts in Spanish: Language, Literature, and/or Linguistics Option

### Requirements for New Students starting in the 2015-2016 Academic Year

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
</tr>
<tr>
<td></td>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SPAN 1001</td>
<td>Basic I [LA]¹</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td></td>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
</tr>
<tr>
<td></td>
<td>SPAN 1002</td>
<td>Basic II [LA]</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CLA/CST 0800-4999 Elective</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SPAN 1003</td>
<td>Intermediate [LB]</td>
</tr>
<tr>
<td></td>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CLA/CST 0800-4999 Elective</td>
<td></td>
</tr>
<tr>
<td></td>
<td>One 0800-4999 Elective in Any School or College</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SPAN 2001</td>
<td>Conversational Review</td>
</tr>
<tr>
<td></td>
<td>CLA/CST 0800-4999 Elective</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CLA/CST 2000+ Social Science/CST Course</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SPAN 2096</td>
<td>Composition [WI]</td>
</tr>
<tr>
<td></td>
<td>SPAN 2002</td>
<td>Hispanic Readings</td>
</tr>
<tr>
<td></td>
<td>CLA/CST 2000+ Course</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CLA/CST 0800-4999 Elective</td>
<td></td>
</tr>
<tr>
<td></td>
<td>One 0800-4999 Elective in Any School or College</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 4</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SPAN 3096</td>
<td>Advanced Analysis and Writing Skills [WI]</td>
</tr>
</tbody>
</table>

¹ LA refers to Language Area, which is a requirement for the Bachelor of Arts in Spanish.
One 3000+ Spanish Course 3
One 3000+ Spanish Course 3
CLA/CST 0800-4999 Elective 3
CLA/CST 0800-4999 Elective 3

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
</table>

Spring
One 4000+ Spanish Course 3
One 4000+ Spanish Course 3
One 4000+ Spanish Course 3
CLA/CST 0800-4999 Elective 3
One 0800-4999 Elective in Any School or College 3

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
</table>

Total Credit Hours: 123

1 Please check prerequisites for all Spanish courses.

Bachelor of Arts in Spanish: Language & Professional Studies Option

The Language and Professional Studies option is designed for students who wish to develop language and professional skills as well as an awareness of Hispanic culture.

Summary of Degree Requirements

1. University Requirements:
   • MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
   • All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific courses required for this major are SPAN 2096 and SPAN 3096.
   • Students must complete requirements of the General Education (GenEd) Program. See the General Education section (p. 143) of the Undergraduate Bulletin for more details.

2. College of Liberal Arts Requirements:
   • Completion of a minimum of 123 credits, including: 90 credits in CLA/CST courses, 45 credits of which must be at the upper level (numbered 2000-4999). For Humanities majors, 6 upper level credits must be earned in the Social Sciences: African American Studies, American Studies, Anthropology, Asian Studies, Criminal Justice, Economics, Environmental Studies, Geography and Urban Studies, History, Jewish Studies, Latin American Studies, Lesbian, Gay, Bisexual and Transgender Studies, Mathematical Economics, Neuroscience: Systems, Behavior and Plasticity, Political Science, Psychology, Sociology, Women’s Studies, or any department in the College of Science and Technology.
   • A minimum GPA of 2.0, cumulatively, in all CLA/CST coursework, and in the major.
   • Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.

3. Foreign Language/Global Studies Requirements:
   • The requirements for the major in Spanish exceed the CLA minimum for this requirement.
   • Notes on Foreign Language Study
     • The third level of language is numbered 1003 in French, German, Italian, Spanish, and Portuguese and numbered 2001 in all other foreign language subjects.
     • Students are strongly encouraged to take the third level of a foreign language as it is the minimum required for election to the prestigious honor society Phi Beta Kappa. (Taking the course does not guarantee admission but not taking it guarantees exclusion.)
     • See the College of Liberal Arts Policies (p. 753) section of this Bulletin for more information on the Foreign Language Placement, Regression in Coursework, and guidelines for students’ other experiences with language.

4. General Electives are typically one-third of a student’s program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

5. Major Requirements (30 credits):
   • Prerequisites: SPAN 1001, SPAN 1002, and SPAN 1003.
   • After completion of prerequisite courses, a total of ten courses are required for the major:

<table>
<thead>
<tr>
<th>Writing Intensive Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 2096 Composition</td>
</tr>
<tr>
<td>SPAN 3096 Advanced Analysis and Writing Skills</td>
</tr>
</tbody>
</table>
### Electives
A maximum of two courses may be selected at the 2000 level

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three Business/Medical/Legal/Translation courses (Spanish 3000-4000 level)</td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

### Literature Course
Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 3121</td>
<td>Introduction to the Literature of Spain</td>
</tr>
<tr>
<td>SPAN 3141</td>
<td>Introduction to the Literature of Latin America</td>
</tr>
</tbody>
</table>

### Additional Electives
At least two Spanish elective courses numbered 4000-4999

### Total Credit Hours
30

Note: Up to two Portuguese or Catalan courses may be taken in place of two Spanish 2000/3000-level courses.

---

**Suggested Academic Plan**

**Bachelor of Arts in Spanish: Language & Professional Studies Option**

**Requirements for New Students starting in the 2015-2016 Academic Year**

#### Year 1

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ENG 0802, 0812, or 0902</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Analytical Reading and Writing [GW]</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>SPAN 1001</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Basic I [LA]</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IH 0851 or 0951</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SPAN 1002</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Basic II [LA]</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CLA/CST 0800-4999 Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>16</td>
</tr>
</tbody>
</table>

#### Year 2

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SPAN 1003</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Intermediate [LB]</td>
<td></td>
</tr>
<tr>
<td></td>
<td>IH 0852 or 0952</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CLA/CST 0800-4999 Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>One 0800-4999 Elective in Any School or College</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3-4</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>SPAN 2001</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Conversational Review</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CLA/CST 0800-4999 Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

#### Year 3

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CLA/CST 2000+ Social Science/CST Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>SPAN 2096</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Composition [WII]</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SPAN 2002</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Hispanic Readings</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>Course</td>
<td>Credits</td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>---------</td>
<td></td>
</tr>
<tr>
<td>CLA/CST 2000+ Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>One 0800-4999 Elective in Any School or College</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>17</strong></td>
<td></td>
</tr>
</tbody>
</table>

### Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLA/CST 2000+ Social Science/CST Course</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 3001 Advanced Composition Conversation</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 2000+ Course</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Elective</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Elective</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

### Year 4

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 3096 Advanced Analysis and Writing Skills [WI]</td>
<td>3</td>
</tr>
<tr>
<td>Spanish 3000-4999 Business/Medical/Legal/Translation course</td>
<td>3</td>
</tr>
<tr>
<td>Spanish 3000-4999 Business/Medical/Legal/Translation course</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Elective</td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Elective</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

### Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>One 4000+ Spanish Course</td>
<td>3</td>
</tr>
<tr>
<td>One 4000+ Spanish Course</td>
<td>3</td>
</tr>
<tr>
<td>Spanish 3000-4999 Business/Medical/Legal/Translation course</td>
<td>3</td>
</tr>
<tr>
<td>One 0800-4999 Elective in Any School or College</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 3121 Introduction to the Literature of Spain</td>
<td></td>
</tr>
<tr>
<td>SPAN 3141 Introduction to the Literature of Latin America</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

### Total Credit Hours: **123**

1. Please check prerequisites for all Spanish courses.

## Bachelor of Arts in Spanish: Spanish for Education Option

The Spanish for Education option includes the Spanish-language courses required for certification in Spanish for Secondary Education in the College of Education at Temple and satisfies the requirements for the Spanish major in the College of Liberal Arts.

### Summary of Degree Requirements

#### 1. University Requirements:

- MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific courses required for this major are SPAN 2096 and SPAN 3096.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education section (p. 143) of the Undergraduate Bulletin for more details.

#### 2. College of Liberal Arts Requirements:

- Completion of a minimum of 123 credits, including: 90 credits in CLA/CST courses, 45 credits of which must be at the upper level (numbered 2000-4999). For Humanities majors, 6 upper level credits must be earned in the Social Sciences: African American Studies, American Studies, Anthropology, Asian Studies, Criminal Justice, Economics, Environmental Studies, Geography and Urban Studies, History, Jewish Studies, Latin American Studies, Lesbian, Gay, Bisexual and Transgender Studies, Mathematical Economics, Neuroscience: Systems, Behavior and Plasticity, Political Science, Psychology, Sociology, Women's Studies, or any department in the College of Science and Technology.
- A minimum GPA of 2.0, cumulatively, in all CLA/CST coursework, and in the major.
- Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.

#### 3. Foreign Language/Global Studies Requirements:
• The requirements for the major in Spanish exceed the CLA minimum for this requirement.

• Notes on Foreign Language Study
  • The third level of language is numbered 1003 in French, German, Italian, Spanish, and Portuguese and numbered 2001 in all other foreign language subjects.
  • Students are strongly encouraged to take the third level of a foreign language as it is the minimum required for election to the prestigious honor society Phi Beta Kappa. (Taking the course does not guarantee admission but not taking it guarantees exclusion.)
  • See the College of Liberal Arts Policies (p. 753) section of this Bulletin for more information on the Foreign Language Placement, Regression in Coursework, and guidelines for students’ other experiences with language.

4. General Electives are typically one-third of a student’s program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

5. Major Requirements (30 credits):
  • Prerequisites: SPAN 1001, SPAN 1002, and SPAN 1003.
  • After completion of prerequisite courses, a total of ten courses are required for the major:

<table>
<thead>
<tr>
<th>Writing Intensive Courses</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 2096 Composition ¹</td>
<td></td>
</tr>
<tr>
<td>SPAN 3096 Advanced Analysis and Writing Skills ²</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Composition &amp; Conversation</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select one of the following:</td>
<td></td>
</tr>
<tr>
<td>SPAN 1076 Intensive Practice in the Four Skills (9 credits)</td>
<td></td>
</tr>
<tr>
<td>SPAN 2001 Conversational Review</td>
<td></td>
</tr>
<tr>
<td>SPAN 2002 Hispanic Readings</td>
<td></td>
</tr>
<tr>
<td>SPAN 2011 Heritage Spanish II</td>
<td></td>
</tr>
<tr>
<td>SPAN 2098 Advanced Intensive Practice in the Four Skills (9 credits)</td>
<td></td>
</tr>
<tr>
<td>SPAN 3001 Advanced Composition &amp; Conversation</td>
<td></td>
</tr>
<tr>
<td>SPAN 3002 Hispanic Readings II</td>
<td></td>
</tr>
<tr>
<td>SPAN 3003 Advanced Grammar for Communication</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Culture &amp; Civilization</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select one of the following:</td>
<td></td>
</tr>
<tr>
<td>SPAN 3204 Latin America through Film</td>
<td></td>
</tr>
<tr>
<td>SPAN 3221 The Cultures of Spain</td>
<td></td>
</tr>
<tr>
<td>SPAN 3222 Spain through Film</td>
<td></td>
</tr>
<tr>
<td>SPAN 3241 The Cultures of Latin America</td>
<td></td>
</tr>
<tr>
<td>SPAN 3243 The Culture of Puerto Rico</td>
<td></td>
</tr>
<tr>
<td>SPAN 3261 The Hispanic World</td>
<td></td>
</tr>
<tr>
<td>SPAN 4161 Hispanic Literature through Art</td>
<td></td>
</tr>
<tr>
<td>SPAN 4221 The Art of Spain</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Linguistics</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select one of the following:</td>
<td></td>
</tr>
<tr>
<td>SPAN 4301 The Sounds of Spanish</td>
<td></td>
</tr>
<tr>
<td>SPAN 4302 Introduction to Spanish Linguistics</td>
<td></td>
</tr>
<tr>
<td>SPAN 4303 Spanish/English Bilingualism</td>
<td></td>
</tr>
<tr>
<td>SPAN 4304 Spanish Applied Linguistics</td>
<td></td>
</tr>
<tr>
<td>SPAN 4305 Evolution of the Spanish Language</td>
<td></td>
</tr>
<tr>
<td>SPAN 4306 Spanish Sociolinguistics</td>
<td></td>
</tr>
<tr>
<td>SPAN 4307 Language and Gender</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Contemporary Literature</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select one of the following:</td>
<td></td>
</tr>
<tr>
<td>SPAN 4128 Hispanic Modernism</td>
<td></td>
</tr>
<tr>
<td>SPAN 4132 20th &amp;/or 21st Century Spanish Literature</td>
<td></td>
</tr>
<tr>
<td>SPAN 4142 Spanish American Short Story</td>
<td></td>
</tr>
<tr>
<td>SPAN 4144 Spanish American Poetry</td>
<td></td>
</tr>
<tr>
<td>SPAN 4146 National Literatures of Spanish America</td>
<td></td>
</tr>
</tbody>
</table>
SPAN 4147 20th and/or 21st Century Puerto Rican Authors
SPAN 4148 Latin American Literature of Social Conflict
SPAN 4152 U.S. Latino/a Studies
SPAN 4162 Hispanic Nobel Laureates

**Additional Literature**

Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 3002</td>
<td>Hispanic Readings II</td>
</tr>
<tr>
<td>SPAN 3121</td>
<td>Introduction to the Literature of Spain</td>
</tr>
<tr>
<td>SPAN 3141</td>
<td>Introduction to the Literature of Latin America</td>
</tr>
<tr>
<td>SPAN 3142</td>
<td>Puerto Rican Readings</td>
</tr>
<tr>
<td>SPAN 3160</td>
<td>Special Topics I</td>
</tr>
<tr>
<td>SPAN 4121</td>
<td>Survey of Spanish Literature</td>
</tr>
<tr>
<td>SPAN 4126</td>
<td>Cervantes</td>
</tr>
<tr>
<td>SPAN 4141</td>
<td>Survey of Spanish American Literature</td>
</tr>
<tr>
<td>SPAN 4161</td>
<td>Hispanic Literature through Art (or one additional contemporary literature course from the above list)</td>
</tr>
<tr>
<td>SPAN 4401</td>
<td>Advanced Translation and Interpretation</td>
</tr>
</tbody>
</table>

**Electives**

Three Spanish electives (SPAN 1003 may be taken as one of these)

**Total Credit Hours**

30

1. SPAN 2096 is a prerequisite for many Spanish courses at the advanced levels.
2. Indicates capstone for the major.

**Suggested Academic Plan**

**Bachelor of Arts in Spanish: Spanish for Education Option**

**Requirements for New Students starting in the 2015-2016 Academic Year**

**Year 1**

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>SPAN 1001</td>
<td>Basic I [LA]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Term Credit Hours</td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

**Spring**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 1002</td>
<td>Basic II [LA]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Term Credit Hours</td>
<td>16</td>
<td></td>
</tr>
</tbody>
</table>

**Year 2**

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 1003</td>
<td>Intermediate [LB]</td>
<td>3</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>One 0800-4999 Elective in Any School or College</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Term Credit Hours</td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

**Spring**
### Minor in Spanish

Six courses (18 credits) numbered 2000-4999 are required; the distribution of courses depends on the individual student's proficiency level. See the faculty advisor in Spanish for more information.

A maximum of three Spanish courses at the 2000 level  
A minimum of three Spanish courses at the 3000 level or higher

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.
Minor in Portuguese

The minor in Portuguese requires 6 courses (18-20) credits in Portuguese.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PORT 1001</td>
<td>Basic I</td>
<td>4</td>
</tr>
<tr>
<td>PORT 1002</td>
<td>Basic II</td>
<td>4</td>
</tr>
</tbody>
</table>

Select 4 Portuguese elective courses from 3000 and 4000 level offerings.  

Total Credit Hours 18-20

1 Students may substitute intermediate or advanced level courses for the beginning PORT 1001 and PORT 1002.
2 At least two Portuguese electives must be taken at the 4000 level.

Minors are awarded only at the time of completion of the bachelor’s degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor’s degree.

Certificate of Specialization in Spanish

The certificate requires completion of six courses, beginning with SPAN 1001 and advancing to more specialized study of Spanish designed to enhance career opportunities in business, communication, government, and social service. See your advisor or contact the Department of Spanish and Portuguese for more information.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 1001</td>
<td>Basic I</td>
<td>4</td>
</tr>
<tr>
<td>SPAN 1002</td>
<td>Basic II</td>
<td>4</td>
</tr>
<tr>
<td>SPAN 1003</td>
<td>Intermediate</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 2001</td>
<td>Conversational Review</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 2096</td>
<td>Composition</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one 3000-level Spanish elective

Total Credit Hours 20

1 May be substituted with SPAN 2098.

Certificates are awarded only at the time of completion of the bachelor’s degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor’s degree.

Certificate of Specialization in Spanish and Latin American Studies for Business

This interdisciplinary certificate is designed to allow Temple students in business-related programs to develop skills and knowledge in two complementary areas so that they may compete more successfully in this growing job market. To earn this certificate, students need a minimum of 18 credits.

Requirements

Required Courses

Select three of the following: 9

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 1001</td>
<td>Basic I</td>
</tr>
<tr>
<td>SPAN 1002</td>
<td>Basic II</td>
</tr>
<tr>
<td>SPAN 1003</td>
<td>Intermediate</td>
</tr>
<tr>
<td>SPAN 2001</td>
<td>Conversational Review</td>
</tr>
<tr>
<td>SPAN 2096</td>
<td>Composition</td>
</tr>
<tr>
<td>SPAN 2002</td>
<td>Hispanic Readings</td>
</tr>
<tr>
<td>SPAN 3002</td>
<td>Hispanic Readings II</td>
</tr>
<tr>
<td>SPAN 1076</td>
<td>Intensive Practice in the Four Skills</td>
</tr>
<tr>
<td>SPAN 2098</td>
<td>Advanced Intensive Practice in the Four Skills</td>
</tr>
</tbody>
</table>

Spanish for Business Professions

Select one of the following: 3

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 3501</td>
<td>Spanish for Business Professions</td>
</tr>
</tbody>
</table>
SPAN 3502  Business Spanish I
SPAN 3503  Business Spanish II
SPAN 3504  Advanced Business Translation and Interpretation

Latin American Culture Course
Select one of the following:
- LAS 1001  Perspectives on Latin America
- LAS 2220  Special Topics - LASS Seminar
- LAS 2101  Latin America through Film and Fiction

Latin American Business Course
Select one of the following:
- LAS 2502  Fundamentals of Latin American Business
- IB 2502  Fundamentals of Latin American Business

Total Credit Hours 18

1  Students participating in SPAN 1076 must also complete SPAN 2002.
2  SPAN 1076 or SPAN 2098 count as two of the three required courses; each is 9 s.h. and taught in connection with the Latin American Studies Semester (LASS), an immersion program offered every spring. Students who choose this option must take at least one additional language course from this list.
3  These courses are part of the Latin American Studies Semester. The LASS Program is an integration of several courses totaling 17 s.h.: 9 credits are assigned to language instruction, 6 credits to culture and society, taught under LAS 2101 and SOC 2163, and 2 credits to the LASS Seminar. All instruction in LASS is in Spanish. The LASS Program runs every Spring term. For more information on the Latin American Studies Semester, visit www.cia.temple.edu/spanpor/study-abroad/lass/.

Certificates are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Certificate of Specialization in Spanish and Latino Studies for the Health and Human Services Professions

The combination of courses in this certificate program is designed to make participants especially qualified to provide health and human services to members of the Latino community. To earn this certificate, students need a minimum of 18 credits.

Requirements

Select three of the following: 9
- SPAN 1001  Basic I
- SPAN 1002  Basic II
- SPAN 1003  Intermediate
- SPAN 2001  Conversational Review
- SPAN 2096  Composition
- SPAN 2002  Hispanic Readings
- SPAN 1076  Intensive Practice in the Four Skills
- SPAN 2098  Advanced Intensive Practice in the Four Skills
- SPAN 2011  Heritage Spanish II

Select one of the following: 3
- SPAN 3601  Spanish for Health Professions
- SPAN 3602  Medical Spanish

Select one of the following: 3
- LAS 1001  Perspectives on Latin America
- LAS 2101  Latin America through Film and Fiction

Select one of the following: 3
- LAS 2072  Puerto Ricans in Philadelphia
- LAS 3020  Topics in Latino Studies
LAS 3101  
Latino Identity in the U.S.

Total Credit Hours  18

1 SPAN 1076 or SPAN 2098 count as two courses; each is 9 s.h. and taught in connection with the Latin American Studies Semester (LASS), an immersion program offered every spring. Students who choose this option need only take one additional course from this list.

Certificates are awarded only at the time of completion of the bachelor’s degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.

Latin American Studies Semester Certificate and Program

Each spring semester, the Spanish and Portuguese Department offers a 17-credit immersion program in Latin American Studies and Spanish. The program (LASS) combines 9 hours of intensive Spanish with 6 hours of study focusing on geography, history, and culture in Latin America, 2 hours of the LASS Seminar, and a three-week trip to Costa Rica. Successful completion of the program is awarded with a certificate of participation. Applications for LASS are received during October and November for the following spring. For information, contact Dr. Hiram Aldarondo (haldaron@temple.edu), Program Director (215-204-1706) or Dr. Patricia Moore-Martinez (patricia.moore-martinez@temple.edu) (215-204-1707).

Women's Studies

Joyce Joyce, Program Director  
811 Anderson Hall  
j (morawski@temple.edu)joyce@temple.edu (jjoyce@temple.edu)

Rujuta Mandelia, Faculty Advisor  
816 Anderson Hall  
215-204-6953  
rujuta@temple.edu

Stephanie Morawski, Administrator  
1041 Anderson Hall  
215-204-8516  
morawski@temple.edu

www.cla.temple.edu/womenstu/

Women's Studies offers a cohesive framework of inquiry for the examination of women, gender, and sexuality in the U.S. and around the world, as they relate to other social categories, such as race, class, disability, nationality, and ethnicity. As an interdisciplinary field, Women's Studies takes into account social, historical, and cultural variables in its study of women’s material and cultural experiences as a social group; the examination of the workings of gender as an analytical category, identity, and social force; and the social, political, and cultural functioning of sexuality. Women's Studies also seeks to transform traditional fields of study by incorporating new methodologies, data, theories, and frameworks developed by feminist scholars.

The Women's Studies Program offers an undergraduate major and minor that can be taken by students in the College of Liberal Arts or by students in other colleges. The certificate in Women's Studies is available only to students outside the College of Liberal Arts. In preparation for graduate school, Women's Studies majors have the opportunity to graduate with distinction in the major after completing an honors thesis.

The Women's Studies Program offers students the opportunity to study women, gender, and sexuality through an interdisciplinary curriculum taught by faculty from various departments across the university. Students learn to apply the methods and theories of social scientists, historians, philosophers, and literary critics to the study of women’s experiences, as well as gender and sexual identities. They explore a growing body of feminist theories that revise our understanding of gender, society, and culture. We encourage students not only to understand the importance of class, race, sexuality, physical ability, and gender to people's lives intellectually, but also to actively learn through their experiences in their fieldwork (internship) placement. After graduation, Women's Studies students enter professional schools in law, medicine and business; take graduate degrees in the humanities and social sciences; and pursue careers in health, counseling, teaching, and public advocacy.

Programs

- Bachelor of Arts in Women's Studies (p. 930)
- Certificate in Women's Studies (p. 933)
- Minor in Women's Studies (p. 933)

Bachelor of Arts in Women's Studies
Summary of Degree Requirements

University Requirements:

• MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
• All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific courses required for this major are WMST 4396 and one Women’s Studies elective that is writing-intensive.
• Students must complete requirements of the General Education (GenEd) Program. See the General Education section (p. 143) of the Undergraduate Bulletin for more details.

College of Liberal Arts Requirements:

• Completion of a minimum of 123 credits, including:
  • 90 credits in CLA/CST courses;
  • 45 credits of which must be at the upper level (numbered 2000-4999).
    • For Social Science majors, 6 upper level credits (numbered 2000-4999) must be taken in Humanities Subject Areas: Arabic, Chinese, English, French, German, Greek (Ancient), Greek and Roman Classics, Hebrew, Hindi, Italian, Japanese, Latin, Philosophy, Religion, Russian, and Spanish in the College of Liberal Arts, Art History in the Tyler School of Art, or any department in the College of Science and Technology.
• A minimum GPA of 2.0, cumulatively, in CLA/CST coursework, and in the major.
• Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.
• Foreign Language/Global Studies Requirements:
  • All students must complete or test out of the first and second levels of a foreign language - these courses are numbered 1001 and 1002;
  • All students must complete at least one course from the GenEd Global/World Society category; and
  • All Bachelor of Arts students must complete one of the following options:
    • Third semester of a foreign language;
    • Demonstrated proficiency beyond the third semester in a foreign language (placement exam or certification from the language department);
    • Take one Global Studies course from the list on the CLA College Graduation Requirements (p. 755) page;
    • Study Abroad at an approved program; or
    • Take a second General Education Global/World Society course.
• Notes on Foreign Language Study
  • The third level of language is numbered 1003 in French, German, Italian, Spanish, and Portuguese and numbered 2001 in all other foreign language subjects.
  • Students are strongly encouraged to take the third level of a foreign language as it is the minimum required for election to the prestigious honor society Phi Beta Kappa. (Taking the course does not guarantee admission but not taking it guarantees exclusion.)
  • See the College of Liberal Arts Policies (p. 753) section of this Bulletin for more information on the Foreign Language Placement, Regression in Coursework, and guidelines for students’ other experiences with language.

General Electives are typically one-third of a student’s program of study and can be focused on a second major, a minor, or towards some other personal enrichment or professional goals. See an academic advisor for assistance in developing an academic plan for these courses.

Major Requirements (36 credits in Women’s Studies):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>WMST 1301</td>
<td>Foundations in Women’s Studies</td>
<td>3</td>
</tr>
<tr>
<td>WMST 1000-level course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Elective Courses^1,^2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select six courses in Women's Studies numbered 2000-4999</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>Select two courses in Women’s Studies at any level (numbered 0800-4999)</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Two-course sequence^3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WMST 4389</td>
<td>Field Work in Women’s Studies</td>
<td>3</td>
</tr>
<tr>
<td>WMST 4396</td>
<td>Research Seminar in Women’s Studies</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credit Hours 36
Majors will be permitted to take two of these eight courses outside Women's Studies (courses that are not cross listed) with the written permission of the advising coordinator. These courses must support the student’s academic or professional growth in conjunction with the major (e.g. a research methods course in another discipline for which the student will write on a subject related to gender or courses taken in a study abroad program).

At least one of the electives above (at any level) must be writing-intensive, ending in -96, -97 or -98.

The final requirement for the major is a two-course sequence. This sequence should be taken during the major’s last three semesters of enrollment. Students will select a field assignment (internship) with the assistance of the advising coordinator. This sequence is designed for students to learn how to write a research paper.

### Distinction in Major

Women's Studies students may graduate with a distinction in the major if they have a GPA of 3.5 or better in the major, a cumulative GPA of 3.0 or better, and successfully complete an honors thesis (minimum 3 credits) under the supervision of a faculty member from Women's Studies.

### Suggested Academic Plan

#### Bachelor of Arts in Women's Studies

**Requirements for New Students starting in the 2015-2016 Academic Year**

<table>
<thead>
<tr>
<th>Year 1</th>
<th></th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Foreign Language 1001 - first level</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>Foreign Language 1002 - second level</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>WMST 1301</td>
<td>Foundations in Women's Studies</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>16</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th></th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>One 1000+ Women's Studies Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>One 0800-4999 Elective in Any School or College</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Foreign Language - third level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GenEd Global/World Society Course</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internationally-Focused Course From Approved List</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>17</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>One 1000-level Women's Studies Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>One 1000+ Women's Studies Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>CLA/CST 0800-4999 Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3</th>
<th></th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CLA/CST 2000+ Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>
One 2000+ Women’s Studies Elective 3
One 2000+ Women's Studies Elective 3
CLA/CST 2000+ Humanities/CST Course 3
CLA/CST 0800-4999 Elective 3

Term Credit Hours 15

Spring
CLA/CST 2000+ Course 3
One 2000+ Writing Intensive Women’s Studies Course [WI] 3
One 2000+ Women’s Studies Elective 3
CLA/CST 2000+ Humanities/CST Course 3
CLA/CST 0800-4999 Elective 3

Term Credit Hours 15

Year 4
Fall
One 2000+ Women’s Studies Elective 3
WMST 4389 Field Work in Women's Studies 1 3
CLA/CST 2000+ Course 3
CLA/CST 2000+ Course 3
CLA/CST 0800-4999 Elective 3

Term Credit Hours 15

Spring
One 2000+ Women’s Studies Elective 3
WMST 4396 Research Seminar in Women's Studies [WI] (Capstone Course) 1 3
CLA/CST 2000+ Course 3
CLA/CST 0800-4999 Elective 3
One 0800-4999 Elective in Any School or College 3

Term Credit Hours 15

Total Credit Hours: 123

1 These courses may not be offered every semester. Please see advisor for offerings.

Certificate in Women’s Studies

This certificate is designed for students whose major is outside the College of Liberal Arts who want to pursue a Women’s Studies-oriented career.

Requirements

WMST 1076 Introduction to Women's Studies 3
or WMST 1096 Introduction to Women's Studies 3
WMST 4389 Field Work in Women's Studies 3
Two electives in Women's Studies 1 6

Total Credit Hours 12

1 At least one of these two courses must be at the upper level.

Certificates are awarded only at the time of completion of the bachelor’s degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor’s degree.

Minor in Women’s Studies

Requirements

WMST 1301 Foundations in Women's Studies 3
Six electives in Women's Studies 1 18

Total Credit Hours 21

1
At least three of the six electives must be taken at the upper level (WMST 2000-4999).

Minors are awarded only at the time of completion of the bachelor's degree and cannot be awarded either as a stand-alone program of study or after completion of the first bachelor's degree.
School of Media & Communication

Founded 1967

David Boardman, Dean
2020 N. 13th Street, Philadelphia, PA 19122
215-204-8421
http://smc.temple.edu/

Goals and Objectives

The School of Media and Communication generates knowledge and educates students to be ethical, analytical and creative leaders, producers and citizens in a multimedia and multicultural society. This mission is pursued through the training of students for leadership careers in media and communications, through advancing research and creative activity in these fields, and through serving the public need for free and open communication. The school is concerned not only with high standards of professional work but also with encouraging the next generation of teachers and media managers to develop an intellectual background and a sense of social responsibility. Toward this end, SMC students are encouraged to take coursework in disciplines outside the school. For some, history and political science are related areas of interest; others choose literature and the arts; still others choose business, economics, or the social sciences. In this way, the school participates in providing not only professional training but also a broad humanistic education for its students.

The faculty of the school comes from diverse backgrounds. Some have extensive professional experience as journalists, television producers, speech writers, advertising executives, and public relations practitioners. Others have come to Media and Communication through academic study, doing graduate work and continuing the practice of research and scholarship while teaching at Temple.

Renowned for their professional experience, research, and teaching, our faculty prepare our graduates for a wide range of careers in communication industries, as well as lead graduate students towards Ph.D., M.A., M.S., and M.J. degrees.

History

The study of communication began formally at Temple University with the founding of the Department of Journalism in 1927. It was the first such department in the Commonwealth.

Theater was an extracurricular activity at Temple until 1931, when formal courses were developed.

Radio-Television became an instructional division in 1947, and extensive film offerings were added in 1967. That year, Journalism and Radio-Television-Film joined Theater to form the School of Communications and Theater. In 1987 the highly-respected Department of Speech moved to the school from the College of Arts and Sciences. A year later, Speech became two departments: Rhetoric and Communication, and Speech-Language-Hearing.

The school was restructured in 1995. Radio-Television-Film became the Department of Film and Media Arts and the Department of Broadcasting, Telecommunications, and Mass Media; Journalism became Journalism, Public Relations, and Advertising; Rhetoric and Communication became Speech Communication. In 1998, the Department of Communication Sciences (Speech-Language-Hearing) moved to the College of Health Professions.

Effective Fall 2004, a change occurred with the Departments of Journalism, Public Relations and Advertising, and Speech Communication. Advertising became a separate department. The Department of Speech Communication changed its name to Strategic and Organizational Communication and includes Public Relations as one of three concentrations: Public Communication (formerly Speech Communication), Public Relations, and Organizational Leadership. In 2010, the Department of Strategic and Organizational Communication changed its name to the Department of Strategic Communication.

In Fall 2011, Communication Studies (p. 956) replaced the former Communications major.

On July 1, 2012, the School of Communications and Theater was renamed the School of Media and Communication. It houses the departments of Advertising; Journalism; Media Studies and Production (formerly Broadcasting, Telecommunications, and Mass Media); and Strategic Communication. The Communication Studies program remains a part of the School of Media and Communication. The Departments of Theater and Film and Media Arts comprised the Division of Theater, Film and Media Arts and joined Boyer School of Music and Dance and the Tyler School of Art to form the Center for the Arts.

Also in 2012, the Department of Broadcasting, Telecommunications, and Mass Media changed its name to Media Studies and Production while the Department of Strategic Communication renamed the Public Communication concentration to Rhetoric and Public Advocacy.

Special Facilities

The School of Media and Communication is housed in buildings designed for teaching, research, and production.
The primary location of the School is Annenberg Hall, which houses the Departments of Advertising; Journalism; and Media Studies and Production. Television and film production areas (studios and editing, graphics, and film labs) occupy the first floor. The building also includes extensive video and film editing areas, a 75-seat multimedia screening room, photographic labs, two news writing labs and smart classrooms.

The Department of Strategic Communication is housed in Weiss Hall.

The Joe First Media Center, SMC’s newest addition, is located on the first floor, linking Annenberg and Tomlinson Halls. The center is a communications and media hub for the school and includes a cyber-café, a multimedia information center, and a venue for displaying student work.

**Special Programs**

**TUTV - Temple University Television**

In Fall 2010, the university launched TUTV, a new regional cable television channel with associated new media platforms, which will showcase the innovative work done by Temple students, faculty, and alumni.

TUTV offices and master control are located on the first floor of Annenberg Hall and is a part of the Kal & Lucille Rudman Media Production Center. The Rudman Center also features a broadcast studio and a computer-equipped classroom. The station features news, sports, music, comedy, and documentary programs. TUTV presents content from many of the university’s other professional schools, plus programs produced in association with community cultural groups and professional broadcasters. Student volunteers are also accepted. For more information, contact the TUTV General Manager at paul.gluck@temple.edu.

**Temple Update**

Temple Update is a production course in which students can gain experience producing, reporting, and editing for a half-hour weekly news magazine format. The program airs on a cable outlet. The course gives students the opportunity to produce material for a résumé tape and provides students with valuable experience in field work, news writing, video editing, and the pressure of a live program.

**Internship Program**

Although the requirements may vary, internships are available to junior and senior students of every department in the school. Internships are for academic credit and must involve professional activity related to the student’s course of study. The internships must be approved by the administrator or faculty member charged with supervising internships.

**Study Away**

The School of Media and Communication offers several programs for students who are interested in studying away and strongly encourages students to participate in these programs.

The school offers semester programs in London and Dublin for undergraduate and graduate students. Students can spend either the fall or spring semester abroad, and have the option to study consecutive fall and spring semesters in these locations. The London semester coursework includes an SMC faculty-led course, required for all students, electives in advertising, journalism, media studies and production, strategic communication, film, theater, and more. An optional, guaranteed part-time internship placement in a student’s field of study is a popular component of the program. The Dublin semester program requires an Irish Life and Cultures course and offers both numerous electives and an optional but guaranteed part-time internship placement.

The Arcosanti program is a new offering for spring 2016. This program includes a media and ecology course for the duration of the spring semester with spring break travel to Arcosanti, Arizona, a hub of architecture and ecology.

Summer Study Away programs are also an important feature of the school’s special programs. Realizing the inestimable value of direct contact with professionals and other experts, the School of Media and Communication offers an annual 6-7 credit summer seminar in London on British Mass Media led by an SMC faculty member.

Temple Dublin is a five to six week-long program which allows students to experience the old and the new Dublin while taking 6-7 credits of SMC coursework.

Temple Peru is a new program for summer 2015 at Universidad San Ignacio de Loyola in Cusco. Students on this program earn 6-7 SMC credits and take courses in English with Peruvian and international students.

Temple South Africa offers students an opportunity to produce journalistic and documentary narrative, a body of photographic work, or to conduct media research for 6 credits in journalism. The program has a journalistic focus with the prime purpose of producing “news content.” This production will be multi-media inclusive of audio, photographs, text and video and will focus on use of mobile media. The program can accommodate students who do not have a journalism/production background, such as students interested in conducting term-paper-style research. However, that research must have a journalism-media focused topic.
The Communities and Organizations of New York program investigates the communicative components of New York City by focusing on its neighborhoods, organizations, and institutions. Coursework for this program is held on Saturdays, but students may also undertake an internship or academic experience component during the week as part of this study-away experience.

The Global Internship Program offers students the opportunity to participate in 8-week guaranteed, full-time internship opportunities in one of four international locations: Barcelona, Hong Kong, Paris, or London, or one of seven domestic locations: Boston, Chicago, Los Angeles, Miami, New York City, San Francisco or Washington, DC. All students, regardless of their internship location, spend time together on Temple's Main Campus studying Intercultural Communications in the Workplace as a group before they depart for their chosen destination. Students work one-on-one with an industry expert so as to secure an internship in their desired field. Each of the programs is a unique combination that includes travel, learning, and exciting events, with a resume building internship. Knowledge of a foreign language is not required to study in any of these locations. However, some previous experience with Spanish (for the Barcelona internship option), French (for the Paris internship option), or some proficiency in Mandarin and/or Cantonese (for the Hong Kong internship option) can lead to even more internship opportunities while abroad.

All semester and summer programs are open to qualified students from other universities and colleges and to others who choose to continue their education in a less formal manner than in a prescribed program of study.

SMC is also in the process of developing new Study Away programs. Check with the Study Away advisor for information on these developments. Current information on the SMC programs listed here is available from SMC Study Away at 215-204-2677 or 215-204-6535.

See Education Abroad (p. 49) for more information about University Study Abroad options.

**Student Contact**

For information about the School of Media and Communication, please contact the SMC Student Affairs at 215-204-5273.

**Academic Policies & Regulations**

Please see the Undergraduate Academic Policies (p. 81) section of this Bulletin. Students are responsible for complying with all university-wide academic policies as well as those of the School of Media and Communication that appear below.

**Academic Standing**

A matriculated undergraduate student in the university is in Academic Good Standing if enrolled in a baccalaureate degree-seeking program.

Please see the University’s policy on Academic Standing (p. 83) for detailed information about Academic Warning, Academic Probation, and Academic Dismissal.

**Credits Not Applied Toward the Degree**

Credits earned in the following courses are not applied toward a degree in the School of Media and Communication: lower-level courses in Military Science, Topical Studies, RCC, ELECT, and Mathematics 0015.

**Dean's List**

Each fall and spring semester, those undergraduates who have met the credit hour and academic criteria for their school or college are placed on the Dean's List. See the Dean's List (p. 92) policy for specific GPA and credit-hour requirements.

**Re-enrollment**

Students returning to the School of Media and Communication after an absence of one semester (unless an approved Leave of Absence form was filed prior to the leave) must use the Undergraduate Bulletin in effect at the time of readmission or any subsequent Undergraduate Bulletin. Credits more than 10 years old may not be applied toward a degree in the school. For application deadlines and the re-enrollment form, please visit: www.temple.edu/vpus/documents/request_to_reenroll.pdf.

**Transfer Students**

Refer to the Transfer Students Admissions (p. 23) section of this Bulletin for general information on transferring courses to Temple. In addition to these criteria, each department in the School of Media and Communication will evaluate any credit to be transferred into a major. This evaluation generally is done at the first meeting with a faculty advisor during the first semester. The maximum number of credit hours allowed to transfer in the major are: 12 hours in Advertising; 20 hours in Media Studies and Production; 24 hours in Communication Studies; 12 hours in Journalism; and 12 hours in Strategic Communication.

**School Requirements for Graduation**

The School of Media and Communication requires 124 credits to graduate; completion of the university General Education (GenEd (p. 143)) (p. 143) requirements; completion of departmental requirements, including two writing-intensive courses in the major; a minimum of 2.00 GPA, both cumulative and in the major; and completion of a maximum of 78 credits within the school and a minimum of 46 credits outside of the school.
Minimum and maximum credit requirements within each major are listed with the departmental requirements.

Students who are planning to graduate must schedule an official graduation review with an academic advisor and complete the application for graduation at least one semester prior to the anticipated graduation date. Appointments may be made in SMC Student Affairs/Advising, Annenberg Hall Room 9.

Program Descriptions

1. The total number of credit hours at graduation may be greater for some students based on initial placement exams, transfer evaluations, individual curricular choices, and academic progress.

2. Students must fulfill the necessary prerequisites for any given course or course sequence. See the Prerequisites and Co-requisites Policy (p. 99) in the university-wide Academic Policies section of this Bulletin.

Advising

SMC Student Affairs/Advising
9 Annenberg Hall
2020 N. 13th Street
Philadelphia, PA 19122
215-204-5273
http://smc.temple.edu/undergraduate/advising/
advice@temple.edu

Students in the School of Media and Communication are advised by professional academic advisors and faculty advisors. New students (up to 30 credits), transfer students in their first semester, interdepartmental majors, undeclared students, and students on academic probation make advising appointments in SMC Student Affairs/Advising, located on the ground floor of Annenberg Hall. All other students are advised by faculty in their respective departments. Consult your departmental office for assignment to the appropriate faculty advisor.

Academic advisors attempt to avoid errors when advising students about their program requirements, but schools and colleges cannot assume liability for errors in advising. Therefore, students must assume primary responsibility for knowing the requirements for their degree and for acquiring current information about their academic status.

Most students will be eligible to register for classes online via Self Service Banner through the TU Portal (https://tuportal4.temple.edu/cp/home/displaylogin). However, all students should meet with an advisor prior to the eligible registration period.

Students preparing to graduate must file the necessary paperwork at least one semester prior to the graduation date. At that time, an appointment should be made in SMC Student Affairs/Advising to complete a graduation review and application for graduation.

Faculty

Osei Appiah, Professor, Department of Advertising, School of Media and Communication; Ph.D., Stanford University.

Geoffrey Baym, Professor, Department of Media Studies and Production, School of Media and Communication; Ph.D., University of Utah.

David Boardman, Professor, Department of Journalism, School of Media and Communication; M.A., University of Washington.

Deborah Cai, Professor, Department of Strategic Communication, School of Media and Communication; Ph.D., Michigan State University.

Guillermo G. Caliendo, Assistant Professor (Teaching/Instructional), Department of Strategic Communication, School of Media and Communication; Ph.D., University of Pittsburgh.

John Edward Campbell, Assistant Professor, Department of Media Studies and Production, School of Media and Communication; Ph.D., University of Pennsylvania.

Amy L. Caples, Assistant Professor (Teaching/Instructional), Department of Media Studies and Production, School of Media and Communication; B.A., Temple University.

Jessica Castonguay, Assistant Professor (Teaching/Instructional), Department of Advertising, School of Media and Communication; Ph.D., University of Arizona.

William B. Cook, Assistant Professor (Teaching/Instructional), Department of Advertising, School of Media and Communication; M.A., Pennsylvania State University.

Brian Creech, Assistant Professor, Department of Journalism, School of Media and Communication; Ph.D., University of Georgia.
Sherri Hope Culver, Associate Professor (Teaching/Instructional), Department of Media Studies and Production, School of Media and Communication; M.L.A., University of Pennsylvania.

Fabienne L. Darling-Wolf, Associate Professor, Department of Journalism, School of Media and Communication; Ph.D., University of Iowa.

Jason del Gandio, Assistant Professor (Teaching/Instructional), Department of Strategic Communication, School of Media and Communication; Ph.D., Southern Illinois University, Carbondale.

Abbe S. Depretis, Assistant Professor (Teaching/Instructional), Department of Strategic Communication, School of Media and Communication; Ph.D., University of Maryland, College Park.

Brooke E. Duffy, Assistant Professor, Department of Advertising, School of Media and Communication; Ph.D., University of Pennsylvania.

Alison Ebbecke, Assistant Professor (Teaching/Instructional), Department of Strategic Communication, School of Media and Communication; B.A., Temple University.

Thomas E. Eveslage, Professor, Department of Journalism, School of Media and Communication.

Gregg C. Feistman, Associate Professor (Teaching/Instructional), Department of Strategic Communication, School of Media and Communication; M.A., Marist College.

Jan L. Fernback, Associate Professor, Department of Media Studies and Production, School of Media and Communication; Ph.D., University of Colorado.

Matthew R. Fine, Assistant Professor (Practice), Department of Media Studies and Production, School of Media and Communication; M.S., Columbia University.

Edward L. Fink, Professor, Department of Strategic Communication, School of Media and Communication; Ph.D., University of Wisconsin-Madison.

Jennifer Lovrinic Freeman, Assistant Professor (Teaching/Instructional), Department of Advertising, School of Media and Communication; B.S., Northwestern University.

Joseph Glennon, Assistant Professor (Teaching/Instructional), Department of Advertising, School of Media and Communication; B.A., University of Massachusetts.

Paul Gluck, Associate Professor (Practice), Department of Media Studies and Production, School of Media and Communication; B.A., Temple University.

Scott Gratson, Associate Professor (Teaching/Instructional), Department of Communication Studies, School of Media and Communication; Ph.D., University of Denver.

Bruce W. Hardy, Assistant Professor, Department of Strategic Communication, School of Media and Communication; Ph.D., University of Pennsylvania.

Christopher Harper, Professor, Department of Journalism, School of Media and Communication; M.J., Northwestern University.

Stacey J. Harpster, Assistant Professor (Teaching/Instructional), Department of Advertising, School of Media and Communication; M.B.A., Temple University.

R. Lance Holbert, Professor, Department of Strategic Communication, School of Media and Communication; Ph.D., University of Wisconsin-Madison.

Thomas L. Jacobson, Professor, Department of Media Studies and Production, School of Media and Communication; Ph.D., University of Washington.

Peter Jaroff, Assistant Professor (Practice), Department of Media Studies and Production, School of Media and Communication; B.A., Grinnell College.

Tricia S. Jones, Professor, Department of Strategic Communication, School of Media and Communication; Ph.D., Ohio State University.

Sheryi D. Kantrowitz, Assistant Professor (Teaching/Instructional), Department of Advertising, School of Media and Communication; BFA, Syracuse University.

Carolyn L. Kitch, Professor, Department of Journalism, School of Media and Communication; Ph.D., Temple University.

John S. Klotz, Associate Professor (Practice), Department of Media Studies and Production, School of Media and Communication; M.S., Rosemont College.

Lauren Kogen, Assistant Professor, Department of Media Studies and Production, School of Media and Communication; Ph.D., University of Pennsylvania.

Magdalena Konieczna, Assistant Professor, Department of Journalism, School of Media and Communication; Ph.D., University of Wisconsin-Madison.
Heather LaMarre, Assistant Professor, Department of Strategic Communication, School of Media and Communication; Ph.D., Ohio State University.

John A. Lent, Professor Emeritus, Department of Media Studies and Production, School of Media and Communication; Ph.D., University of Iowa.

Tony C. Liao, Assistant Professor, Department of Media Studies and Production, School of Media and Communication; Ph.D., Cornell University.

Matthew Lombard, Associate Professor, Department of Media Studies and Production, School of Media and Communication; Ph.D., Stanford University.

Michael L. Maynard, Associate Professor, Department of Advertising, School of Media and Communication; Ph.D., Rutgers University.

George W. Miller III, Associate Professor (Practice), Department of Journalism, School of Media and Communication; M.J., Columbia University.

Logan K. Molyneux, Assistant Professor, Department of Journalism, School of Media and Communication; Ph.D., University of Texas-Austin.

Bryan Monroe, Professor, Department of Media Studies and Production, School of Media and Communication.

William J. Mooney, Assistant Professor (Practice), Department of Media Studies and Production, School of Media and Communication; B.A., Goddard College.

Nancy E. Morris, Professor, Department of Media Studies and Production, School of Media and Communication; Ph.D., University of Pennsylvania.

Katherine A. Mueller, Assistant Professor (Teaching/Instructional), Department of Advertising, School of Media and Communication; B.F.A., Moore College of Art and Design.

Patrick D. Murphy, Associate Professor, Department of Media Studies and Production, School of Media and Communication; Ph.D., Ohio University.

Howard A. Myrick, Professor, Department of Media Studies and Production, School of Media and Communication; Ph.D., University of Southern California.

Maida Odom, Assistant Professor (Teaching/Instructional), Department of Journalism, School of Media and Communication; M.L.A., University of Pennsylvania.

Wazhmah Osman, Assistant Professor, Department of Media Studies and Production, School of Media and Communication; Ph.D., New York University.

Donnaly Pompper, Associate Professor, Department of Strategic Communication, School of Media and Communication; Ph.D., Temple University.

Hector Postigo, Associate Professor, Department of Media Studies and Production, School of Media and Communication; Ph.D., Rensselaer Polytechnic Institute.

Cornelius B. Pratt, Professor, Department of Strategic Communication, School of Media and Communication; Ph.D., University of Minnesota.

Dana K. Saewitz, Associate Professor (Teaching/Instructional), Department of Advertising, School of Media and Communication; M.L.A., University of Pennsylvania.

Adrienne Shaw, Assistant Professor, Department of Media Studies and Production, School of Media and Communication; Ph.D., University of Pennsylvania.

Larry Stains, Associate Professor (Teaching/Instructional), Department of Journalism, School of Media and Communication; M.J., Columbia University.

Lori L. Tharps, Assistant Professor, Department of Journalism, School of Media and Communication; M.S., Columbia University.

Edward J. Trayes, Professor, Department of Journalism, School of Media and Communication; Ph.D., University of Iowa.

Karen M. Turner, Associate Professor, Department of Journalism, School of Media and Communication; J.D., Northwestern University School of Law.

Elizabeth Leebron Tutelman, Professor, Department of Media Studies and Production, School of Media and Communication; Ph.D., Northwestern University.

Barry Vacker, Associate Professor (Teaching/Instructional), Department of Media Studies and Production, School of Media and Communication; Ph.D., University of Texas at Austin.

Francesca A. Viola, Assistant Professor (Teaching/Instructional), Department of Journalism, School of Media and Communication; J.D., Widener University.

Linn Washington, Associate Professor, Department of Journalism, School of Media and Communication; M.A., Yale Law School.

Kristine Trever Weatherston, Assistant Professor (Teaching/Instructional), Department of Media Studies and Production, School of Media and Communication; Ph.D., Virginia Commonwealth University.
Tracey Weiss, Assistant Professor (Teaching/Instructional), Department of Strategic Communication, School of Media and Communication; Ph.D., Temple University.

Thomas Wright, Assistant Professor (Teaching/Instructional), Department of Strategic Communication, School of Media and Communication; Ph.D., Purdue University.

Soo Min Yu, Assistant Professor, Department of Journalism, School of Media and Communication; Ph.D., Simon Fraser University.

Laura Zaylea, Assistant Professor (Teaching/Instructional), Department of Media Studies and Production, School of Media and Communication; M.F.A., San Francisco Art Institute.

Advertising

Osei Appiah, Ph.D.
Department Chair
215-204-4268

Department Office:
Annenberg Hall, Room 300
215-204-4268
http://smc.temple.edu/advertising/

Advertising is a competitive, creative, challenging and exciting industry, serving major businesses at the intersection of media and society. Advertising students will develop skills in strategic planning, research, copywriting, art direction, media buying and planning, sales, management, team work, leadership, and oral and written presentations. Students will be well prepared for careers in digital and traditional advertising as well as media and marketing organizations in all kinds of industries. Our program prepares students to work at the nexus of economic communications and social communications. They will be positioned to succeed in professional careers and to respond wisely as citizens, consumers, and community leaders.

Based on the evidence from over 5,000 survey questionnaires, full-time advertising students at Temple University fall into clearly-defined groups:

- Students energetically interested in advertising as a career;
- Students who have creative talent and wish to express it;
- Students who are broadly interested in media and the power and mystery of advertising;
- Students interested in marketing, sales, or business, but who do not wish to major in business or finance;
- Students who think advertising will be a fun way to get a job-oriented college degree.

Students in the Department of Advertising will learn:

- How to identify appropriate research designs for understanding consumer wants, needs, and communication behavior, and be able to interpret the results for developing brand and advertising strategies;
- How to conceive, write, design and produce advertising in all media formats which can be measured against marketing objectives and strategies;
- How to establish strategies and to negotiate executions for the investment of advertising dollars in all media vehicles and how to evaluate the results;
- How to manage client relations and the process of producing advertising from strategy through production at a profit.
- How to be prepared to respond to a rapidly-changing, fragmented digital media environment.

Programs

- Bachelor of Arts in Advertising: Account Management Concentration (p. 941)
- Bachelor of Arts in Advertising: Art Direction Concentration (p. 944)
- Bachelor of Arts in Advertising: Copywriting Concentration (p. 947)
- Bachelor of Arts in Advertising: Media Planning Concentration (p. 950)
- Bachelor of Arts in Advertising: Research & Strategy Concentration (p. 953)

Bachelor of Arts in Advertising: Account Management Concentration

This concentration offers preparation for careers in management, which will open doors for students in a broad array of industries in today's complex, fragmented media landscape. In the three advanced Account Management courses (ADV 3031, ADV 3033, and ADV 4034) students will learn about Digital Analytics and Reporting, Advertising Sales, and Account Management. Students are also required to take Introduction to Marketing (ADV 2111) in preparation for the advanced classes.
Requirements for the Degree

Summary of Requirements

1. University requirements:
   a. New students are required to complete the General Education (GenEd (p. 143)) curriculum.
   b. All students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for this major are ADV 1196 and ADV 4196.

2. Maximum of 78 credits in the School of Media and Communication.

3. Minimum of 48 credits in Advertising courses, maximum of 60 credits in Advertising courses.

4. A grade of C or higher must be attained in all required Advertising courses.

5. An overall GPA of 2.0 must be attained in the major.

6. 1000-level Advertising courses are prerequisites to 2000-level Advertising courses; 2000-level Advertising courses are prerequisites to 3000-level Advertising courses; 3000-level Advertising courses are prerequisites to 4000-level Advertising courses.

7. No more than 12 semester hours of transfer credits may be applied to Advertising major requirements.

8. No more than 8 credits may be taken in Kinesiology and Dance activities courses.

Advertising: Account Management Requirements

1000-Level Core Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADV 1101</td>
<td>Introduction to Media and Society</td>
</tr>
<tr>
<td>ADV 1102</td>
<td>Introduction to Advertising</td>
</tr>
<tr>
<td>ADV 1196</td>
<td>Persuasive Writing</td>
</tr>
<tr>
<td>ADV 1103</td>
<td>Digital Media and Advertising¹</td>
</tr>
</tbody>
</table>

2000-Level Core Requirements

Required Course

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADV 2111</td>
<td>Introduction to Marketing</td>
</tr>
</tbody>
</table>

Select two of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADV 2121</td>
<td>Introduction to Copywriting</td>
</tr>
<tr>
<td>ADV 2131</td>
<td>Introduction to Media Planning</td>
</tr>
<tr>
<td>ADV 2141</td>
<td>Introduction to Advertising Research and Strategy</td>
</tr>
<tr>
<td>ADV 2151</td>
<td>Introduction to Art Direction: Visual Communication</td>
</tr>
</tbody>
</table>

Upper-Level Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADV 4196</td>
<td>Morality, Law and Advertising</td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADV 3171</td>
<td>Diamond Edge Communication³</td>
</tr>
<tr>
<td>ADV 3185</td>
<td>Advertising Internship³</td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADV 4102</td>
<td>Advertising Campaigns</td>
</tr>
<tr>
<td>ADV 4103</td>
<td>National Student Advertising Competition³</td>
</tr>
</tbody>
</table>

Account Management Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADV 3031</td>
<td>Digital Analytics and Reporting</td>
</tr>
<tr>
<td>ADV 3033</td>
<td>Advertising Sales</td>
</tr>
<tr>
<td>ADV 4034</td>
<td>Account Management</td>
</tr>
</tbody>
</table>

Advertising Electives

Select a minimum of 9 credits from the following list:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADV 1000</td>
<td>Topics in Advertising 1</td>
</tr>
<tr>
<td>ADV 1001</td>
<td>Introduction to Digital Design Tools</td>
</tr>
<tr>
<td>ADV 2001</td>
<td>Intermediate Digital Design Tools</td>
</tr>
<tr>
<td>ADV 2052</td>
<td>Introduction to Typography</td>
</tr>
<tr>
<td>ADV 2057</td>
<td>Creating and Filming Advertising from Script to Screen</td>
</tr>
<tr>
<td>ADV 2102</td>
<td>Introduction to Pharmaceutical Advertising</td>
</tr>
<tr>
<td>ADV 2103</td>
<td>Introduction to Web Design and Development</td>
</tr>
<tr>
<td>ADV 2104</td>
<td>Personal Branding</td>
</tr>
<tr>
<td>ADV 3000</td>
<td>Topics in Advertising 3000</td>
</tr>
</tbody>
</table>
ADV 3003  National Student Advertising Competition Preparation
ADV 3042  Quantitative Advertising Research
ADV 3101  Creative Thinking for Advertising

Total Credit Hours 48

1 Students may substitute ADV 4101 for this requirement.
2 Advertising students must complete the 2000-level core course required for their concentration as noted above, and two additional 2000-level core courses.
3 Requires special permission from instructor.

Internships or Diamond Edge Communications

All advertising majors are required to do either a professional internship or be involved with Diamond Edge Communications (DEC), our student-run ad agency. Both offer students valuable hands-on experience in actual advertising-related professional experiences. DEC works with local Philadelphia clients, under the supervision of an advertising professor, to develop strategic plans, research, digital and traditional creative materials, media plans and presentations. The internship program is carefully managed by our Internship Directors to help students find the best possible internship opportunities. The Internship Directors, faculty members and SMC’s Director of Career Services will help students with preparation of résumés, cover letters, and LinkedIn pages. We will also guide students through the process of seeking and identifying quality internship opportunities.

Suggested Academic Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Arts in Advertising: Account Management Concentration

Requirements for New Students starting in the 2015-2016 Academic Year

Year 1

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>ADV 1101</td>
<td>Introduction to Media and Society</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ADV 1102</td>
<td>Introduction to Advertising</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>COMM 1001</td>
<td>SMC Freshman Seminar</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15</strong></td>
<td></td>
</tr>
<tr>
<td>Spring</td>
<td>ADV 1103</td>
<td>Digital Media and Advertising</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ADV 1196</td>
<td>Persuasive Writing [WI]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3-4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15</strong></td>
<td></td>
</tr>
</tbody>
</table>

Year 2

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>ADV 2111</td>
<td>Introduction to Marketing</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Select one of the following:</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ADV 2121</td>
<td>Introduction to Copywriting</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ADV 2131</td>
<td>Introduction to Media Planning</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ADV 2141</td>
<td>Introduction to Advertising Research and Strategy</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ADV 2151</td>
<td>Introduction to Art Direction: Visual Communication</td>
<td></td>
</tr>
<tr>
<td></td>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15</strong></td>
<td></td>
</tr>
<tr>
<td>Spring</td>
<td>Select one of the following:</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ADV 2121</td>
<td>Introduction to Copywriting</td>
<td></td>
</tr>
</tbody>
</table>
ADV 2131  Introduction to Media Planning
ADV 2141  Introduction to Advertising Research and Strategy
ADV 2151  Introduction to Art Direction: Visual Communication

Advertising Elective 3
GenEd Breadth Course
GenEd Breadth Course
GenEd Breadth Course

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Year 3</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>Advertising Elective 3</td>
<td>3</td>
</tr>
<tr>
<td>ADV 3031</td>
<td>Digital Analytics and Reporting</td>
</tr>
<tr>
<td>Electives</td>
<td>10</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>16</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>ADV 3033</td>
<td>Advertising Sales</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3</td>
</tr>
<tr>
<td>ADV 3171</td>
<td>Diamond Edge Communication 2</td>
</tr>
<tr>
<td>ADV 3185</td>
<td>Advertising Internship 2</td>
</tr>
<tr>
<td>Electives</td>
<td>10</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>16</td>
</tr>
<tr>
<td><strong>Year 4</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>Advertising Elective 3</td>
<td>3</td>
</tr>
<tr>
<td>ADV 4196</td>
<td>Morality, Law and Advertising [WI]</td>
</tr>
<tr>
<td>Electives</td>
<td>10</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>16</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3</td>
</tr>
<tr>
<td>ADV 4102</td>
<td>Advertising Campaigns</td>
</tr>
<tr>
<td>ADV 4103</td>
<td>National Student Advertising Competition 2</td>
</tr>
<tr>
<td>ADV 4034</td>
<td>Account Management</td>
</tr>
<tr>
<td>Electives</td>
<td>10</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>16</td>
</tr>
<tr>
<td><strong>Total Credit Hours</strong></td>
<td>124</td>
</tr>
</tbody>
</table>

1. See the list of elective options under Requirements. The courses students can take to fulfill their Advertising electives will vary from semester to semester.
2. ADV 3171, ADV 3185, and ADV 4103 require special permission from instructor.

Bachelor of Arts in Advertising: Art Direction Concentration

Conceptual thinking is a requirement for all creative people in advertising. In addition, students in Art Direction will develop hands-on skills in creating both digital and traditional advertising. Students in Art Direction must develop proficiency in the Adobe Creative Suite. Concentration courses are ADV 3052, ADV 3053 and ADV 4064. The Portfolio class provides students the opportunity to work in teams with copywriters and to develop a professional-quality portfolio. Note: Students entering after Spring 2016 must apply for acceptance in the Art Direction concentration after they have completed ADV 1001 and ADV 2151. Transfer students should apply immediately upon acceptance to Temple University. For more information about the Portfolio Application process, please click here: http://smc.temple.edu/advertising/curriculum/art-direction-track/.

Requirements for the Degree

Summary of Requirements

1. University requirements:
   a. New students are required to complete the General Education (GenEd (p. 143)) curriculum.
b. All students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for this major are ADV 1196 and ADV 4196.

2. Maximum of 78 credits in the School of Media and Communication.
3. Minimum of 48 credits in Advertising courses, maximum of 60 credits in Advertising courses.
4. A grade of C or higher must be attained in all required Advertising courses.
5. An overall GPA of 2.0 must be attained in the major.
6. 1000-level Advertising courses are prerequisites to 2000-level Advertising courses; 2000-level Advertising courses are prerequisites to 3000-level Advertising courses; 3000-level Advertising courses are prerequisites to 4000-level Advertising courses.
7. No more than 12 semester hours of transfer credits may be applied to Advertising major requirements.
8. No more than 8 credits may be taken in Kinesiology and Dance activities courses.

### Advertising: Art Direction Requirements

<table>
<thead>
<tr>
<th>1000-Level Core Requirements</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADV 1101</td>
<td>Introduction to Media and Society</td>
</tr>
<tr>
<td>ADV 1102</td>
<td>Introduction to Advertising</td>
</tr>
<tr>
<td>ADV 1196</td>
<td>Persuasive Writing</td>
</tr>
<tr>
<td>ADV 1103</td>
<td>Digital Media and Advertising</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2000-Level Core Requirements</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Course</td>
<td></td>
</tr>
<tr>
<td>ADV 2151</td>
<td>Introduction to Art Direction: Visual Communication</td>
</tr>
<tr>
<td>Select two of the following:</td>
<td></td>
</tr>
<tr>
<td>ADV 2111</td>
<td>Introduction to Marketing</td>
</tr>
<tr>
<td>ADV 2121</td>
<td>Introduction to Copywriting</td>
</tr>
<tr>
<td>ADV 2131</td>
<td>Introduction to Media Planning</td>
</tr>
<tr>
<td>ADV 2141</td>
<td>Introduction to Advertising Research and Strategy</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Upper-Level Requirements</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADV 4196</td>
<td>Morality, Law and Advertising</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
</tr>
<tr>
<td>ADV 3171</td>
<td>Diamond Edge Communication</td>
</tr>
<tr>
<td>ADV 3185</td>
<td>Advertising Internship</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
</tr>
<tr>
<td>ADV 4102</td>
<td>Advertising Campaigns</td>
</tr>
<tr>
<td>ADV 4103</td>
<td>National Student Advertising Competition</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Art Direction Requirements</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADV 1001</td>
<td>Introduction to Digital Design Tools</td>
</tr>
<tr>
<td>ADV 3052</td>
<td>Art Direction I: Concept &amp; Layout</td>
</tr>
<tr>
<td>ADV 3053</td>
<td>Art Direction II: Narrative and Multimedia</td>
</tr>
<tr>
<td>ADV 4064</td>
<td>Advertising Portfolio</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Advertising Electives</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select a minimum of 6 credits from the following list:</td>
<td></td>
</tr>
<tr>
<td>ADV 1000</td>
<td>Topics in Advertising 1</td>
</tr>
<tr>
<td>ADV 2001</td>
<td>Intermediate Digital Design Tools</td>
</tr>
<tr>
<td>ADV 2052</td>
<td>Introduction to Typography</td>
</tr>
<tr>
<td>ADV 2057</td>
<td>Creating and Filming Advertising from Script to Screen</td>
</tr>
<tr>
<td>ADV 2102</td>
<td>Introduction to Pharmaceutical Advertising</td>
</tr>
<tr>
<td>ADV 2103</td>
<td>Introduction to Web Design and Development</td>
</tr>
<tr>
<td>ADV 2104</td>
<td>Personal Branding</td>
</tr>
<tr>
<td>ADV 3000</td>
<td>Topics in Advertising 3000</td>
</tr>
<tr>
<td>ADV 3003</td>
<td>National Student Advertising Competition Preparation</td>
</tr>
<tr>
<td>ADV 3042</td>
<td>Quantitative Advertising Research</td>
</tr>
<tr>
<td>ADV 3101</td>
<td>Creative Thinking for Advertising</td>
</tr>
</tbody>
</table>

Total Credit Hours 48
1 Students may substitute ADV 4101 for this requirement.
2 Advertising students must complete the 2000-level core course required for their concentration as noted above, and two additional 2000-level core courses.
3 Requires special permission from instructor.
4 Sequence may not be taken concurrently.

Internships or Diamond Edge Communications

All advertising majors are required to do either a professional internship or be involved with Diamond Edge Communications (DEC), our student-run ad agency. Both offer students valuable hands-on experience in actual advertising-related professional experiences. DEC works with local Philadelphia clients, under the supervision of an advertising professor, to develop strategic plans, research, digital and traditional creative materials, media plans and presentations. The internship program is carefully managed by our Internship Directors to help students find the best possible internship opportunities. The Internship Directors, faculty members and SMC's Director of Career Services will help students with preparation of résumés, cover letters, and LinkedIn pages. We will also guide students through the process of seeking and identifying quality internship opportunities.

Suggested Academic Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Arts in Advertising: Art Direction Concentration

Requirements for New Students starting in the 2015-2016 Academic Year

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADV 1101</td>
<td>Introduction to Media and Society</td>
<td>3</td>
</tr>
<tr>
<td>ADV 1102</td>
<td>Introduction to Advertising</td>
<td>3</td>
</tr>
<tr>
<td>COMM 1001</td>
<td>SMC Freshman Seminar</td>
<td>1</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADV 1196</td>
<td>Persuasive Writing [WI]</td>
</tr>
<tr>
<td>ADV 1001</td>
<td>Introduction to Digital Design Tools</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3-4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADV 2151</td>
<td>Introduction to Art Direction: Visual Communication</td>
<td>3</td>
</tr>
<tr>
<td>ADV 1103</td>
<td>Digital Media and Advertising</td>
<td>3</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select two of the following:</td>
<td>6</td>
</tr>
<tr>
<td>ADV 2111</td>
<td>Introduction to Marketing</td>
</tr>
<tr>
<td>ADV 2121</td>
<td>Introduction to Copywriting</td>
</tr>
<tr>
<td>ADV 2131</td>
<td>Introduction to Media Planning</td>
</tr>
<tr>
<td>ADV 2141</td>
<td>Introduction to Advertising Research and Strategy</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>
## Year 3
### Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advertising Elective¹</td>
<td>3</td>
</tr>
<tr>
<td>ADV 3052</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>10</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 16

### Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADV 3053</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3</td>
</tr>
<tr>
<td>ADV 3171</td>
<td></td>
</tr>
<tr>
<td>ADV 3185</td>
<td></td>
</tr>
<tr>
<td>Electives</td>
<td>10</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 16

## Year 4
### Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADV 4196</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>10</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 16

### Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select one of the following:</td>
<td>3</td>
</tr>
<tr>
<td>ADV 4102</td>
<td></td>
</tr>
<tr>
<td>ADV 4103</td>
<td></td>
</tr>
<tr>
<td>ADV 4064</td>
<td></td>
</tr>
<tr>
<td>Electives</td>
<td>10</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 16

**Total Credit Hours:** 124

¹ See the list of elective options under Requirements. The courses students can take to fulfill their Advertising electives will vary from semester to semester.

² The Art Direction Portfolio application process begins with incoming students of Spring 2016. ADV 3052 requires application and acceptance into Art Direction concentration.

³ ADV 3171, ADV 3185 and ADV 4103 require special permission from instructor.

**NOTE:** Students in the Art Direction concentration must complete a portfolio review application and be accepted into the track. To begin the Art Direction courses in Year 3 Fall, students must submit the application by January 15. See advertising department website or office for details.

## Bachelor of Arts in Advertising: Copywriting Concentration

In an advertising agency, copywriters and art directors work in partnership to develop outstanding, innovative creative work. Copywriting students will take three advanced courses in copywriting. These advanced courses will help students develop their conceptual skills and writing talents in preparation for the competitive world of copywriting. The Portfolio class provides students the opportunity to work in teams with Art Directors and to work on the production of a professional-quality portfolio. Students following the Copywriting concentration take ADV 3022, ADV 3023, and ADV 4064.

## Requirements for the Degree

### Summary of Requirements

1. University requirements:
   a. New students are required to complete the General Education (GenEd) curriculum.
   b. All students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for this major are ADV 1196 and ADV 4196.

2. Maximum of 78 credits in the School of Media and Communication.

3. Minimum of 48 credits in Advertising courses, maximum of 60 credits in Advertising courses.

4. A grade of C or higher must be attained in all required Advertising courses.

5. An overall GPA of 2.0 must be attained in the major.
6. 1000-level Advertising courses are prerequisites to 2000-level Advertising courses; 2000-level Advertising courses are prerequisites to 3000-level Advertising courses; 3000-level Advertising courses are prerequisites to 4000-level Advertising courses.
7. No more than 12 semester hours of transfer credits may be applied to Advertising major requirements.
8. No more than 8 credits may be taken in Kinesiology and Dance activities courses.

**Advertising: Copywriting Requirements**

### 1000-Level Core Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADV 1101</td>
<td>Introduction to Media and Society</td>
</tr>
<tr>
<td>ADV 1102</td>
<td>Introduction to Advertising</td>
</tr>
<tr>
<td>ADV 1196</td>
<td>Persuasive Writing</td>
</tr>
<tr>
<td>ADV 1103</td>
<td>Digital Media and Advertising</td>
</tr>
</tbody>
</table>

### 2000-Level Core Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADV 2121</td>
<td>Introduction to Copywriting</td>
</tr>
</tbody>
</table>

Select two of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADV 2111</td>
<td>Introduction to Marketing</td>
</tr>
<tr>
<td>ADV 2131</td>
<td>Introduction to Media Planning</td>
</tr>
<tr>
<td>ADV 2141</td>
<td>Introduction to Advertising Research and Strategy</td>
</tr>
<tr>
<td>ADV 2151</td>
<td>Introduction to Art Direction: Visual Communication</td>
</tr>
</tbody>
</table>

### Upper-Level Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADV 4196</td>
<td>Morality, Law and Advertising</td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADV 3171</td>
<td>Diamond Edge Communication</td>
</tr>
<tr>
<td>ADV 3185</td>
<td>Advertising Internship</td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADV 4102</td>
<td>Advertising Campaigns</td>
</tr>
<tr>
<td>ADV 4103</td>
<td>National Student Advertising Competition</td>
</tr>
</tbody>
</table>

### Copywriting Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADV 3022</td>
<td>Copywriting for Print and Web</td>
</tr>
<tr>
<td>ADV 3023</td>
<td>Copywriting for Radio, TV and Video</td>
</tr>
<tr>
<td>ADV 4064</td>
<td>Advertising Portfolio</td>
</tr>
</tbody>
</table>

### Advertising Electives

Select a minimum of 9 credits from the following list:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADV 1000</td>
<td>Topics in Advertising 1</td>
</tr>
<tr>
<td>ADV 1001</td>
<td>Introduction to Digital Design Tools</td>
</tr>
<tr>
<td>ADV 2001</td>
<td>Intermediate Digital Design Tools</td>
</tr>
<tr>
<td>ADV 2052</td>
<td>Introduction to Typography</td>
</tr>
<tr>
<td>ADV 2057</td>
<td>Creating and Filming Advertising from Script to Screen</td>
</tr>
<tr>
<td>ADV 2102</td>
<td>Introduction to Pharmaceutical Advertising</td>
</tr>
<tr>
<td>ADV 2103</td>
<td>Introduction to Web Design and Development</td>
</tr>
<tr>
<td>ADV 2104</td>
<td>Personal Branding</td>
</tr>
<tr>
<td>ADV 3000</td>
<td>Topics in Advertising 3000</td>
</tr>
<tr>
<td>ADV 3003</td>
<td>National Student Advertising Competition</td>
</tr>
<tr>
<td>ADV 3042</td>
<td>Quantitative Advertising Research</td>
</tr>
<tr>
<td>ADV 3101</td>
<td>Creative Thinking for Advertising</td>
</tr>
</tbody>
</table>

**Total Credit Hours**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
</table>

1. Students may substitute ADV 4101 for this requirement.
2. Advertising students must complete the 2000-level core course required for their concentration as noted above, and two additional 2000-level core courses.
3. Requires special permission from instructor.
Internships or Diamond Edge Communications

All advertising majors are required to do either a professional internship or be involved with Diamond Edge Communications (DEC), our student-run ad agency. Both offer students valuable hands-on experience in actual advertising-related professional experiences. DEC works with local Philadelphia clients, under the supervision of an advertising professor, to develop strategic plans, research, digital and traditional creative materials, media plans and presentations. The internship program is carefully managed by our Internship Directors to help students find the best possible internship opportunities. The Internship Directors, faculty members and SMC's Director of Career Services will help students with preparation of résumés, cover letters, and LinkedIn pages. We will also guide students through the process of seeking and identifying quality internship opportunities.

Suggested Academic Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Arts in Advertising: Copywriting Concentration

Requirements for New Students starting in the 2015-2016 Academic Year

<table>
<thead>
<tr>
<th>Year 1</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADV 1101</td>
<td>Introduction to Media and Society</td>
<td>3</td>
</tr>
<tr>
<td>ADV 1102</td>
<td>Introduction to Advertising</td>
<td>3</td>
</tr>
<tr>
<td>COMM 1001</td>
<td>SMC Freshman Seminar</td>
<td>1</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADV 1103</td>
<td>Digital Media and Advertising</td>
<td>3</td>
</tr>
<tr>
<td>ADV 1196</td>
<td>Persuasive Writing [WI]</td>
<td>3</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3-4</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADV 2121</td>
<td>Introduction to Copywriting</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ADV 2111</td>
<td>Introduction to Marketing</td>
<td></td>
</tr>
<tr>
<td>ADV 2131</td>
<td>Introduction to Media Planning</td>
<td></td>
</tr>
<tr>
<td>ADV 2141</td>
<td>Introduction to Advertising Research and Strategy</td>
<td></td>
</tr>
<tr>
<td>ADV 2151</td>
<td>Introduction to Art Direction: Visual Communication</td>
<td></td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ADV 2111</td>
<td>Introduction to Marketing</td>
<td></td>
</tr>
<tr>
<td>ADV 2131</td>
<td>Introduction to Media Planning</td>
<td></td>
</tr>
<tr>
<td>ADV 2141</td>
<td>Introduction to Advertising Research and Strategy</td>
<td></td>
</tr>
<tr>
<td>ADV 2151</td>
<td>Introduction to Art Direction: Visual Communication</td>
<td></td>
</tr>
<tr>
<td>Advertising Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>
Bachelor of Arts in Advertising: Media Planning Concentration

This concentration prepares students for careers in digital and traditional media buying and planning and media sales. These skills are highly valued by corporations, media companies, media sales organizations, media buying and planning firms, research companies and advertising agencies. Students will study Digital Analytics and Reporting (ADV 3031), Advertising Sales (ADV 3033), and Advanced Media Planning (ADV 4054).

Requirements for the Degree

Summary of Requirements

1. University requirements:
   a. New students are required to complete the General Education (GenEd (p. 143)) curriculum.
   b. All students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for this major are ADV 1196 and ADV 4196.

2. Maximum of 78 credits in the School of Media and Communication.

3. Minimum of 48 credits in Advertising courses, maximum of 60 credits in Advertising courses.

4. A grade of C or higher must be attained in all required Advertising courses.

5. An overall GPA of 2.0 must be attained in the major.

6. 1000-level Advertising courses are prerequisites to 2000-level Advertising courses; 2000-level Advertising courses are prerequisites to 3000-level Advertising courses; 3000-level Advertising courses are prerequisites to 4000-level Advertising courses.

7. No more than 12 semester hours of transfer credits may be applied to Advertising major requirements.

8. No more than 8 credits may be taken in Kinesiology and Dance activities courses.

---

Year 3

Fall

Advertising Elective¹

ADV 3022 Copywriting for Print and Web 3

Electives 10

Term Credit Hours 16

Spring

ADV 3023 Copywriting for Radio, TV and Video 3

Select one of the following:

ADV 3171 Diamond Edge Communication² 3
ADV 3185 Advertising Internship²

Electives 10

Term Credit Hours 16

Year 4

Fall

Advertising Elective¹

ADV 4196 Morality, Law and Advertising [WI] 3

Electives 10

Term Credit Hours 16

Spring

Select one of the following:

ADV 4102 Advertising Campaigns 3
ADV 4103 National Student Advertising Competition²
ADV 4064 Advertising Portfolio 3

Electives 10

Term Credit Hours 16

Total Credit Hours: 124

¹ See the list of elective options under Requirements. The courses students can take to fulfill their Advertising electives will vary from semester to semester.
² ADV 3171, ADV 3185, and ADV 4103 require special permission from instructor.
Advertising: Media Planning Requirements

1000-Level Core Requirements 12

- ADV 1101 Introduction to Media and Society
- ADV 1102 Introduction to Advertising
- ADV 1196 Persuasive Writing
- ADV 1103 Digital Media and Advertising

2000-Level Core Requirements 9

Required Course
- ADV 2131 Introduction to Media Planning

Select two of the following:
- ADV 2111 Introduction to Marketing
- ADV 2121 Introduction to Copywriting
- ADV 2141 Introduction to Advertising Research and Strategy
- ADV 2151 Introduction to Art Direction: Visual Communication

Upper-Level Requirements 9

- ADV 4196 Morality, Law and Advertising

Select one of the following:
- ADV 3171 Diamond Edge Communication
- ADV 3185 Advertising Internship

Select one of the following:
- ADV 4102 Advertising Campaigns
- ADV 4103 National Student Advertising Competition

Media Planning Requirements 9

- ADV 3031 Digital Analytics and Reporting
- ADV 3033 Advertising Sales
- ADV 4054 Advanced Media Planning

Advertising Electives 9

Select a minimum of 9 credits from the following list:
- ADV 1000 Topics in Advertising
- ADV 1001 Introduction to Digital Design Tools
- ADV 2001 Intermediate Digital Design Tools
- ADV 2052 Introduction to Typography
- ADV 2057 Creating and Filming Advertising from Script to Screen
- ADV 2102 Introduction to Pharmaceutical Advertising
- ADV 2103 Introduction to Web Design and Development
- ADV 2104 Personal Branding
- ADV 3000 Topics in Advertising
- ADV 3003 National Student Advertising Competition Preparation
- ADV 3042 Quantitative Advertising Research
- ADV 3101 Creative Thinking for Advertising

Total Credit Hours 48

1 Students may substitute ADV 4101 for this requirement.
2 Advertising students must complete the 2000-level core course required for their concentration as noted above, and two additional 2000-level core courses.
3 Requires special permission from instructor.

Internships or Diamond Edge Communications

All advertising majors are required to do either a professional internship or be involved with Diamond Edge Communications (DEC), our student-run ad agency. Both offer students valuable hands-on experience in actual advertising-related professional experiences. DEC works with local Philadelphia clients, under the supervision of an advertising professor, to develop strategic plans, research, digital and traditional creative materials, media plans and presentations. The internship program is carefully managed by our Internship Directors to help students find the best possible internship opportunities.
The Internship Directors, faculty members and SMC’s Director of Career Services will help students with preparation of résumés, cover letters, and LinkedIn pages. We will also guide students through the process of seeking and identifying quality internship opportunities.

**Suggested Academic Plan**

Please note that this is a **suggested** academic plan. Depending on your situation, your academic plan may look different.

**Bachelor of Arts in Advertising: Media Planning Concentration**

**Requirements for New Students starting in the 2015-2016 Academic Year**

<table>
<thead>
<tr>
<th>Year 1</th>
<th></th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADV 1101</td>
<td>Introduction to Media and Society</td>
<td>3</td>
</tr>
<tr>
<td>ADV 1102</td>
<td>Introduction to Advertising</td>
<td>3</td>
</tr>
<tr>
<td>COMM 1001</td>
<td>SMC Freshman Seminar</td>
<td>1</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADV 1103</td>
<td>Digital Media and Advertising</td>
<td>3</td>
</tr>
<tr>
<td>ADV 1196</td>
<td>Persuasive Writing [WI]</td>
<td>3</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3-4</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th></th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADV 2131</td>
<td>Introduction to Media Planning</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ADV 2111</td>
<td>Introduction to Marketing</td>
<td>3</td>
</tr>
<tr>
<td>ADV 2121</td>
<td>Introduction to Copywriting</td>
<td>3</td>
</tr>
<tr>
<td>ADV 2141</td>
<td>Introduction to Advertising Research and Strategy</td>
<td>3</td>
</tr>
<tr>
<td>ADV 2151</td>
<td>Introduction to Art Direction: Visual Communication</td>
<td>3</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ADV 2111</td>
<td>Introduction to Marketing</td>
<td>3</td>
</tr>
<tr>
<td>ADV 2121</td>
<td>Introduction to Copywriting</td>
<td>3</td>
</tr>
<tr>
<td>ADV 2141</td>
<td>Introduction to Advertising Research and Strategy</td>
<td>3</td>
</tr>
<tr>
<td>ADV 2151</td>
<td>Introduction to Art Direction: Visual Communication</td>
<td>3</td>
</tr>
<tr>
<td>Advertising Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3</th>
<th></th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advertising Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ADV 3031</td>
<td>Digital Analytics and Reporting</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>
### Bachelor of Arts in Advertising: Research & Strategy Concentration

Students following this concentration will receive training that helps them develop skills in strategic thinking and planning, understanding consumer behavior, conducting surveys, focus groups and other forms of research, analyzing data, testing copy and studying America's changing demographics. Strong research and strategic thinking skills will prepare students for a wide variety of careers in corporations, research firms, marketing companies and advertising agencies. Students in Research and Strategy take ADV 3031, ADV 3043 and ADV 4044. ADV 3042 is a recommended elective.

### Requirements for the Degree

**Summary of Requirements**

1. University requirements:
   - a. New students are required to complete the General Education (GenEd (p. 143)) curriculum.
   - b. All students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for this major are ADV 1196 and ADV 4196.

2. Maximum of 78 credits in the School of Media and Communication.

3. Minimum of 48 credits in Advertising courses, maximum of 60 credits in Advertising courses.

4. A grade of C or higher must be attained in all required Advertising courses.

5. An overall GPA of 2.0 must be attained in the major.

6. 1000-level Advertising courses are prerequisites to 2000-level Advertising courses; 2000-level Advertising courses are prerequisites to 3000-level Advertising courses; 3000-level Advertising courses are prerequisites to 4000-level Advertising courses.

7. No more than 12 semester hours of transfer credits may be applied to Advertising major requirements.

8. No more than 8 credits may be taken in Kinesiology and Dance activities courses.

### Advertising: Research & Strategy Requirements

#### 1000-Level Core Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADV 1101</td>
<td>Introduction to Media and Society</td>
</tr>
<tr>
<td>ADV 1102</td>
<td>Introduction to Advertising</td>
</tr>
<tr>
<td>ADV 1196</td>
<td>Persuasive Writing</td>
</tr>
</tbody>
</table>

---

1. See the list of elective options under Requirements. The courses students can take to fulfill their advertising electives will vary from semester to semester.

2. ADV 3171, ADV 3185, and ADV 4103 require special permission from instructor.
**ADV 1103**
Digital Media and Advertising ¹

### 2000-Level Core Requirements

<table>
<thead>
<tr>
<th>Required Course</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ADV 2141</td>
<td>Introduction to Advertising Research and Strategy</td>
</tr>
</tbody>
</table>

Select two of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADV 2111</td>
<td>Introduction to Marketing</td>
</tr>
<tr>
<td>ADV 2121</td>
<td>Introduction to Copywriting</td>
</tr>
<tr>
<td>ADV 2131</td>
<td>Introduction to Media Planning</td>
</tr>
<tr>
<td>ADV 2151</td>
<td>Introduction to Art Direction: Visual Communication</td>
</tr>
</tbody>
</table>

### Upper-Level Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADV 4196</td>
<td>Morality, Law and Advertising</td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADV 3171</td>
<td>Diamond Edge Communication ³</td>
</tr>
<tr>
<td>ADV 3185</td>
<td>Advertising Internship ³</td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADV 4102</td>
<td>Advertising Campaigns</td>
</tr>
<tr>
<td>ADV 4103</td>
<td>National Student Advertising Competition ³</td>
</tr>
</tbody>
</table>

### Research & Strategy Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADV 3031</td>
<td>Digital Analytics and Reporting</td>
</tr>
<tr>
<td>ADV 3043</td>
<td>Qualitative Advertising Research</td>
</tr>
<tr>
<td>ADV 4044</td>
<td>Account Planning</td>
</tr>
</tbody>
</table>

### Advertising Electives

Select a minimum of 9 credits from the following list:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADV 1000</td>
<td>Topics in Advertising 1</td>
</tr>
<tr>
<td>ADV 1001</td>
<td>Introduction to Digital Design Tools</td>
</tr>
<tr>
<td>ADV 2001</td>
<td>Intermediate Digital Design Tools</td>
</tr>
<tr>
<td>ADV 2052</td>
<td>Introduction to Typography</td>
</tr>
<tr>
<td>ADV 2057</td>
<td>Creating and Filming Advertising from Script to Screen</td>
</tr>
<tr>
<td>ADV 2102</td>
<td>Introduction to Pharmaceutical Advertising</td>
</tr>
<tr>
<td>ADV 2103</td>
<td>Introduction to Web Design and Development</td>
</tr>
<tr>
<td>ADV 2104</td>
<td>Personal Branding</td>
</tr>
<tr>
<td>ADV 3000</td>
<td>Topics in Advertising 3000</td>
</tr>
<tr>
<td>ADV 3003</td>
<td>National Student Advertising Competition Preparation</td>
</tr>
<tr>
<td>ADV 3042</td>
<td>Quantitative Advertising Research</td>
</tr>
<tr>
<td>ADV 3101</td>
<td>Creative Thinking for Advertising</td>
</tr>
</tbody>
</table>

### Total Credit Hours

48

---

¹ Students may substitute ADV 4101 for this requirement.

² Advertising students must complete the 2000-level course required for their concentration as noted above, and two additional 2000-level core courses.

³ Requires special permission from instructor.

### Internships or Diamond Edge Communications

All advertising majors are required to do either a professional internship or be involved with Diamond Edge Communications (DEC), our student-run ad agency. Both offer students valuable hands-on experience in actual advertising-related professional experiences. DEC works with local Philadelphia clients, under the supervision of an advertising professor, to develop strategic plans, research, digital and traditional creative materials, media plans and presentations. The internship program is carefully managed by our Internship Directors to help students find the best possible internship opportunities. The Internship Directors, faculty members and SMC's Director of Career Services will help students with preparation of résumés, cover letters, and LinkedIn pages. We will also guide students through the process of seeking and identifying quality internship opportunities.

### Suggested Academic Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.
# Bachelor of Arts in Advertising: Research & Strategy Concentration

## Requirements for New Students starting in the 2015-2016 Academic Year

### Year 1

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADV 1101</td>
<td>Introduction to Media and Society</td>
<td>3</td>
</tr>
<tr>
<td>ADV 1102</td>
<td>Introduction to Advertising</td>
<td>3</td>
</tr>
<tr>
<td>COMM 1001</td>
<td>SMC Freshman Seminar</td>
<td>1</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADV 1103</td>
<td>Digital Media and Advertising</td>
<td>3</td>
</tr>
<tr>
<td>ADV 1196</td>
<td>Persuasive Writing [WI]</td>
<td>3</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GZ]</td>
<td>3-4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

### Year 2

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADV 2141</td>
<td>Introduction to Advertising Research and Strategy</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ADV 2111</td>
<td>Introduction to Marketing</td>
<td></td>
</tr>
<tr>
<td>ADV 2121</td>
<td>Introduction to Copywriting</td>
<td></td>
</tr>
<tr>
<td>ADV 2131</td>
<td>Introduction to Media Planning</td>
<td></td>
</tr>
<tr>
<td>ADV 2151</td>
<td>Introduction to Art Direction: Visual Communication</td>
<td></td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select one of the following:</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ADV 2111</td>
<td>Introduction to Marketing</td>
<td></td>
</tr>
<tr>
<td>ADV 2121</td>
<td>Introduction to Copywriting</td>
<td></td>
</tr>
<tr>
<td>ADV 2131</td>
<td>Introduction to Media Planning</td>
<td></td>
</tr>
<tr>
<td>ADV 2151</td>
<td>Introduction to Art Direction: Visual Communication</td>
<td></td>
</tr>
<tr>
<td>Advertising Elective¹</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

### Year 3

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advertising Elective¹</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ADV 3031</td>
<td>Digital Analytics and Reporting</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td></td>
<td>10</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>16</td>
</tr>
</tbody>
</table>

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADV 3043</td>
<td>Qualitative Advertising Research</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ADV 3171</td>
<td>Diamond Edge Communication²</td>
<td></td>
</tr>
<tr>
<td>ADV 3185</td>
<td>Advertising Internship²</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>16</td>
</tr>
</tbody>
</table>
Electives

<table>
<thead>
<tr>
<th>Year 4</th>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td>Advertising Elective</td>
<td>3</td>
</tr>
<tr>
<td>ADV 4196</td>
<td>Morality, Law and Advertising [WI]</td>
</tr>
<tr>
<td>Electives</td>
<td>10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 4</th>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Spring</strong></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3</td>
</tr>
<tr>
<td>ADV 4102</td>
<td>Advertising Campaigns</td>
</tr>
<tr>
<td>ADV 4103</td>
<td>National Student Advertising Competition²</td>
</tr>
<tr>
<td>ADV 4044</td>
<td>Account Planning</td>
</tr>
<tr>
<td>Electives</td>
<td>10</td>
</tr>
</tbody>
</table>

Total Credit Hours: **124**

1. See the list of elective options under Requirements. The courses students can take to fulfill their Advertising electives will vary from semester to semester.

2. ADV 3171, ADV 3185, and ADV 4103 require special permission from instructor.

Communication Studies

Scott Gratson, Ph.D., Program Director
9C Annenberg Hall
215-204-6434
sgratson@temple.edu
http://smc.temple.edu/commstudies/

Communication Studies is a studies-based interdisciplinary major. It features the academic (aesthetic, analytical, critical, historical, theoretical) and interdisciplinary study of communication as represented by the departments included within the School of Media and Communication.

Designed to ensure flexibility and choice, Communication Studies allows students a chance to fully investigate multiple fields in the communications discipline. Emphasis is placed on providing an overview of Communication while also accentuating personal academic growth. Personal choice and options allow students a chance to complete the degree in a timely manner.

In this interdisciplinary program, Communication Studies students will select one of the following tracks as a distinctive area of investigation:

- Communication and Entrepreneurship;
- Contemporary Media Environments;
- Global Civil Society; or
- Policy, Regulation and Advocacy.

A Major of Distinction track is also available for advanced scholars.

The flexibility of the Communications Studies program offers students access to the field experiences, internships, and study away experiences vital to a comprehensive education. Students with a number of skill sets and academic interest areas are often drawn to this innovative program and graduates are poised for a number of professional and academic possibilities, such as graduate, law, or professional school. Graduates of this program will be well-suited to pursue a variety of positions across numerous aspects of the Communications field.

Students receive cross-curricular expertise through foundation and core courses. Academic rigor and student choice are at the very core of the program. Choices allow a student flexibility and curricular oversight ensures a solid, academically robust education. Courses are designed to allow student progress to be monitored at yearly intervals. Experiential learning is promoted, particularly during the junior and senior years. Cross cultural exchanges and experiences are integral aspects of the program's design. Advanced scholars have a distinct and individualized track.

Programs

- Bachelor of Arts in Communication Studies: Communication and Entrepreneurship Track (p. 960)
- Bachelor of Arts in Communication Studies: Contemporary Media Environments Track (p. 963)
- Bachelor of Arts in Communication Studies: Global Civil Society Track (p. 966)
Bachelor of Arts in Communication Studies: Major of Distinction (Thesis Track)

The Major of Distinction is an academically rigorous program for students who wish to construct an interdisciplinary curriculum that meets their individual interests across the SMC departments. In the Major of Distinction, each student works individually with a faculty advisor from a relevant SMC department to build a curriculum that goes beyond the offered tracks. The student completes five courses, four of which must be at the 3000 or 4000 level, and in the senior year completes a two-semester thesis. A student in the Major of Distinction must have completed three semesters of a foreign language (or equivalent with the approval of the Director of Communication Studies) by the time of graduation. If appropriate to the student's research, an advanced methods or theory course may be required by the student's faculty advisor.

Students apply for a Major of Distinction in the second semester of their sophomore year. To be considered, students must be on schedule to complete their Foundational and Core Communications courses by the end of their sophomore year. Also, students must have earned at least a 3.5 cumulative grade point average (GPA) in their Foundational and Core Communications courses along with a 3.25 overall GPA. Students must submit an application to the Director of Communication Studies that includes a statement of student's interest, a proposed curriculum, and a support letter from a full-time SMC faculty member willing to act as student's faculty advisor.

Once accepted into the Major of Distinction and in consultation with his or her faculty advisor and the Director of Communication Studies, each student constructs his or her own curriculum. The curriculum must contain five courses, four of which must be at the 3000 or 4000 level, and include courses from at least three of the SMC majors. Courses selected should be designed to lead to the senior-year thesis.

Summary of Requirements

The degree of Bachelor of Arts may be conferred upon a student majoring in Communication Studies by the recommendation of the faculty and upon satisfactory completion of a minimum of 124 semester hours (s.h.) of credit with a cumulative grade point average of 2.0 overall and in the major. Students must meet:

1. University requirements
   - All students are required to complete the General Education (GenEd (p. 143)) curriculum.
   - All students must take a minimum of two writing-intensive courses in the major at Temple University.

2. School of Media and Communication requirements (p. 937).
3. Minimum of 42 s.h. in Communication Studies.
4. Each course that fulfills a requirement for the major must be passed with a C- or better.
5. Maximum of 27 s.h. in any one SMC department may be counted toward the degree.
6. A maximum of 4 s.h. of Internship credit may be counted toward the degree.
7. A maximum of 8 s.h. combined of Independent Study and/or Special Projects may be counted toward the degree.
8. No more than 8 s.h. in Kinesiology and Dance activities courses.
9. Students may participate in study away programs.
10. Transfer students are required to complete a minimum of 24 s.h. of major courses at Temple.
11. Communication Studies majors may minor in established SMC minors. The Communication Studies student who declares a minor must complete the entire program requirements for both the major and the minor. Courses listed for both the Communication Studies major and SMC minor will only apply towards one of the curriculums. If the class is part of an array of courses, students will be required to take a different course to satisfy the major requirement.

Communication Studies: Major of Distinction (Thesis Track) Requirements

1. All Communication Studies majors must take the following two foundation courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMST 1111</td>
<td>Communication and Public Life</td>
<td>3</td>
</tr>
<tr>
<td>MSP 1021</td>
<td>Media and Society</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credit Hours</strong></td>
<td></td>
<td><strong>6</strong></td>
</tr>
</tbody>
</table>

2. All majors will take five additional core courses. Students will select one course each from the categories below (15 credits). Students should plan to meet the prerequisites for courses in their selected track (see below) by taking appropriate core courses.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMST 2111</td>
<td>Communications Seminar</td>
<td>3</td>
</tr>
</tbody>
</table>

Communication Theory
Select one of the following: 3

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADV 1101</td>
<td>Introduction to Media and Society</td>
</tr>
<tr>
<td>ADV 1102</td>
<td>Introduction to Advertising</td>
</tr>
<tr>
<td>JRN 1111</td>
<td>Journalism and Society</td>
</tr>
<tr>
<td>MSP 1011</td>
<td>Introduction to Media Theory</td>
</tr>
</tbody>
</table>

**Research Methods**
Select one of the following: 3

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADV 1141</td>
<td>Introduction to Advertising Research</td>
</tr>
<tr>
<td>JRN 2101</td>
<td>Journalism Research 1</td>
</tr>
<tr>
<td>MSP 2141</td>
<td>Media Research 1</td>
</tr>
</tbody>
</table>

**Analysis**
Select one of the following: 3

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADV 2151</td>
<td>Introduction to Art Direction: Visual Communication</td>
</tr>
<tr>
<td>MSP 2421</td>
<td>Media Popular Culture 1</td>
</tr>
<tr>
<td>STRC 1111</td>
<td>Public Speaking</td>
</tr>
<tr>
<td>or STRC 1911</td>
<td>Honors Public Speaking</td>
</tr>
</tbody>
</table>

**Cross-Cultural Perspectives**
Select one of the following: 3

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>STRC 2672</td>
<td>Global Communication and Leadership</td>
</tr>
<tr>
<td>STRC 3801</td>
<td>Intercultural Communication</td>
</tr>
</tbody>
</table>

**Total Credit Hours** 15

1 Course has prerequisites.

3. In the Major of Distinction, each student works individually with a faculty advisor from a relevant SMC department to build a curriculum that goes beyond that offered by the established tracks.

**Major of Distinction Coursework** 21

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>One SMC course at any level</td>
<td>3</td>
</tr>
<tr>
<td>Four 3000+ SMC courses</td>
<td>12</td>
</tr>
<tr>
<td>CMST Thesis Hours</td>
<td>6</td>
</tr>
</tbody>
</table>

**Language Proficiency**

<table>
<thead>
<tr>
<th>Language Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language 1001 level</td>
</tr>
<tr>
<td>Language 1002 level</td>
</tr>
<tr>
<td>Language 1003 level</td>
</tr>
</tbody>
</table>

**Suggested Academic Plan**

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

**Bachelor of Arts in Communication Studies: Major of Distinction Track**

**Requirements for New Students starting in the 2015-2016 Academic Year**

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CMST 1111</td>
<td>Communication and Public Life</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MSP 1021</td>
<td>Media and Society</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Foreign Language 1001 level</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>COMM 1001</td>
<td>SMC Freshman Seminar</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Spring</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Select one of the following (Communication Theory): 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ADV 1101</td>
<td>Introduction to Media and Society</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ADV 1102</td>
<td>Introduction to Advertising</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Courses</td>
<td>Credits</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>---------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JRN 1111: Journalism and Society</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MSP 1011: Introduction to Media Theory</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IH 0851 or 0951: Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign Language 1002 Level</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>17</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Year 2**

**Fall**

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMST 2111: Communications Seminar</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following (Analysis):</td>
<td></td>
</tr>
<tr>
<td>ADV 2151: Introduction to Art Direction: Visual Communication</td>
<td>3</td>
</tr>
<tr>
<td>MSP 2421: Media Popular Culture</td>
<td></td>
</tr>
<tr>
<td>STRC 1111 or 1911: Public Speaking</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3-4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>Foreign Language 1003 Level</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

**Spring**

Select one of the following (Research Methods):

- ADV 1141: Introduction to Advertising Research 
- JRN 2101: Journalism Research 
- MSP 2141: Media Research 

Select one of the following (Cross-Cultural Perspectives):

- STRC 2672: Global Communication and Leadership 
- STRC 3801: Intercultural Communication 
- IH 0852 or 0952: Mosaic: Humanities Seminar II [GZ] 

GenEd Breadth Course 
GenEd Breadth Course 
GenEd Breadth Course 

| Term Credit Hours | 15 |

**Year 3**

**Fall**

One Writing-Intensive SMC Course - any level 
One 3000-4999 SMC Course 
GenEd Breadth Course 
Electives 

| Term Credit Hours | 16 |

**Spring**

One 3000-4999 Writing-Intensive SMC Course 
One 4000-4999 SMC Course 
GenEd Breadth Course 
Electives 

| Term Credit Hours | 16 |

**Year 4**

**Fall**

Thesis Hours 
One 3000-4999 SMC Course 
Electives 

| Term Credit Hours | 15 |

**Spring**

Thesis Hours 

| Term Credit Hours | 3 |
Bachelor of Arts in Communication Studies: Communication and Entrepreneurship Track

This track focuses on the intersection between the field of communication and entrepreneurship. Classes will reflect the communicative and functional aspect of entrepreneurship by focusing on and critiquing organizational development. Developed from principles of digital convergence and innovation, this track reflects the need for a host of skills that will function in the digital workplace and will allow students to consider means of developing a more nuanced understanding of capitalism and its impacts.

Summary of Requirements

The degree of Bachelor of Arts may be conferred upon a student majoring in Communication Studies by the recommendation of the faculty and upon satisfactory completion of a minimum of 124 semester hours (s.h.) of credit with a cumulative grade point average of 2.0 overall and in the major. Students must meet:

1. University requirements
   • All students are required to complete the General Education (GenEd (p. 143)) curriculum.
   • All students must take a minimum of two writing-intensive courses in the major at Temple University.
2. School of Media and Communication requirements (p. 937).
3. Minimum of 42 s.h. in Communication Studies.
4. Each course that fulfills a requirement for the major must be passed with a C- or better.
5. Maximum of 27 s.h. in any one SMC department may be counted toward the degree.
6. A maximum of 4 s.h. of Internship credit may be counted toward the degree.
7. A maximum of 8 s.h. combined of Independent Study and/or Special Projects may be counted toward the degree.
8. No more than 8 s.h. in Kinesiology and Dance activities courses.
9. Students may participate in study away programs.
10. Transfer students are required to complete a minimum of 24 s.h. of major courses at Temple.
11. Communication Studies majors may minor in established SMC minors. The Communication Studies student who declares a minor must complete the entire program requirements for both the major and the minor. Courses listed for both the Communication Studies major and SMC minor will only apply towards one of the curriculums. If the class is part of an array of courses, students will be required to take a different course to satisfy the major requirement.

Communication Studies: Communication and Entrepreneurship Track Requirements

1. All Communication Studies majors must take the following two foundation courses:
   - CMST 1111 Communication and Public Life 3
   - MSP 1021 Media and Society 3
   Total Credit Hours 6

2. All majors will take five additional core courses. Students will select one course each from the categories below (15 credits). Students should plan to meet the prerequisites for courses in their selected track (see below) by taking appropriate core courses.

Core Courses
- CMST 2111 Communications Seminar 1 3

Communication Theory
- Select one of the following: 3
  - ADV 1101 Introduction to Media and Society
  - ADV 1102 Introduction to Advertising
  - JRN 1111 Journalism and Society
  - MSP 1011 Media Research

Research Methods
- Select one of the following: 3
  - ADV 1141 Introduction to Advertising Research 2
  - JRN 2101 Journalism Research 1
  - MSP 2141 Media Research 1
Analysis
Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADV 2151</td>
<td>Introduction to Art Direction: Visual Comm.</td>
</tr>
<tr>
<td>MSP 2421</td>
<td>Media Popular Culture</td>
</tr>
<tr>
<td>STRC 1111</td>
<td>Public Speaking</td>
</tr>
<tr>
<td>or STRC 1911</td>
<td>Honors Public Speaking</td>
</tr>
</tbody>
</table>

Cross-Cultural Perspectives
Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>STRC 2672</td>
<td>Global Communication and Leadership</td>
</tr>
<tr>
<td>STRC 3801</td>
<td>Intercultural Communication</td>
</tr>
</tbody>
</table>

Total Credit Hours 15

1. Course has prerequisites.
2. Courses in various categories can only be counted once.

3. In consultation with a faculty advisor, a student must take seven courses (minimum 21 credits) from the list below.
   • Within the track, a student must take at least one course from at least three different departments.
   • At least four courses in the track must be taken at the 3000 or 4000 level. At least one of these four must be taken at the 4000 level.
   • Students must have met the prerequisites for courses in their track by taking the appropriate core courses (see above).
   • All students must take a minimum of two writing-intensive courses in the major. Writing-intensive courses end in the numbers 96, 97 and 98 and are noted (WI) in the list below.

Communication and Entrepreneurship Track Options 21

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADV 1004</td>
<td>Introduction to Marketing</td>
</tr>
<tr>
<td>ADV 1141</td>
<td>Introduction to Advertising Research 1</td>
</tr>
<tr>
<td>ADV 2101</td>
<td>Advertising Strategy and Positioning</td>
</tr>
<tr>
<td>ADV 2151</td>
<td>Introduction to Art Direction: Visual Comm.</td>
</tr>
<tr>
<td>ADV 3101</td>
<td>Creative Thinking for Advertising</td>
</tr>
<tr>
<td>JRN 3401</td>
<td>Photography</td>
</tr>
<tr>
<td>JRN 3403</td>
<td>Documentary Photography</td>
</tr>
<tr>
<td>JRN 3505</td>
<td>Experimental Journalism</td>
</tr>
<tr>
<td>JRN 3704</td>
<td>Ethical Issues in Journalism</td>
</tr>
<tr>
<td>JRN 3708</td>
<td>Newsroom Management</td>
</tr>
<tr>
<td>JRN 3709</td>
<td>The Entrepreneurial Journalist</td>
</tr>
<tr>
<td>MSP 3421</td>
<td>Technology and Culture</td>
</tr>
<tr>
<td>MSP 3663</td>
<td>Marketing Music and Media</td>
</tr>
<tr>
<td>MSP 4153</td>
<td>Media Criticism</td>
</tr>
<tr>
<td>MSP 4226</td>
<td>Public Media</td>
</tr>
<tr>
<td>MSP 4252</td>
<td>Law and Ethics of Digital Media</td>
</tr>
<tr>
<td>MSP 4324</td>
<td>The Video Game Industry and Game Culture</td>
</tr>
<tr>
<td>MSP 4446</td>
<td>Psychological Processing of Media</td>
</tr>
<tr>
<td>MSP 4454</td>
<td>Public Information Media Campaigns</td>
</tr>
<tr>
<td>MSP 4496</td>
<td>Global Media (WI)</td>
</tr>
<tr>
<td>MSP 4497</td>
<td>Media and Children (WI)</td>
</tr>
<tr>
<td>MSP 4541</td>
<td>Mobile Media</td>
</tr>
<tr>
<td>MSP 4614</td>
<td>Creating a Media Business</td>
</tr>
<tr>
<td>MSP 4657</td>
<td>Current Issues in Media Management</td>
</tr>
<tr>
<td>MSP 4696</td>
<td>Communication in Media Organizations (WI)</td>
</tr>
</tbody>
</table>

1. Courses in various categories can only be counted once.

Suggested Academic Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.
Bachelor of Arts in Communication Studies: Communication and Entrepreneurship Track
Requirements for New Students starting in the 2015-2016 Academic Year

<table>
<thead>
<tr>
<th>Year 1</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CMST 1111</td>
<td>Communication and Public Life</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following (Communication Theory):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADV 1101</td>
<td>Introduction to Media and Society</td>
<td>3</td>
</tr>
<tr>
<td>ADV 1102</td>
<td>Introduction to Advertising</td>
<td></td>
</tr>
<tr>
<td>JRN 1111</td>
<td>Journalism and Society</td>
<td></td>
</tr>
<tr>
<td>MSP 1011</td>
<td>Introduction to Media Theory</td>
<td></td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>COMM 1001</td>
<td>SMC Freshman Seminar</td>
<td>1</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MSP 1021</td>
<td>Media and Society</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CMST 2111</td>
<td>Communications Seminar</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following (Analysis):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADV 2151</td>
<td>Introduction to Art Direction: Visual Communication</td>
<td>3</td>
</tr>
<tr>
<td>MSP 2421</td>
<td>Media Popular Culture</td>
<td></td>
</tr>
<tr>
<td>STRC 1111 or 1911</td>
<td>Public Speaking</td>
<td></td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3-4</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select one of the following (Research Methods):</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ADV 1141</td>
<td>Introduction to Advertising Research</td>
<td></td>
</tr>
<tr>
<td>JRN 2101</td>
<td>Journalism Research</td>
<td></td>
</tr>
<tr>
<td>MSP 2141</td>
<td>Media Research</td>
<td></td>
</tr>
<tr>
<td>Select one of the following (Cross-Cultural Perspectives):</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>STRC 2672</td>
<td>Global Communication and Leadership</td>
<td></td>
</tr>
<tr>
<td>STRC 3801</td>
<td>Intercultural Communication</td>
<td></td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>One CE Track Course - any level</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>One Writing-Intensive CE Track Course - any level</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Electives</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>16</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
One 3000-4999 CE Track Course
3
One 3000-4999 CE Track Course
3
Electives
10

<table>
<thead>
<tr>
<th>Year 4</th>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>16</td>
</tr>
<tr>
<td>One 3000-4999 Writing-Intensive CE Track Course</td>
<td>3</td>
</tr>
<tr>
<td>One CE Track Course - any level</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring</th>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>One 4000-4999 CE Course</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>13</td>
</tr>
</tbody>
</table>

| Total Credit Hours: | 124 |

**Bachelor of Arts in Communication Studies: Contemporary Media Environments Track**

This track provides an historical overview of communication technologies - from papyrus to moveable type, from the rotary press to broadcasting and the Internet - and the ways that they shape public life. It will introduce theories on the relationship between technology and society, focusing on the intersection between communication technologies and the public sphere.

**Summary of Requirements**

The degree of Bachelor of Arts may be conferred upon a student majoring in Communication Studies by the recommendation of the faculty and upon satisfactory completion of a minimum of 124 semester hours (s.h.) of credit with a cumulative grade point average of 2.0 overall and in the major. Students must meet:

1. University requirements
   - All students are required to complete the General Education (GenEd (p. 143)) curriculum.
   - All students must take a minimum of two writing-intensive courses in the major at Temple University.
2. School of Media and Communication requirements (p. 937).
3. Minimum of 42 s.h. in Communication Studies.
4. Each course that fulfills a requirement for the major must be passed with a C- or better.
5. Maximum of 27 s.h. in any one SMC department may be counted toward the degree.
6. A maximum of 4 s.h. of Internship credit may be counted toward the degree.
7. A maximum of 8 s.h. combined of Independent Study and/or Special Projects may be counted toward the degree.
8. No more than 8 s.h. in Kinesiology and Dance activities courses.
9. Students may participate in study away programs.
10. Transfer students are required to complete a minimum of 24 s.h. of major courses at Temple.
11. Communication Studies majors may minor in established SMC minors. The Communication Studies student who declares a minor must complete the entire program requirements for both the major and the minor. Courses listed for both the Communication Studies major and SMC minor will only apply towards one of the curriculums. If the class is part of an array of courses, students will be required to take a different course to satisfy the major requirement.

**Communication Studies: Contemporary Media Environment Track Requirements**

1. All Communication Studies majors must take the following two foundation courses:
   - CMST 1111 Communication and Public Life 3
   - MSP 1021 Media and Society 3

<table>
<thead>
<tr>
<th>Total Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
</tr>
</tbody>
</table>

2. All majors will take five additional core courses. Students will select one course each from the categories below (15 credits). Students should plan to meet the prerequisites for courses in their selected track by taking appropriate core courses.

**Core Courses**
**CMST 2111**  Communications Seminar  

**Communication Theory**  
Select one of the following:  

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADV 1101</td>
<td>Introduction to Media and Society</td>
</tr>
<tr>
<td>ADV 1102</td>
<td>Introduction to Advertising</td>
</tr>
<tr>
<td>JRN 1111</td>
<td>Journalism and Society</td>
</tr>
<tr>
<td>MSP 1011</td>
<td>Introduction to Media Theory</td>
</tr>
</tbody>
</table>

**Research Methods**  
Select one of the following:  

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADV 1141</td>
<td>Introduction to Advertising Research</td>
</tr>
</tbody>
</table>
| JRN 2101 | Journalism Research  
| MSP 2141 | Media Research |

**Analysis**  
Select one of the following:  

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADV 2151</td>
<td>Introduction to Art Direction: Visual Communication</td>
</tr>
</tbody>
</table>
| MSP 2421 | Media Popular Culture  
| STRC 1111 | Public Speaking |
| STRC 1911 | Honors Public Speaking |

**Cross-Cultural Perspectives**  
Select one of the following:  

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>STRC 2672</td>
<td>Global Communication and Leadership</td>
</tr>
<tr>
<td>STRC 3801</td>
<td>Intercultural Communication</td>
</tr>
</tbody>
</table>

**Total Credit Hours**  

<table>
<thead>
<tr>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
</tr>
</tbody>
</table>

1  
Course has prerequisites.

3. In consultation with a faculty advisor, a student must take seven courses (minimum 21 credits) from the list below.  
- Within the track, a student must take at least one course from at least three different departments.  
- At least four courses in the track must be taken at the 3000 or 4000 level. At least one of these four must be taken at the 4000 level.  
- Students must have met the prerequisites for courses in their track by taking the appropriate core courses (see above).  
- All students must take a minimum of two writing-intensive courses in the major. Writing-intensive courses end in the numbers 96, 97 and 98 and are noted (WI) in the list below.

**Contemporary Media Environment Track Options**  

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
</table>
| ADV 2151 | Introduction to Art Direction: Visual Communication  
| JRN 2301 | Introduction to Magazines |
| JRN 3401 | Photography |
| JRN 3403 | Documentary Photography |
| JRN 3505 | Experimental Journalism |
| JRN 3701 | Contemporary Media Issues |
| JRN 3702 | Race and Racism in the News |
| JRN 3703 | History of Journalism |
| JRN 3704 | Ethical Issues in Journalism |
| JRN 3705 | Gender and American Mass Media |
| JRN 3708 | Newsroom Management |
| JRN 3709 | The Entrepreneurial Journalist |
| MSP 3421 | Technology and Culture |
| MSP 4153 | Media Criticism |
| MSP 4226 | Public Media |
| MSP 4252 | Law and Ethics of Digital Media |
| MSP 4296 | History of Electronic Media (WI) |
| MSP 4324 | The Video Game Industry and Game Culture |
| MSP 4445 | Media Images and Analysis |
| MSP 4446 | Psychological Processing of Media |
ADV 2151 will apply towards Contemporary Media Environment track to satisfy a distribution requirement. For students completing this track, they will be required to take MSP 2421, STRC 1111, or STRC 1911 to satisfy the Analysis requirement.

## Suggested Academic Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

### Bachelor of Arts in Communication Studies: Contemporary Media Environments Track

#### Requirements for New Students starting in the 2015-2016 Academic Year

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMST 1111</td>
<td>Communication and Public Life</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following (Communication Theory):</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ADV 1101</td>
<td>Introduction to Media and Society</td>
<td>1</td>
</tr>
<tr>
<td>ADV 1102</td>
<td>Introduction to Advertising</td>
<td>1</td>
</tr>
<tr>
<td>JRN 1111</td>
<td>Journalism and Society</td>
<td>1</td>
</tr>
<tr>
<td>MSP 1011</td>
<td>Introduction to Media Theory</td>
<td>1</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>COMM 1001</td>
<td>SMC Freshman Seminar</td>
<td>1</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MSP 1021</td>
<td>Media and Society</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMST 2111</td>
<td>Communications Seminar</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following (Analysis):</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ADV 2151</td>
<td>Introduction to Art Direction: Visual Communication</td>
<td>1</td>
</tr>
<tr>
<td>MSP 2421</td>
<td>Media Popular Culture</td>
<td>1</td>
</tr>
<tr>
<td>STRC 1111 or 1911</td>
<td>Public Speaking</td>
<td>1</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3-4</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Select one of the following (Cross-Cultural Perspectives):</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>STRC 2672</td>
<td>Global Communication and Leadership</td>
<td>1</td>
</tr>
<tr>
<td>STRC 3801</td>
<td>Intercultural Communication</td>
<td>1</td>
</tr>
<tr>
<td>Select one of the following (Research Methods):</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ADV 1141</td>
<td>Introduction to Advertising Research</td>
<td>1</td>
</tr>
<tr>
<td>JRN 2101</td>
<td>Journalism Research</td>
<td>1</td>
</tr>
<tr>
<td>MSP 2141</td>
<td>Media Research</td>
<td>1</td>
</tr>
</tbody>
</table>
### Bachelor of Arts in Communication Studies: Global Civil Society Track

This track will survey evidence on the emergence of global civil society including social movements, historical development, and the growing international public sphere. Courses will address such topics as public diplomacy, global mediascapes, international and public opinion.

### Summary of Requirements

The degree of Bachelor of Arts may be conferred upon a student majoring in Communication Studies by the recommendation of the faculty and upon satisfactory completion of a minimum of 124 semester hours (s.h.) of credit with a cumulative grade point average of 2.0 overall and in the major. Students must meet:

1. **University requirements**
   - All students are required to complete the General Education (GenEd (p. 143)) curriculum.
   - All students must take a minimum of two writing-intensive courses in the major at Temple University.

2. **School of Media and Communication requirements** (p. 937).

3. Minimum of 42 s.h. in Communication Studies.
4. Each course that fulfills a requirement for the major must be passed with a C- or better.
5. Maximum of 27 s.h. in any one SMC department may be counted toward the degree.
6. A maximum of 4 s.h. of Internship credit may be counted toward the degree.
7. A maximum of 8 s.h. combined of Independent Study and/or Special Projects may be counted toward the degree.
8. No more than 8 s.h. in Kinesiology and Dance activities courses.
9. Students may participate in study away programs.
10. Transfer students are required to complete a minimum of 24 s.h. of major courses at Temple.
11. Communication Studies majors may minor in established SMC minors. The Communication Studies student who declares a minor must complete the entire program requirements for both the major and the minor. Courses listed for both the Communication Studies major and SMC minor will only apply towards one of the curriculums. If the class is part of an array of courses, students will be required to take a different course to satisfy the major requirement.

### Year 3

#### Fall
- One CME Track Course - any level 3
- One Writing-Intensive CME Track Course - any level 3
- Electives 10

### Year 4

#### Fall
- One 3000-4999 CME Track Course 3
- One 3000-4999 CME Track Course 3
- Electives 10

#### Spring
- One 4000-4999 CME Course 3
- Electives 13

### Total Credit Hours: 124
Communication Studies: Global Civil Society Track Requirements

1. All Communication Studies majors must take the following two foundation courses:
   CMST 1111   Communication and Public Life 3
   MSP 1021   Media and Society 3
   **Total Credit Hours** 6

2. All majors will take five additional core courses. Students will select one course each from the categories below. Students should plan to meet the prerequisites for courses in their selected track by taking appropriate core courses.

   **Core Courses**
   CMST 2111   Communications Seminar ¹ 3

   **Communication Theory**
   Select one of the following: 3
   - ADV 1101   Introduction to Media and Society
   - ADV 1102   Introduction to Advertising
   - JRN 1111   Journalism and Society
   - MSP 1011   Introduction to Media Theory

   **Research Methods**
   Select one of the following: 3
   - ADV 1141   Introduction to Advertising Research
   - JRN 2101   Journalism Research ¹
   - MSP 2141   Media Research ¹

   **Analysis**
   Select one of the following: 3
   - ADV 2151   Introduction to Art Direction: Visual Communication
   - MSP 2421   Media Popular Culture ¹
   - STRC 1111   Public Speaking
   or STRC 1911   Honors Public Speaking

   **Cross-Cultural Perspectives**
   Select one of the following: 3
   - STRC 2672   Global Communication and Leadership
   - STRC 3801   Intercultural Communication

   **Total Credit Hours** 15

¹ Course has prerequisites.

3. In consultation with a faculty advisor, a student must take seven courses (minimum 21 credits) from the list below.
   - Within the track, a student must take at least one course from at least three different departments.
   - At least four courses in the track must be taken at the 3000 or 4000 level. At least one of these four must be taken at the 4000 level.
   - Students must have met the prerequisites for courses in their track by taking the appropriate core courses (see above).
   - All students must take a minimum of two writing-intensive courses in the major. Writing-intensive courses end in the numbers 96, 97 and 98 and are noted (WI) in the list below.

   **Global Civil Society Track Options**
   JRN 3401   Photography 4
   JRN 3403   Documentary Photography 3
   JRN 3505   Experimental Journalism 3
   JRN 3702   Race and Racism in the News 3
   JRN 3705   Gender and American Mass Media 3
   JRN 3706   International News Communication 3
   JRN 3709   The Entrepreneurial Journalist 3
   JRN 3751   Foreign Studies in Journalism ³ to 6
   MSP 3296   Travel Writing (WI) ¹ 3
   MSP 3421   Technology and Culture 3
   MSP 3471   Media and Cultural Differences 3

   ³ Writing-intensive courses.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSP 3473</td>
<td>Media and the Environment</td>
<td>3</td>
</tr>
<tr>
<td>MSP 3572</td>
<td>Communication and Development</td>
<td>3</td>
</tr>
<tr>
<td>MSP 4153</td>
<td>Media Criticism</td>
<td>3</td>
</tr>
<tr>
<td>MSP 4252</td>
<td>Law and Ethics of Digital Media</td>
<td>3</td>
</tr>
<tr>
<td>MSP 4324</td>
<td>The Video Game Industry and Game Culture</td>
<td>3</td>
</tr>
<tr>
<td>MSP 4445</td>
<td>Media Images and Analysis</td>
<td>3</td>
</tr>
<tr>
<td>MSP 4446</td>
<td>Psychological Processing of Media</td>
<td>3</td>
</tr>
<tr>
<td>MSP 4496</td>
<td>Global Media (WI)</td>
<td>3</td>
</tr>
<tr>
<td>MSP 4497</td>
<td>Media and Children (WI)</td>
<td>3</td>
</tr>
<tr>
<td>MSP 4453</td>
<td>Information Society</td>
<td>3</td>
</tr>
<tr>
<td>MSP 4541</td>
<td>Mobile Media</td>
<td>3</td>
</tr>
<tr>
<td>MSP 4572</td>
<td>British Media and Telecommunication</td>
<td>3 to 6</td>
</tr>
<tr>
<td>STRC 2662</td>
<td>Leading Groups and Team Building</td>
<td>3</td>
</tr>
<tr>
<td>STRC 2672</td>
<td>Global Communication and Leadership</td>
<td>3</td>
</tr>
</tbody>
</table>

1. Permission of SMC Study Away Director or Assistant Director required.
2. Courses in various categories can only be counted once.

**Suggested Academic Plan**

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

**Bachelor of Arts in Communication Studies: Global Civil Society Track**

**Requirements for New Students starting in the 2015-2016 Academic Year**

**Year 1**

<table>
<thead>
<tr>
<th>Term</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CMST 1111: Communication and Public Life</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Select one of the following (Communication Theory):</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ADV 1101: Introduction to Media and Society</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ADV 1102: Introduction to Advertising</td>
<td></td>
</tr>
<tr>
<td></td>
<td>JRN 1111: Journalism and Society</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MSP 1011: Introduction to Media Theory</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ENG 0802, 0812, or 0902: Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>COMM 1001: SMC Freshman Seminar</td>
<td>1</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

<table>
<thead>
<tr>
<th>Term</th>
<th>Spring</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MSP 1021: Media and Society</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Elective</td>
<td>3-4</td>
</tr>
</tbody>
</table>

**Elective**

**Year 2**

<table>
<thead>
<tr>
<th>Term</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CMST 2111: Communications Seminar</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Select one of the following (Analysis):</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ADV 2151: Introduction to Art Direction: Visual Communication</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MSP 2421: Media Popular Culture</td>
<td></td>
</tr>
<tr>
<td></td>
<td>STRC 1111 or 1911: Public Speaking</td>
<td></td>
</tr>
<tr>
<td></td>
<td>IH 0851 or 0951: Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
</tbody>
</table>
### Bachelor of Arts in Communication Studies: Policy, Regulation and Advocacy Track

This track focuses on citizen advocacy in the field of communication as related to and shaped by communication policy and regulation. Students are introduced to historical and recent examples of citizen advocacy in communication policy through the examination of social movements, civic journalism, art and performance, and special interest groups tied to issues of race, gender, ethnicity, sexual orientation, and the environment.

### Summary of Requirements

The degree of Bachelor of Arts may be conferred upon a student majoring in Communication Studies by the recommendation of the faculty and upon satisfactory completion of a minimum of 124 semester hours (s.h.) of credit with a cumulative grade point average of 2.0 overall and in the major. Students must meet:

1. University requirements
   - All students are required to complete the General Education (GenEd (p. 143)) curriculum.
   - All students must take a minimum of two writing-intensive courses in the major at Temple University.

2. School of Media and Communication requirements (p. 937).
3. Minimum of 42 s.h. in Communication Studies.
4. Each course that fulfills a requirement for the major must be passed with a C- or better.
5. Maximum of 27 s.h. in any one SMC department may be counted toward the degree.
6. A maximum of 4 s.h. of Internship credit may be counted toward the degree.
7. A maximum of 8 s.h. combined of Independent Study and/or Special Projects may be counted toward the degree.
8. No more than 8 s.h. in Kinesiology and Dance activities courses.
9. Students may participate in study away programs.
10. Transfer students are required to complete a minimum of 24 s.h. of major courses at Temple.
11. Communication Studies majors may minor in established SMC minors. The Communication Studies student who declares a minor must complete the entire program requirements for both the major and the minor. Courses listed for both the Communication Studies major and SMC minor will only apply towards one of the curriculums. If the class is part of an array of courses, students will be required to take a different course to satisfy the major requirement.

**Communication Studies: Policy, Regulation and Advocacy Track Requirements**

1. All Communication Studies majors must take the following two foundation courses:
   - **CMST 1111** Communication and Public Life  3
   - **MSP 1021** Media and Society  3
   **Total Credit Hours**  6

2. All majors will take five additional core courses. Students will select one course each from the categories below (15 credits). Students should plan to meet the prerequisites for courses in their selected track by taking appropriate core courses.
   **Core Courses**
   - **CMST 2111** Communications Seminar  3
   - **Communication Theory**
     - Select one of the following:  3
       - ADV 1101 Introduction to Media and Society
       - ADV 1102 Introduction to Advertising
       - JRN 1111 Journalism and Society
       - MSP 1011 Introduction to Media Theory
   - **Research Methods**
     - Select one of the following:  3
       - ADV 1141 Introduction to Advertising Research
       - JRN 2101 Journalism Research  1
       - MSP 2141 Media Research  1
   - **Analysis**
     - Select one of the following:  3
       - ADV 2151 Introduction to Art Direction: Visual Communication
       - MSP 2421 Media Popular Culture  1
       - STRC 1111 Public Speaking
       - or STRC 1911 Honors Public Speaking
   - **Cross-Cultural Perspectives**
     - Select one of the following:  3
       - STRC 2672 Global Communication and Leadership
       - STRC 3801 Intercultural Communication
   **Total Credit Hours**  15

  1 Course has prerequisites.

3. In consultation with a faculty advisor, a student must take seven courses (minimum 21 credits) from the list below.
   - Within the track, a student must take at least one course from at least three different departments.
   - At least four courses in the track must be taken at the 3000 or 4000 level. At least one of these four must be taken at the 4000 level.
   - Students must have met the prerequisites for courses in their track by taking the appropriate core courses (see above).
   - All students must take a minimum of two writing-intensive courses in the major, at least one must be taken at the 3000+ level. Writing-intensive courses end in the numbers 96, 97 and 98 and are noted (WI) in the list below.
### Policy, Regulation and Advocacy Track Options

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADV 4196</td>
<td>Morality, Law and Advertising (WI)</td>
<td>3</td>
</tr>
<tr>
<td>JRN 3101</td>
<td>Journalism and the Law</td>
<td>3</td>
</tr>
<tr>
<td>JRN 3401</td>
<td>Photography</td>
<td>4</td>
</tr>
<tr>
<td>JRN 3403</td>
<td>Documentary Photography</td>
<td>3</td>
</tr>
<tr>
<td>JRN 3505</td>
<td>Experimental Journalism</td>
<td>3</td>
</tr>
<tr>
<td>JRN 3702</td>
<td>Race and Racism in the News</td>
<td>3</td>
</tr>
<tr>
<td>JRN 3704</td>
<td>Ethical Issues in Journalism</td>
<td>3</td>
</tr>
<tr>
<td>JRN 3705</td>
<td>Gender and American Mass Media</td>
<td>3</td>
</tr>
<tr>
<td>JRN 3709</td>
<td>The Entrepreneurial Journalian</td>
<td>3</td>
</tr>
<tr>
<td>MSP 3421</td>
<td>Technology and Culture</td>
<td>3</td>
</tr>
<tr>
<td>MSP 3471</td>
<td>Media and Cultural Differences</td>
<td>3</td>
</tr>
<tr>
<td>MSP 3473</td>
<td>Media and the Environment</td>
<td>3</td>
</tr>
<tr>
<td>MSP 3572</td>
<td>Communication and Development</td>
<td>3</td>
</tr>
<tr>
<td>MSP 4153</td>
<td>Media Criticism</td>
<td>3</td>
</tr>
<tr>
<td>MSP 4221</td>
<td>Information Technology Policy</td>
<td>3</td>
</tr>
<tr>
<td>MSP 4425</td>
<td>Lesbian, Gay, Bisexual, and Transgender Representation in Popular Media</td>
<td>3</td>
</tr>
<tr>
<td>MSP 4226</td>
<td>Public Media</td>
<td>3</td>
</tr>
<tr>
<td>MSP 4252</td>
<td>Law and Ethics of Digital Media</td>
<td>3</td>
</tr>
<tr>
<td>MSP 4324</td>
<td>The Video Game Industry and Game Culture</td>
<td>3</td>
</tr>
<tr>
<td>MSP 4445</td>
<td>Media Images and Analysis</td>
<td>3</td>
</tr>
<tr>
<td>MSP 4446</td>
<td>Psychological Processing of Media</td>
<td>3</td>
</tr>
<tr>
<td>MSP 4453</td>
<td>Information Society</td>
<td>3</td>
</tr>
<tr>
<td>MSP 4454</td>
<td>Public Information Media Campaigns</td>
<td>3</td>
</tr>
<tr>
<td>MSP 4496</td>
<td>Global Media (WI)</td>
<td>3</td>
</tr>
<tr>
<td>MSP 4497</td>
<td>Media and Children (WI)</td>
<td>3</td>
</tr>
<tr>
<td>MSP 4541</td>
<td>Mobile Media</td>
<td>3</td>
</tr>
<tr>
<td>STRC 2112</td>
<td>Strategies and Tactics of Persuasion</td>
<td>3</td>
</tr>
<tr>
<td>STRC 2296</td>
<td>Rhetoric of Social Movements (WI)</td>
<td>3</td>
</tr>
<tr>
<td>STRC 3323</td>
<td>Rhetoric and Political Culture</td>
<td>3</td>
</tr>
<tr>
<td>STRC 3333</td>
<td>Rhetorical Theory</td>
<td>3</td>
</tr>
<tr>
<td>STRC 3336</td>
<td>Argumentation</td>
<td>3</td>
</tr>
<tr>
<td>STRC 3396</td>
<td>Rhetorical Criticism (WI)</td>
<td>3</td>
</tr>
</tbody>
</table>

### Suggested Academic Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

### Bachelor of Arts in Communication Studies: Policy, Regulation and Advocacy Track

#### Requirements for New Students starting in the 2015-2016 Academic Year

##### Year 1

<table>
<thead>
<tr>
<th>Term</th>
<th>Course Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>CMST 1111</td>
<td>Communication and Public Life</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ADV 1101</td>
<td>Introduction to Media and Society</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ADV 1102</td>
<td>Introduction to Advertising</td>
<td></td>
</tr>
<tr>
<td></td>
<td>JRN 1111</td>
<td>Journalism and Society</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MSP 1011</td>
<td>Introduction to Media Theory</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>COMM 1001</td>
<td>SMC Freshman Seminar</td>
<td>1</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 15
### Spring

- **MSP 1021** Media and Society 3
- GenEd Breadth Course 3
- GenEd Breadth Course 3
- GenEd Breadth Course 3
- Elective 3-4

#### Term Credit Hours
15

### Year 2

#### Fall

- **CMST 2111** Communications Seminar 3
- Select one of the following (Analysis): 3
  - **ADV 2151** Introduction to Art Direction: Visual Communication
  - **MSP 2421** Media Popular Culture
  - **STRC 1111 or 1911** Public Speaking
- **IH 0851 or 0951** Mosaic: Humanities Seminar I [GY] 3
- GenEd Breadth Course 3
- GenEd Breadth Course 3

#### Term Credit Hours
15

### Spring

- Select one of the following (Cross-Cultural Perspectives): 3
  - **STRC 2672** Global Communication and Leadership
  - **STRC 3801** Intercultural Communication
- Select one of the following (Research Methods): 3
  - **ADV 1141** Introduction to Advertising Research
  - **JRN 2101** Journalism Research
  - **MSP 2141** Media Research
- **IH 0852 or 0952** Mosaic: Humanities Seminar II [GZ] 3
- GenEd Breadth Course 3
- GenEd Breadth Course 3

#### Term Credit Hours
15

### Year 3

#### Fall

- One PRA Track Course - any level 3
- One Writing-Intensive PRA Track Course - any level 3
- Electives 10

#### Term Credit Hours
16

### Spring

- One 3000-4999 PRA Track Course 3
- One 3000-4999 PRA Track Course 3
- Electives 10

#### Term Credit Hours
16

### Year 4

#### Fall

- One 3000-4999 Writing-Intensive PRA Track Course 3
- One PRA Track Course - any level 3
- Electives 10

#### Term Credit Hours
16

### Spring

- One 4000-4999 PRA Track Course 3
Minor in Communication Studies

Scott Gratson, Ph.D., Program Director
9C Annenberg Hall
215-204-6434
sgratson@temple.edu
http://smc.temple.edu/commstudies/

The focus of the Communication Studies program is on the academic (aesthetic, analytical, critical, historical, theoretical) and interdisciplinary study of communication and media.

The minor will require students to take two foundational courses (6 credits) introducing students to the broad concepts of communication in public life and of media history and convergence. Students will then take one course from each of the follow categories (12 credits): Communication Theory, Research Methods, Analysis, and Cross-Cultural Perspectives.

Unlike Communication Studies majors, students will not be required to take advanced coursework.

The minor is available to undergraduate students in any major except Communication Studies. Other SMC students may declare the major, but all minor requirements must be separate from major requirements, with the exception of MSP 1021.

Requirements

Students will complete a total of 18 credits in the Communication Studies minor.

All students must take the following foundation courses (6 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMST 1111</td>
<td>Communication and Public Life</td>
<td>3</td>
</tr>
<tr>
<td>MSP 1021</td>
<td>Media and Society</td>
<td>3</td>
</tr>
</tbody>
</table>

All students will take four additional core courses (12 credits). They will select one course each from the categories below:

Communication Theory

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADV 1101</td>
<td>Introduction to Media and Society</td>
<td>3</td>
</tr>
<tr>
<td>ADV 1102</td>
<td>Introduction to Advertising</td>
<td>3</td>
</tr>
<tr>
<td>JRN 1111</td>
<td>Journalism and Society</td>
<td>3</td>
</tr>
<tr>
<td>MSP 1011</td>
<td>Introduction to Media Theory</td>
<td>3</td>
</tr>
</tbody>
</table>

Research Methods

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADV 1141</td>
<td>Introduction to Advertising Research</td>
<td>3</td>
</tr>
<tr>
<td>JRN 2101</td>
<td>Journalism Research</td>
<td>3</td>
</tr>
<tr>
<td>MSP 2141</td>
<td>Media Research</td>
<td>3</td>
</tr>
</tbody>
</table>

Analysis

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADV 2151</td>
<td>Introduction to Art Direction: Visual Communication</td>
<td>3</td>
</tr>
<tr>
<td>MSP 2421</td>
<td>Media Popular Culture</td>
<td>3</td>
</tr>
<tr>
<td>STRC 1111</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
</tbody>
</table>

Cross-Cultural Perspectives

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>STRC 2672</td>
<td>Global Communication and Leadership</td>
<td>3</td>
</tr>
<tr>
<td>STRC 3801</td>
<td>Intercultural Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

Students must earn at least a C- in all required courses.

International Communication Concentration

The International Communication Concentration (ICC) provides a theoretical and practical education in international and intercultural communication and media. This program allows students to develop sought-after competencies in cultural sensitivity and intercultural communication skills by encouraging students to reflect on their own cultural lenses. Students participating in the ICC program will be exposed to multiple international perspectives through internationally- and interculturally-oriented courses offered on Temple’s domestic campuses and may be supplemented with study abroad coursework.
This program is restricted to SMC students only.

To earn the International Communication Concentration transcript notation, a student must successfully complete a total of 18-20 credits of International / Intercultural studies courses, a maximum 9 credits of which may come from courses transferred into Temple, across 3 areas:

### Common Course
- **STRC 3801** Intercultural Communication 3

### SMC International/Intercultural courses

**Select three of the following:** 9

**Advertising**
- **ADV 3101** Creative Thinking for Advertising (Study Abroad sections only - London)
- **ADV 3185** Advertising Internship (International Internship only, through Study Abroad: London, Barcelona, Hong Kong)

**Journalism**
- **JRN 3254** International Reporting
- **JRN 3296** Travel Writing (Study Abroad sections only - London/Dublin)
- **JRN 3706** International News Communication
- **JRN 3751** Foreign Studies in Journalism (Study Abroad - London, Tokyo, Dublin, South Africa)
- **JRN 3885** Internship (International Internships only, through Study Abroad: London, Barcelona, Hong Kong)

**Media Studies & Production**
- **MSP 3296** Travel Writing (Study Abroad sections only - London/Dublin)
- **MSP 3471** Media and Cultural Differences
- **MSP 3572** Communication and Development
- **MSP 4453** Information Society
- **MSP 4496** Global Media
- **MSP 4571** Foreign Studies in BTMM (Study Abroad - London/Dublin)
- **MSP 4572** British Media and Telecommunication (Study Abroad - London)
- **MSP 4785** Internship (Study Abroad sections only - London)

**Strategic Communication**
- **STRC 2672** Global Communication and Leadership
- **STRC 3385** Internship in Rhetoric and Public Advocacy (International Internships only, through Study Abroad: London, Barcelona, Hong Kong)
- **STRC 3585** Internship in Public Relations (International Internship only, through Study Abroad: London, Barcelona, Hong Kong)
- **STRC 3685** Internship in Organizational Leadership (International Internship only, through Study Abroad: London, Barcelona, Hong Kong)
- **STRC 3670** Special Topics in Organizational Leadership

### International/Intercultural Electives outside of SMC

Two sequential courses (e.g. 1001 and 1002) in any one foreign language or any two of the following: 6-8

**Art History**
- **ARTH 1003** History of Art in Rome (Study Abroad - Rome)
- **ARTH 1155** Art Heritage of the Western World I
- **ARTH 1156** Art Heritage of the Western World II
- **ARTH 1801** Arts of Asia (Study Abroad - Japan)
- **ARTH 2001** European Crafts and Decorative Arts
- **ARTH 2102** Greek Mythology and Art
- **ARTH 2105** Roman Art and Archaeology
- **ARTH 2129** Greek and Roman Sculpture
- **ARTH 2135** Art and Archeology of Ancient Rome and the Mediterranean (Study Abroad - Rome)
- **ARTH 2428** High and Late Baroque Art in Rome (Study Abroad - Rome)
- **ARTH 2431** Southern Baroque Art: Italy and Spain
- **ARTH 2432** Northern Baroque Art
- **ARTH 2622** Galleries and Studios of Rome (Study Abroad - Rome)
- **ARTH 2651** Symbolism, Dada, and Surrealism
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTH 2815</td>
<td>Japanese Art (Study Abroad - Japan)</td>
</tr>
<tr>
<td>ASST 1051</td>
<td>Premodern Asia</td>
</tr>
<tr>
<td>ASST 1052</td>
<td>Modern Asia</td>
</tr>
<tr>
<td>ASST 1801</td>
<td>Chinese and Japanese Literature in Cultural Context</td>
</tr>
<tr>
<td>ASST 2011</td>
<td>Survey of Japanese Literature Before 1868</td>
</tr>
<tr>
<td>ASST 2015</td>
<td>Tokyo in Literature and Film</td>
</tr>
<tr>
<td>ASST 2021</td>
<td>Japanese Literature in Film</td>
</tr>
<tr>
<td>ASST 2074</td>
<td>Geography of East and South Asia</td>
</tr>
<tr>
<td>ASST 2097</td>
<td>Asian Diaspora</td>
</tr>
<tr>
<td>ASST 2098</td>
<td>Japanese Popular Culture and its Literature</td>
</tr>
<tr>
<td>ASST 2238</td>
<td>Visual Anthropology of Modern Japan</td>
</tr>
<tr>
<td>ASST 2351</td>
<td>Japan in a Changing World</td>
</tr>
<tr>
<td>ASST 2367</td>
<td>South Asia: Peoples, Culture, Experiences</td>
</tr>
<tr>
<td>ASST 2373</td>
<td>Japanese Culture</td>
</tr>
<tr>
<td>ASST 2374</td>
<td>The Anthropology of Modern China</td>
</tr>
<tr>
<td>ASST 2511</td>
<td>Introduction to Asian Business</td>
</tr>
<tr>
<td>ASST 3011</td>
<td>Monks, Masters, and Magicians: Religion in Premodern Chinese Literature</td>
</tr>
<tr>
<td>ASST 3052</td>
<td>Environmental Problems in Asia</td>
</tr>
<tr>
<td>ASST 3247</td>
<td>Ideology and Social Change in Japan</td>
</tr>
<tr>
<td>ASST 3251</td>
<td>China: State and Society</td>
</tr>
<tr>
<td>ASST 3551</td>
<td>History of Vietnam</td>
</tr>
<tr>
<td>ASST 3696</td>
<td>Asian Women in Transition</td>
</tr>
<tr>
<td>ASST 4268</td>
<td>Indian Philosophy: An Introduction</td>
</tr>
<tr>
<td>ASST 4624</td>
<td>Modern Japan: Empire, War, Society</td>
</tr>
<tr>
<td>FMA 4673</td>
<td>International Cinema</td>
</tr>
<tr>
<td>GUS 1025</td>
<td>World Urban Patterns</td>
</tr>
<tr>
<td>GUS 1031</td>
<td>Geography of World Affairs</td>
</tr>
<tr>
<td>GUS 2032</td>
<td>Urban Systems in a Global Economy</td>
</tr>
<tr>
<td>GUS 2073</td>
<td>African Development</td>
</tr>
<tr>
<td>GUS 2074</td>
<td>East and South Asia</td>
</tr>
<tr>
<td>GUS 2121</td>
<td>Russian Cities</td>
</tr>
<tr>
<td>GUS 3076</td>
<td>Metropolitan Tokyo</td>
</tr>
<tr>
<td>GUS 4021</td>
<td>International Urbanization</td>
</tr>
<tr>
<td>HIST 2501</td>
<td>Introduction to East Asia: China</td>
</tr>
<tr>
<td>HIST 2502</td>
<td>Introduction to East Asia: Japan</td>
</tr>
<tr>
<td>HIST 2503</td>
<td>Introduction to Southeast Asia: Insular</td>
</tr>
<tr>
<td>HIST 2504</td>
<td>Introduction to Southeast Asia: Mainland</td>
</tr>
<tr>
<td>HIST 2511</td>
<td>Introduction to African History</td>
</tr>
<tr>
<td>HIST 2514</td>
<td>Introduction to Latin America</td>
</tr>
<tr>
<td>HIST 2515</td>
<td>Civilization and Modernity in the Caribbean</td>
</tr>
<tr>
<td>HIST 2516</td>
<td>Modern Islamic History</td>
</tr>
<tr>
<td>HIST 2611</td>
<td>Third World Issues through Film</td>
</tr>
<tr>
<td>HIST 3321</td>
<td>Irish History</td>
</tr>
<tr>
<td>HIST 3331</td>
<td>History of England</td>
</tr>
<tr>
<td>HIST 3362</td>
<td>Russia: Nationality and Empire</td>
</tr>
<tr>
<td>HIST 3363</td>
<td>Russia: Revolution, State, and Empire</td>
</tr>
<tr>
<td>HIST 3511</td>
<td>Southern Africa: A History</td>
</tr>
<tr>
<td>HIST 3521</td>
<td>The Chinese Revolution</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------------------------------------------------</td>
</tr>
<tr>
<td>HIST 3522</td>
<td>Contemporary China</td>
</tr>
<tr>
<td>HIST 3531</td>
<td>Modern India</td>
</tr>
<tr>
<td>HIST 3541</td>
<td>Japan Today</td>
</tr>
<tr>
<td>HIST 3542</td>
<td>Women and Society in Japan</td>
</tr>
<tr>
<td>HIST 3561</td>
<td>History of Brazil</td>
</tr>
<tr>
<td>HIST 3562</td>
<td>Contemporary Mexico</td>
</tr>
<tr>
<td>HIST 3565</td>
<td>Hist Latin Amer to 1930</td>
</tr>
<tr>
<td>HIST 3571</td>
<td>Israel: History, Politics and Society</td>
</tr>
<tr>
<td>HIST 3572</td>
<td>Modern Middle East</td>
</tr>
<tr>
<td>HIST 3675</td>
<td>Third World Women's Lives</td>
</tr>
<tr>
<td>HIST 3696</td>
<td>Asian Women in Transition</td>
</tr>
<tr>
<td>HIST 4698</td>
<td>Revolutionary Mexico</td>
</tr>
<tr>
<td>HIST 4896</td>
<td>Jews, Judaism, and the Modern World</td>
</tr>
</tbody>
</table>

**Jewish Studies**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>JST 2408</td>
<td>Jewish Secular Thought and Culture from Spinoza to Seinfeld: A History of Jewish Secularism</td>
</tr>
<tr>
<td>JST 2409</td>
<td>Secular Jewish Utopian Politics / Jewtopias: The Jewish Romance with Communism, Zionism, and America</td>
</tr>
<tr>
<td>JST 2706</td>
<td>Jewish Diaspora/Survey of Jewish History</td>
</tr>
<tr>
<td>JST 2797</td>
<td>Jewish Humor Past and Present</td>
</tr>
<tr>
<td>JST 3408</td>
<td>Israel in the Middle East</td>
</tr>
<tr>
<td>JST 3411</td>
<td>The Philosophies of Judaism</td>
</tr>
<tr>
<td>JST 3711</td>
<td>Israelis and Palestinians</td>
</tr>
<tr>
<td>JST 4896</td>
<td>Modern Jewish History</td>
</tr>
</tbody>
</table>

**Latin American Studies**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAS 1001</td>
<td>Perspectives on Latin America</td>
</tr>
<tr>
<td>LAS 1022</td>
<td>Latin American Social Struggles</td>
</tr>
<tr>
<td>LAS 2101</td>
<td>Latin America through Film and Fiction</td>
</tr>
<tr>
<td>LAS 2231</td>
<td>Democracy in Latin America</td>
</tr>
<tr>
<td>LAS 2232</td>
<td>Politics of Development in Latin America</td>
</tr>
<tr>
<td>LAS 2361</td>
<td>Peoples of Latin America</td>
</tr>
<tr>
<td>LAS 2362</td>
<td>Peoples and Cultures of the Caribbean</td>
</tr>
<tr>
<td>LAS 2502</td>
<td>Fundamentals of Latin American Business</td>
</tr>
<tr>
<td>LAS 2514</td>
<td>Historical Continuity and Social Change in Latin America</td>
</tr>
<tr>
<td>LAS 3267</td>
<td>Sociology of Music: Nation, Race, Class and Gender in Argentina and Brazil</td>
</tr>
<tr>
<td>LAS 3601</td>
<td>&quot;Other Voices&quot; in Latin American Literature</td>
</tr>
<tr>
<td>LAS 3602</td>
<td>Caribbean Literature and Culture</td>
</tr>
<tr>
<td>LAS 3702</td>
<td>African Religions and New World Culture</td>
</tr>
<tr>
<td>LAS 3801</td>
<td>African Culture in Brazil</td>
</tr>
</tbody>
</table>

**Political Science**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLS 1201</td>
<td>Foreign Governments and Politics</td>
</tr>
<tr>
<td>POLS 1301</td>
<td>International Politics</td>
</tr>
<tr>
<td>POLS 2211</td>
<td>Contemporary Politics of Europe</td>
</tr>
<tr>
<td>POLS 2212</td>
<td>Eastern Europe, Russia and the West</td>
</tr>
<tr>
<td>POLS 2314</td>
<td>Politics of International Law</td>
</tr>
<tr>
<td>POLS 2231</td>
<td>Comparative Political Systems in Latin America</td>
</tr>
<tr>
<td>POLS 2321</td>
<td>Politics of the Global Economy</td>
</tr>
<tr>
<td>POLS 2331</td>
<td>International Organization</td>
</tr>
<tr>
<td>POLS 2341</td>
<td>U.S. Foreign Policy</td>
</tr>
<tr>
<td>POLS 3212</td>
<td>British Government and Politics</td>
</tr>
<tr>
<td>POLS 3241</td>
<td>Mideast Politics</td>
</tr>
<tr>
<td>POLS 3252</td>
<td>East Asia and the United States</td>
</tr>
<tr>
<td>POLS 3265</td>
<td>International Environmental Policy</td>
</tr>
</tbody>
</table>
Journalism

Carolyn L. Kitch, Ph.D., Department Chair
George W. Miller III, MSJ, MLA, Assistant Department Chair
316 Annenberg Hall
215-204-7433
journ@temple.edu
http://smc.temple.edu/journalism/

The curriculum for Journalism is based on developing critical thinking in students for a multimedia, urban, journalistic environment. This requires a broad educational background coupled with rigorous professional training. The curriculum emphasizes subject matter from other disciplines, particularly those in the liberal arts. The department also believes that effective writing is central to communication and is, therefore, integral to the department curriculum.

Graduates of the program will develop:

1. Strong skills in reporting, writing, photography, audio/video newsgathering, print and web editing and design.
2. The ability to analyze critically past and present trends of journalism and to help craft alternative forms of journalism for the future.
3. A strong sense of ethical responsibility and the knowledge necessary for ethical decision-making.
4. An understanding of digital and interactive media technologies.
5. The ability to provide information in multimedia formats.
6. A culture of collaboration through team reporting....
7. ...in order to tell stories emanating from a diverse urban environment.
8. A keen understanding of the increasingly-global nature of today's journalistic environment.

Temple's Journalism Department is one of only two programs in Pennsylvania accredited by the Accrediting Council on Education in Journalism and Mass Communication (ACEJMC). The department has a chapter of the national journalism and mass communication honor society, Kappa Tau Alpha. Additionally, every spring the department awards thousands of dollars in scholarships to deserving majors.

Programs

- Bachelor of Arts in Journalism (p. 978)
Bachelor of Arts in Journalism

Students need to meet the department’s nine required courses as well as 18 credits of journalism electives, forming an area of emphasis. A capstone experience, JRN 4196, combines urban community journalism with multimedia storytelling. This capstone produces the online news site, PhiladelphiaNeighborhoods.com.

Students who major in Journalism enter a variety of careers, including those as web reporters and producers, newspaper reporters and editors, still and video photographers, radio and television reporters and producers, and magazine writers and editors.

Although students must ultimately be responsible for their own academic programs, freshmen and first-semester transfer students will first meet with a School of Media and Communication (SMC) academic advisor. During the sophomore and junior years, a student must meet at least once each year with a faculty advisor who is knowledgeable about the area of study the student is following.

Summary of Requirements

The degree of Bachelor of Arts may be conferred upon a student majoring in Journalism by recommendation of the faculty and upon satisfactory completion of a minimum of 124 semester hours of credit with a cumulative average of 2.0 overall and in the major.

Students must meet:

1. University requirements:
   a. All students are required to complete the General Education (GenEd (p. 143)) curriculum.
   b. All students must take a minimum of two writing-intensive courses in the major at Temple University. The specific writing-intensive courses required for this major are JRN 1196 and JRN 4196.

2. School of Media and Communication requirements (p. 937).

3. Minimum 45 credits in Journalism required. Maximum 52 credits in the School of Media and Communication permitted. Students must complete 72 credits outside the School of Media and Communication.
   a. Students are cautioned to plan their program so they do not exceed the 52-credit hour limit that is set by our accrediting body.

4. Journalism majors must receive a grade of C or higher in all required department courses and electives for them to count for the major.

5. A maximum of 6 credits may be earned for internships and a maximum of 3 credits for independent studies. If students plan to take multiple internships, please keep in mind the six-credit maximum. Internships may be taken for 1-3 credits.

6. Only 8 credits will be accepted from Kinesiology and Dance activity courses.

7. No more than 30 credits may be taken in any single CLA department without special written permission from the Department of Journalism. These requirements are to ensure a broad-based liberal arts education for each major.

8. Journalism-related coursework must be evaluated for transfer (including courses taken through study abroad programs after enrolling at Temple University) by the Department Chair. No more than 12 credits in total will be accepted for transfer from an accredited journalism/mass communication program; maximum 9 credits from a non-accredited program. Under no circumstances will credit be allowed for duplicate courses.

9. The department does not award credit for academic or life experience. Students with extensive experience may present evidence and petition for a waiver of department course requirements.

10. Coursework taken in Business Education, lower-level credits in Military Science, and the Extern Program are not applicable towards graduation.

Departmental Requirements for the Major

It is the student's responsibility to meet all course prerequisite requirements.

Foundation Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>JRN 1101</td>
<td>Elements of Writing 1</td>
</tr>
<tr>
<td>JRN 111</td>
<td>Journalism and Society 1</td>
</tr>
<tr>
<td>JRN 1196</td>
<td>Writing for Journalism 1, 2</td>
</tr>
<tr>
<td>JRN 1113</td>
<td>Audio/Visual Newsgathering</td>
</tr>
<tr>
<td>JRN 1114</td>
<td>Design for Journalists</td>
</tr>
</tbody>
</table>

Advanced Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>JRN 2101</td>
<td>Journalism Research</td>
</tr>
<tr>
<td>JRN 3101</td>
<td>Journalism and the Law</td>
</tr>
<tr>
<td>JRN 3601</td>
<td>Multimedia Storytelling</td>
</tr>
</tbody>
</table>

Capstone Course

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>JRN 4196</td>
<td>PhiladelphiaNeighborhoods.com</td>
</tr>
</tbody>
</table>

Area of Emphasis Electives

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>JRN 1196</td>
<td>PhiladelphiaNeighborhoods.com</td>
</tr>
</tbody>
</table>
2000-level and above electives  

<table>
<thead>
<tr>
<th>Required Liberal Arts Courses for the Journalism Major</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 1101 U.S. History to 1877</td>
<td>3</td>
</tr>
<tr>
<td>HIST 1102 U.S. History since 1877</td>
<td>3</td>
</tr>
<tr>
<td>POLS 1101 The American Political System</td>
<td>3</td>
</tr>
<tr>
<td>POLS 2102 American State and Local Politics</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3</td>
</tr>
<tr>
<td>GUS 0861 Urban Dynamics: Global, Regional, and Local Connections</td>
<td></td>
</tr>
<tr>
<td>GUS 1021 Urban Society: Race, Class, and Community</td>
<td></td>
</tr>
<tr>
<td>GUS 1025 World Urban Patterns</td>
<td></td>
</tr>
<tr>
<td>SOC 1176 Introduction to Sociology</td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3</td>
</tr>
<tr>
<td>ECON 0858 The American Economy</td>
<td></td>
</tr>
<tr>
<td>ECON 1001 Introduction to the Economy</td>
<td></td>
</tr>
<tr>
<td>ECON 1101 Macroeconomic Principles</td>
<td></td>
</tr>
<tr>
<td>ECON 1102 Microeconomic Principles</td>
<td></td>
</tr>
<tr>
<td>ECON 1103 Global Economics Issues</td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3-4</td>
</tr>
<tr>
<td>MATH 1013 Elements of Statistics</td>
<td></td>
</tr>
<tr>
<td>PSY 1167 Foundations in Statistical Methods</td>
<td></td>
</tr>
<tr>
<td>SOC 1167 Social Statistics</td>
<td></td>
</tr>
<tr>
<td>STAT 0826 Statistics in the News</td>
<td></td>
</tr>
</tbody>
</table>

Total Credit Hours  

Suggested Academic Plan  

Please note that these are suggested academic plans. Depending on your situation, your academic plan may look different.

Bachelor of Arts in Journalism  

Requirements for New Students starting in the 2015-2016 Academic Year  

<table>
<thead>
<tr>
<th>Year 1</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td></td>
</tr>
<tr>
<td>JRN 1101 Elements of Writing</td>
<td>2</td>
</tr>
<tr>
<td>JRN 1111 Journalism and Society</td>
<td>3</td>
</tr>
<tr>
<td>POLS 1101 The American Political System</td>
<td>3</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902 Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
</tr>
<tr>
<td>COMM 1001 SMC Freshman Seminar</td>
<td>1</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>JRN 1196 Writing for Journalism [WI]</td>
<td>3</td>
</tr>
<tr>
<td>HIST 1101 U.S. History to 1877</td>
<td>3</td>
</tr>
<tr>
<td>IH 0851 or 0951 Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>
### Year 2

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>JRN 1113</td>
<td>Audio/Visual Newsgathering</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Journalism Area of Specialization</td>
<td></td>
</tr>
<tr>
<td>POLS 2102</td>
<td>American State and Local Politics</td>
<td>3</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 15

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>JRN 1114</td>
<td>Design for Journalists</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Journalism Area of Specialization</td>
<td></td>
</tr>
<tr>
<td>HIST 1102</td>
<td>U.S. History since 1877</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 15

### Year 3

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>JRN 2101</td>
<td>Journalism Research</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Journalism Area of Specialization</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Non-Journalism Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Select one of the following:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GUS 0861</td>
<td>Urban Dynamics: Global, Regional, and Local Connections [GU]</td>
</tr>
<tr>
<td></td>
<td>GUS 1021</td>
<td>Urban Society: Race, Class, and Community</td>
</tr>
<tr>
<td></td>
<td>GUS 1025</td>
<td>World Urban Patterns</td>
</tr>
<tr>
<td></td>
<td>SOC 1176</td>
<td>Introduction to Sociology</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 15

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>JRN 3101</td>
<td>Journalism and the Law</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Journalism Area of Specialization</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Select one of the following:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ECON 0858</td>
<td>The American Economy [GU]</td>
</tr>
<tr>
<td></td>
<td>ECON 1001</td>
<td>Introduction to the Economy</td>
</tr>
<tr>
<td></td>
<td>ECON 1101</td>
<td>Macroeconomic Principles</td>
</tr>
<tr>
<td></td>
<td>ECON 1102</td>
<td>Microeconomic Principles</td>
</tr>
<tr>
<td></td>
<td>ECON 1103</td>
<td>Global Economics Issues</td>
</tr>
<tr>
<td></td>
<td>Select one of the following:</td>
<td>3-4</td>
</tr>
<tr>
<td></td>
<td>MATH 1013</td>
<td>Elements of Statistics</td>
</tr>
<tr>
<td></td>
<td>PSY 1167</td>
<td>Foundations in Statistical Methods</td>
</tr>
<tr>
<td></td>
<td>SOC 1167</td>
<td>Social Statistics</td>
</tr>
<tr>
<td></td>
<td>STAT 0826</td>
<td>Statistics in the News [GQ]</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 15

### Year 4

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>JRN 3601</td>
<td>Multimedia Storytelling</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Journalism Area of Specialization</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Journalism Area of Specialization</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Non-Journalism Electives</td>
<td>6</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 15

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>JRN 4196</td>
<td>Philadelphianeighborhoods.com [WI]</td>
<td>4</td>
</tr>
</tbody>
</table>
The Department of Media Studies and Production expands students’ knowledge and skills to create, evaluate, and manage media content and organizations. With the urban and global communities as their living laboratories, students draw on their creativity, entrepreneurship, intellectual curiosity and analytical abilities to navigate digital media in our global society.

Theory and practice are integrated into all areas of study in the major. Media Studies & Production students learn how to produce, evaluate and manage media content for traditional and emerging media in a variety of genres, including information (news and documentary), music, comedy, sports, drama, and commercial and noncommercial persuasion campaigns. They study institutions that create, distribute and investigate media products (e.g., production studios, television and radio networks and audience measurement companies) and learn how to create and operate successful media businesses. Media Studies & Production students learn to think purposefully and critically about media, and examine media roles in history, culture and society from many perspectives. They also learn how to act ethically as they interact with the world both in careers in media institutions and as media consuming and producing citizens.

Programs

- Bachelor of Arts in Media Studies and Production: Emergent Media Track (p. 981)
- Bachelor of Arts in Media Studies and Production: Media Analysis Track (p. 985)
- Bachelor of Arts in Media Studies and Production: Media Business and Entrepreneurship Track (p. 988)
- Bachelor of Arts in Media Studies and Production: Media Production Track (p. 992)
- Digital Media Technologies (p. )

Bachelor of Arts in Media Studies and Production: Emergent Media Track

The Emergent Media Professional Option track focuses on critical analysis and production in new digital media, specifically in mobile media, the web, and video games. Students who study this track develop an understanding of the global nature of the new digital media environment and its business practices, and production processes. Students who follow this track will be prepared for careers as digital media consultants, web designers, and marketing professionals in the converged media environment.

Requirements for the Degree

Summary of Requirements

The degree of Bachelor of Arts may be conferred upon a student majoring in Media Studies and Production by the recommendation of the faculty and upon satisfactory completion of a minimum of 124 semester hours of credit with a cumulative grade point average of 2.0 overall and in the major. Students must meet:

1. University requirements
   - All students are required to complete the General Education (GenEd (p. 143)) curriculum.
   - All students must take a minimum of two writing-intensive courses in the major at Temple University.

2. School of Media and Communication requirements (p. 937).
4. Each course that fulfills a requirement for the major must be passed with a C- or better.
5. All prerequisites must be met unless exempted in writing.
6. No more than 20 transfer credits may be applied to the Media Studies & Production major.
7. No more than 8 credits in Kinesiology and Dance activities courses.
8. No more than 12 credits total for internship, practicum, and independent study courses.

Media Studies And Production: Emergent Media Track Requirements

### Foundation Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSP 1011</td>
<td>Introduction to Media Theory</td>
<td>3</td>
</tr>
<tr>
<td>MSP 1021</td>
<td>Media and Society</td>
<td>3</td>
</tr>
<tr>
<td>MSP 1701</td>
<td>Introduction to Media Technology</td>
<td>3</td>
</tr>
<tr>
<td>MSP 4785</td>
<td>Internship (or Practicum)</td>
<td>3-4</td>
</tr>
<tr>
<td>MSP 4039</td>
<td>Senior Seminar</td>
<td>3</td>
</tr>
</tbody>
</table>

### Media Policy & Ethics Requirement

Select a minimum of one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSP 4221</td>
<td>Information Technology Policy</td>
</tr>
<tr>
<td>MSP 4252</td>
<td>Law and Ethics of Digital Media</td>
</tr>
<tr>
<td>MSP 4296</td>
<td>History of Electronic Media (WI)</td>
</tr>
<tr>
<td>MSP 4454</td>
<td>Public Information Media Campaigns</td>
</tr>
</tbody>
</table>

### Media & Critical Topics Requirement

Select a minimum of one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSP 3421</td>
<td>Technology and Culture</td>
</tr>
<tr>
<td>MSP 4153</td>
<td>Media Criticism</td>
</tr>
<tr>
<td>MSP 4445</td>
<td>Media Images and Analysis</td>
</tr>
<tr>
<td>MSP 4446</td>
<td>Psychological Processing of Media</td>
</tr>
<tr>
<td>MSP 4453</td>
<td>Information Society</td>
</tr>
<tr>
<td>MSP 4497</td>
<td>Media and Children (WI)</td>
</tr>
</tbody>
</table>

### International/Intercultural Media Issues Requirement

Select a minimum of one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSP 3471</td>
<td>Media and Cultural Differences</td>
</tr>
<tr>
<td>MSP 3473</td>
<td>Media and the Environment</td>
</tr>
<tr>
<td>MSP 3572</td>
<td>Communication and Development</td>
</tr>
<tr>
<td>MSP 4496</td>
<td>Global Media (WI)</td>
</tr>
<tr>
<td>MSP 4571</td>
<td>Foreign Studies in BTMM</td>
</tr>
<tr>
<td>MSP 4572</td>
<td>British Media and Telecommunication</td>
</tr>
</tbody>
</table>

### Emergent Media Professional Option Selections

Minimum of 3 courses taken from one sub-focus, and 2 from the other sub-focus

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSP 2421</td>
<td>Media Popular Culture</td>
</tr>
<tr>
<td>MSP 2741</td>
<td>Introduction to Internet Studies and Web Authoring</td>
</tr>
<tr>
<td>MSP 4324</td>
<td>The Video Game Industry and Game Culture</td>
</tr>
<tr>
<td>MSP 4446</td>
<td>Psychological Processing of Media</td>
</tr>
<tr>
<td>MSP 4541</td>
<td>Mobile Media</td>
</tr>
<tr>
<td>MSP 2751</td>
<td>Audio for Media</td>
</tr>
<tr>
<td>MSP 3709</td>
<td>Advanced Editing</td>
</tr>
<tr>
<td>MSP 3751</td>
<td>Studio Music Recording Techniques</td>
</tr>
<tr>
<td>MSP 4614</td>
<td>Creating a Media Business</td>
</tr>
<tr>
<td>MSP 4703</td>
<td>Multimedia Production for Corporations and Non-Profits</td>
</tr>
<tr>
<td>MSP 4741</td>
<td>Emergent Media Production</td>
</tr>
<tr>
<td>MSP 4751</td>
<td>Audio Mixing and Mastering</td>
</tr>
</tbody>
</table>

Total Credit Hours: 42-43
Must be completed within the first 45 credits at Temple University. Students transferring in to Temple need to complete at least one Media Studies & Production foundation course at Temple, unless exempted by the chair of the department.

All majors must have 2.75 GPA or greater to enroll in the Internship (3-4 credit hours); all other majors with a lower GPA must complete at least one Practicum (MSP 4487, MSP 4596, MSP 4597, MSP 4687, MSP 4787, MSP 4887).

Taken during final 30 credits.

If MSP 4446 is taken, student will decide whether to count it as Media & Critical Topics requirement or Emergent Media Studies option since courses in various categories can only be counted once.

Internships and Senior Seminar

The academic experience for all Media Studies & Production majors culminates with the MSP 4039 Senior Seminar and MSP 4785 Internship for 3 or 4 credit hours (NOTE: To qualify for an internship, students must have Junior or Senior standing, a minimum of 2.75 GPA, and passing grades (C-) in the Media Studies & Production requirement courses. For students with a GPA lower than 2.75, a Practicum must be completed in place of the Internship). Together, these courses provide the opportunity to explore their potential professional futures. Internship opportunities exist locally (at virtually every media-oriented organization in the greater Philadelphia region), nationally (in New York City, Los Angeles, Chicago, and other U.S. media markets), and internationally (in London, Dublin, Paris, Barcelona, Hong Kong, and Tokyo through the School of Media and Communication's Study Away Program and Temple's Education Abroad Office). Students who wish to enroll in a second internship as an elective can take MSP 4786 for 1 to 3 credit hours.

Practica

There are six (6) practica options:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSP 4487</td>
<td>TUTV Practicum</td>
<td>3</td>
</tr>
<tr>
<td>MSP 4596</td>
<td>TV News Production Practicum - Temple Update</td>
<td>4</td>
</tr>
<tr>
<td>MSP 4597</td>
<td>Sports Production Practicum</td>
<td>4</td>
</tr>
<tr>
<td>MSP 4687</td>
<td>Recording Industry Practicum</td>
<td>3</td>
</tr>
<tr>
<td>MSP 4787</td>
<td>Television Production Workshop</td>
<td>3 to 8</td>
</tr>
<tr>
<td>MSP 4887</td>
<td>Radio Production Practicum</td>
<td>3</td>
</tr>
</tbody>
</table>

Students enrolled in TUTV Practicum (MSP 4487) play a key role in the operation of Temple University Television (TUTV) and will work with the course instructor, engineering staffers and others to schedule the station and produce original content. In the TV News Production Practicum - Temple Update (MSP 4596), students produce a weekly live-to-tape TV newsmagazine that airs on local cable TV. The Sports Production Practicum (MSP 4597) is a weekly sports program produced by students. Recording Industry Practicum (MSP 4687) is an intensive, practical course that engages students in the day-to-day operation of our student-run record label. Television Production Workshop (MSP 4787) also fulfills the requirement of a practicum and involves the production of various content also for broadcast on local cable.

Media Studies & Production courses designated as "Practicum" can be taken as either Media Studies & Production electives or in place of MSP 4785 Internship.

Suggested Academic Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Arts in Media Studies & Production: Emergent Media Track

Requirements for New Students starting in the 2015-2016 Academic Year

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>MSP 1021 Media and Society</td>
<td>3</td>
</tr>
<tr>
<td>MSP 1701 Introduction to Media Technology</td>
<td>3</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902 Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
</tr>
<tr>
<td>COMM 1001 SMC Freshman Seminar</td>
<td>1</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>15</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>MSP 1011 Introduction to Media Theory</td>
<td>3</td>
</tr>
<tr>
<td>Emergent Media Studies or Emergent Media Production Course</td>
<td>3-4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>Year</td>
<td>Term</td>
</tr>
<tr>
<td>--------</td>
<td>------</td>
</tr>
<tr>
<td>2</td>
<td>Fall</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Term Credit Hours</td>
</tr>
<tr>
<td></td>
<td>Spring</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Term Credit Hours</td>
</tr>
<tr>
<td>3</td>
<td>Fall</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Term Credit Hours</td>
</tr>
<tr>
<td></td>
<td>Spring</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Term Credit Hours</td>
</tr>
<tr>
<td>4</td>
<td>Fall</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Term Credit Hours</td>
</tr>
<tr>
<td></td>
<td>Spring</td>
</tr>
</tbody>
</table>
Schools, Colleges, and Divisions 985

MSP 4785  Internship
MSP 4487  TUTV Practicum
MSP 4596  TV News Production Practicum - Temple Update [WI]
MSP 4597  Sports Production Practicum [WI]
MSP 4687  Recording Industry Practicum
MSP 4787  Television Production Workshop
MSP 4887  Radio Production Practicum

Electives  12

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Term Credit Hours</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Total Credit Hours:</td>
<td>124</td>
<td></td>
</tr>
</tbody>
</table>

1 All students are required to take at least two WI courses in their major so each competency area (Media Policy & Ethics, Media & Critical Topics, and International/Intercultural Media Issues) offers a WI option. If a student is eligible for MSP 4596 or MSP 4597 and chooses to take one of these courses to fulfill internship/practicum requirement, the course would also fulfill one of the WI requirements.

Bachelor of Arts in Media Studies and Production: Media Analysis Track

The Media Analysis Professional Option track introduces students to the critical understanding of the roles of media in contemporary life, including media technology as a cultural force; the nature of media institutions, audiences, and texts; and the media as a source of shared social identities. Students who select this track are prepared for careers as media consultants, editorial or technical writers, community activists, corporate communication producers, media scholars, and market research analysts.

Requirements for the Degree

Summary of Requirements

The degree of Bachelor of Arts may be conferred upon a student majoring in Media Studies and Production by the recommendation of the faculty and upon satisfactory completion of a minimum of 124 semester hours of credit with a cumulative grade point average of 2.0 overall and in the major. Students must meet:

1. University requirements
   • All students are required to complete the General Education (GenEd (p. 143)) curriculum.
   • All students must take a minimum of two writing-intensive courses in the major at Temple University.

2. School of Media and Communication requirements (p. 937).


4. Each course that fulfills a requirement for the major must be passed with a C- or better.

5. All prerequisites must be met unless exempted in writing.

6. No more than 20 transfer credits may be applied to the Media Studies & Production major.

7. No more than 8 credits in Kinesiology and Dance activities courses.

8. No more than 12 credits total for internship, practicum, and independent study courses.

Media Studies And Production: Media Analysis Track Requirements

Foundation Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSP 1011</td>
<td>Introduction to Media Theory (^1)</td>
<td>3</td>
</tr>
<tr>
<td>MSP 1021</td>
<td>Media and Society (^1)</td>
<td>3</td>
</tr>
<tr>
<td>MSP 1701</td>
<td>Introduction to Media Technology (^1)</td>
<td>3</td>
</tr>
<tr>
<td>MSP 4785</td>
<td>Internship (or Practicum) (^2)</td>
<td>3-4</td>
</tr>
<tr>
<td>MSP 4039</td>
<td>Senior Seminar (^3)</td>
<td>3</td>
</tr>
</tbody>
</table>

Media Policy & Ethics Requirement

Select a minimum of one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSP 4221</td>
<td>Information Technology Policy</td>
</tr>
<tr>
<td>MSP 4252</td>
<td>Law and Ethics of Digital Media</td>
</tr>
<tr>
<td>MSP 4296</td>
<td>History of Electronic Media (WI) (^4)</td>
</tr>
<tr>
<td>MSP 4454</td>
<td>Public Information Media Campaigns (^4)</td>
</tr>
</tbody>
</table>

Media & Critical Topics Requirement
Select a minimum of one of the following:  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSP 3421</td>
<td>Technology and Culture</td>
<td>3</td>
</tr>
<tr>
<td>MSP 4153</td>
<td>Media Criticism</td>
<td>3</td>
</tr>
<tr>
<td>MSP 4445</td>
<td>Media Images and Analysis</td>
<td>4</td>
</tr>
<tr>
<td>MSP 4446</td>
<td>Psychological Processing of Media</td>
<td>4</td>
</tr>
<tr>
<td>MSP 4453</td>
<td>Information Society</td>
<td>4</td>
</tr>
<tr>
<td>MSP 4497</td>
<td>Media and Children (WI)</td>
<td>4</td>
</tr>
</tbody>
</table>

**International/Intercultural Media Issues Requirement**

Select a minimum of one of the following:  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSP 3471</td>
<td>Media and Cultural Differences</td>
<td>3</td>
</tr>
<tr>
<td>MSP 3473</td>
<td>Media and the Environment</td>
<td>3</td>
</tr>
<tr>
<td>MSP 3572</td>
<td>Communication and Development</td>
<td>3</td>
</tr>
<tr>
<td>MSP 4496</td>
<td>Global Media (WI)</td>
<td>4</td>
</tr>
<tr>
<td>MSP 4571</td>
<td>Foreign Studies in BTMM</td>
<td>4</td>
</tr>
<tr>
<td>MSP 4572</td>
<td>British Media and Telecommunication</td>
<td>4</td>
</tr>
</tbody>
</table>

**Media Analysis Professional Option Selections**

Select a minimum of 18 credit hours from the following courses:  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSP 2141</td>
<td>Media Research</td>
<td>3</td>
</tr>
<tr>
<td>MSP 2421</td>
<td>Media Popular Culture</td>
<td>3</td>
</tr>
<tr>
<td>MSP 2741</td>
<td>Introduction to Internet Studies and Web Authoring</td>
<td>3</td>
</tr>
<tr>
<td>MSP 2889</td>
<td>Field Experience in Youth Media and Media Literacy</td>
<td>3</td>
</tr>
<tr>
<td>MSP 3196</td>
<td>Writing Workshop (WI)</td>
<td>3</td>
</tr>
<tr>
<td>MSP 4226</td>
<td>Public Media</td>
<td>3</td>
</tr>
<tr>
<td>MSP 4296</td>
<td>History of Electronic Media (WI)</td>
<td>4</td>
</tr>
<tr>
<td>MSP 4445</td>
<td>Media Images and Analysis</td>
<td>4</td>
</tr>
<tr>
<td>MSP 4446</td>
<td>Psychological Processing of Media</td>
<td>4</td>
</tr>
<tr>
<td>MSP 4453</td>
<td>Information Society</td>
<td>4</td>
</tr>
<tr>
<td>MSP 4454</td>
<td>Public Information Media Campaigns</td>
<td>4</td>
</tr>
<tr>
<td>MSP 4497</td>
<td>Media and Children (WI)</td>
<td>3</td>
</tr>
<tr>
<td>MSP 4541</td>
<td>Mobile Media</td>
<td>3</td>
</tr>
<tr>
<td>MSP 4696</td>
<td>Communication in Media Organizations (WI)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credit Hours**  

- **42-43**

---

1. Must be completed within the first 45 credits at Temple University. Students transferring in to Temple need to complete at least one Media Studies & Production foundation course at Temple, unless exempted by the chair of the department.

2. All majors must have 2.75 GPA or greater to enroll in the Internship (3-4 credit hours); all other majors with a lower GPA must complete at least one Practicum (MSP 4487, MSP 4596, MSP 4597, MSP 4687, MSP 4787, MSP 4887).

3. Taken during final 30 credits.

4. Courses in various categories can only be counted once.

**Internships and Senior Seminar**

The academic experience for all Media Studies & Production majors culminates with the MSP 4039 Senior Seminar and MSP 4785 Internship for 3 or 4 credit hours (NOTE: To qualify for an internship, students must have Junior or Senior standing, a minimum of 2.75 GPA, and passing grades (C-) in the Media Studies & Production requirement courses. For students with a GPA lower than 2.75, a Practicum must be completed in place of the Internship). Together, these courses provide students the opportunity to explore their potential professional futures. Internship opportunities exist locally (at virtually every media-oriented organization in the greater Philadelphia region), nationally (in New York City, Los Angeles, Chicago, and other U.S. media markets), and internationally (in London, Dublin, Paris, Barcelona, Hong Kong, and Tokyo through the School of Media and Communication's Study Away Program and Temple's Education Abroad Office). Students who wish to enroll in a second internship as an elective can take MSP 4786 for 1 to 3 credit hours.

**Practica**

There are six (6) practica options:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSP 4487</td>
<td>TUTV Practicum</td>
<td>3</td>
</tr>
<tr>
<td>MSP 4596</td>
<td>TV News Production Practicum - Temple Update</td>
<td>4</td>
</tr>
</tbody>
</table>
Students enrolled in TUTV Practicum (MSP 4487) play a key role in the operation of Temple University Television (TUTV) and will work with the course instructor, engineering staffers and others to schedule the station and produce original content. In the TV News Production Practicum - Temple Update (MSP 4596), students produce a weekly live-to-tape TV newsmagazine that airs on local cable TV. The Sports Production Practicum (MSP 4597) is a weekly sports program produced by students. Recording Industry Practicum (MSP 4687) is an intensive, practical course that engages students in the day-to-day operation of our student-run record label. Television Production Workshop (MSP 4787) also fulfills the requirement of a practicum and involves the production of various content also for broadcast on local cable.

Media Studies & Production courses designated as "Practicum" can be taken as either Media Studies & Production electives or in place of MSP 4785 Internship.

**Suggested Academic Plan**

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

**Bachelor of Arts in Media Studies & Production: Media Analysis Track**

Requirements for New Students starting in the 2015-2016 Academic Year

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSP 1021</td>
<td>Media and Society</td>
<td>3</td>
</tr>
<tr>
<td>MSP 1701</td>
<td>Introduction to Media Technology</td>
<td>3</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>COMM 1001</td>
<td>SMC Freshman Seminar</td>
<td>1</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td>Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MSP 1011</td>
<td>Introduction to Media Theory</td>
<td>3</td>
</tr>
<tr>
<td>Media Analysis Professional Option Course¹</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Media Analysis Professional Option Course¹</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3-4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td>Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Media Analysis Professional Option Course¹</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Media Analysis Professional Option Course¹</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td>Year 3</td>
<td>Fall</td>
<td>Credit Hours</td>
</tr>
<tr>
<td>Media Analysis Professional Option Course¹</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following (International/Intercultural Media Issues Requirement):¹</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>
### Year 3

<table>
<thead>
<tr>
<th>Term</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring</td>
<td>MSP 3471</td>
<td>Media and Cultural Differences</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MSP 3473</td>
<td>Media and the Environment</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MSP 3572</td>
<td>Communication and Development</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MSP 4496</td>
<td>Global Media [WI]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MSP 4571</td>
<td>Foreign Studies in BTMM</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MSP 4572</td>
<td>British Media and Telecommunication</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td></td>
<td></td>
<td>11</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

#### Spring

**Media Analysis Professional Option Course**: 1

Select one of the following (Media Policy & Ethics Requirement): 1

**MSP 4221**  Information Technology Policy

**MSP 4296**  History of Electronic Media [WI]

**MSP 4252**  Law and Ethics of Digital Media

**MSP 4454**  Public Information Media Campaigns

**Electives**  10

| **Term Credit Hours** | **16** |

### Year 4

<table>
<thead>
<tr>
<th>Term</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>MSP 4039</td>
<td>Senior Seminar</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Select one of the following (Media &amp; Critical Topics Requirement): 1</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MSP 3421</td>
<td>Technology and Culture</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MSP 4153</td>
<td>Media Criticism</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MSP 4445</td>
<td>Media Images and Analysis</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MSP 4446</td>
<td>Psychological Processing of Media</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MSP 4453</td>
<td>Information Society</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MSP 4497</td>
<td>Media and Children [WI]</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td></td>
<td></td>
<td>10</td>
</tr>
</tbody>
</table>

### Fall

| **Term Credit Hours** | **16** |

### Spring

Select one of the following (Internship or Practica): 1

**MSP 4785**  Internship

**MSP 4487**  TUTV Practicum

**MSP 4596**  TV News Production Practicum - Temple Update [WI]

**MSP 4597**  Sports Production Practicum [WI]

**MSP 4687**  Recording Industry Practicum

**MSP 4787**  Television Production Workshop

**MSP 4887**  Radio Production Practicum

**Electives**  12

| **Term Credit Hours** | **15** |

**Total Credit Hours**: 124

---

1. All students are required to take at least two WI courses in their major. Media Analysis track offers the following WI options: MSP 3196, MSP 4296, MSP 4497, and MSP 4696. International/Intercultural Media Issues competency area also offers another WI option: MSP 4496. If a student is eligible for MSP 4596 or MSP 4597 and chooses to take one of these courses to fulfill internship/practicum requirement, the course would also fulfill one of the WI requirements.

### Bachelor of Arts in Media Studies and Production: Media Business and Entrepreneurship Track

The Media Business & Entrepreneurship Professional Option track introduces students to the practical and ethical ways to start, operate or participate in an enterprise that creates, produces, and/or distributes media content. Students who follow this track seek career opportunities as media entrepreneurs,
media production freelancers, owners/operators of production companies or recording studios, web site developers, or founders/owners of a station, channel or network.

Requirements for the Degree of Bachelor of Arts

Summary of Requirements
The degree of Bachelor of Arts may be conferred upon a student majoring in Media Studies and Production by the recommendation of the faculty and upon satisfactory completion of a minimum of 124 semester hours of credit with a cumulative grade point average of 2.0 overall and in the major. Students must meet:

1. University requirements
   • All students are required to complete the General Education (GenEd (p. 143)) curriculum.
   • All students must take a minimum of two writing-intensive courses in the major at Temple University.

2. School of Media and Communication requirements (p. 937).
4. Each course that fulfills a requirement for the major must be passed with a C- or better.
5. All prerequisites must be met unless exempted in writing.
6. No more than 20 transfer credits may be applied to the Media Studies & Production major.
7. No more than 8 credits in Kinesiology and Dance activities courses.
8. No more than 12 credits total for internship, practicum, and independent study courses.

Media Studies And Production: Media Business & Entrepreneurship Track Requirements

Foundation Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSP 1011</td>
<td>Introduction to Media Theory</td>
<td>3</td>
</tr>
<tr>
<td>MSP 1021</td>
<td>Media and Society</td>
<td>3</td>
</tr>
<tr>
<td>MSP 1701</td>
<td>Introduction to Media Technology</td>
<td>3</td>
</tr>
<tr>
<td>MSP 4785</td>
<td>Internship (or Practicum)</td>
<td>3-4</td>
</tr>
<tr>
<td>MSP 4039</td>
<td>Senior Seminar</td>
<td>3</td>
</tr>
</tbody>
</table>

Media Policy & Ethics Requirement

Select a minimum of one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSP 4221</td>
<td>Information Technology Policy</td>
</tr>
<tr>
<td>MSP 4252</td>
<td>Law and Ethics of Digital Media</td>
</tr>
<tr>
<td>MSP 4296</td>
<td>History of Electronic Media (WI)</td>
</tr>
<tr>
<td>MSP 4454</td>
<td>Public Information Media Campaigns</td>
</tr>
</tbody>
</table>

Media & Critical Topics Requirement

Select a minimum of one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSP 3421</td>
<td>Technology and Culture</td>
</tr>
<tr>
<td>MSP 4153</td>
<td>Media Criticism</td>
</tr>
<tr>
<td>MSP 4445</td>
<td>Media Images and Analysis</td>
</tr>
<tr>
<td>MSP 4446</td>
<td>Psychological Processing of Media</td>
</tr>
<tr>
<td>MSP 4453</td>
<td>Information Society (WI)</td>
</tr>
<tr>
<td>MSP 4497</td>
<td>Media and Children (WI)</td>
</tr>
</tbody>
</table>

International/Intercultural Media Issues Requirement

Select a minimum of one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSP 3471</td>
<td>Media and Cultural Differences</td>
</tr>
<tr>
<td>MSP 3473</td>
<td>Media and the Environment</td>
</tr>
<tr>
<td>MSP 3572</td>
<td>Communication and Development</td>
</tr>
<tr>
<td>MSP 4496</td>
<td>Global Media (WI)</td>
</tr>
<tr>
<td>MSP 4571</td>
<td>Foreign Studies in BTMM</td>
</tr>
<tr>
<td>MSP 4572</td>
<td>British Media and Telecommunication</td>
</tr>
</tbody>
</table>

Media Business & Entrepreneurship Professional Option Selections

Select a minimum of 18 credit hours from the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSP 1655</td>
<td>The Business of Media</td>
</tr>
</tbody>
</table>
MSP 3225  Educational Multimedia Production  
MSP 3611  Media Advertising  
MSP 3631  Media Sales  
MSP 3663  Marketing Music and Media  
MSP 3701  Genres of Media Production  
MSP 4226  Public Media  
MSP 4453  Information Society  
MSP 4614  Creating a Media Business  
MSP 4641  Programming for Multiplatform Media  
MSP 4657  Current Issues in Media Management  
MSP 4663  Art and Business of Record Production  
MSP 4696  Communication in Media Organizations (WI)  
MSP 4703  Multimedia Production for Corporations and Non-Profits

Total Credit Hours 42-43

1. Must be completed within the first 45 credits at Temple University. Students transferring in to Temple need to complete at least one Media Studies & Production foundation course at Temple, unless exempted by the chair of the department.

2. All majors must have 2.75 GPA or greater to enroll in the Internship (3-4 credit hours); all other majors with a lower GPA must complete at least one Practicum (MSP 4487, MSP 4596, MSP 4597, MSP 4687, MSP 4787, MSP 4887).

3. Taken during final 30 credits.

4. If MSP 4453 is taken, student will decide whether to count it as Media & Critical Topics requirement or Media Business & Entrepreneurship option since courses in various categories can only be counted once.

Internships and Senior Seminar

The academic experience for all Media Studies & Production majors culminates with the MSP 4039 Senior Seminar and MSP 4785 Internship for 3 or 4 credit hours (NOTE: To qualify for an internship, students must have Junior or Senior standing, a minimum of 2.75 GPA, and passing grades (C-) in the Media Studies & Production requirement courses. For students with a GPA lower than 2.75, a Practicum must be completed in place of the Internship). Together, these courses provide students the opportunity to explore their potential professional futures. Internship opportunities exist locally (at virtually every media-oriented organization in the greater Philadelphia region), nationally (in New York City, Los Angeles, Chicago, and other U.S. media markets), and internationally (in London, Dublin, Paris, Barcelona, Hong Kong, and Tokyo through the School of Media and Communication’s Study Away Program and Temple’s Education Abroad Office). Students who wish to enroll in a second internship as an elective can take MSP 4786 for 1 to 3 credit hours.

Practica

There are six (6) practica options:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Practicum Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSP 4487</td>
<td>TUTV Practicum</td>
<td>3</td>
</tr>
<tr>
<td>MSP 4596</td>
<td>TV News Production Practicum - Temple Update</td>
<td>4</td>
</tr>
<tr>
<td>MSP 4597</td>
<td>Sports Production Practicum</td>
<td>4</td>
</tr>
<tr>
<td>MSP 4687</td>
<td>Recording Industry Practicum</td>
<td>3</td>
</tr>
<tr>
<td>MSP 4787</td>
<td>Television Production Workshop</td>
<td>3 to 8</td>
</tr>
<tr>
<td>MSP 4887</td>
<td>Radio Production Practicum</td>
<td>3</td>
</tr>
</tbody>
</table>

Students enrolled in TUTV Practicum (MSP 4487) play a key role in the operation of Temple University Television (TUTV) and will work with the course instructor, engineering staffers and others to schedule the station and produce original content. In the TV News Production Practicum - Temple Update (MSP 4596), students produce a weekly live-to-tape TV newsmagazine that airs on local cable TV. The Sports Production Practicum (MSP 4597) is a weekly sports program produced by students. Recording Industry Practicum (MSP 4687) is an intensive, practical course that engages students in the day-to-day operation of our student-run record label. Television Production Workshop (MSP 4787) also fulfills the requirement of a practicum and involves the production of various content also for broadcast on local cable.

Media Studies & Production courses designated as “Practicum” can be taken as either Media Studies & Production electives or in place of MSP 4785 Internship.

Suggested Academic Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.
Bachelor of Arts in Media Studies & Production: Media Business & Entrepreneurship Track
Requirements for New Students starting in the 2015-2016 Academic Year

<table>
<thead>
<tr>
<th>Year 1</th>
<th></th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MSP 1021</td>
<td>Media and Society</td>
<td>3</td>
</tr>
<tr>
<td>MSP 1701</td>
<td>Introduction to Media Technology</td>
<td>3</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>COMM 1001</td>
<td>SMC Freshman Seminar</td>
<td>1</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MSP 1011</td>
<td>Introduction to Media Theory</td>
<td>3</td>
</tr>
<tr>
<td>Media Business &amp; Entrepreneurship Course¹</td>
<td></td>
<td>3-4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th></th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Media Business &amp; Entrepreneurship Course¹</td>
<td></td>
<td>3-4</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3-4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Media Business &amp; Entrepreneurship Course¹</td>
<td></td>
<td>3-4</td>
</tr>
<tr>
<td>Media Business &amp; Entrepreneurship Course¹</td>
<td></td>
<td>3-4</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3</th>
<th></th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Media Business &amp; Entrepreneurship Course¹</td>
<td></td>
<td>3-4</td>
</tr>
<tr>
<td>Select one of the following (International/Intercultural Media Issues Requirement):¹</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>MSP 3471</td>
<td>Media and Cultural Differences</td>
<td>3</td>
</tr>
<tr>
<td>MSP 3473</td>
<td>Media and the Environment</td>
<td></td>
</tr>
<tr>
<td>MSP 3572</td>
<td>Communication and Development</td>
<td></td>
</tr>
<tr>
<td>MSP 4496</td>
<td>Global Media [W]</td>
<td></td>
</tr>
<tr>
<td>MSP 4571</td>
<td>Foreign Studies in BTMM</td>
<td></td>
</tr>
<tr>
<td>MSP 4572</td>
<td>British Media and Telecommunication</td>
<td></td>
</tr>
<tr>
<td>Electives</td>
<td></td>
<td>10</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Media Business &amp; Entrepreneurship Course¹</td>
<td></td>
<td>3-4</td>
</tr>
<tr>
<td>Select one of the following (Media &amp; Critical Topics Requirement):¹</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>MSP 3421</td>
<td>Technology and Culture</td>
<td></td>
</tr>
<tr>
<td>MSP 4153</td>
<td>Media Criticism</td>
<td></td>
</tr>
<tr>
<td>MSP 4445</td>
<td>Media Images and Analysis</td>
<td></td>
</tr>
<tr>
<td>MSP 4446</td>
<td>Psychological Processing of Media</td>
<td></td>
</tr>
</tbody>
</table>
MSP 4453  Information Society
MSP 4497  Media and Children [WI]

Electives  10

**Year 4**

**Fall**

MSP 4039  Senior Seminar  3

Select one of the following (Media Policy & Ethics Requirement):

- MSP 4221  Information Technology Policy  3
- MSP 4252  Law and Ethics of Digital Media
- MSP 4296  History of Electronic Media [WI]
- MSP 4454  Public Information Media Campaigns

Electives  10

**Term Credit Hours**  16

**Spring**

Select one of the following (Internship or Practica):\(^1\)

- MSP 4785  Internship  3-4
- MSP 4487  TUTV Practicum
- MSP 4596  TV News Production Practicum - Temple Update [WI]
- MSP 4597  Sports Production Practicum [WI]
- MSP 4687  Recording Industry Practicum
- MSP 4787  Television Production Workshop
- MSP 4887  Radio Production Practicum

Electives

**Term Credit Hours**  16

**Total Credit Hours:**  124

\(^1\) Media Business & Entrepreneurship Track has one WI built in as an option (MSP 4696). All students are required to take at least two WI courses in their major so each competency area (Media Policy & Ethics, Media & Critical Topics, and International/Intercultural Media Issues) offers a WI option to fulfill one of the WI requirements. If a student is eligible for MSP 4596 or MSP 4597 and chooses to take one of these courses to fulfill internship/practicum requirement, the course would also fulfill one of the WI requirements.

**Bachelor of Arts in Media Studies and Production: Media Production Track**

The Media Production Professional Option track introduces students to conceptual and technical tools employed to create media content for the digital world. Students who study in this track develop strong professional skills as well as critical and analytical abilities that enable them to evaluate content for various media. They seek career opportunities as producers, writers, videographers, editors, recording engineers, web site designers, and talent in traditional and emerging media.

**Requirements for the Degree**

**Summary of Requirements**

The degree of Bachelor of Arts may be conferred upon a student majoring in Media Studies and Production by the recommendation of the faculty and upon satisfactory completion of a minimum of 124 semester hours of credit with a cumulative grade point average of 2.0 overall and in the major. Students must meet:

1. University requirements
   - All students are required to complete the General Education (GenEd p. 143) curriculum.
   - All students must take a minimum of two writing-intensive courses in the major at Temple University.

2. School of Media and Communication requirements (p. 937).
4. Each course that fulfills a requirement for the major must be passed with a C- or better.
5. All prerequisites must be met unless exempted in writing.
6. No more than 20 transfer credits may be applied to the Media Studies & Production major.
7. No more than 8 credits in Kinesiology and Dance activities courses.
8. No more than 12 credits total for internship, practicum, and independent study courses.

### Media Studies And Production: Media Production Track Requirements

#### Foundation Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSP 1011</td>
<td>Introduction to Media Theory</td>
<td>3</td>
</tr>
<tr>
<td>MSP 1021</td>
<td>Media and Society</td>
<td>3</td>
</tr>
<tr>
<td>MSP 1701</td>
<td>Introduction to Media Technology</td>
<td>3</td>
</tr>
<tr>
<td>MSP 4785</td>
<td>Internship (or Practicum)</td>
<td>3-4</td>
</tr>
<tr>
<td>MSP 4039</td>
<td>Senior Seminar</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Media Policy & Ethics Requirement

Select a minimum of one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSP 4221</td>
<td>Information Technology Policy</td>
<td>3</td>
</tr>
<tr>
<td>MSP 4252</td>
<td>Law and Ethics of Digital Media</td>
<td></td>
</tr>
<tr>
<td>MSP 4296</td>
<td>History of Electronic Media (WI)</td>
<td></td>
</tr>
<tr>
<td>MSP 4454</td>
<td>Public Information Media Campaigns</td>
<td></td>
</tr>
</tbody>
</table>

#### Media & Critical Topics Requirement

Select a minimum of one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSP 3421</td>
<td>Technology and Culture</td>
<td></td>
</tr>
<tr>
<td>MSP 4153</td>
<td>Media Criticism</td>
<td></td>
</tr>
<tr>
<td>MSP 4445</td>
<td>Media Images and Analysis</td>
<td></td>
</tr>
<tr>
<td>MSP 4446</td>
<td>Psychological Processing of Media</td>
<td></td>
</tr>
<tr>
<td>MSP 4453</td>
<td>Information Society</td>
<td></td>
</tr>
<tr>
<td>MSP 4497</td>
<td>Media and Children (WI)</td>
<td></td>
</tr>
</tbody>
</table>

#### International/Intercultural Media Issues Requirement

Select a minimum of one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSP 3471</td>
<td>Media and Cultural Differences</td>
<td></td>
</tr>
<tr>
<td>MSP 3473</td>
<td>Media and the Environment</td>
<td></td>
</tr>
<tr>
<td>MSP 3572</td>
<td>Communication and Development</td>
<td></td>
</tr>
<tr>
<td>MSP 4496</td>
<td>Global Media (WI)</td>
<td></td>
</tr>
<tr>
<td>MSP 4571</td>
<td>Foreign Studies in BTMM</td>
<td></td>
</tr>
<tr>
<td>MSP 4572</td>
<td>British Media and Telecommunication</td>
<td></td>
</tr>
</tbody>
</table>

#### Media Production Professional Option Courses

Select a minimum of four of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSP 2701</td>
<td>Introduction to Media Production</td>
<td>4</td>
</tr>
<tr>
<td>or MSP 2751</td>
<td>Audio for Media</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSP 2721</td>
<td>Voice-Over Techniques for Media</td>
<td></td>
</tr>
<tr>
<td>MSP 3196</td>
<td>Writing Workshop (WI)</td>
<td></td>
</tr>
<tr>
<td>MSP 3631</td>
<td>Media Sales</td>
<td></td>
</tr>
<tr>
<td>MSP 3701</td>
<td>Genres of Media Production</td>
<td></td>
</tr>
<tr>
<td>MSP 3709</td>
<td>Advanced Editing</td>
<td></td>
</tr>
<tr>
<td>MSP 3721</td>
<td>Media Performance</td>
<td></td>
</tr>
<tr>
<td>MSP 3751</td>
<td>Studio Music Recording Techniques</td>
<td></td>
</tr>
<tr>
<td>MSP 3771</td>
<td>Radio</td>
<td></td>
</tr>
<tr>
<td>MSP 4541</td>
<td>Mobile Media</td>
<td></td>
</tr>
<tr>
<td>MSP 4641</td>
<td>Programming for Multiplatform Media</td>
<td></td>
</tr>
<tr>
<td>MSP 4663</td>
<td>Art and Business of Record Production</td>
<td></td>
</tr>
<tr>
<td>MSP 4701</td>
<td>Producing and Directing</td>
<td></td>
</tr>
<tr>
<td>MSP 4751</td>
<td>Audio Mixing and Mastering</td>
<td></td>
</tr>
<tr>
<td>MSP 4796</td>
<td>Creative Scriptwriting</td>
<td></td>
</tr>
</tbody>
</table>

**Total Credit Hours**: 42-45
Internships and Senior Seminar

The academic experience for all Media Studies & Production majors culminates with the MSP 4039 Senior Seminar and MSP 4785 Internship for 3 or 4 credit hours (NOTE: To qualify for an internship, students must have Junior or Senior standing, a minimum of 2.75 GPA, and passing grades (C-) in the Media Studies & Production requirement courses. For students with a GPA lower than 2.75, a Practicum must be completed in place of the Internship). Together, these courses provide students the opportunity to explore their potential professional futures. Internship opportunities exist locally (at virtually every media-oriented organization in the greater Philadelphia region), nationally (in New York City, Los Angeles, Chicago, and other U.S. media markets), and internationally (in London, Dublin, Paris, Barcelona, Hong Kong, and Tokyo through the School of Media and Communication's Study Away Program and Temple's Education Abroad Office). Students who wish to enroll in a second internship as an elective can take MSP 4786 for 1 to 3 credit hours.

Practica

There are six (6) practicum options:

- MSP 4487 TUTV Practicum 3
- MSP 4596 TV News Production Practicum - Temple Update 4
- MSP 4597 Sports Production Practicum 4
- MSP 4687 Recording Industry Practicum 3
- MSP 4787 Television Production Workshop 3 to 8
- MSP 4887 Radio Production Practicum 3

Students enrolled in TUTV Practicum (MSP 4487) play a key role in the operation of Temple University Television (TUTV) and will work with the course instructor, engineering staffers and others to schedule the station and produce original content. In the TV News Production Practicum - Temple Update (MSP 4596), students produce a weekly live-to-tape TV newsmagazine that airs on local cable TV. The Sports Production Practicum (MSP 4597) is a weekly sports program produced by students. Recording Industry Practicum (MSP 4687) is an intensive, practical course that engages students in the day-to-day operation of our student-run record label. Television Production Workshop (MSP 4787) also fulfills the requirement of a practicum and involves the production of various content also for broadcast on local cable.

Media Studies & Production courses designated as "Practicum" can be taken as either Media Studies & Production electives or in place of MSP 4785 Internship.

Suggested Academic Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Arts in Media Studies & Production: Media Production Track

Requirements for New Students starting in the 2015-2016 Academic Year

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>MSP 1021</td>
<td>Media and Society</td>
</tr>
<tr>
<td>MSP 1701</td>
<td>Introduction to Media Technology</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
</tr>
<tr>
<td>COMM 1001</td>
<td>SMC Freshman Seminar</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>15</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>MSP 1011</td>
<td>Introduction to Media Theory</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>4</td>
</tr>
</tbody>
</table>
### Year 2
#### Fall
- **Media Production Professional Option Course:** 3-4
- **IH 0851 or 0951:** Mosaic: Humanities Seminar I [GY] 3
- **GenEd Breadth Course:** 3-4
- **GenEd Breadth Course:** 3
- **Electives:** 3

#### Term Credit Hours
15

#### Spring
- **Media Production Professional Option Course:** 3-4
- **IH 0852 or 0952:** Mosaic: Humanities Seminar II [GZ] 3
- **GenEd Breadth Course:** 3
- **GenEd Breadth Course:** 3
- **Electives:** 3

#### Term Credit Hours
15

### Year 3
#### Fall
- **Media Production Professional Option Course:** 3-4
- **Select one of the following (Media & Critical Topics Requirement):**
  - **MSP 3421:** Technology and Culture
  - **MSP 4153:** Media Criticism
  - **MSP 4445:** Media Images and Analysis
  - **MSP 4446:** Psychological Processing of Media
  - **MSP 4453:** Information Society
  - **MSP 4497:** Media and Children [WI]
- **Electives:** 10

#### Term Credit Hours
16

#### Spring
- **Media Production Professional Option Course:** 3-4
- **Select one of the following (International/Intercultural Media Issues Requirement):**
  - **MSP 3471:** Media and Cultural Differences
  - **MSP 3473:** Media and the Environment
  - **MSP 3572:** Communication and Development
  - **MSP 4496:** Global Media [WI]
  - **MSP 4571:** Foreign Studies in BTMM
  - **MSP 4572:** British Media and Telecommunication
- **Electives:** 10

#### Term Credit Hours
16

### Year 4
#### Fall
- **MSP 4039:** Senior Seminar 3
- **Select one of the following (Media Policy & Ethics Requirement):**
  - **MSP 4221:** Information Technology Policy
  - **MSP 4252:** Law and Ethics of Digital Media
  - **MSP 4296:** History of Electronic Media [WI]
  - **MSP 4454:** Public Information Media Campaigns
- **Media Studies & Production Elective (if needed) or Electives:** 10

#### Term Credit Hours
16

#### Spring
Select one of the following (Internship or Practica):

- MSP 4785 Internship
- MSP 4487 TUTV Practicum
- MSP 4596 TV News Production Practicum - Temple Update [WI]
- MSP 4597 Sports Production Practicum [WI]
- MSP 4687 Recording Industry Practicum
- MSP 4787 Television Production Workshop
- MSP 4887 Radio Production Practicum

**Electives**

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Credit Hours</td>
<td>15</td>
</tr>
</tbody>
</table>

**1** Media Production Professional Option Track offers the following WI options: MSP 3196 and MSP 4796. All students are required to take at least two WI courses in their major so each competency area (Media Policy & Ethics, Media & Critical Topics, and International/Intercultural Media Issues) offers a WI option to fulfill one of the WI requirements. If a student wishes to take MSP 4596 or MSP 4597 to fulfill internship/practicum requirement, the course would also fulfill one of the WI requirements.

### Strategic Communication

R. Lance Holbert, Ph.D., Chair
Weiss Hall 216A
215-204-3152
http://smc.temple.edu/strc/

The Department of Strategic Communication educates students in the theory and practice of public communication and leadership, with the primary emphasis on communication and social influence or advocacy. The department offers a bachelor's degree in four concentrations that focus on a general sequence, as well as on persuasion and political culture, communication in organizations, and communication strategies. Their overarching goal is to influence internal and external audiences.

The department offers the general sequence and three optional concentrations: Organizational Leadership, Public Relations, and Rhetoric and Public Advocacy. In addition to completing the department core, students may select and fulfill the requirements of a concentration. Until students choose a concentration within Strategic Communication, they are deemed enrolled in the general sequence of Strategic Communication. Students are also required to complete courses outside the school.

### Programs

- Bachelor of Arts in Strategic Communication (p. 996)
- Bachelor of Arts in Strategic Communication: Concentration in Organizational Leadership (p. 998)
- Bachelor of Arts in Strategic Communication: Concentration in Public Relations (p. 1000)
- Bachelor of Arts in Strategic Communication: Concentration in Rhetoric & Public Advocacy (p. 1003)
- Minor in Leadership (p. 1005)
- Minor in Public Relations (p. 1006)

### Bachelor of Arts in Strategic Communication

The General Sequence allows students more flexibility in studying strategic communication; more flexibility in meeting the necessary requirements of the major; and more flexibility in designing unique sequences of courses suited for particular goals and career paths.

### Summary of Requirements

The degree of Bachelor of Arts may be conferred upon a student majoring in Strategic Communication by the recommendation of the faculty and upon satisfactory completion of a minimum of 124 semester hours of credit with a cumulative grade point average of 2.0 overall and in the major. Students must meet:

1. University requirements:
   - All students required to complete the General Education (GenEd (p. 143)) curriculum.
   - All students must take a minimum of two writing-intensive courses in their major at Temple University.

2. School of Media and Communication requirements (p. 937).
3. Minimum 36 credit hours in Strategic Communication, including the department’s four Core courses (12 hours).
4. Maximum 54 credit hours may be taken in Strategic Communication courses.
5. A grade of C or higher must be attained in all required Strategic Communication courses.
6. No more than 12 semester hours of transfer credits may be applied to Strategic Communication requirements.
7. No more than 8 credits may be taken in Kinesiology and Dance activities courses.

### Strategic Communication General Sequence

**Department Core Requirements**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STRC 1111</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>or STRC 1911</td>
<td>Honors Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>STRC 1112</td>
<td>Communicating Leadership</td>
<td>3</td>
</tr>
<tr>
<td>STRC 2111</td>
<td>Introduction to Communication Theory</td>
<td>3</td>
</tr>
<tr>
<td>STRC 2112</td>
<td>Strategies and Tactics of Persuasion</td>
<td>3</td>
</tr>
</tbody>
</table>

**General Sequence Requirements**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000+ STRC Writing Intensive Course</td>
<td>3</td>
</tr>
<tr>
<td>Three STRC Courses at 2000-level or above</td>
<td>9</td>
</tr>
<tr>
<td>3000+ STRC Writing Intensive Course</td>
<td>3</td>
</tr>
<tr>
<td>Three STRC Courses at 3000-level or above</td>
<td>9</td>
</tr>
</tbody>
</table>

**Total Credit Hours**

36

### Suggested Academic Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

### Bachelor of Arts in Strategic Communication: General Sequence

**Requirements for New Students starting in the 2015-2016 Academic Year**

#### Year 1

##### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STRC 1112</td>
<td>Communicating Leadership</td>
<td>3</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>COMM 1001</td>
<td>SMC Freshman Seminar</td>
<td>1</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

15

##### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STRC 1111 or 1911</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3-4</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Term Credit Hours**

15

#### Year 2

##### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STRC 2000+ Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>STRC 2000+ WI Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Term Credit Hours**

15

##### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STRC 2111</td>
<td>Introduction to Communication Theory</td>
<td>3</td>
</tr>
<tr>
<td>STRC 2000+ Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>
Bachelor of Arts in Strategic Communication: Concentration in Organizational Leadership

The concentration in Organizational Leadership provides students with a thorough grounding in organizational and small-group communication. Students' coursework in these areas will incorporate a special focus on both the theories and skills needed for the creation and maintenance of fruitful leader-follower relationships.

Summary of Requirements

The degree of Bachelor of Arts may be conferred upon a student majoring in Strategic Communication by the recommendation of the faculty and upon satisfactory completion of a minimum of 124 semester hours of credit with a cumulative grade point average of 2.0 overall and in the major. Students must meet:

1. University requirements:
   • All students are required to complete the General Education (GenEd (p. 143)) curriculum.
   • All students must take a minimum of two writing-intensive courses in their major at Temple University.

2. School of Media and Communication requirements (p. 937).

3. Minimum 36 credit hours in Strategic Communication, including the department's four Core courses (12 hours).

4. Maximum 54 credit hours may be taken in Strategic Communication courses.

5. A grade of C or higher must be attained in all required Strategic Communication courses.

6. No more than 12 semester hours of transfer credits may be applied to Strategic Communication requirements.

7. No more than 8 credits may be taken in Kinesiology and Dance activities courses.

Organizational Leadership Concentration

Department Core Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>STRC 1111</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>or STRC 1911</td>
<td>Honors Public Speaking</td>
<td></td>
</tr>
<tr>
<td>STRC 1112</td>
<td>Communicating Leadership</td>
<td>3</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credit Hours</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>STRC 2111</td>
<td>Introduction to Communication Theory</td>
<td>3</td>
</tr>
<tr>
<td>STRC 2112</td>
<td>Strategies and Tactics of Persuasion</td>
<td>3</td>
</tr>
</tbody>
</table>

**Concentration Core Requirements**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STRC 2661</td>
<td>Introduction to Organizational Communication</td>
<td>3</td>
</tr>
<tr>
<td>STRC 2662</td>
<td>Leading Groups and Team Building</td>
<td>3</td>
</tr>
<tr>
<td>STRC 3663</td>
<td>Research Methods for Organizational Communication</td>
<td>3</td>
</tr>
<tr>
<td>STRC 4696</td>
<td>Diverse Communication and Leadership (WI)</td>
<td>3</td>
</tr>
<tr>
<td>STRC 4774</td>
<td>Communicating Organizational Change</td>
<td>3</td>
</tr>
</tbody>
</table>

**Organizational Leadership Concentration Electives**

Select three of the following (one must be WI):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STRC 2296</td>
<td>Rhetoric of Social Movements (WI)</td>
<td>3</td>
</tr>
<tr>
<td>STRC 2496</td>
<td>News Writing and Media Relations (WI)</td>
<td>3</td>
</tr>
<tr>
<td>STRC 2552</td>
<td>Introduction to Public Relations</td>
<td>3</td>
</tr>
<tr>
<td>STRC 2672</td>
<td>Global Communication and Leadership</td>
<td>3</td>
</tr>
<tr>
<td>STRC 3396</td>
<td>Rhetorical Criticism (WI)</td>
<td>3</td>
</tr>
<tr>
<td>STRC 3670</td>
<td>Special Topics in Organizational Leadership</td>
<td>3</td>
</tr>
<tr>
<td>STRC 3685</td>
<td>Internship in Organizational Leadership</td>
<td>3</td>
</tr>
<tr>
<td>STRC 3801</td>
<td>Intercultural Communication</td>
<td>3</td>
</tr>
<tr>
<td>STRC 4670</td>
<td>Special Topics in Organizational Leadership</td>
<td>3</td>
</tr>
<tr>
<td>STRC 4775</td>
<td>Health Communication</td>
<td>3</td>
</tr>
<tr>
<td>STRC 4879</td>
<td>Collaborative Advocacy</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credit Hours**

36

**Suggested Academic Plan**

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

**Bachelor of Arts in Strategic Communication: Concentration in Organizational Leadership**

**Requirements for New Students starting in the 2015-2016 Academic Year**

**Year 1**

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STRC 1112</td>
<td>Communicating Leadership</td>
<td>3</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>COMM 1001</td>
<td>SMC Freshman Seminar</td>
<td>1</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

15

**Spring**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STRC 1111 or 1911</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3-4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

15

**Year 2**

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STRC 2661</td>
<td>Introduction to Organizational Communication</td>
<td>3</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

15

**Spring**
Bachelor of Arts in Strategic Communication: Concentration in Public Relations

Public Relations uses communication techniques to influence behaviors and attitudes. The Public Relations concentration combines public relations classes with requirements in public speaking, leadership, persuasion, and communication theory, and is satisfied through completing 36 semester hours in the major.

Summary of Requirements

The degree of Bachelor of Arts may be conferred upon a student majoring in Strategic Communication by the recommendation of the faculty and upon satisfactory completion of a minimum of 124 semester hours of credit with a cumulative grade point average of 2.0 overall and in the major. Students must meet:
1. University requirements:
   - All students are required to complete the General Education (GenEd (p. 143)) curriculum.
   - All students must take a minimum of two writing-intensive courses in their major at Temple University.

2. School of Media and Communication requirements (p. 937).
3. Minimum 36 credit hours in Strategic Communication, including the department's four Core courses (12 hours).
4. Maximum 54 credit hours may be taken in Strategic Communication courses.
5. A grade of C or higher must be attained in all required Strategic Communication courses.
6. No more than 12 semester hours of transfer credits may be applied to Strategic Communication requirements.
7. No more than 8 credits may be taken in Kinesiology and Dance activities courses.

### Public Relations Concentration

**Department Core Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>STRC 1111</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>or STRC 1911</td>
<td>Honors Public Speaking</td>
<td></td>
</tr>
<tr>
<td>STRC 1112</td>
<td>Communicating Leadership</td>
<td>3</td>
</tr>
<tr>
<td>STRC 2111</td>
<td>Introduction to Communication Theory</td>
<td>3</td>
</tr>
<tr>
<td>STRC 2112</td>
<td>Strategies and Tactics of Persuasion</td>
<td>3</td>
</tr>
</tbody>
</table>

**Concentration Core Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>STRC 2496</td>
<td>News Writing and Media Relations</td>
<td>3</td>
</tr>
<tr>
<td>STRC 2551</td>
<td>Media Information Gathering and Evaluation</td>
<td>3</td>
</tr>
<tr>
<td>STRC 2552</td>
<td>Introduction to Public Relations</td>
<td>3</td>
</tr>
<tr>
<td>STRC 3543</td>
<td>Fundamentals of Public Relations Writing</td>
<td>3</td>
</tr>
<tr>
<td>STRC 3596</td>
<td>Advanced Public Relations Writing</td>
<td>3</td>
</tr>
<tr>
<td>STRC 4859</td>
<td>Public Relations Management and Case Problems</td>
<td>3</td>
</tr>
</tbody>
</table>

**Required Courses in other Strategic Communication Concentrations**

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>STRC 2661</td>
<td>Introduction to Organizational Communication</td>
<td>3</td>
</tr>
<tr>
<td>STRC 2662</td>
<td>Leading Groups and Team Building</td>
<td></td>
</tr>
<tr>
<td>STRC 2672</td>
<td>Global Communication and Leadership</td>
<td></td>
</tr>
<tr>
<td>STRC 3801</td>
<td>Intercultural Communication</td>
<td></td>
</tr>
<tr>
<td>STRC 4774</td>
<td>Communicating Organizational Change</td>
<td></td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>STRC 2296</td>
<td>Rhetoric of Social Movements</td>
<td>3</td>
</tr>
<tr>
<td>STRC 3323</td>
<td>Rhetoric and Political Culture</td>
<td></td>
</tr>
<tr>
<td>STRC 3333</td>
<td>Rhetorical Theory</td>
<td></td>
</tr>
<tr>
<td>STRC 3336</td>
<td>Argumentation</td>
<td></td>
</tr>
<tr>
<td>STRC 3396</td>
<td>Rhetorical Criticism</td>
<td></td>
</tr>
</tbody>
</table>

**Special Topics, Independent Study, and Internships**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>STRC 2440</td>
<td>Special Topics in Public Relations</td>
<td></td>
</tr>
<tr>
<td>STRC 3440</td>
<td>Special Topics in Public Relations</td>
<td></td>
</tr>
<tr>
<td>STRC 4440</td>
<td>Special Topics in Public Relations</td>
<td></td>
</tr>
<tr>
<td>STRC 3483</td>
<td>Directed Readings in Public Relations</td>
<td></td>
</tr>
<tr>
<td>STRC 3582</td>
<td>Independent Study in Public Relations</td>
<td></td>
</tr>
<tr>
<td>STRC 3585</td>
<td>Internship in Public Relations</td>
<td></td>
</tr>
</tbody>
</table>

**Total Credit Hours**

- 36

---

1. May take STRC 2496 concurrently with either STRC 2551 or STRC 2552 (but not both).
2. Students in the PR concentration are strongly urged to take STRC 2552 before taking STRC 2551.
3. Open only to PR concentration and General Sequence students. Prerequisite: successful completion of STRC 2496, STRC 2551, STRC 2552 and STRC 3543.
Suggested Academic Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Arts in Strategic Communication: Concentration in Public Relations

Requirements for New Students starting in the 2015-2016 Academic Year

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>STRC 1112</td>
<td>Communicating Leadership</td>
</tr>
<tr>
<td></td>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
</tr>
<tr>
<td></td>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>COMM 1001</td>
<td>SMC Freshman Seminar</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Spring</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>STRC 1111 or 1911</td>
<td>Public Speaking</td>
</tr>
<tr>
<td></td>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3-4</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>STRC 2496</td>
<td>News Writing and Media Relations [WI]</td>
</tr>
<tr>
<td></td>
<td>STRC 2552</td>
<td>Introduction to Public Relations</td>
</tr>
<tr>
<td></td>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Spring</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>STRC 2111</td>
<td>Introduction to Communication Theory</td>
</tr>
<tr>
<td></td>
<td>STRC 2551</td>
<td>Media Information Gathering and Evaluation</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Electives</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>STRC 2112</td>
<td>Strategies and Tactics of Persuasion</td>
</tr>
<tr>
<td></td>
<td>STRC 3543</td>
<td>Fundamentals of Public Relations Writing</td>
</tr>
<tr>
<td></td>
<td>Electives</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Spring</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>STRC 3596</td>
<td>Advanced Public Relations Writing [WI]</td>
</tr>
<tr>
<td></td>
<td>Electives</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Select one of the following:</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>STRC 2661</td>
<td>Introduction to Organizational Communication</td>
</tr>
<tr>
<td></td>
<td>STRC 2662</td>
<td>Leading Groups and Team Building</td>
</tr>
<tr>
<td></td>
<td>STRC 2672</td>
<td>Global Communication and Leadership</td>
</tr>
<tr>
<td></td>
<td>STRC 3801</td>
<td>Intercultural Communication</td>
</tr>
<tr>
<td></td>
<td>STRC 4774</td>
<td>Communicating Organizational Change</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>
Bachelor of Arts in Strategic Communication: Concentration in Rhetoric & Public Advocacy

The Rhetoric and Public Advocacy Concentration provides students with theory and practice in social influence. Students learn theories of advocacy in a variety of settings, gain experience in critical analysis of persuasive messages, and develop skills in creating strategic communications.

Summary of Requirements

The degree of Bachelor of Arts may be conferred upon a student majoring in Strategic Communication by the recommendation of the faculty and upon satisfactory completion of a minimum of 124 semester hours of credit with a cumulative grade point average of 2.0 overall and in the major. Students must meet:

1. University requirements:
   - All students are required to complete the General Education (GenEd (p. 143)) curriculum.
   - All students must take a minimum of two writing-intensive courses in their major at Temple University.

2. School of Media and Communication requirements (p. 937).

3. Minimum 36 credit hours in Strategic Communication, including the department's four Core courses (12 hours).

4. Maximum 54 credit hours may be taken in Strategic Communication courses.

5. A grade of C or higher must be attained in all required Strategic Communication courses.

6. No more than 12 semester hours of transfer credits may be applied to Strategic Communication requirements.

7. No more than 8 credits may be taken in Kinesiology and Dance activities courses.

Rhetoric and Public Advocacy Concentration

Department Core Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>STRC 111</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>or STRC 1911</td>
<td>Honors Public Speaking</td>
<td></td>
</tr>
<tr>
<td>STRC 112</td>
<td>Communicating Leadership</td>
<td>3</td>
</tr>
<tr>
<td>STRC 2111</td>
<td>Introduction to Communication Theory</td>
<td>3</td>
</tr>
<tr>
<td>STRC 2112</td>
<td>Strategies and Tactics of Persuasion</td>
<td>3</td>
</tr>
</tbody>
</table>

Concentration Core Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>STRC 2221</td>
<td>Public Advocacy</td>
<td>3</td>
</tr>
<tr>
<td>STRC 2296</td>
<td>Rhetoric of Social Movements</td>
<td>3</td>
</tr>
<tr>
<td>STRC 3333</td>
<td>Rhetorical Theory</td>
<td>3</td>
</tr>
<tr>
<td>STRC 3336</td>
<td>Argumentation</td>
<td>3</td>
</tr>
<tr>
<td>STRC 3396</td>
<td>Rhetorical Criticism</td>
<td>3</td>
</tr>
<tr>
<td>STRC 4839</td>
<td>Seminar in Rhetoric and Public Advocacy (capstone)</td>
<td>3</td>
</tr>
</tbody>
</table>

Rhetoric & Public Advocacy Concentration Elective Courses
Select two of the following:  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>STRC 3234</td>
<td>Speech Writing</td>
</tr>
<tr>
<td>STRC 3323</td>
<td>Rhetoric and Political Culture</td>
</tr>
<tr>
<td>STRC 2552</td>
<td>Introduction to Public Relations</td>
</tr>
<tr>
<td>STRC 2661</td>
<td>Introduction to Organizational Communication</td>
</tr>
<tr>
<td>STRC 2662</td>
<td>Leading Groups and Team Building</td>
</tr>
<tr>
<td>STRC 2440</td>
<td>Special Topics in Public Relations</td>
</tr>
<tr>
<td>STRC 3440</td>
<td>Special Topics in Public Relations</td>
</tr>
<tr>
<td>STRC 3801</td>
<td>Intercultural Communication</td>
</tr>
<tr>
<td>STRC 4440</td>
<td>Special Topics in Public Relations</td>
</tr>
</tbody>
</table>

**Special Topics, Independent Study, and Internships**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>STRC 3220</td>
<td>Special Topics in Rhetoric and Public Advocacy</td>
</tr>
<tr>
<td>STRC 3382</td>
<td>Independent Study in Rhetoric and Public Advocacy</td>
</tr>
<tr>
<td>STRC 3385</td>
<td>Internship in Rhetoric and Public Advocacy</td>
</tr>
<tr>
<td>STRC 4220</td>
<td>Special Topics in Rhetoric and Public Advocacy</td>
</tr>
</tbody>
</table>

**Total Credit Hours** 36

**Suggested Academic Plan**

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

**Bachelor of Arts in Strategic Communication: Concentration in Rhetoric and Public Advocacy**

**Requirements for New Students starting in the 2015-2016 Academic Year**

**Year 1**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>STRC 1112</td>
<td>Communicating Leadership</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>COMM 1001</td>
<td>SMC Freshman Seminar</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Term Credit Hours</td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>Spring</td>
<td>STRC 1111 or 1911</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
<td>3-4</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Term Credit Hours</td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

**Year 2**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>STRC 2111</td>
<td>Introduction to Communication Theory</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>STRC 2221</td>
<td>Public Advocacy</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Term Credit Hours</td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>Spring</td>
<td>STRC 2296</td>
<td>Rhetoric of Social Movements (WI)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Electives</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Term Credit Hours</td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

Select one of the following:  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>STRC 2440</td>
<td>Special Topics in Public Relations</td>
</tr>
<tr>
<td>STRC 2552</td>
<td>Introduction to Public Relations</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>STRC 2661</td>
<td>Introduction to Organizational Communication</td>
</tr>
<tr>
<td>STRC 2662</td>
<td>Leading Groups and Team Building</td>
</tr>
<tr>
<td>STRC 3234</td>
<td>Speech Writing</td>
</tr>
<tr>
<td>STRC 3323</td>
<td>Rhetoric and Political Culture</td>
</tr>
<tr>
<td>STRC 3440</td>
<td>Special Topics in Public Relations</td>
</tr>
<tr>
<td>STRC 3801</td>
<td>Intercultural Communication</td>
</tr>
<tr>
<td>STRC 4440</td>
<td>Special Topics in Public Relations</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 15

**Year 3**

<table>
<thead>
<tr>
<th>Term</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>STRC 2112 Strategies and Tactics of Persuasion</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>STRC 3336 Argumentation</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Electives</td>
<td>10</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 16

<table>
<thead>
<tr>
<th>Term</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring</td>
<td>STRC 3396 Rhetorical Criticism [WI]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Electives</td>
<td>10</td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STRC 2440</td>
<td>Special Topics in Public Relations</td>
<td>3</td>
</tr>
<tr>
<td>STRC 2552</td>
<td>Introduction to Public Relations</td>
<td></td>
</tr>
<tr>
<td>STRC 2661</td>
<td>Introduction to Organizational Communication</td>
<td></td>
</tr>
<tr>
<td>STRC 2662</td>
<td>Leading Groups and Team Building</td>
<td></td>
</tr>
<tr>
<td>STRC 3234</td>
<td>Speech Writing</td>
<td></td>
</tr>
<tr>
<td>STRC 3323</td>
<td>Rhetoric and Political Culture</td>
<td></td>
</tr>
<tr>
<td>STRC 3440</td>
<td>Special Topics in Public Relations</td>
<td></td>
</tr>
<tr>
<td>STRC 3801</td>
<td>Intercultural Communication</td>
<td></td>
</tr>
<tr>
<td>STRC 4440</td>
<td>Special Topics in Public Relations</td>
<td></td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 16

**Year 4**

<table>
<thead>
<tr>
<th>Term</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>STRC 3333 Rhetorical Theory (Fall Only)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Electives</td>
<td>13</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 16

<table>
<thead>
<tr>
<th>Term</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring</td>
<td>STRC 4839 Seminar in Rhetoric and Public Advocacy (capstone)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Electives</td>
<td>13</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 16

**Total Credit Hours:** 124

**Minor in Leadership**

The Leadership Minor comprises six courses (18 s.h.) that provide students in other Temple University programs the opportunity to better prepare for life after graduation by acquiring the knowledge and skills required to communicate effectively and to lead at the organizational, team, and individual levels.

The goal of the Leadership Minor is to help students to understand that leadership is a communication and relational process, not a position. Viewed that way, leadership requires responsible, thoughtful reflection and action at all societal levels. That also requires competencies in being self-aware, in managing teams, in making ethical decisions, and leading with an intent to engender positive change.

**Requirements**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STRC 1111</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>or STRC 1911</td>
<td>Honors Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>STRC 1112</td>
<td>Communicating Leadership</td>
<td>3</td>
</tr>
<tr>
<td>STRC 2661</td>
<td>Introduction to Organizational Communication</td>
<td>3</td>
</tr>
</tbody>
</table>
Minor in Public Relations

The Public Relations minor consists of seven courses (21 s.h.) that provide students in other programs at Temple University the opportunity to better prepare them for life after graduation by gaining the knowledge and skill sets required to communicate effectively and lead at the organizational, team, and individual levels.

The goal of the Public Relations minor is to help students to understand that public relations is a communication and relational process, not a position. Viewed this way, public relations requires responsible, thoughtful reflection and action from all levels of organizations, not just those in leadership positions. This approach requires competencies of self-awareness, oral and written communication skills, ethical decision-making and action, and the ability to understand audiences and generate mutual win-win scenarios using a variety of communication tools to generate a vision and lead with, through, and for others to bring about positive change.

This program will build both knowledge and skills for students to understand true public relations, e.g., “relating” to publics in a meaningful two-way dialogue built on mutual trust and respect, and be able to effectively formulate a position and influence and empower others. They will be able to use the knowledge gained from this program to bridge the divide between the theoretical and practical application in the business they work in and the communities they serve.

Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STRC 1111</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>or STRC 1911</td>
<td>Honors Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>STRC 1112</td>
<td>Communicating Leadership</td>
<td>3</td>
</tr>
<tr>
<td>STRC 2111</td>
<td>Introduction to Communication Theory</td>
<td>3</td>
</tr>
<tr>
<td>STRC 2112</td>
<td>Strategies and Tactics of Persuasion</td>
<td>3</td>
</tr>
<tr>
<td>STRC 2551</td>
<td>Media Information Gathering and Evaluation</td>
<td>3</td>
</tr>
<tr>
<td>STRC 2552</td>
<td>Introduction to Public Relations</td>
<td>3</td>
</tr>
<tr>
<td>STRC 3543</td>
<td>Fundamentals of Public Relations Writing</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credit Hours 21
College of Science & Technology

Founded 1998

Michael Klein, Dean
400 Carnell Hall
1803 North Broad Street
215-204-2888
http://cst.temple.edu/
cst@temple.edu

Introduction

Science and technology were responsible for a profound transformation of the world in the 20th century and will drive the economy of the 21st century. The objectives of the undergraduate programs of the College of Science and Technology are to prepare students for careers in these important areas and to graduate informed, responsible citizens.

The college approaches science and technology as a body of knowledge that has an advancing frontier and a complex interface with society. The traditional mandate for a university is to provide undergraduate students with a comprehensive education and the opportunity to focus closely on a particular area of study. The College of Science and Technology embraces this mandate and extends additional opportunities to our students. Science and Technology students are encouraged to participate in faculty research projects and thus experience the advancement of this body of knowledge.

Bachelor of Science programs offer a greater concentration in major coursework, while Bachelor of Arts programs offer a greater variety of coursework. All programs offer undergraduates the opportunity to work with distinguished faculty and a richly-diverse and stimulating student body as they prepare for active roles in society.

Mission Statement

The mission of the College of Science and Technology is to seek academic excellence by providing outstanding instruction in the sciences, and to foster scientific research of the highest quality. In pursuing its mission the College is committed to meeting the needs of a diverse student body, and is truly dedicated to the founding principles of Temple University in providing a superior education to the prepared student. The educational mission of the College is pursued through offering a current curriculum that incorporates the fundamental principles as well as the latest discoveries in the major scientific disciplines.

Interdisciplinary degree programs and independent research projects allow the student to explore scientific boundaries. The College offers a general education curriculum that provides the opportunity for non-science majors to be better informed of the complex scientific and ethical issues facing society. The College also strives to improve science and mathematics education in the Philadelphia schools. All of these aspects of the educational mission of the College are achieved through the dedicated efforts of the faculty, who are leading scholars in their field.

The research mission of the College is pursued through a sustained effort to recruit the best and brightest new faculty, to aggressively develop promising research initiatives, and to create a modern science campus with facilities fully supportive of cutting-edge research. The College also strives to support the scholarly pursuits and professional activities of its faculty, who in turn advance their respective disciplines. In doing so, the College provides an outstanding environment for graduate and undergraduate research, with the Departments and Centers as focal points for interdisciplinary research initiatives and graduate degree programs. In pursuing its research mission the College of Science and Technology will be a vital participant in establishing Temple University as a recognized center of excellence in scientific research and development.

Admissions

See Undergraduate Admissions (p. 19) for more details.

Financial Aid / Scholarships

See Financial Aid: Scholarships & Grants (p. 137) for more details.

Special Programs

Study Abroad

See Education Abroad (p. 49) in the Opportunities section of this Bulletin and Temple University's Study Abroad web site at http://studyabroad.temple.edu/ for more information about study abroad options.
University Honors Program
Students in the College of Science and Technology may apply to the University Honors Program. Honors students are eligible to enroll in CST honors courses, provided that they have satisfied the prerequisites and co-requisites. Honors courses are designated with a nine as the second digit in the four-digit number, e.g. MATH 1941 is Honors Calculus I. See Academic Opportunities: University Honors Program (p. 51) for more information.

Undergraduate Research Program
Students in the College of Science and Technology may participate in real-world research experience with world-class scientists. Completing hands-on independent research is critical to the next step in a student's educational or professional career.

Science Scholars Program
The Science Scholars Program offers accomplished and motivated students additional research opportunities and mentorships.

TUteach Certification for Secondary Education
Eight Bachelor of Science programs enable students to prepare for secondary education certification while mastering the content of their field. The programs are: Biology with Teaching, Chemistry with Teaching, Earth and Space Science with Teaching, General Science with Teaching, Mathematics with Teaching, Mathematics and Computer Science with Teaching, Mathematics and Technology with Teaching, and Physics with Teaching. The programs require that students complete the collegial Bachelor of Science requirements and a total of 124 credits. See the TUteach Programs (p. 1162) for more details.

Accelerated Five-Year Bachelor's/Master's Programs with Teacher Certification
The Biology, Chemistry, Earth & Environmental Science, Mathematics, and Physics Departments enable talented students to complete both a Bachelor's degree in one of the above departments and a Master's degree in Education in a total of five years. After completing the Bachelor's degree in one of the aforementioned disciplines, students spend an additional year as a graduate student in the College of Education. Students must apply for the five-year Master's program during their sophomore year. If accepted, they will take both undergraduate major courses as well as Master's in Education courses beginning in their junior year. They complete their undergraduate major in their fourth year and their Master's in their fifth year. Students who complete this program earn a Master of Education degree and are certified to teach in Pennsylvania schools. See the College of Education (p. 393) for more details.

Early Admission to Professional Programs
Students in the College of Science and Technology who have been admitted to one of the following programs: Lewis Katz School of Medicine at Temple University, Temple University Kornberg School of Dentistry, Temple University School of Podiatry, Temple University School of Pharmacy, or the Doctorate of Physical Therapy, at the end of their third year and have completed 90 semester hours, including all course requirements for the major, College and University, may transfer their first year in professional study toward the completion of the credit requirements for the degree of Bachelor of Arts. Biology and Chemistry majors may also transfer approved courses in their first year of professional study toward the elective courses in their major.

Students in the College of Science and Technology who have been admitted to other health-related professional schools at the end of their third year with a cumulative GPA of at least 3.5 and who have completed 90 semester hours, including all course requirements of the major, College and University, may petition the dean for the transfer of their first year of professional study toward the completion of the credit requirements for the degree of Bachelor of Arts. University residency (p. 83) requirements must also be met.

Awards and Achievements
Awards
Juniors and seniors are often honored for outstanding performance in a variety of academic areas and for exceptional service to the College and the University. Information about these awards is available in departmental offices or in the Office of Student Services, 1810 Liacouras Walk, Room 203.

Distinction in Major
Many programs allow exceptional students to receive a Distinction in Major. Please see the Bulletin pages for the specific requirements for any particular major.

Phi Beta Kappa
See Honor Societies: Phi Beta Kappa (p. 57).
Student Associations

Majors' Associations

Many of the departments within the College of Science and Technology support student interest organizations known as Majors' Associations or Societies. Each department organization provides an opportunity for students to interact with faculty and other students who share similar interests. It is through these venues that students may influence course offerings, faculty recruitment, and departmental policy.

- Biochemistry Society
  https://temple.collegiatelink.net/organization/Biochemistry_Society
- Biology Society
  https://temple.collegiatelink.net/organization/Biology_Society
  http://tubiosociety.weebly.com
- Chemical Society
  https://temple.collegiatelink.net/organization/Chemical_Society
  http://tucs.weebly.com
- Philadelphia Organic Chemists Club
  http://www.pocclub.org
- Association for Computing Machinery (CS and IS&T)
  https://temple.collegiatelink.net/organization/ACM
  http://acm.temple.edu/#/about
- Association for Computing Machinery for Women (CS and IS&T):
  https://temple.collegiatelink.net/organization/ACMW
- Geology Society
  https://ees.cst.temple.edu/geology_club/
- Society for Undergraduate Mathematics
- Math Club
  https://temple.collegiatelink.net/organization/Math_Club
  https://math.temple.edu/mathclub/
- Society of Physics Students
  https://temple.collegiatelink.net/organization/Society_of_Physics_Students
- Research Society

Pre-Professional Health Associations

Temple University has many pre-professional health organizations that may interest students in the College of Science and Technology. These organizations allow students to interact with others with similar professional interests and gain more knowledge about admissions requirements and examinations.

- American Medical Student Association
  https://temple.collegiatelink.net/organization/AMSA
- Alpha Epsilon Delta (AED) Health Pre-Professional Honor Society
  http://templeaed.weebly.com/index.html
- SNMA: Student National Medical Association
  www.snma.org (http://www.snma.org)
- MEDLIFE (Medicine, Education, and Development to Low-Income Families Everywhere)
  www.tumedlife.weebly.com (http://www.tumedlife.weebly.com)
- Pre-Pharmacy Association
  https://temple.collegiatelink.net/organization/Pre_Pharmacy_Association
  http://templepca.weebly.com
- Pre-Dental Health Society
  https://temple.collegiatelink.net/organization/PreDental_Health_Society
  http://tupdhs.weebly.com/
- Pre-Physician Assistant Organization
  http://templeppao.weebly.com
- Temple’s Pre-Physical Therapy Association
  www.TPPTA.weebly.com (http://www.TPPTA.weebly.com)
- Pre-Occupational Therapy Association (TPOT)
  https://www.facebook.com/pages/TempePre-Occupational-Therapy-Student-Association/218601304970259?ref=bookmarks
- Emergency Medical Services
  www.templeems.org (http://www.templeems.org)
• HOSA-Future Health Professionals
  https://temple.collegiatelink.net/organization/hosa
• Foundation for International Medical Relief of Children (FIMRC)
• Healthcare Leadership Organization
  http://tuhlo.weebly.com/
• Pre-Student Osteopathic Medical Association
• Pre-Veterinary Association of Temple

Student Contact
For information about the College of Science & Technology, please contact the Office of Student Services, 215-204-2890.

Contact information for academic programs can be found under the listing for each individual program.

Academic Policies & Regulations
Please see the Undergraduate Academic Policies (p. 81) in this Bulletin. Students are responsible for complying with all university-wide academic policies that apply to their individual academic status. Additional and unique policies, or exceptions for the College of Science and Technology (CST), appear below.

Academic Holds
Pre-Pharmacy
Pre-Pharmacy students who have completed 30 or more credits without declaring a major shall be placed on “academic hold” and directed to see a CST advisor before the priority registration period of the subsequent semester.

Program Warning
Any CST student who does not make satisfactory progress in the CST major or track may be placed on “academic hold” and directed to see a departmental or CST advisor before the priority registration period of the subsequent semester.

Undeclared
Students who have not declared a major who have completed 60 or more credits shall be placed on “academic hold” and directed to see a CST advisor before the priority registration period of the subsequent semester.

Adding or Changing Majors or Minors
See Change of Program below.

Backtracking
Students may not apply toward the degree program credit earned for a lower-level course, if the student has progressed two levels beyond the material being taught. For example, a student who has successfully completed PHYS 1062 Elementary Classical Physics II may not subsequently take PHYS 0847 How Things Work: The Physics of Everyday Life for degree credit. This rule applies to Math and Science courses, language courses, and other sequenced courses. Advanced students should consult with an advisor in the CST’s Office of Student Services before taking a lower-level course.

Change of Program (COP)

CST Students
In order to add or change majors or minors within the College of Science and Technology, a CST student must meet with an advisor in the CST’s Office of Student Services. The advisor will evaluate the student’s record in accordance with the following policy:

1. CST students in their first semester at Temple University who wish to add or change majors or minors within the CST will be automatically approved, provided they are taking, have satisfied or placed higher than a GenEd level or higher Mathematics course.

2. Continuing CST students who wish to add or change declared majors or minors within the CST must have a cumulative grade point average (GPA) of 2.00 or higher. Continuing CST students who wish to change their major to undeclared will be automatically approved, provided that the total of completed and registered credits is fewer than 60 credits.

3. CST students can complete a second major in the CST by fulfilling all requirements for the primary and second majors, including at least four distinct courses in the primary major and four distinct courses in the second major. Distinct courses are those that do not overlap to fulfill requirements in the other major.
Non-CST Students
To transfer into the College of Science and Technology (CST), a non-CST student must attend a Change of Program (COP) information session (http://cst.temple.edu/students/changing-your-major-or-minor). Prior to attending, the student’s record must be in accordance with the following policy:

1. Students in their first semester at Temple University who wish to transfer into CST will be automatically approved, provided that they are taking or have satisfied at least a GenEd level or higher Mathematics course.
2. Continuing students who wish to transfer into CST must have a cumulative grade point average (GPA) of 2.00 or higher and must have completed at least a GenEd level or higher Mathematics course and a GenEd level Science course (or additional GenEd level Mathematics) course, both with a grade of C (2.00) or better.

Once these parameters are met, the student then attends the Change of Program (COP) information session. In the COP, students receive information on the majors/minors offered in CST as well as resources available to students. Following the COP, students eligible to transfer into CST schedule an appointment to meet with an Academic Advisor. The advisor will go over program requirements and answer any additional questions.

Co-requisites and Prerequisites
Students may be de-enrolled from courses for which they do not meet prerequisites and co-requisites. (Please see the Prerequisites and Co-requisites (p. 99) policy for more information.) Students are responsible for reviewing and abiding by all course prerequisites and co-requisites in the Course Catalog (http://www.temple.edu/apply/common/catcheck.asp). The requirements are designed to assure that students are appropriately prepared to be successful in their courses. Prerequisites provide an efficient manner for students to register for the next course in a sequence for which they are prepared. Students who appropriately satisfy prerequisites are permitted to register for a first and second attempt. Completion of a prerequisite does not permit a student to enroll in the third attempt of a repeated course. Students may attempt a course for the third time only if they have received permission from the College, which is not guaranteed and may require additional coursework (See Repeat Policy below).

Course Eligibility
The College of Science and Technology offers four types of undergraduate courses:

1. Preparatory courses numbered 0700-0799: open to all students, including non-degree seeking students who have completed appropriate course prerequisites and have completed or are in the process of completing required co-requisite courses. If required, students must complete these courses before enrolling in any higher level courses in the same department.
2. General Education courses numbered 0800-0999: open to all students, including non-degree seeking students who have completed appropriate course prerequisites and have completed or are in the process of completing required co-requisite courses. These courses satisfy University General Education requirements as indicated in the course description.
3. Lower-Level courses numbered 1000-1999: open to all students, including non-degree seeking students who have completed appropriate course prerequisites and have completed or are in the process of completing required co-requisite courses. These are general foundation level courses in the various disciplines.
4. Upper-Level courses numbered 2000-4999: open to all students, including non-degree seeking students who have completed appropriate course prerequisites and have completed or are in the process of completing required co-requisite courses. These courses build on the foundation courses (and on other upper-level courses) to provide a focused exploration of field-specific content.
5. Graduate-Level courses numbered 5000-9999: undergraduate students are generally prohibited from taking Graduate-Level courses. In rare circumstances, special permission may be granted by the department for undergraduate students to take graduate courses.

Courses Inapplicable to Graduation
Semester hours earned in MATH 0701 or MATH 0702, lower-level military science (ROTC), and RCC-enhanced courses are not credited toward the minimum semester hours required for graduation.

Students will not be awarded duplicate credit for courses that are repeated in transfer or at Temple.

Students will not receive credit toward graduation for lower-level courses, which are two or more courses below either an already-completed course or their placement level. For example, if a student successfully completes MATH 1041 Calculus I, then they are not permitted to subsequently take MATH 1021 College Algebra for new credits.

A maximum of 8 semester hours of credit will be allowed by CST for life experience and CLEP examinations. A maximum of 4 courses or up to 12 semester hours will be allowed for upper-level Military Science (Army ROTC), Naval Science (Navy ROTC) or Aerospace Studies (Air Force ROTC) courses. A maximum of 12 total semester hours will be allowed for a combination of CLEP, Life Experience, and upper-level Military Science.

Courses Over Five Years Old
In admitting transfer or returning students, the College of Science and Technology will, when possible, allow credit for courses taken five or more years prior to the date of admission or re-enrollment. The College of Science and Technology may choose not to accept courses regardless of age for credit in the major. Foundation courses, courses of a technical nature or courses in a particularly dynamic field may not be accepted for credit.
Courses over five years old will be reviewed by the College to determine whether they will be accepted toward the degree. Final determination of the acceptability of such courses is the responsibility of the Office of Student Services and generally occurs after the student has matriculated or been rematriculated.

**Dean's List**

Each fall and spring semester, those undergraduates who have met the credit hour and academic criteria for their school or college are placed on the Dean's List. See the Dean's List (p. 92) policy for specific GPA and credit-hour requirements.

**Fly in 4**

Fly in 4 is a partnership between incoming freshmen and the university, potentially saving them thousands of dollars in debt. For more information on this program, see fly.temple.edu.

**Grading**

Major, Minor, and GenEd courses must be completed with a letter grade of C- or higher unless otherwise specified. Certain courses require a C or better in order to advance to the next level.

**Graduation Procedures**

All College of Science and Technology students are required to complete a graduation review with an advisor in the Office of Student Services prior to the start of their senior year. The graduation review involves a detailing of the courses and credits completed and those that remain to be completed for graduation. Students are expected to be active participants in the review and have equal responsibility for assuring the accuracy and completeness of the review.

Students must apply for graduation online via Self-Service Banner (SSB) early in the semester in which they will complete their degree requirements. For application deadlines, see the University's Undergraduate Graduation Procedures (p. 95).

**Life Experience Credits**

Students are required to write what proficiencies are developed by their life experience and designate courses similar to their background. The experience will be reviewed by the appropriate faculty. Students need a 2.5 minimum cumulative GPA in order to apply. A maximum of 12 semester hours is allowed for the combined category of life experience, upper-level military science (ROTC) courses, and CLEP/DSST examinations.

**Non-Traditional Credits**

A maximum of 12 semester hours of credit will be allowed by CST for life experience, upper-level military science (ROTC) courses, and CLEP/DSST examinations.

**Overload Requests**

Students in the College of Science and Technology must petition through the Office of Student Services for approval of an overload when they request to take more than 17 credits in either the fall or spring semesters or more than 8 credits in either summer session. The following items are considered when reviewing an overload petition:

- Minimum 2.75 GPA overall and in the last semester of graded coursework.
- The number of credits completed in previous semesters.
- The number of science and math courses taken previously in each semester.
- The amount of credits requested.
- The type of courses requested. The office focuses particularly on the number of science and math courses in the student's proposed roster.

Each petition will be reviewed individually based on the number of credits requested.

**Permission to Complete a Course(s) at Another Institution After Matriculation**

Students in the College of Science and Technology who wish to take courses at another institution after matriculation must petition the Office of Student Services for approval prior to enrolling in such a course. Petition forms are available at www.temple.edu/vpus/forms/index.htm. Students should first discuss their academic plans with their advisor. The student is then responsible for obtaining any needed course descriptions from the other institution and attaching it to the petition form. The student takes the petition to the corresponding Temple department for faculty review and then submits the petition to the Office of Student Services for final approval.

Courses taken without prior approval will not be transferrable toward the Temple degree. In addition, students must have completed the prerequisites and have completed or be completing any listed co-requisites of both the Temple equivalent course and course at the host institution.

Please see the University policy on Permission to Complete a Course at Another Institution after Matriculation (p. 98) for more information.
Placedment Tests

The results of placement tests determine if students are required to enroll in preparatory composition and mathematics courses. All incoming freshmen must take English and mathematics placement tests. Prior to taking the Placement tests, students are encouraged to review their English and mathematics work, and are particularly encouraged to use My Math Test (http://www.temple.edu/msrc/tutoring/MMT.asp) or ALEKS (http://www.temple.edu/msrc/tutoring/ALEKS.asp) as a refresher.

All CST transfer students are required to complete the math placement test, regardless of transfer credits. For students who have already completed their program’s mathematics requirement or the prerequisite requirement through transfer credits, the test will be used as a diagnostic tool. The test results will be informational only and will not restrict or dictate course selection nor negate the transferability of credits. The results of the placement exam should be discussed with an academic advisor at the time of the initial registration. Your advisor may suggest certain "bridge courses" that will assist you in preparing for more advanced coursework. Bridge courses build on content from courses for which you have received transfer credit, allow you to keep your credits, and support your preparation for the next course in your sequence.

If students are unsuccessful in courses beyond their placement results, they may be asked to repeat the prerequisite course at Temple regardless of transfer credits.

Transfer students who have not completed ENG 0802 are also required to take the English placement test. Students assigned to ENG 0701 or ENG 0711 must register each semester for that course until the requirement is completed. Only upon successful completion of ENG 0701 or ENG 0711 can such students enroll in ENG 0802 or ENG 0812.

Plagiarism and Academic Cheating

Plagiarism and academic cheating are prohibited by the College of Science and Technology. The development of independent thought and a respect for the thoughts of others is essential to intellectual growth. The prohibition of plagiarism and cheating is intended to foster this independence and respect. See the policy on Academic Honesty (p. 36) in this Bulletin.

The penalty for plagiarism or cheating as a first offense is normally an F in the course in which the offense is committed. In such cases, the instructor completes the Settlement of a Charge of Academic Dishonesty form and sends it to the Office of Student Services. The Office of Student Conduct and Community Standards generally adjudicates all cases and student appeals.

Pre-Pharmacy Track Students

Pre-Pharmacy track students must declare a primary major upon completion of 30 credits. Students who have completed 30 credits without declaring a primary major will have an academic hold placed on their record that will prevent them from registering. Students must meet with an advisor to declare a major in order to have the hold removed. All Pre-Pharmacy students should identify a “parallel” program of study in addition to indicating their intent to pursue Pharmacy School admission.

Prerequisites and Co-Requisites

Students may be de-enrolled from courses for which they do not meet prerequisites and co-requisites. (Please see the Prerequisites and Co-requisites (p. 99) policy for more information.) Students are responsible for reviewing and abiding by all course prerequisites and co-requisites in the Course Catalog (http://www.temple.edu/apply/common/catcheck.asp). The requirements are designed to assure that students are appropriately prepared to be successful in their courses. Prerequisites provide an efficient manner for students to register for the next course in a sequence for which they are prepared. Students who appropriately satisfy prerequisites are permitted to register for a first and second attempt. Completion of a prerequisite does not permit a student to enroll in the third attempt of a repeated course. Students may attempt a course for the third time only if they have received permission from the College, which is not guaranteed and may require additional coursework (See Repeat Policy below).

Program Performance

Students should maintain a 2.00 cumulative GPA in their major or track and make satisfactory progress towards their CST degrees. The Critical Path initiative has prompted the College to identify milestones in each major meant to guide students towards degree completion. Outreach efforts will be sent to students who have fallen off track based on their need to repeat courses or who have fallen below a 2.0 GPA within the College. Guidance will be offered to assist these students with making progress towards their degree and repairing their GPA.

Re-enrollment to the College of Science and Technology

College of Science and Technology students who have not enrolled for two consecutive semesters must submit a Request to Re-Enroll (http://www.temple.edu/vpus/documents/request_to_reenroll.pdf). Any existing holds must be cleared prior to re-enrollment and official transcripts provided for any college-level courses completed after leaving Temple University. Students who have been away for less than two semesters are subject to university policies and restrictions governing taking courses at another institution and must receive permission prior to enrollment in such courses. In addition, courses over five years old will be reviewed by the College to determine whether they will be accepted toward the degree. Final determination of the acceptability of such courses is the responsibility of the Office of Student Services and generally occurs after the student has been rematrículated.

The deadline for application to re-enroll for the fall semester is August 1; the deadline to re-enroll for the spring semester is December 1, and the deadline for summer semester I and II is April 1. Also see the policy on Academic Standing (http://policies.temple.edu/getdoc.asp?policy_no=02.10.11).
If the student's original curriculum is no longer available, students are required to follow the most current curriculum or choose another current curriculum, upon return. This applies to any student who has not registered for a single fall or spring semester. This can have significant impacts on degree progress and students are encouraged to discuss any planned absences with an advisor.

Full-time degree-seeking students have the option of pursuing a Leave of Absence for a period of no more than 2 semesters by submitting the Undergraduate Leave of Absence (http://www.temple.edu/vpus/documents/Undergraduate_Leave_Of_Absence_Petition.pdf) form. Please refer to the Leave of Absence Policy (http://policies.temple.edu/getdoc.asp?policy_no=02.10.16) for more information.

Repeating a Course
Students may attempt a course two times without restriction. Students in the College of Science & Technology are encouraged to meet with an advisor prior to attempting a course for the second time. A third attempt of any course is not guaranteed and requires permission of the student's home college. Petitions for a third attempt may require additional coursework, remediation, and/or academic/personal planning. Please refer to the University policy on Repeating a Course (p. 99) for further information.

Undeclared Majors
After completing 30 credits, undeclared majors in the College of Science and Technology will be notified that they need to select a major. Students who have completed 60 credits without declaring a major will have a hold placed on their record that will prevent them from registering. Students must meet with an advisor to declare a major in order to have the hold removed.

Warning, Probation and Dismissal
All University policies on warning, probation and dismissal are enforced with this addition: CST students who are put on Academic Warning or Probation should see an academic advisor to review their proposed schedule of courses. See the University's policy on Academic Standing (http://policies.temple.edu/getdoc.asp?policy_no=02.10.11) for more details.

General College Graduation Requirements
Requirements for the Bachelor of Science (B.S.) and the Bachelor of Arts (B.A.) Degrees
The College of Science and Technology offers two undergraduate degrees: a Bachelor of Arts (B.A.) and a Bachelor of Science (B.S.). The B.A. degree gives students a broad-based education, including the study of a foreign language. The B.S. degree is for those students who wish for more specialized training in their chosen disciplines.

Credit Hour Requirements
The College of Science and Technology requires that students complete a total of 123 credits for most programs. The TUteach programs (Biology with Teaching, Chemistry with Teaching, Earth & Space Science with Teaching, General Science with Teaching, Mathematics with Teaching, Mathematics and Computer Science with Teaching, Mathematics and Technology with Teaching, and Physics with Teaching) require students to complete a total of 124 credits. Of those totals, 90 credits must be in the College of Science and Technology or the College of Liberal Arts (CLA). A course shall count as a College of Science and Technology or College of Liberal Arts course if it is offered by a department or program in either of the respective colleges, or if it is in the department of Art History, or if it is taken to satisfy a major or minor requirement in the College of Science and Technology. Of those 90 credits, 45 must be in upper-level courses. Upper-level courses consist of course numbers at the 2000 level or above. Students receiving a Bachelor of Arts (as opposed to Bachelor of Science) degree must take at least two courses numbered 2000 or above in the College of Liberal Arts.

Courses Inapplicable to Graduation
Semester hours earned in MATH 0701, MATH 0702, lower-level military science (ROTC), and RCC-enhanced courses are not credited toward the minimum semester hours required for graduation.

Students will not be awarded duplicate credit for courses that are repeated in transfer or at Temple.

Students will not receive credit towards graduation for lower-level courses, which are two or more courses below either an already-completed course or their placement level. For example, if a student successfully completes MATH 1041 Calculus I, then they are not permitted to subsequently take MATH 1021 College Algebra for new credits.

A maximum of 8 semester hours of credit will be allowed by CST for life experience and CLEP examinations. A maximum of 4 courses or up to 12 semester hours will be allowed for upper-level Military Science (Army ROTC), Naval Science (Navy ROTC) or Aerospace Studies (Air Force ROTC) courses. A maximum of 12 total semester hours will be allowed for a combination of CLEP, Life Experience and upper-level Military Science (Army ROTC), Naval Science (Navy ROTC) or Aerospace Studies (Air Force ROTC) courses.

Grade Point Average (GPA) Requirement
The College of Science & Technology requires that students have a GPA of at least 2.00 overall and at least 2.00 in the courses applicable to their major and/or minor GPA.
**Residency Requirements**

Students who transfer into the College of Science and Technology must complete at least 45 of their last 60 semester hours of coursework at Temple. These credits must be applicable to their degree.

For Bachelor of Arts programs, 7 of the courses required for the major must be completed at Temple. For the Bachelor of Science programs that are within a single discipline, 9 of the courses required for the major must be completed at Temple. For the Bachelor of Science programs that are interdisciplinary, 10 of the courses required for the major must be completed at Temple.

In addition, half of the courses required in the department of the major must be taken at Temple. Please refer to degree programs for the specific number of major courses required.

**Bachelor of Science Requirements**

**General Education**

All students are required to complete the General Education (GenEd p. 143) requirements. The General Education curriculum consists of 25-26 s.h.

**Major**

Students must also complete the requirements of a departmental major. The minimum acceptable grade in a course taken to fulfill major requirements is a C- unless otherwise specified. Bachelor of Science majors are offered in the following programs:

- Applied Mathematics
- Biochemistry
- Biology
- Biology with Teaching
- Biophysics
- Chemistry
- Chemistry with Teaching
- Computer Science
- Earth and Space Science with Teaching
- Environmental Science
- General Science with Teaching
- Geology
- Information Science and Technology
- Mathematics
- Mathematics and Computer Science
- Mathematics and Physics
- Mathematics with Teaching
- Mathematics and Computer Science with Teaching
- Mathematics and Technology with Teaching
- Neuroscience - Cellular & Molecular
- Pharmaceutical Sciences
- Physics
- Physics with Teaching

**MINOR**

Students may also choose to complete the requirements for a minor. The minimum acceptable grade in a course taken to fulfill minor requirements is a C- unless otherwise specified. At least three of the courses credited towards the minor must be courses that were not credited towards the major or certificate. If the primary major is not within CST, the student should follow the policies of the home college regarding distinct courses. At least half of the courses taken by a student to fulfill the minor must be taken at Temple. Minors are available in the following programs:

- Biology
- Computer Science
- Digital Media Technologies (CIS/MSP)
- Geology
- Information Science and Technology
- Mathematics
• Physics

Certificate
Students may also choose to complete the requirements for a certificate. The minimum acceptable grade in a course taken to fulfill certificate requirements is a C- unless otherwise specified. At least two of the courses credited towards the certificate must be courses that were not credited towards the major or minor. If the primary major is not within CST, the student should follow the policies of the home college regarding distinct courses. At least half of the courses taken by a student to fulfill the certificate must be taken at Temple. Certificates are available in the following programs:
  • Computer Security & Digital Forensics
  • Fundamentals of Programming

Second Major
Students may complete a second major by fulfilling all requirements for the primary and second majors, including at least four distinct courses in the primary major and four distinct courses in the second major. If the primary major is not within CST, the student should follow the policies of the home college regarding distinct courses. General Education requirements must be satisfied in accordance with the requirements of the primary major. In instances of a double major, only one degree will be conferred.

Bachelor of Arts Requirements

General Education
All students are required to complete the General Education (GenEd (p. 143)) requirements. The General Education curriculum consists of 25-26 s.h.

Language Requirement
In addition to the University General Education requirement, Bachelor of Arts candidates must complete a second language requirement. B.A. degree candidates are required to successfully complete the second semester (typically courses numbered 1002) of a second language or demonstrate proficiency in a second language. Languages include: American Sign Language, Arabic, Chinese, French, German, Greek, Hebrew, Hindi, Italian, Japanese, Korean, Latin, Portuguese, Russian, Spanish, and Vietnamese.

Upper-level Distribution Requirements
Bachelor of Arts students must complete upper-level distribution requirements by taking two upper-level courses in one or more departments of the College of Liberal Arts or the department of Art History. Upper-level courses consist of course numbers at the 2000 level or above.

Students who have second majors, one of which is in the College of Liberal Arts or Art History, automatically satisfy the distribution requirement.

Major
Bachelor of Arts candidates must complete the requirements of a major. It is important to note that students enter the College of Science and Technology as Bachelor of Science majors. If students wish to change their degree choice to Bachelor of Arts, they must complete a declaration of major form in the Office of Student Services with an advisor. The minimum acceptable grade in a course taken to fulfill major requirements is a C- unless otherwise specified. B.A. majors are offered in the following programs:
  • Biology
  • Chemistry
  • Computer Science
  • Geology
  • Information Science and Technology
  • Mathematics
  • Mathematical Economics (MATH/ECON)
  • Natural Sciences
  • Physics

MINOR
Students may also choose to complete the requirements for a minor. The minimum acceptable grade in a course taken to fulfill minor requirements is a C- unless otherwise specified. At least three of the courses credited towards the minor must be courses that were not credited towards the major or certificate. If the primary major is not within CST, the student should follow the policies of the home college regarding distinct courses. At least half of the courses taken by a student to fulfill the minor must be taken at Temple. Minors are available in the following programs:
  • Biology
  • Computer Science
  • Digital Media Technologies (CIS/MSP)
• Geology
• Information Science and Technology
• Mathematics
• Physics

Certificate
Students may also choose to complete the requirements for a certificate. The minimum acceptable grade in a course taken to fulfill certificate requirements is a C- unless otherwise specified. At least two of the courses credited towards the certificate must be courses that were not credited towards the major or minor. If the primary major is not within CST, the student should follow the policies of the home college regarding distinct courses. At least half of the courses taken by a student to fulfill the certificate must be taken at Temple. Certificates are available in the following programs:
• Computer Security & Digital Forensics
• Fundamentals of Programming

Second Major
Students may complete a second major by fulfilling all requirements for the primary and second majors, including at least four distinct courses in the primary major and four distinct courses in the second major. General Education requirements must be satisfied in accordance with the requirements of the primary major. In instances of a double major, only one degree will be conferred.

Individual Program Requirements
Certain courses fulfill multiple requirements. In careful consultation with your advisor, you will be able to optimize curriculum choices.

The total number of hours required for the degree may vary based on initial placement exams, transfer evaluations, individual curriculum choices, and academic programs.

Listed under each degree program are the courses students must successfully complete to earn that particular B.A. or B.S. degree. These required courses are in addition to the General Education curriculum requirements.

Academic Advising

The Office of Student Services
1810 Liacouras Walk
Suite 203
215-204-2890
http://cst.temple.edu/
cstadv@temple.edu

The Office of Student Services in the College of Science and Technology guides students from New Student Orientation through graduation to assist them in ensuring that they complete all degree requirements and work to their fullest potential. Professional advisors (http://cst.temple.edu/students/advising-and-student-services/academic-advisors) help students plan courses, explore majors, research career opportunities, and understand Temple’s resources. Faculty advisors (http://cst.temple.edu/students/advising-and-student-services/faculty-advisors) in each major use their field experience and knowledge of departmental curriculum to help students choose courses consistent with their specific career objectives.

Specialized Services
• New Student Orientation: Group advising and registration appointments for all newly-admitted first-semester freshmen and transfer students.
• Advising and Registration Services: Students may want to meet with professional advisors at different times during their academic career to discuss their academic progress, develop educational and career goals, discover academic success strategies and check on their remaining graduation requirements. The express advising and advising-by-appointment schedule is available at http://cst.temple.edu/students/advising-and-student-services. Registration with an advisor is required for students with a cumulative, last semester attended or major/track GPA below 2.0 and for any students registering for more than 17 credits. Newly-admitted or readmitted students are also required to meet with an advisor for registration.
• Petition Processing: The Director and Assistant Director of Student Services review petitions on a rolling basis. Typical petition requests include those for a third registration for the same course, for an overload of credits, to complete a course at another institution after matriculation, for a leave of absence, for a withdrawal with an approved excuse, and for Exceptions to Policy.
• Progress Report: At 60 credits, students may schedule a progress report with their academic advisor to lay out a semester plan for completing the remaining requirements before graduation.
• Graduation Review: All College of Science and Technology students are required to complete a graduation review with an advisor in the Office of Student Services prior to the start of their senior year. The advisor will explain the remaining course and credit requirements needed to graduate. Students are expected to be active participants in the review and have equal responsibility for assuring the accuracy and completeness of the review.
Departmental Advising

After their New Student Orientation advising and registration session, students’ major departments will have access to their academic credentials for subsequent advising by faculty advisors. Faculty advising is very important in developing ties between a student’s academic program and his or her professional goals. Faculty advisors may assist students in finding research opportunities and professional internships and will help students choose courses that will best prepare them for their field of interest within a particular discipline. A list of Faculty Advisors (http://cst.temple.edu/students/advising-and-student-services/faculty-advisors) may be found on the CST web site.

Academic Advising and Student Responsibility

All academic advisors are trained to read and evaluate information carefully to give students the best possible advice. However, primary responsibility for curriculum completion rests with the student. Every student must be aware of the requirements of his or her degree and should collaborate with an advisor regularly to ensure timely completion of his or her program.

Student Advisors/Ombudspersons

Each department in the College of Science and Technology has a Student Advisor/Ombudsperson (SA/O) who is a qualified undergraduate student in that department. The SA/O is thoroughly familiar with requirements and curricula of the department and can competently advise fellow students on the courses and faculty members of the department. He or she also has information about career options for the department’s graduates. The SA/O also coordinates the student grievance procedure. A list of Student Advisors/Ombudspersons (http://cst.temple.edu/advising-and-student-services/student-ambassadors) is available on the CST web site. Each SA/O has an office in his or her department, and the SA/O program coordinator is located in the Office of Student Services.

Student Grievance Procedure

The SA/O is familiar with the College of Science and Technology Grievance Procedure and is the first person to consult in case of an academic grievance. The SA/O will serve as a student-faculty liaison and attempt to resolve the grievance through mediation. The College of Science and Technology grievance procedure (http://cst.temple.edu/students/advising-and-student-services/student-grievance-procedure) is available on the CST web site. A list of Student Advisors/Ombudspersons (http://cst.temple.edu/advising-and-student-services/student-ambassadors) is available on the CST web site.

Continuing Student Registration

Continuing student registration is the period during the fall and spring semesters when currently-enrolled students should register. Degree Audit Reports (DARS) provide a compact summary of a student’s progress toward a degree, including a list of requirements yet to be completed. Eligible students obtain their DARS documents via TUportal.

Prior to processing their registrations, freshmen are strongly recommended to meet with advisors to review their DARS documents and discuss course selections for the upcoming semester. New transfer students and continuing students in good academic standing are encouraged to meet with their departmental advisors before processing their schedules via Self-Service Banner. Students ineligible to use Self-Service Banner are required to meet with an advisor.

Pre-Professional Advising

Knowledge gained in the College of Science and Technology curricula provides the foundation needed in preparing for Professional Health School entrance exams. Many of the courses required by professional programs such as dentistry, medicine, pharmacy, and veterinary medicine are incorporated into College of Science and Technology curricula. This approach allows our students to fulfill degree requirements, while at the same time meeting admissions criteria for professional and graduate programs.

CST offers three ways in which students can pursue health professional programs.

- Students may complete a bachelor’s degree and apply to the health professional program.
- Students may apply to the 3+4 and 3+3 accelerated programs linked to particular Temple health professional programs by which they may complete both their bachelor and professional degree.
- Students may apply to the direct admit 3+4 pre-pharmacy & pharmacy program by which students would complete a Bachelor of Science in Pharmaceutical Sciences (BS-PS) and a Doctor of Pharmacy (PharmD).
- Students may apply to the 3+4 pre-pharmacy program by which students would only complete a Doctor of Pharmacy (PharmD).

Students interested in professional health programs should contact the Office of Pre-Professional Health Studies for detailed advising. The office is located in 1810 Liacouras Walk, Suite 100 and further information can be found at www.temple.edu/healthadvising. Applicants to professional health programs who are either pursuing a degree+professional program or the 3+professional program must complete a “Letter of Intent” with the Office of Pre-Professional Health Advising, preferably during their first semester but no later than the spring of their freshman year. Applicants to a Pharmacy program on a 3+4 track apply directly to the Pharmacy program. The curriculum and advising of these students is specifically tailored to fulfill the prerequisites set forth by the Temple University School of Pharmacy. Pre-pharmacy students must declare a major upon completion of 30 credits. All students should identify a “parallel” program of study in addition to indicating their intent to pursue a professional health program.
Faculty

Please go to the College of Science & Technology web site at cst.temple.edu and click on the individual department at the bottom of the page for a list of faculty in each department. See also https://directory.temple.edu/.

Abraham Abebe, Assistant Professor (Teaching/Instructional), Department of Mathematics, College of Science and Technology; Ph.D., University of North Carolina at Greensboro.

Ergin H. Ahmed, Assistant Professor (Research), Department of Physics, College of Science and Technology; Ph.D., Temple University.

Robert M. Aiken, Professor Emeritus, Department of Computer and Information Sciences, College of Science and Technology; Ph.D., Northwestern University.

Ola Ajaj, Assistant Professor (Teaching/Instructional), Department of Computer and Information Sciences, College of Science and Technology; Ph.D., Florida Atlantic University.

Shohreh Amini, Professor, Department of Biology, College of Science and Technology; Ph.D., University of Pennsylvania.

Edwin J. Anderson, Professor Emeritus, Department of Earth and Environmental Science, College of Science and Technology; Ph.D., Brown University.

Rodrigo B. Andrade, Associate Professor, Department of Chemistry, College of Science and Technology; Ph.D., Massachusetts Institute of Technology.

Eleni Anni, Associate Professor (Research), Department of Biology, College of Science and Technology.

Alla Arzumanyan, Assistant Professor (Teaching/Instructional), Department of Biology, College of Science and Technology; Ph.D., Yerevan State University.

Leonard B. Auerbach, Professor Emeritus, Department of Physics, College of Science and Technology; Ph.D., University of California Berkeley.

Jessica Babcock, Instructor (Teaching/Instructional), Department of Mathematics, College of Science and Technology; M.Ed., Temple University.

Darius Balcianas, Associate Professor, Department of Biology, College of Science and Technology; Ph.D., Uppsala University.

Jorune Balciuniene, Assistant Professor (Research), Department of Biology, College of Science and Technology; Ph.D., Uppsala University.

Michael Joseph Balsai, Assistant Professor (Teaching/Instructional), Department of Biology, College of Science and Technology; Ph.D., University of Pennsylvania.

Giora Baram, Associate Professor Emeritus, Department of Computer and Information Sciences, College of Science and Technology; Ph.D., University of Toledo.

Ershaad Basheer, Assistant Professor (Research), Department of Mathematics, College of Science and Technology; M.S., Jawaharlal Nehru Centre for Advanced Scientific Research.

Suman Batish, Assistant Professor (Teaching/Instructional), Department of Biology, College of Science and Technology; Ph.D., University of Cambridge.

Mary A. Beasten, Instructor (Teaching/Instructional), Department of Chemistry, College of Science and Technology; M.A., Temple University.

Richard Beigel, Professor, Department of Computer and Information Sciences, College of Science and Technology; Ph.D., Stanford University.

Gianfranco Bellipanni, Assistant Professor (Teaching/Instructional), Department of Biology, College of Science and Technology; Ph.D., University of Palermo.

Shiferaw S. Berhanu, Professor, Department of Mathematics, College of Science and Technology; Ph.D., Rutgers University.

Dorothy B. Berner, Professor Emeritus, Department of Biology, College of Science and Technology; Ph.D., University of Pennsylvania.

Md Zakirul Alam Bhuiyan, Assistant Professor (Research), Department of Computer and Information Sciences, College of Science and Technology.

Christopher J. Biehl, Instructor (Teaching/Instructional), Department of Computer and Information Sciences, College of Science and Technology; M.B.A., Temple University.

James L. Bloomer, Associate Professor Emeritus, Department of Chemistry, College of Science and Technology; Ph.D., University of London.

James D. Bloxton, Assistant Professor (Teaching/Instructional), Department of Chemistry, College of Science and Technology; Ph.D., Temple University.

Silvia Boffo, Assistant Professor (Research), Department of Biology, College of Science and Technology.
Vassil Boiadjiev, Assistant Professor (Teaching/Instructional), Department of Chemistry, College of Science and Technology; Ph.D., University of Wisconsin-Milwaukee.

Eric U. Borguet, Professor, Department of Chemistry, College of Science and Technology; Ph.D., University of Pennsylvania.

Elena Borovitskaya, Associate Professor (Teaching/Instructional), Department of Physics, College of Science and Technology; Ph.D., Institute of Applied Physics, Nizhni Novgorod, Russia.

Angela L. Bricker, Assistant Professor (Teaching/Instructional), Department of Biology, College of Science and Technology; Ph.D., University of Cambridge.

William S. Brinigar, Professor Emeritus, Department of Chemistry, College of Science and Technology; Ph.D., University of Kansas.

Theodore W. Burkhardt, Professor, Department of Physics, College of Science and Technology; Ph.D., Stanford University.

Ilya V. Buynevich, Assistant Professor, Department of Earth and Environmental Science, College of Science and Technology; Ph.D., Boston University.

Jeffrey Campbell, Assistant Professor (Teaching/Instructional), Department of Chemistry, College of Science and Technology; Ph.D., University of California Berkeley.

Vincenzo Carnevale, Assistant Professor (Research), Department of Biology, College of Science and Technology; Ph.D., International School for Advanced Studies, Trieste.

Frank N. Chang, Professor, Department of Biology, College of Science and Technology; Ph.D., University of Wisconsin.

Farzana Chaudhry, Assistant Professor (Teaching/Instructional), Department of Mathematics, College of Science and Technology; Ph.D., Oxford University.

Orin N. Chein, Professor Emeritus, Department of Mathematics, College of Science and Technology; Ph.D., New York University.

Steven M. Chemtob, Assistant Professor, Department of Earth and Environmental Science, College of Science and Technology; Ph.D., California Institute of Technology.

Hua Chen, Assistant Professor (Research), Department of Biology, College of Science and Technology; Ph.D., University of California Berkeley.

Je-Wei Chen, Assistant Professor (Teaching/Instructional), Department of Mathematics, College of Science and Technology; Ph.D., State University of New York Stony Brook.

Ke Chen, Assistant Professor, Department of Physics, College of Science and Technology; Ph.D., Chinese Academy of Sciences.

Paul Christner, Associate Professor (Teaching/Instructional), Department of Biology, College of Science and Technology; Ph.D., University of Pennsylvania.

Francis T. Christoph Jr., Associate Professor Emeritus, Department of Mathematics, College of Science and Technology; Ph.D., Rutgers University.

Bruce P. Conrad, Associate Professor Emeritus, Department of Mathematics, College of Science and Technology; Ph.D., University of California Berkeley.

Erik Cordes, Associate Professor, Department of Biology, College of Science and Technology; Ph.D., Pennsylvania State University.

Raymond F. Coughlin, Associate Professor, Department of Mathematics, College of Science and Technology; Ph.D., Illinois Institute of Technology.

Edward T. Crotty, Assistant Professor (Teaching/Instructional), Department of Computer and Information Sciences, College of Science and Technology.

Shumo Cui, Assistant Professor (Research), Department of Mathematics, College of Science and Technology.

Hai-Lung Dai, Professor, Department of Chemistry, College of Science and Technology; Ph.D., University of California Berkeley.

David R. Dalton, Professor, Department of Chemistry, College of Science and Technology; Ph.D., University of California Los Angeles.

Boris A. Datskovsky, Professor, Department of Mathematics, College of Science and Technology; Ph.D., Harvard University.

Alexandra Krull Davatzes, Assistant Professor, Department of Earth and Environmental Science, College of Science and Technology; Ph.D., Stanford University.

Nicholas Davatzes, Associate Professor, Department of Earth and Environmental Science, College of Science and Technology; Ph.D., Stanford University.

Bruce A. Davidson, Professor (Research), Department of Physics, College of Science and Technology.
Franklin A. Davis, Professor, Department of Chemistry, College of Science and Technology; Ph.D., Syracuse University.

Timothy S. Davis, Instructor (Teaching/Instructional), Department of Earth and Environmental Science, College of Science and Technology.

Nanjie Deng, Associate Professor (Research), Department of Chemistry, College of Science and Technology; Ph.D., Hyderabad University.

Louis F. Devicaris, Instructor (Teaching/Instructional), Department of Chemistry, College of Science and Technology; M.S., Villanova University.

Graham Dobereiner, Assistant Professor, Department of Chemistry, College of Science and Technology; Ph.D., Yale University.

Vasily Dolgushev, Professor, Department of Mathematics, College of Science and Technology; Ph.D., Massachusetts Institute of Technology.

Marilena Downing, Instructor (Teaching/Instructional), Department of Mathematics, College of Science and Technology; M.A., Temple University.

Eduard Dragut, Assistant Professor, Department of Computer and Information Sciences, College of Science and Technology; Ph.D., University of Illinois at Chicago.

Xiaojiang Du, Associate Professor, Department of Computer and Information Sciences, College of Science and Technology; Ph.D., University of Maryland College Park.

Leroy W. Dubeck, Professor Emeritus, Department of Physics, College of Science and Technology; Ph.D., Rutgers University.

Zbigniew Dziembowski, Associate Professor, Department of Physics, College of Science and Technology; Ph.D., Warsaw University.

Nina Edelman, Assistant Professor (Teaching/Instructional), Department of Mathematics, College of Science and Technology; M.A., University of Pennsylvania.

Khaled M. Elokely, Assistant Professor (Research), Department of Chemistry, College of Science and Technology.

Jennifer Emtage, Assistant Professor (Teaching/Instructional), Department of Biology, College of Science and Technology; Ph.D., Johns Hopkins University.

Ivan N. Erdelyi, Professor Emeritus, Department of Mathematics, College of Science and Technology; Ph.D., Victor Babes University of Cluj, Roumania.

Ananias A. Escalante, Professor, Department of Biology, College of Science and Technology; Ph.D., University of California Irvine.

Sarah R. Evangelista, Associate Professor Emeritus, Department of Mathematics, College of Science and Technology; M.A., Temple University.

Mark A. Feitelson, Professor, Department of Biology, College of Science and Technology; Ph.D., University of California Los Angeles.

Aleksey Filin, Assistant Professor (Research), Department of Chemistry, College of Science and Technology; Ph.D., Institute for Solid State Physics.

John Fiore, Instructor (Teaching/Instructional), Department of Computer and Information Sciences, College of Science and Technology; M.S., University of Pennsylvania.

Giacomo Fiorin, Assistant Professor (Research), Department of Biology, College of Science and Technology; Ph.D., International School for Advanced Studies, Trieste.

Steven Fleming, Professor (Teaching/Instructional), Department of Chemistry, College of Science and Technology; Ph.D., University of Wisconsin.

Natalie P. Flynn, Instructor (Teaching/Instructional), Department of Earth and Environmental Science, College of Science and Technology; M.A., Temple University.

Dieter Forster, Professor, Department of Physics, College of Science and Technology; Ph.D., Harvard University.

Jerrold Franklin, Professor Emeritus, Department of Physics, College of Science and Technology; Ph.D., University of Illinois.

Seema Freer, Associate Professor (Practice), Department of Biology, College of Science and Technology; Ph.D., Thomas Jefferson University.

Amy Freestone, Assistant Professor, Department of Biology, College of Science and Technology; Ph.D., University of California Davis.

Frank L. Friedman, Professor Emeritus, Department of Computer and Information Sciences, College of Science and Technology; Ph.D., Purdue University.

Ser-Wei Fu, Assistant Professor (Research), Department of Mathematics, College of Science and Technology; Ph.D., University of Illinois at Urbana-Champaign.

David Futer, Associate Professor, Department of Mathematics, College of Science and Technology; Ph.D., Stanford University.
Janos Galambos, Professor Emeritus, Department of Mathematics, College of Science and Technology; Ph.D., Eotvos University, Budapest, Hungary.

Leonard J. Garrett, Professor Emeritus, Department of Computer and Information Sciences, College of Science and Technology; Ph.D., University of Pennsylvania.

Edward T. Gawlinski, Associate Professor, Department of Physics, College of Science and Technology; Ph.D., Boston University.

Mohamed Ghalwash, Assistant Professor (Research), Department of Computer and Information Sciences, College of Science and Technology.

Jayakumar G. Gilbert, Assistant Professor (Teaching/Instructional), Department of Chemistry, College of Science and Technology; Ph.D., Drexel University.

Edward T. Gawlinski, Associate Professor, Department of Physics, College of Science and Technology; Ph.D., Boston University.

Mohamed Ghalwash, Assistant Professor (Research), Department of Computer and Information Sciences, College of Science and Technology.

Jayakumar G. Gilbert, Assistant Professor (Teaching/Instructional), Department of Chemistry, College of Science and Technology; Ph.D., Drexel University.

Jose Gimenez, Assistant Professor (Teaching/Instructional), Department of Mathematics, College of Science and Technology; B.S., Temple University.

Antonio Giordano, Professor, Department of Biology, College of Science and Technology; Ph.D., University of Trieste.

Antonio M. Goncalves, Professor Emeritus, Department of Chemistry, College of Science and Technology; Ph.D., University of Chicago.

Harry B. Gottlieb, Instructor (Teaching/Instructional), Department of Chemistry, College of Science and Technology; M.S., Villanova University.

Yury Grabovsky, Professor, Department of Mathematics, College of Science and Technology; Ph.D., New York University.

David E. Grandstaff, Professor, Department of Earth and Environmental Science, College of Science and Technology; Ph.D., Princeton University.

Alexander Gray, Assistant Professor, Department of Physics, College of Science and Technology; Ph.D., Lawrence Berkeley National Laboratory and University of California, Davis.

Edward R. Grubberg, Professor Emeritus, Department of Biology, College of Science and Technology; Ph.D., University of Illinois.

Yuhong Guo, Assistant Professor, Department of Computer and Information Sciences, College of Science and Technology; Ph.D., University of Alberta.

Cristian E. Gutiérrez, Professor, Department of Mathematics, College of Science and Technology; Ph.D., University of Buenos Aires.

Raymond Habas, Professor, Department of Biology, College of Science and Technology; Ph.D., State University of New York Stony Brook.

Seymour Haber, Professor Emeritus, Department of Mathematics, College of Science and Technology; Ph.D., Massachusetts Institute of Technology.

Peter Hagis Jr., Professor Emeritus, Department of Mathematics, College of Science and Technology; Ph.D., University of Pennsylvania.

Nahed Hamid, Instructor (Teaching/Instructional), Department of Mathematics, College of Science and Technology; M.S., Kean University.

Jun Han, Assistant Professor (Research), Department of Chemistry, College of Science and Technology; Ph.D., Texas A and M University.

Thommas E. Hanson, Professor Emeritus, Department of Biology, College of Science and Technology; Ph.D., Michigan State University.

William R. Harvey, Professor Emeritus, Department of Biology, College of Science and Technology; Ph.D., Harvard University.

Zameer U. Hasan, Professor, Department of Physics, College of Science and Technology; Ph.D., Australian National University, Canberra.

Stephen Blair Hedges, Professor, Department of Biology, College of Science and Technology; Ph.D., University of Maryland.

Meredith M. Hegg, Assistant Professor (Teaching/Instructional), Department of Mathematics, College of Science and Technology.

Emanuel B. Hey, Professor, Department of Biology, College of Science and Technology; Ph.D., State University of New York Stony Brook.

Omar Hijab, Professor, Department of Mathematics, College of Science and Technology; Ph.D., University of California Berkeley.

S. Robert Hiller, Professor Emeritus, Department of Biology, College of Science and Technology; Ph.D., Yale University.

David R. Hill, Professor, Department of Mathematics, College of Science and Technology; Ph.D., University of Pittsburgh.

David T. Hill, Assistant Professor (Teaching/Instructional), Department of Chemistry, College of Science and Technology; Ph.D., Temple University.

Ralph Hillman, Professor Emeritus, Department of Biology, College of Science and Technology; Ph.D., Yale University.

S. Tonia Hsieh, Assistant Professor, Department of Biology, College of Science and Technology; Ph.D., Harvard University.

Anthony Hughes, Associate Professor (Teaching/Instructional), Department of Computer and Information Sciences, College of Science and Technology; Ph.D., University of Illinois.
Maria Iavarone, Associate Professor, Department of Physics, College of Science and Technology; Ph.D., University of Napoli Federico II.

Giorgio P. Ingargiola, Associate Professor Emeritus, Department of Computer and Information Sciences, College of Science and Technology; Ph.D., University of Pennsylvania.

Robert L. Intemann, Professor Emeritus, Department of Physics, College of Science and Technology; Ph.D., Stevens Institute of Technology.

Susan A. Jansen-Varnum, Professor, Department of Chemistry, College of Science and Technology; Ph.D., University of Missouri-St. Louis.

Serge Jasmin, Assistant Professor (Teaching/Instructional), Department of Chemistry, College of Science and Technology; B.S., Temple University.

Bo Ji, Assistant Professor, Department of Computer and Information Sciences, College of Science and Technology; Ph.D., Ohio State University.

Kelli Shepard El Jones, Instructor (Teaching/Instructional), Department of Mathematics, College of Science and Technology.

Sunnie Joshi, Assistant Professor (Research), Department of Mathematics, College of Science and Technology; Ph.D., Texas A and M University.

Joseph Jupin, Instructor (Teaching/Instructional), Department of Computer and Information Sciences, College of Science and Technology.

Qing Kang, Assistant Professor (Research), Department of Chemistry, College of Science and Technology.

Krishna Kant, Professor, Department of Computer and Information Sciences, College of Science and Technology; Ph.D., University of Texas at Dallas.

James S. Karra, Associate Professor Emeritus, Department of Physics, College of Science and Technology; Ph.D., Rutgers University.

Gurpreet Kaur, Assistant Professor (Teaching/Instructional), Department of Biology, College of Science and Technology; Ph.D., Temple University.

Roy A. Keyer, Associate Professor (Teaching/Instructional), Department of Chemistry, College of Science and Technology; Ph.D., University of California Irvine.

Bojeong Kim, Assistant Professor, Department of Earth and Environmental Science, College of Science and Technology; Ph.D., Cornell University.

Isaac Klapper, Professor, Department of Mathematics, College of Science and Technology; Ph.D., New York University Courant Institute of Mathematical Sciences.

Michael L. Klein, Professor, Department of Chemistry, College of Science and Technology; Ph.D., University of Bristol.

Elliot B. Koffman, Professor Emeritus, Department of Computer and Information Sciences, College of Science and Technology; Ph.D., Case Western Reserve University.

Axel Kohlmeyer, Professor (Research), Department of Mathematics, College of Science and Technology.

James F. Korsh, Professor, Department of Computer and Information Sciences, College of Science and Technology; Ph.D., University of Pennsylvania.

Svetlana Kotochigova, Professor (Research), Department of Physics, College of Science and Technology; Ph.D., St. Petersburg State University.

V. Sankrithi Krishnan, Professor Emeritus, Department of Mathematics, College of Science and Technology.

Grant R. Krow, Professor Emeritus, Department of Chemistry, College of Science and Technology; Ph.D., Princeton University.

Rob J. Kulathinal, Assistant Professor, Department of Biology, College of Science and Technology; Ph.D., McMaster University.

Sudhir Kumar, Professor, Department of Biology, College of Science and Technology; Ph.D., Pennsylvania State University.

Eugene Kwatny, Professor, Department of Computer and Information Sciences, College of Science and Technology; Ph.D., Drexel University.

Sally Kyvernitis, Instructor (Teaching/Instructional), Department of Computer and Information Sciences, College of Science and Technology; M.S., Indiana University.

Mortimer M. Labes, Professor Emeritus, Department of Chemistry, College of Science and Technology; Ph.D., Massachusetts Institute of Technology.

Paul S. LaFollette Jr., Associate Professor, Department of Computer and Information Sciences, College of Science and Technology; M.D., Temple University.

Rolf Lakaemper, Associate Professor, Department of Computer and Information Sciences, College of Science and Technology; Ph.D., University of Hamburg.

Savio Laricchia, Assistant Professor (Research), Department of Physics, College of Science and Technology.
Sigurd Y. Larsen, Professor Emeritus, Department of Physics, College of Science and Technology; Ph.D., Columbia University.

Longin Jan Latecki, Professor, Department of Computer and Information Sciences, College of Science and Technology; Ph.D., University of Hamburg.

Michael Lawlor, Assistant Professor (Teaching/Instructional), Department of Chemistry, College of Science and Technology; Ph.D., Massachusetts Institute of Technology.

David Letkovitz, Professor Emeritus, Department of Computer and Information Sciences, College of Science and Technology; Ph.D., University of Pennsylvania.

Edward S. Letzter, Professor, Department of Mathematics, College of Science and Technology; Ph.D., University of Washington.

Robert J. Levis, Professor, Department of Chemistry, College of Science and Technology; Ph.D., Pennsylvania State University.

Ronald M. Levy, Professor, Department of Chemistry, College of Science and Technology; Ph.D., Harvard University.

Zhihai Li, Assistant Professor (Research), Department of Chemistry, College of Science and Technology; Ph.D., University of Aachen.

David A. Liberles, Associate Professor, Department of Biology, College of Science and Technology; Ph.D., California Institute of Technology.

Chyanlong Lin, Associate Professor, Department of Physics, College of Science and Technology; Ph.D., Temple University.

Haibin Ling, Associate Professor, Department of Computer and Information Sciences, College of Science and Technology; Ph.D., University of Maryland College Park.

Seymour Lipschutz, Professor Emeritus, Department of Mathematics, College of Science and Technology; Ph.D., New York University.

Maria E. Lorenz, Associate Professor (Teaching/Instructional), Department of Mathematics, College of Science and Technology; Ph.D., University of Southern California.

Martin W. Lorenz, Professor, Department of Mathematics, College of Science and Technology; Ph.D., Universität Giessen.

Sheryl L. Love, Assistant Professor (Teaching/Instructional), Department of Biology, College of Science and Technology; Ph.D., Temple University.

A. Marjatta Lyra, Professor, Department of Physics, College of Science and Technology; Ph.D., University of Stockholm.

Marcella Macaluso, Associate Professor (Research), Department of Biology, College of Science and Technology; Ph.D., University of Palermo.

Christopher M. MacDermaid, Assistant Professor (Research), Department of Chemistry, College of Science and Technology.

C. Jeffrey Martoff, Professor, Department of Physics, College of Science and Technology; Ph.D., University of California Berkeley.

Spiridoula Matsika, Professor, Department of Chemistry, College of Science and Technology; Ph.D., Ohio State University.

Kathleen E. Mc Kinley, Instructor (Practice), Department of Mathematics, College of Science and Technology; M.S., Saint Joseph's University.

Rose Marie McGinnis, Instructor (Teaching/Instructional), Department of Computer and Information Sciences, College of Science and Technology; M.B.A., Temple University.

Michelle Hedwig McGowan, Assistant Professor (Teaching/Instructional), Department of Biology, College of Science and Technology; Ph.D., Rutgers University.

George Mehler, Assistant Professor (Practice), Department of Mathematics, College of Science and Technology; Ph.D., Temple University.

Jatinder S. Mehta, Professor, Department of Mathematics, College of Science and Technology; Ph.D., University of Wisconsin.

Gerardo A. Mendoza, Professor, Department of Mathematics, College of Science and Technology; Ph.D., Massachusetts Institute of Technology.

Bernard Meth, Professor Emeritus, Department of Mathematics, College of Science and Technology; Ph.D., University of Pittsburgh.

Andreas Metz, Associate Professor, Department of Physics, College of Science and Technology; Ph.D., Institut Für Kernphysik Universität Mainz.

Zein-Eddine Meziani, Professor, Department of Physics, College of Science and Technology; Ph.D., Université de Paris XI.

Ted W. Mihalisin, Professor Emeritus, Department of Mathematics, College of Science and Technology; Ph.D., University of Rochester.

Richard L. Miller, Professor Emeritus, Department of Biology, College of Science and Technology; Ph.D., University of Chicago.

Irina Mitrea, Professor, Department of Mathematics, College of Science and Technology; Ph.D., University of Minnesota.
Sayaka Miura, Assistant Professor (Research), Department of Biology, College of Science and Technology; Ph.D., Pennsylvania State University.

Shahram Mohrekesh, Assistant Professor (Teaching/Instructional), Department of Computer and Information Sciences, College of Science and Technology.

Karl Morris, Assistant Professor (Teaching/Instructional), Department of Computer and Information Sciences, College of Science and Technology; Ph.D., Florida International University.

Michael I. Mote, Professor Emeritus, Department of Biology, College of Science and Technology; Ph.D., University of California Los Angeles.

Sudipto Mukherjee, Assistant Professor (Research), Department of Chemistry, College of Science and Technology.

Atsuhiro Muto, Assistant Professor, Department of Earth and Environmental Science, College of Science and Technology.

George H. Myer, Professor Emeritus, Department of Earth and Environmental Science, College of Science and Technology; Ph.D., Yale University.

James Napolitano, Professor, Department of Physics, College of Science and Technology; Ph.D., Stanford University.

William D. Nathan, Professor Emeritus, Department of Mathematics, College of Science and Technology; Ph.D., Syracuse University.

Stuart E. Neff, Professor Emeritus, Department of Biology, College of Science and Technology; Ph.D., Cornell University.

Donald E. Neville, Professor Emeritus, Department of Physics, College of Science and Technology; Ph.D., University of Chicago.

Matthew Newby, Assistant Professor (Teaching/Instructional), Department of Physics, College of Science and Technology.

Allen W. Nicholson, Professor, Department of Biology, College of Science and Technology; Ph.D., University of Pennsylvania.

Rhonda H. Nicholson, Assistant Professor (Teaching/Instructional), Department of Biology, College of Science and Technology; Ph.D., Wayne State University.

John Noel, Assistant Professor (Research), Department of Physics, College of Science and Technology; Ph.D., Texas A and M University.

John T. Nosek, Professor, Department of Computer and Information Sciences, College of Science and Technology; Ph.D., Temple University.

Jonathan Nyquist, Professor, Department of Earth and Environmental Science, College of Science and Technology; Ph.D., University of Wisconsin.

Zoran Obradovic, Professor, Department of Computer and Information Sciences, College of Science and Technology; Ph.D., Pennsylvania State University.

Johanan Odhner, Assistant Professor (Research), Department of Chemistry, College of Science and Technology.

Elmer L. Offenbacher, Professor Emeritus, Department of Physics, College of Science and Technology; Ph.D., University of Pennsylvania.

Michael Opferman, Assistant Professor (Teaching/Instructional), Department of Physics, College of Science and Technology.

Charles Osborne, Assistant Professor (Teaching/Instructional), Department of Mathematics, College of Science and Technology; Ph.D., Temple University.

Maria A. Pacheco, Assistant Professor (Research), Department of Biology, College of Science and Technology.

Karen B. Palter, Associate Professor, Department of Biology, College of Science and Technology; Ph.D., Princeton University.

Ellen Panofsky, Assistant Professor (Teaching/Instructional), Department of Mathematics, College of Science and Technology; Ph.D., Lehigh University.

Michael Paolone, Assistant Professor (Research), Department of Physics, College of Science and Technology; Ph.D., University of South Carolina Columbia.

Christopher Pascucci, Instructor (Teaching/Instructional), Department of Computer and Information Sciences, College of Science and Technology; M.S., University of Pennsylvania.

Eli A. Passow, Professor Emeritus, Department of Mathematics, College of Science and Technology; Ph.D., Yeshiva University.

Susan Patterson, Associate Professor, Department of Biology, College of Science and Technology; Ph.D., University of Washington.

John A. Paulos, Professor, Department of Mathematics, College of Science and Technology; Ph.D., University of Wisconsin.

Haowei Peng, Assistant Professor (Research), Department of Physics, College of Science and Technology.
John P. Perdew, Professor, Department of Physics, College of Science and Technology; Ph.D., Cornell University.

Isaak Pesenson, Professor (Teaching/Instructional), Department of Mathematics, College of Science and Technology; Ph.D., Academy of Science of the ASSR.

Hala O. Pflugfelder, Professor Emeritus, Department of Mathematics, College of Science and Technology; Ph.D., Albert-Ludwigs-Universität Freiburg im Breisgau.

Claudia Pine-Simon, Instructor (Teaching/Instructional), Department of Computer and Information Sciences, College of Science and Technology; M.S., University of Pennsylvania.

Alexander Platt, Assistant Professor (Research), Department of Biology, College of Science and Technology; Ph.D., Harvard University.

Arthur T. Poe, Professor Emeritus, Department of Computer and Information Sciences, College of Science and Technology; Ph.D., University of Illinois at Urbana-Champaign.

Sergei L. Kosakovsky Pond, Professor, Department of Science and Technology.

Andrew Price, Associate Professor (Teaching/Instructional), Department of Chemistry, College of Science and Technology; Ph.D., Purdue University.

Sean Gillian Queisser, Assistant Professor, Department of Mathematics, College of Science and Technology.

K. Raghunandan, Professor Emeritus, Department of Mathematics, College of Science and Technology; Ph.D., Colorado State University.

Daniele Ramella, Assistant Professor (Teaching/Instructional), Department of Chemistry, College of Science and Technology.

Yi Rao, Assistant Professor (Research), Department of Chemistry, College of Science and Technology; Ph.D., Institute of Chemistry, Chinese Academy of Sciences.

Harry P. Rappaport, Professor Emeritus, Department of Biology, College of Science and Technology; Ph.D., Yale University.

Robert Rang, Assistant Professor (Teaching/Instructional), Department of Chemistry, College of Science and Technology; Ph.D., University of Michigan.

Sujith Ravi, Assistant Professor, Department of Earth and Environmental Science, College of Science and Technology; Ph.D., University of Virginia.

Louis Raymon, Professor Emeritus, Department of Mathematics, College of Science and Technology; Ph.D., Yeshiva University.

Daniel Reich, Professor Emeritus, Department of Mathematics, College of Science and Technology; Ph.D., Princeton University.

Brian Rider, Professor, Department of Mathematics, College of Science and Technology; Ph.D., New York University Courant Institute of Mathematical Sciences.

Peter S. Riseborough, Professor, Department of Physics, College of Science and Technology; Ph.D., Imperial College London.

Igor Rivin, Professor, Department of Mathematics, College of Science and Technology; Ph.D., Princeton University.

Flavio Rizzolio, Assistant Professor (Research), Department of Biology, College of Science and Technology; Ph.D., University of Pavia.

Shepherd K. Roberts, Professor Emeritus, Department of Biology, College of Science and Technology; Ph.D., Princeton University.

Dmitri Romanov, Professor (Research), Department of Physics, College of Science and Technology; Ph.D., Novosibirsk Institute of Semiconductor Physics, USSR Academy of Sciences.

Charles W. Ross, Associate Professor (Teaching/Instructional), Department of Chemistry, College of Science and Technology.

Adele Ruosi, Associate Professor (Research), Department of Physics, College of Science and Technology.

Prakash C. Rushi, Instructor (Teaching/Instructional), Department of Mathematics, College of Science and Technology; M.Ed., Temple University.

Adrienn Ruzsinszky Perdew, Assistant Professor, Department of Physics, College of Science and Technology; Ph.D., Budapest University of Technology and Economics.

Douglas T. Saladik, Associate Professor (Teaching/Instructional), Department of Biology, College of Science and Technology; Ph.D., Temple University.

Robert E. Salomon, Professor Emeritus, Department of Chemistry, College of Science and Technology; Ph.D., University of Oregon.

Robert W. Sanders, Professor, Department of Biology, College of Science and Technology; Ph.D., University of Georgia.

Christian E. Schafmeister, Professor, Department of Chemistry, College of Science and Technology; Ph.D., University of California San Francisco.
John J. Schiller, Associate Professor, Department of Mathematics, College of Science and Technology; Ph.D., University of Pennsylvania.

William F. Schmitt, Professor Emeritus, Department of Computer and Information Sciences, College of Science and Technology; Ph.D., University of Pennsylvania.

Robert L. Sears, Professor Emeritus, Department of Biology, College of Science and Technology; Ph.D., University of California Berkeley.

Benjamin Seibold, Assistant Professor, Department of Mathematics, College of Science and Technology; Ph.D., University of Kaiserslautern.

Arun Sethuraman, Assistant Professor (Research), Department of Biology, College of Science and Technology; Ph.D., Iowa State University.

Cinzia Sevignani, Assistant Professor (Teaching/Instructional), Department of Biology, College of Science and Technology; Ph.D., University of Modena.

Brent Sewall, Assistant Professor, Department of Biology, College of Science and Technology; Ph.D., University of California Davis.

Yunfeng Shan, Department of Biology, College of Science and Technology.

Joel B. Sheffield, Professor, Department of Biology, College of Science and Technology; Ph.D., University of Chicago.

Yuan Justin Shi, Associate Professor, Department of Computer and Information Sciences, College of Science and Technology; Ph.D., University of Pennsylvania.

Scott M. Sieburth, Professor, Department of Chemistry, College of Science and Technology; Ph.D., Harvard University.

Jeremy Sivek, Assistant Professor (Teaching/Instructional), Department of Mathematics, College of Science and Technology; Ph.D., University of Pittsburgh.

Jonathan Smith, Associate Professor (Teaching/Instructional), Department of Chemistry, College of Science and Technology; Ph.D., Wesleyan University.

Gregory S. Smutzer, Associate Professor (Teaching/Instructional), Department of Biology, College of Science and Technology; Ph.D., State University of New York at Buffalo.

Daniel D. Spaeth, Assistant Professor (Teaching/Instructional), Department of Biology, College of Science and Technology; Ph.D., Temple University.

Francis C. Spano, Professor, Department of Chemistry, College of Science and Technology; Ph.D., Princeton University.

Nikolaos Sparveris, Assistant Professor, Department of Physics, College of Science and Technology; Ph.D., University of Athens.

Rachel Spigler, Assistant Professor, Department of Biology, College of Science and Technology; Ph.D., University of Georgia.

Avinash Srinivasan, Assistant Professor (Teaching/Instructional), Department of Computer and Information Sciences, College of Science and Technology; Ph.D., Florida Atlantic University.

Ranganatha Srinivasan, Professor, Department of Mathematics, College of Science and Technology; Ph.D., Wayne State University.

Robert J. Stanley, Professor, Department of Chemistry, College of Science and Technology; Ph.D., Pennsylvania State University.

Leon Steinberg, Professor Emeritus, Department of Mathematics, College of Science and Technology; Ph.D., University of Pennsylvania.

Matthew Stover, Assistant Professor, Department of Mathematics, College of Science and Technology; Ph.D., University of Texas at Austin.

Daniel R. Strongin, Professor, Department of Chemistry, College of Science and Technology; Ph.D., University of California Berkeley.

Deborah Stull, Assistant Professor (Teaching/Instructional), Department of Biology, College of Science and Technology; Ph.D., Yale University.

Jianwei Sun, Assistant Professor (Research), Department of Physics, College of Science and Technology; Ph.D., Tulane University.

Yugang Sun, Associate Professor, Department of Chemistry, College of Science and Technology; Ph.D., University of Science and Technology of China.

Bernd Surrow, Associate Professor, Department of Physics, College of Science and Technology; Ph.D., University of Hamburg.

Daniel B. Szyld, Professor, Department of Mathematics, College of Science and Technology; Ph.D., New York University.

Raza A. Tahir-Kheli, Professor Emeritus, Department of Physics, College of Science and Technology; Ph.D., Oxford University.

Stephen T. Takats, Professor Emeritus, Department of Biology, College of Science and Technology; Ph.D., University of Wisconsin-Madison.
Chiu Chiang Tan, Assistant Professor, Department of Computer and Information Sciences, College of Science and Technology; Ph.D., College of William and Mary.

Jacqueline C. Tanaka, Associate Professor, Department of Biology, College of Science and Technology; Ph.D., University of Illinois.

Hong Tang, Assistant Professor (Research), Department of Physics, College of Science and Technology; Ph.D., Northwestern Polytechnical University.

Rongjia Tao, Professor, Department of Physics, College of Science and Technology; Ph.D., Columbia University.

Dennis O. Terry Jr., Associate Professor, Department of Earth and Environmental Science, College of Science and Technology; Ph.D., University of Nebraska.

Allan E. Thomas, Assistant Professor (Teaching/Instructional), Department of Chemistry, College of Science and Technology; Ph.D., Temple University.

H. Frank Thornton, Associate Professor Emeritus, Department of Mathematics, College of Science and Technology; M.A., Princeton University.

Laura Toran, Professor, Department of Earth and Environmental Science, College of Science and Technology; Ph.D., University of Wisconsin.

Darius H. Torchinsky, Assistant Professor, Department of Physics, College of Science and Technology; Ph.D., Massachusetts Institute of Technology.

Georgia Triantafillou, Professor, Department of Mathematics, College of Science and Technology; Ph.D., University of Bonn, Germany.

Tsvetelin D. Tsankov, Assistant Professor (Teaching/Instructional), Department of Physics, College of Science and Technology; Ph.D., Drexel University.

Allison Tumarkin-Deratzian, Associate Professor (Teaching/Instructional), Department of Earth and Environmental Science, College of Science and Technology; Ph.D., University of Pennsylvania.

Gene C. Ulmer, Professor Emeritus, Department of Earth and Environmental Science, College of Science and Technology; Ph.D., Pennsylvania State University.

Wendy Urban, Instructor (Teaching/Instructional), Department of Computer and Information Sciences, College of Science and Technology; M.B.A., Temple University.

Shivaiah Vaddypally, Assistant Professor (Research), Department of Chemistry, College of Science and Technology; Ph.D., Hyderabad University.

Ann M. Valentine, Associate Professor, Department of Chemistry, College of Science and Technology; Ph.D., Massachusetts Institute of Technology.

Elena Ya Vishik, Assistant Professor (Teaching/Instructional), Department of Mathematics, College of Science and Technology; Ph.D., Moscow Pedagogical Institute.

Vladimir Visnjic, Assistant Professor (Teaching/Instructional), Department of Mathematics, College of Science and Technology; Ph.D., University of Bonn, Germany.

Evelyn Vleck, Instructor (Teaching/Instructional), Department of Biology, College of Science and Technology; M.A., William Paterson College.

Vincent Voelz, Assistant Professor, Department of Chemistry, College of Science and Technology; Ph.D., University of California San Francisco.

Slobodan Vucetic, Associate Professor, Department of Computer and Information Sciences, College of Science and Technology; Ph.D., Washington State University.

Doreen Wald, Instructor (Teaching/Instructional), Department of Mathematics, College of Science and Technology; M.Ed., Temple University.

Chelsea Walton, Assistant Professor, Department of Mathematics, College of Science and Technology.

Anduo Wang, Assistant Professor, Department of Computer and Information Sciences, College of Science and Technology.

Charles Wang, Associate Professor (Teaching/Instructional), Department of Computer and Information Sciences, College of Science and Technology.

Pei Wang, Associate Professor (Teaching/Instructional), Department of Computer and Information Sciences, College of Science and Technology; Ph.D., Indiana University.

Richard B. Waring, Associate Professor, Department of Biology, College of Science and Technology; Ph.D., Essex University.

Stephen S. Washburne, Associate Professor Emeritus, Department of Chemistry, College of Science and Technology; Ph.D., Massachusetts Institute of Technology.
Patrick Waters, Assistant Professor (Research), Department of Mathematics, College of Science and Technology.

Bradford B. Wayland, Professor, Department of Chemistry, College of Science and Technology; Ph.D., University of Illinois.

Weerasinghe Arachchige Kushan Weerasinghe, Instructor (Research), Department of Chemistry, College of Science and Technology.

Robert B. Weinberg, Professor Emeritus, Department of Physics, College of Science and Technology; Ph.D., Columbia University.

Richard C. Weisenberg, Professor Emeritus, Department of Biology, College of Science and Technology; Ph.D., University of Chicago.

Sarah Wengenroth, Assistant Professor, Department of Chemistry, College of Science and Technology; Ph.D., Duke University.

Vladimira V. Wilent, Assistant Professor (Teaching/Instructional), Department of Chemistry, College of Science and Technology; Ph.D., University of Pennsylvania.

Michael Wilhelm, Assistant Professor (Research), Department of Chemistry, College of Science and Technology; Ph.D., University of Pennsylvania.

Katherine A. Willets, Associate Professor, Department of Chemistry, College of Science and Technology.

John R. Williams, Professor Emeritus, Department of Chemistry, College of Science and Technology; Ph.D., University of Western Australia.

Matthaeus Wolak, Assistant Professor (Research), Department of Physics, College of Science and Technology.

Paul Wolfgang, Instructor (Teaching/Instructional), Department of Computer and Information Sciences, College of Science and Technology; B.S.E.E., University of Pennsylvania.

Jie Wu, Professor, Department of Computer and Information Sciences, College of Science and Technology; Ph.D., Florida Atlantic University.

Wei Wu, Assistant Professor (Teaching/Instructional), Department of Mathematics, College of Science and Technology; Ph.D., University of Leuven.

Xifan Wu, Assistant Professor, Department of Physics, College of Science and Technology; Ph.D., Rutgers University.

William Wuest, Assistant Professor, Department of Chemistry, College of Science and Technology; Ph.D., University of Pennsylvania.

Stephanie L. Wunder, Professor, Department of Chemistry, College of Science and Technology; Ph.D., University of Massachusetts.

Xiaoxing Xi, Professor, Department of Physics, College of Science and Technology; Ph.D., Peking University and Institute of Physics.

Junchao Xia, Associate Professor (Research), Department of Physics, College of Science and Technology.

Xiaojun Xu, Assistant Professor (Research), Department of Physics, College of Science and Technology; Ph.D., Chinese Academy of Sciences.

Wei-Shih Yang, Professor, Department of Mathematics, College of Science and Technology; Ph.D., Cornell University.

Weidong Yang, Associate Professor, Department of Biology, College of Science and Technology; Ph.D., Fudan University.

Zenghui Yang, Assistant Professor (Research), Department of Physics, College of Science and Technology.

Alexander P. Yates, Associate Professor, Department of Computer and Information Sciences, College of Science and Technology; Ph.D., University of Washington.

Jingjie Yu, Assistant Professor (Research), Department of Biology, College of Science and Technology.

Liping Yu, Assistant Professor (Research), Department of Physics, College of Science and Technology.

Tan Yuen, Associate Professor, Department of Physics, College of Science and Technology; Ph.D., Temple University.

Michael J. Zdilla, Assistant Professor, Department of Chemistry, College of Science and Technology; Ph.D., Princeton University.

Qiang Zeng, Assistant Professor, Department of Computer and Information Sciences, College of Science and Technology.

Bin Zhang, Assistant Professor (Research), Department of Physics, College of Science and Technology; Ph.D., University of Pittsburgh.

Dong Zhou, Assistant Professor (Research), Department of Mathematics, College of Science and Technology; Ph.D., Temple University.

David E. Zitarelli, Professor Emeritus, Department of Mathematics, College of Science and Technology; Ph.D., Pennsylvania State University.

Matthew Zumbrum, Assistant Professor (Research), Department of Mathematics, College of Science and Technology; Ph.D., University of Delaware.
Accelerated Programs

The College of Science and Technology has a variety of accelerated programs in partnership with professional and graduate programs.

1. Temple Professional School Programs (Lewis Katz School of Medicine at Temple University, Temple University Kornberg School of Dentistry, Temple University School of Podiatry, Temple University School of Pharmacy) agree to cooperate in providing an accelerated 3 + 4 undergraduate/professional school education leading to a Bachelor of Arts degree in the College of Science and Technology and a Doctorate degree from the Professional School. Also, the College of Science and Technology and the Temple University College of Public Health agree to cooperate in providing an accelerated 3 + 3 undergraduate/graduate education leading to a Bachelor of Arts degree in the College of Science and Technology and a Doctorate of Physical Therapy in the College of Public Health. The joint programs will each consist of a minimum of 90 semester hours of undergraduate coursework toward completion of a Bachelor of Arts degree in the College of Science and Technology at Temple University and the regular curriculum in the professional program.

2. Many departments in the College of Science and Technology cooperate in providing an accelerated 4 + 1 undergraduate/graduate education leading to a Bachelor of Arts or Science degree in the College of Science and Technology as well as a Masters of Arts or Science degree from the Graduate School.

3. Temple's College of Education cooperates in providing a 4 + 1 undergraduate/graduate education leading to a Bachelor of Arts or Science degree in the College of Science and Technology as well as a Masters of Education degree from the College of Education.

Below are the links to more specific details on the agreements with Temple's Graduate and Professional Schools:

Programs

- Biology, B.A./M.Ed. (p. 1030)
- Biology, B.S./M.Ed. (p. 1031)
- Chemistry, B.A./M.A. (p. 1032)
- Chemistry, B.A./M.Ed. (p. 1032)
- Chemistry, B.S./M.A. (p. 1033)
- Chemistry, B.S./M.Ed. (p. 1033)
- Computer Science, B.A./M.S. (p. 1034)
- Computer Science, B.A./M.S. IST (p. 1035)
- Computer Science, B.S./M.S. (p. 1035)
- Computer Science, B.S./M.S. IST (p. 1036)
- Dental, 3+N Program (p. 1036)
- Geology, B.A./M.Ed. (p. 1039)
- Geology, B.S./M.Ed. (p. 1039)
- Information Science & Technology, B.A./M.S. (p. 1040)
- Information Science & Technology, B.S./M.S. (p. 1040)
- Mathematics, B.A./M.Ed. (p. 1041)
- Mathematics, B.A./M.S. (p. 1041)
- Mathematics, B.S./M.Ed. (p. 1042)
- Mathematics, B.S./M.S. (p. 1043)
- Medical, 3+N Program (p. 1043)
- Pharmaceutical Sciences, B.S. (p. 1046)
- Pharmacy, 3+N Program (p. 1049)
- Physical Therapy, 3+N Program (p. 1052)
- Physics, B.A./M.Ed. (p. 1054)
- Physics, B.A./M.S. (p. 1054)
- Physics, B.S./M.Ed. (p. 1055)
- Physics, B.S./M.S. (p. 1055)
- Podiatry, 3+N Program (p. 1056)

Biology, B.A./M.Ed.

Undergraduate Contact Information:

Dr. Allen Nicholson, Chair
Biology-Life Sciences Building, Room 255
215-204-8851

Dr. Joel Sheffield, Faculty Advisor (Last names A-M)
Biology-Life Sciences Building, Room 311
215-204-8839
joel.sheffield@temple.edu

Ms. Evelyn Vleck, Faculty Advisor (Last names N-Z)
Biology-Life Science Building, Room 248P
215-204-6528
evelyn.vleck@temple.edu

Graduate Contact Information:
Secondary Education Program
College of Education
1301 Cecil B. Moore Avenue
Philadelphia, PA 19122-6091
educate@temple.edu
215-204-8011

Five-Year Combined B.A. and M.Ed. Program

Five-Year Master’s/Secondary Education Certification Program
This is a combined program between the College of Science & Technology and the College of Education. For more information, see the following program pages: Biology B.A. (p. 1059) and Secondary Education/Science Education M.Ed. (http://bulletin.temple.edu/graduate/scd/education/secondary-education-science-education-med)

Biology, B.S./M.Ed.

Undergraduate Contact Information:
Dr. Allen Nicholson, Chair
Biology-Life Sciences Building, Room 255
215-204-8851

Dr. Joel Sheffield, Faculty Advisor (Last names A-M)
Biology-Life Sciences Building, Room 311
215-204-8839
joel.sheffield@temple.edu

Ms. Evelyn Vleck, Faculty Advisor (Last names N-Z)
Biology-Life Science Building, Room 248P
215-204-6528
evelyn.vleck@temple.edu

Graduate Contact Information:
Secondary Education Program
College of Education
1301 Cecil B. Moore Avenue
Philadelphia, PA 19122-6091
educate@temple.edu
215-204-8011

Five-Year Combined B.S. and M.Ed. Program

Five-Year Master’s/Secondary Education Certification Program
This is a combined program between the College of Science & Technology and the College of Education. For more information, see the following program pages: Biology B.S. (p. 1063) and Secondary Education/Science Education M.Ed. (http://bulletin.temple.edu/graduate/scd/education/secondary-education-science-education-med)
Chemistry, B.A./M.A.

Undergraduate Contact Information:

Dr. Robert Levis, Chair  
Beury Hall, Room 130  
215-204-7118

Dr. Spiridoula Matsika, Faculty Advisor (Last names A-G)  
Beury Hall, Room 242  
215-204-7703  
spiridoula.matsika@temple.edu

Dr. Robert Stanley, Faculty Advisor (Last names H-N)  
Beury Hall, Room 250B  
215-204-2027  
robert.stanley@temple.edu

Dr. Michael Zdilla, Faculty Advisor (Last names O-Z)  
Beury Hall, Room 440  
215-204-7886  
michael.zdilla@temple.edu

Graduate Contact Information:

Dr. Frank Spano, Graduate Program Chair  
Beury Hall, Room 346  
215-204-5203  
spano@temple.edu

Five-Year Master's Program

Five-Year B.A./M.A.

Chemistry majors at the beginning of their junior year may apply for admission to the fifth-year M.A. Program. Upon admission to the program and satisfactory completion of the program requirements, the student is assured of having a master's degree at the end of the fifth year. Interested students should contact their advisor for details. For more information, see the following program pages: Chemistry B.A. (p. 1087) and Chemistry M.A. (http://bulletin.temple.edu/graduate/scd/cst/chemistry-ma)

Chemistry, B.A./M.Ed.

Undergraduate Contact Information:

Dr. Robert Levis, Chair  
Beury Hall, Room 130  
215-204-7118

Dr. Spiridoula Matsika, Faculty Advisor (Last names A-G)  
Beury Hall, Room 242  
215-204-7703  
spiridoula.matsika@temple.edu

Dr. Robert Stanley, Faculty Advisor (Last names H-N)  
Beury Hall, Room 250B  
215-204-2027  
robert.stanley@temple.edu

Dr. Michael Zdilla, Faculty Advisor (Last names O-Z)  
Beury Hall, Room 440  
215-204-7886  
michael.zdilla@temple.edu

Graduate Contact Information:

Secondary Education Program
Five-Year Combined B.A. and M.Ed. Program

This is a combined program between the College of Science and Technology and the College of Education. For more information, see the following program pages: Chemistry B.A. (p. 1087) and Secondary Education/Science Education M.Ed. (http://bulletin.temple.edu/graduate/scd/education/secondary-education-science-education-med)

Chemistry, B.S./M.A.

Undergraduate Contact Information:
Dr. Robert Levis, Chair
Beury Hall, Room 130
215-204-7118

Dr. Spiridoula Matsika, Faculty Advisor (Last names A-G)
Beury Hall, Room 242
215-204-7703
spiridoula.matsika@temple.edu

Dr. Robert Stanley, Faculty Advisor (Last names H-N)
Beury Hall, Room 250B
215-204-2027
robert.stanley@temple.edu

Dr. Michael Zdilla, Faculty Advisor (Last names O-Z)
Beury Hall, Room 440
215-204-7886
michael.zdilla@temple.edu

Graduate Contact Information:
Dr. Frank Spano, Graduate Program Chair
Beury Hall, Room 346
215-204-5203
spano@temple.edu

Five-Year Master's Program

Five-Year B.S./M.A.

Chemistry majors at the beginning of their junior year may apply for admission to the fifth-year M.A. Program. Upon admission to the program and satisfactory completion of the program requirements, the student is assured of having a master’s degree at the end of the fifth year. Interested students should contact their advisor for details. For more information, see the following program pages: Chemistry B.S. (p. 1091) and Chemistry M.A. (http://bulletin.temple.edu/graduate/scd/cst/chemistry-ma)

Chemistry, B.S./M.Ed.

Undergraduate Contact Information:
Dr. Robert Levis, Chair
Beury Hall, Room 130
215-204-7118

Dr. Spiridoula Matsika, Faculty Advisor (Last names A-G)
Beury Hall, Room 242
215-204-7703
spiridoula.matsika@temple.edu
Five-Year Combined B.S. and M.Ed. Program

Five-Year Master's/Secondary Education Certification Program

This is a combined program between the College of Science and Technology and the College of Education. For more information, see the following program pages: Chemistry B.S. (p. 1091) and Secondary Education/Science Education M.Ed. (http://bulletin.temple.edu/graduate/scd/education/secondary-education-science-education-med)

Computer Science, B.A./M.S.

Undergraduate Contact Information:

Dr. Jie Wu, Chair
Science Education and Research Center, Room 304
215-204-8450

Sally Kyvernitis, Faculty Advisor
Science Education and Research Center, Room 330
215-204-2030
sallyk@temple.edu

Graduate Contact Information:

Dr. Yuan Shi, Graduate Program Chair
Science Education and Research Center, Room 348
215-204-5203
shi@temple.edu

FIVE-YEAR MASTER'S PROGRAM

B.A. in Computer Science / M.S. in Computer Science

High achieving Computer Science majors with at least 5 semesters at Temple are qualified to apply to the Five Year Master's Program.

- Students may apply to the Five Year Program after completing a progress review in CST advising, meeting with the Faculty advisor, and registering for their sixth term. These must be completed before their Senior year. They are admitted before their Senior year. In addition to having a GPA of 3.5 or higher, students must be able to complete at least 99 credits (including CIS 3207 and CIS 3223) before the start of their Senior year. Please note that many of our graduate CS electives expect a background in networking and math (e.g., Calculus III, Linear Algebra Statistics), so students should select their undergraduate courses appropriately.
- During their Senior year, students take 24 credits, 9 credits of which are graduate. These 9 graduate credits count three ways: (a) as general undergraduate credit, (b) as upper level undergraduate CS elective credit, (c) as graduate credit.
- After their Senior year, students receive their undergraduate degree, then are formally admitted to the graduate program (with 9 graduate credits already completed).
- During their fifth year, students take an additional 21 graduate credits and graduate with a Master's degree.
Interested students should contact their advisor for details. For more information, see the following program pages: Computer Science B.A. (p. 1097) and Computer Science M.S. (http://bulletin.temple.edu/graduate/scd/cst/computer-science-ms) and the CIS Department’s Graduate Page (http://temple.edu/cis/graduate) (includes link to application).

**Computer Science, B.A./M.S. IST**

**Undergraduate Contact Information:**

Dr. Jie Wu, Chair
Science Education and Research Center, Room 304
215-204-8450

Sally Kyvernitis, Faculty Advisor
Science Education and Research Center, Room 330
215-204-2030
sallyk@temple.edu

**Graduate Contact Information:**

Dr. Yuan Shi, Graduate Program Chair
Science Education and Research Center, Room 348
215-204-5203
shi@temple.edu

**FIVE-YEAR MASTER'S PROGRAM**

**B.A. in Computer Science / M.S. in Information Science and Technology**

High achieving Computer Science majors with at least 5 semesters at Temple are qualified to apply to the Five Year Master’s Program.

- Students may apply to the Five Year Program after completing a progress review in CST advising, meeting with the Faculty advisor, and registering for their sixth term. These must be completed before the Spring of their Junior year. They are admitted before their Senior year. In addition to having a GPA of 3.5 or higher, students must be able to complete at least 99 credits (including CIS 3207, a course in networking, and a course in databases) before the start of their Senior year.
- During their Senior year, students take 24 credits, 9 credits of which are graduate. These 9 graduate credits count three ways: (a) as general undergraduate credit, (b) as upper level undergraduate CS elective credit, (c) as graduate credit.
- After their Senior year, students receive their undergraduate degree, then are formally admitted to the graduate program (with 9 graduate credits already completed).
- During their fifth year, students take an additional 21 graduate credits and graduate with a Master’s degree.

Interested students should contact their advisor for details. For more information, see the following program pages: Computer Science B.A. (p. 1097) and Information Science and Technology M.S. (http://bulletin.temple.edu/graduate/scd/cst/information-science-technology-ms) and the CIS Department’s Graduate Page (http://temple.edu/cis/graduate) (includes link to application).

**Computer Science, B.S./M.S.**

**Undergraduate Contact Information:**

Dr. Jie Wu, Chair
Science Education and Research Center, Room 304
215-204-8450

Sally Kyvernitis, Faculty Advisor
Science Education and Research Center, Room 330
215-204-2030
sallyk@temple.edu

**Graduate Contact Information:**

Dr. Yuan Shi, Graduate Program Chair
Science Education and Research Center, Room 348
215-204-5203
shi@temple.edu
Five-Year Master's Program
B.S. in Computer Science / M.S. in Computer Science

High achieving Computer Science majors with at least 5 semesters at Temple are qualified to apply to the Five Year Master's Program.

- Students may apply to the Five Year Program after completing a progress review in CST advising, meeting with the Faculty advisor, and registering for their sixth term. These must be completed before the Spring of their Junior year. They are admitted before their Senior year. In addition to having a GPA of 3.5 or higher, students must be able to complete at least 99 credits (including CIS 3207 and CIS 3223) before the start of their Senior year. Please note that many of our graduate CS electives expect a background in networking and math (e.g., Calculus III, Linear Algebra, Statistics), so students should select their undergraduate courses appropriately.

- During their Senior year, students take 24 credits, 9 credits of which are graduate. These 9 graduate credits count three ways: (a) as general undergraduate credit, (b) as upper level undergraduate CS elective credit, (c) as graduate credit.

- After their Senior year, students receive their undergraduate degree and then are formally admitted to the graduate program (with 9 graduate credits already completed).

- During their fifth year, students take an additional 21 graduate credits and graduate with a Master's degree.

Interested students should contact their advisor for details. For more information, see the following program pages: Computer Science B.S. (p. 1101) and Computer Science M.S. (http://bulletin.temple.edu/graduate/scd/cst/computer-science-ms) and the CIS Department's Graduate Page (http://temple.edu/cis/graduate) (includes link to application).

Computer Science, B.S./M.S. IST

Undergraduate Contact Information:
Dr. Jie Wu, Chair
Science Education and Research Center, Room 304
215-204-8450

Sally Kyvernitis, Faculty Advisor
Science Education and Research Center, Room 330
215-204-2030
sallyk@temple.edu

Graduate Contact Information:
Dr. Yuan Shi, Graduate Program Chair
Science Education and Research Center, Room 348
215-204-5203
shi@temple.edu

FIVE-YEAR MASTER'S PROGRAM
B.S. in Computer Science / M.S. in Information Science and Technology

High achieving Computer Science majors with at least 5 semesters at Temple are qualified to apply to the Five Year Master's Program.

- Students may apply to the Five Year Program after completing a progress review in CST advising, meeting with the Faculty advisor, and registering for their sixth term. These must be completed before the Spring of their Junior year. They are admitted before their Senior year. In addition to having a GPA of 3.5 or higher, students must be able to complete at least 99 credits (including CIS 3207, a course in networking, and a course in databases) before the start of their Senior year.

- During their Senior year, students take 24 credits, 9 credits of which are graduate. These 9 graduate credits count three ways: (a) as general undergraduate credit, (b) as upper level undergraduate CS elective credit, (c) as graduate credit.

- After their Senior year, students receive their undergraduate degree and then are formally admitted to the graduate program (with 9 graduate credits already completed).

- During their fifth year, students take an addition 21 graduate credits and graduate with a Master's degree.

Interested students should contact their advisor for details. For more information, see the following program pages: Computer Science B.S. (p. 1101) and Information Science & Technology M.S. (http://bulletin.temple.edu/graduate/scd/cst/information-science-technology-ms) and the CIS Department's Graduate Page (http://temple.edu/cis/graduate) (includes link to application).

Dental, 3+N Program

College of Science and Technology
Students must meet the admissions requirements ([http://dentistry.temple.edu/admissions/requirements](http://dentistry.temple.edu/admissions/requirements)) for early admission to the Temple University Kornberg School of Dentistry. If you are applying to other dental schools, please use the web to find admissions requirements.

**Guidelines for Completion of the Bachelor of Arts Degree in the College of Science & Technology**

- Bachelor of Arts candidates in the College of Science and Technology (CST) must complete all requirements for the major before entering the School of Dentistry with the exception of the following:
  1. Biology majors may count up to three of the following first year School of Dentistry courses as Biology electives:
     - DENT D277 Physiology so long as the student has not previously earned credit for BIOL 3334;
     - DENT D100 Biochemistry so long as the student has not previously earned credit for BIOL 4375;
     - DENT D101 General & Oral Histology so long as the student has not previously earned credit for BIOL 2235;
     - DENT D202 Gross Anatomy so long as the student has not previously earned credit for BIOL 2233.
  2. Chemistry majors may count the following first year School of Dentistry course as a Chemistry elective:
     - DENT D100 Biochemistry so long as the student has not previously earned credit for BIOL 4375/ CHEM 4401.

- College of Science and Technology students may count up to 33 equivalent credit hours from the first year at the School of Dentistry as equivalents of upper-level credits in the College of Science and Technology or the College of Liberal Arts.
- College of Science and Technology students may count up to 33 equivalent credit hours from the first year at the School of Dentistry to fulfill their general credit hour requirements for the Bachelor of Arts degree in the College of Science and Technology.
- Appropriate course sequences for majors offered by the College of Science and Technology will be available in the Office of Student Services (1810 Liacouras Walk, Suite 203) or Pre-Professional Health Studies (1810 Liacouras Walk, Suite 100) and will be shared with prospective and current students.

**Suggested Academic Plan for CST + Dental School 3+4 Program**

Below is a suggested academic plan. Individual plans will vary based on previous course work, AP credits, performance on University placement tests, and specific undergraduate major. Students who qualify for the 3+4 program will develop an individual academic plan with the Pre-Professional Health Studies during their first semester at the University.

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>MATH 1041 or 1941</td>
<td>Calculus I</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
</tr>
<tr>
<td>CHEM 1031 &amp; CHEM 1033</td>
<td>General Chemistry I</td>
</tr>
<tr>
<td>CHEM 1951 &amp; CHEM 1953</td>
<td>Honors General Chemical Science I</td>
</tr>
<tr>
<td>Major / General Education / Elective Credits</td>
<td></td>
</tr>
<tr>
<td>Apply to 3+4 Program</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>15</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>MATH 1042 or 1942</td>
<td>Calculus II</td>
</tr>
<tr>
<td>BIOL 1111 or 1911</td>
<td>Introduction to Biology I</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
</tr>
<tr>
<td>CHEM 1032 &amp; CHEM 1034</td>
<td>General Chemistry II</td>
</tr>
<tr>
<td>CHEM 1952 &amp; CHEM 1954</td>
<td>Honors General Chemical Science II</td>
</tr>
</tbody>
</table>
Major / General Education / Elective Credits  

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
</tr>
</tbody>
</table>

**Year 2**

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 2112 or 2912</td>
<td>Introduction to Biology II</td>
<td>4</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 2201 &amp; CHEM 2203</td>
<td>Organic Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 2211 &amp; CHEM 2213</td>
<td>Organic Chemistry for Majors I</td>
<td></td>
</tr>
<tr>
<td>CHEM 2921 &amp; CHEM 2923</td>
<td>Organic Chemistry for Honors I</td>
<td></td>
</tr>
</tbody>
</table>

Major / General Education / Elective Credits  

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
</tr>
</tbody>
</table>

**Spring**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>CHEM 2202 &amp; CHEM 2204</td>
<td>Organic Chemistry II</td>
<td></td>
</tr>
<tr>
<td>CHEM 2212 &amp; CHEM 2214</td>
<td>Organic Chemistry for Majors II</td>
<td></td>
</tr>
<tr>
<td>CHEM 2922 &amp; CHEM 2924</td>
<td>Organic Chemistry for Honors II</td>
<td></td>
</tr>
</tbody>
</table>

Major / General Education / Elective Credits  

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
</tr>
</tbody>
</table>

**Year 3**

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 2021 or 2921</td>
<td>General Physics I</td>
<td>4</td>
</tr>
</tbody>
</table>

Major / General Education / Elective Credits  

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
</tr>
</tbody>
</table>

**Spring**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 2022 or 2922</td>
<td>General Physics II</td>
<td>4</td>
</tr>
</tbody>
</table>

Major / General Education / Elective Credits  

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
</tr>
</tbody>
</table>

**Total Credit Hours:**  

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>90</td>
</tr>
</tbody>
</table>

**First Year - Dental School**

Approximately 34 credits of course work completed during the first year of Dental School will be applied to the CST major's total number of earned hours needed for the completion of the degree requirements for graduation. For some majors, course work will count as elective hours in the major; for all others, course work counts as elective hours toward the completion of the minimum of 123 credits for the undergraduate degree. In planning an undergraduate schedule it is essential to consult with an academic advisor.

**Notes:**

1. Students in the Accelerated Program must have been pre-approved through the Pre-Professional Health Studies (PPHS) and have signed an "Intent to Pursue" form during their first semester. This form must be on file with PPHS.
2. Because students in an accelerated program must meet both the course requirements for entry to professional school and the course requirements for their major, it is necessary for these students to consult with an advisor in their major as well as the PPHS as early in their academic career as possible. Failure to do so may make completing the required courses in the first 90 hours impossible.
3. The academic plan presented here is a generic plan; the actual plan will depend on choice of major and number of AP credits applied from high school transcript.
4. With some exceptions, CST students must complete the requirements for their major within their first 90 hours; course work in the first year of professional school counts as elective hours toward degree completion.
5. Biology Majors - Some of the course work during the first year of Dental School can be counted for Biology electives as well as general electives for degree completion. Certain electives are excluded. Be sure to consult with an academic advisor.
6. Non Life-Science Majors - In order to complete the required courses in 3 years, majors that do not overlap with pre-medical course requirements must have AP credit, take an overload, or enroll in summer session classes.

Geology, B.A./M.Ed.

Undergraduate Contact Information:

Dr. Jonathan Nyquist, Chair
Beury Hall, Room 326
215-204-7172

Dr. Allison Tumarkin-Deratzian, Faculty Advisor
Beury Hall, Room 315B
215-204-2321
altid@temple.edu

Graduate Contact Information:

Secondary Education Program
College of Education
1301 Cecil B. Moore Avenue
Philadelphia, PA 19122-6091
educate@temple.edu
215-204-8011

Five-Year Combined B.A. and M.Ed. Program

Five-Year Master's/Secondary Education Certification Program

This is a combined program between the College of Science and Technology and the College of Education. For more information, see the following program pages: Geology B.A. (p. 1125) and Secondary Education/Science Education M.Ed. (http://bulletin.temple.edu/graduate/scd/education/secondary-education-science-education-med/.html)

Geology, B.S./M.Ed.

Undergraduate Contact Information:

Dr. Jonathan Nyquist, Chair
Beury Hall, Room 326
215-204-7172

Dr. Allison Tumarkin-Deratzian, Faculty Advisor
Beury Hall, Room 315B
215-204-2321
altid@temple.edu

Graduate Contact Information:

Secondary Education Program
College of Education
1301 Cecil B. Moore Avenue
Philadelphia, PA 19122-6091
educate@temple.edu
215-204-8011

Five-Year Combined B.S. and M.Ed. Program

Five-Year Master's/Secondary Education Certification Program

This is a combined program between the College of Science and Technology and the College of Education. For more information, see the following program pages: Geology B.S. (p. 1129) and Secondary Education/Science Education M.Ed. (http://bulletin.temple.edu/graduate/scd/education/secondary-education-science-education-med/.html)
Information Science & Technology, B.A./M.S.

Undergraduate Contact Information:

Dr. Jie Wu, Chair
Science Education and Research Center, Room 304
215-204-8450

Ms. Wendy Urban, Undergraduate Faculty Advisor
Science Education and Research Center, Room 352
215-204-5236
wendy.urban@temple.edu

Graduate Contact Information:

Dr. Yuan Shi, Graduate Program Chair
Science Education and Research Center, Room 348
215-204-5203
shi@temple.edu

Ms. Sally Kyvernitis, Graduate Faculty Advisor
Science Education and Research Center, Room 330
215-204-2030
sallyk@temple.edu

FIVE-YEAR MASTER'S PROGRAM

B.A. and M.S. in Information Science and Technology

High achieving IST majors with at least 5 semesters at Temple are qualified to apply to the Five Year Master's Program.

• Students may apply to the Five Year Program after completing a progress review in CST advising, meeting with the Faculty advisor, and registering for their sixth term. These must be completed before the Spring of their Junior year. They are admitted before their Senior year. In addition to having a GPA of 3.5 or higher, students must be able to complete at least 99 credits (including CIS 2033 Computational Probability and Statistics, CIS 3329 Network Architectures, and CIS 3342 Networked Application Systems) before the start of their Senior year.

• During their Senior year, students take 24 credits, 9 credits of which are graduate. These 9 graduate credits count three ways: (a) as general undergraduate credit, (b) as upper level undergraduate CS elective credit, (c) as graduate credit.

• After their Senior year, students receive their undergraduate degree, then are formally admitted to the graduate program (with 9 graduate credits already completed).

• During their fifth year, students take an additional 21 graduate credits and graduate with a Master's degree.

Interested students should contact their advisor for details. For more information, see the following program pages: Information Science & Technology B.A. (p. 1107) and Information Science & Technology M.S. (http://bulletin.temple.edu/graduate/scd/cst/information-science-technology-ms) and the CIS Department's Graduate Page (http://temple.edu/cis/graduate) (includes link to application).

Information Science & Technology, B.S./M.S.

Undergraduate Contact Information:

Dr. Jie Wu, Chair
Science Education and Research Center, Room 304
215-204-8450

Ms. Wendy Urban, Undergraduate Faculty Advisor
Science Education and Research Center, Room 353
215-204-5236
wendy.urban@temple.edu

Graduate Contact Information:

Dr. Yuan Shi, Graduate Program Chair
Science Education and Research Center, Room 348
215-204-5203
shi@temple.edu
FIVE-YEAR MASTER’S PROGRAM
B.S. and M.S. in Information Science and Technology

High achieving IST majors with at least 5 semesters at Temple are qualified to apply to the Five Year Master’s Program.

- Students may apply to the Five Year Program after completing a progress review in CST advising, meeting with the Faculty advisor, and registering for their sixth term. These must be completed before the Spring of their Junior year. They are admitted before their Senior year. In addition to having a GPA of 3.5 or higher, students must be able to complete at least 99 credits (including CIS 2033 Computational Probability and Statistics, CIS 3329 Network Architectures, and CIS 3342 Networked Application Systems) before the start of their Senior year.
- During their Senior year, students take 24 credits, 9 credits of which are graduate. These 9 graduate credits count three ways: (a) as general undergraduate credit, (b) as upper level undergraduate CS elective credit, (c) as graduate credit.
- After their Senior year, students receive their undergraduate degree, then are formally admitted to the graduate program (with 9 graduate credits already completed).
- During their fifth year, students take an additional 21 graduate credits and graduate with a Master’s degree.

Interested students should contact their advisor for details. For more information, see the following program pages: Information Science & Technology B.S. (p. 1110) and Information Science & Technology M.S. (http://bulletin.temple.edu/graduate/scd/cst/information-science-technology-ms) and the CIS Department’s Graduate Page (http://temple.edu/cis/graduate) (includes link to application).

Mathematics, B.A./M.Ed.

Undergraduate Contact Information:

Dr. Edward Letzter, Chair
Wachman Hall, Room 638
215-204-7841

Dr. Boris Datskovsky, Associate Chair
Wachman Hall, Room 632
215-204-7847
mathadvising@temple.edu

Dr. Maria E. Lorenz, Undergraduate Chair
Wachman Hall, Room 542
215-204-6764
mathadvising@temple.edu

Graduate Contact Information:

Secondary Education Program
College of Education
1301 Cecil B. Moore Avenue
Philadelphia, PA 19122-6091
educate@temple.edu
215-204-8011

Five-Year Combined B.A. and M.Ed. Program

Five-Year Master’s/Secondary Education Certification Program

This is a combined program between the College of Science and Technology and the College of Education. For more information, see the following program pages: Mathematics B.A. (p. 1138) and Secondary Education/Mathematics Education M.Ed. (http://bulletin.temple.edu/graduate/scd/education/secondary-education-mathematics-education-med)

Mathematics, B.A./M.S.

Undergraduate Contact Information:

Dr. Edward Letzter, Chair
Wachman Hall, Room 638
215-204-7841

Dr. Boris Datskovsky, Associate Chair
Wachman Hall, Room 632
Five-Year Master's Program

The Combined B.A./M.S. Program

To participate in this five-year program, a mathematics major should be enrolled in the B.A. program. Application to continue in the M.S. program must be made to the graduate chair of the department no later than the first semester of the senior year. To be accepted by the M.S. program, a student must have a GPA of at least 3.25 in Mathematics courses when the application is made. Students must complete MATH 3141, MATH 3142, and MATH 4051 in place of MATH 3137 and MATH 3138, and MATH 3098 in place of MATH 3096 in order to be considered for admission to the Master's program. In addition to completing the B.A. requirements, the student must complete four additional graduate-level mathematics courses numbered 5000 and above by the end of her/his senior year. If the General Education and College requirements have also been met, the student will be awarded the B.A. degree at the conclusion of this portion of the program. All courses must be passed with a grade of C- or better, and no more than two graduate courses can carry a grade less than B- for the student to continue with the M.S. portion of the program.

Fifth-Year Course Requirements

The student will take a total of six graduate-level courses, selected to conform to the M.S. requirements. At the end of the fifth year, the student must either write a master's thesis or pass one of the following examinations:

- Master's Comprehensive Examination in Pure Mathematics
- Master's Comprehensive Examination in Applied Mathematics
- Ph.D. Combined Comprehensive Examination (M.S. level pass)

For more information, see the following program pages: Mathematics B.A. (p. 1138) and Mathematics M.S. (http://bulletin.temple.edu/graduate/scd/cst/mathematics-ms)

Mathematics, B.S./M.Ed.

Undergraduate Contact Information:

Dr. Edward Letzter, Chair
Wachman Hall, Room 638
215-204-7841

Dr. Boris Datskovsky, Associate Chair
Wachman Hall, Room 632
215-204-7847
mathadvising@temple.edu

Dr. Maria E. Lorenz, Undergraduate Chair
Wachman Hall, Room 542
215-204-6764
mathadvising@temple.edu

Graduate Contact Information:

Secondary Education Program
College of Education
1301 Cecil B. Moore Avenue
Philadelphia, PA 19122-6091
Schools, Colleges, and Divisions

1043

educate@temple.edu
215-204-8011

Five-Year Combined B.S. and M.Ed. Program

Five-Year Master’s/Secondary Education Certification Program

This is a combined program between the College of Science and Technology and the College of Education. For more information, see the following program pages: Mathematics B.S. (p. 1142) and Secondary Education/Mathematics Education M.Ed. (http://bulletin.temple.edu/graduate/scd/education/secondary-education-mathematics-education-med)

Mathematics, B.S./M.S.

Undergraduate Contact Information:

Dr. Edward Letzter, Chair
Wachman Hall, Room 638
215-204-7841

Dr. Boris Datskovsky, Associate Chair
Wachman Hall, Room 632
215-204-7847
mathadvising@temple.edu

Dr. Maria E. Lorenz, Undergraduate Chair
Wachman Hall, Room 542
215-204-6764
mathadvising@temple.edu

Graduate Contact Information:

Dr. Shiferaw Berhanu, Director of Graduate Studies
Wachman Hall, Room 614
215-204-7848
shiferaw.berhanu@temple.edu

Five-Year Master’s Program

The Combined B.S./M.S. Program

To participate in this five-year program, a mathematics major should be enrolled in the B.S. program. Application to continue in the M.S. program must be made to the graduate chair of the department no later than the first semester of the senior year. To be accepted by the M.S. program, a student must have a GPA of at least 3.25 in Mathematics courses when the application is made. Students must complete MATH 3141, MATH 3142 and MATH 4051 in place of MATH 3137 and MATH 3138, and MATH 3098 in place of MATH 3096 in order to be considered for admission to the Master’s program. In addition to completing the B.S. requirements, the student must complete four additional graduate-level mathematics courses numbered 5000 and above by the end of her/his senior year. If the General Education and College requirements have also been met, the student will be awarded the B.S. degree at the conclusion of this portion of the program. All courses must be passed with a grade of C- or better, and no more than two graduate courses can carry a grade less than B- for the student to continue with the M.S. portion of the program.

Fifth-Year Course Requirements

The student will take a total of six graduate-level courses, selected to conform to the M.S. requirements. At the end of the fifth year, the student must either write a master’s thesis or pass one of the following examinations:

• Master’s Comprehensive Examination in Pure Mathematics
• Master’s Comprehensive Examination in Applied Mathematics
• Ph.D. Combined Comprehensive Examination (M.S. level pass)

For more information, see the following program pages: Mathematics B.S. (p. 1142) and Mathematics M.S. (http://bulletin.temple.edu/graduate/scd/cst/mathematics-ms)

Medical, 3+N Program

College of Science and Technology
Students who entered Temple University as Health Scholars are able to be considered for early admissions (http://www.temple.edu/medicine/admissions) to the Lewis Katz School of Medicine at Temple University as BA/MD Accelerated Option candidates. The 3+4 option is only with Lewis Katz School of Medicine. If interested in applying to other schools, students will need to follow a 4+4 option.

Guidelines for Completion of the Bachelor of Arts Degree in the College of Science & Technology

- Health Scholar Bachelor of Arts candidates in the College of Science and Technology (CST) must complete all requirements for the major before entering the Lewis Katz School of Medicine with the exception of the following:

  Biology majors may count up to three of the following first year Lewis Katz School of Medicine courses as Biology electives:

  MS1-Block1 (Fundamentals of Anatomy) as long as the student has not already received credit for BIOL 2233;
  MS1-Block2 (Fundamentals of Medicine 1); MS1-Blocks3&4 (Biological Systems I: Cardiovascular, Blood, Respiratory and Renal Systems & Biological Systems II: Gastrointestinal, Endocrine, Bone and Reproductive Systems);
  MS1-Block5 (Biological Systems III: Nervous and Musculoskeletal Systems) as long as the student has not already received credit for BIOL 3334 or BIOL 3352;
  MS1-Block6 (Biological Systems IV: Inflammation, Immune System and Skin).

- College of Science and Technology Health Scholars may count up to 33 equivalent credit hours from the first year at the Lewis Katz School of Medicine as equivalents of upper-level credits in the College of Science and Technology or the College of Liberal Arts.

- College of Science and Technology Health Scholars may count up to 33 equivalent credit hours from the first year at the Lewis Katz School of Medicine to fulfill their general credit hour requirements for the Bachelor of Arts degree in the College of Science and Technology.

- Appropriate course sequences for majors offered by the College of Science and Technology will be available in the Office of Student Services (1810 Liacouras Walk, Suite 203) and will be shared with prospective students and current Health Scholars. Advising on progress toward career goal and eventual presentation as a Health Scholar (3+4 or 4+4) will occur through Pre-Professional Health Studies (1810 Liacouras Walk, Suite 100).

Suggested Academic Plan for CST + Medical School 3+4 Program

Below is a suggested academic plan. Individual plans will vary based on previous course work, AP credits, performance on University placement tests, and specific undergraduate major. Health Scholars who qualify for the 3+4 program will develop an individual academic plan with Pre-Professional Health Studies during their first semester at the University.

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1041 or 1941</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1031 &amp; CHEM 1033</td>
<td>General Chemistry I</td>
<td></td>
</tr>
<tr>
<td>CHEM 1951 &amp; CHEM 1953</td>
<td>Honors General Chemical Science I</td>
<td></td>
</tr>
<tr>
<td>Major / General Education / Elective Credits</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>Apply to 3+4 Program</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Term Credit Hours</td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

| | Spring | |
| | MATH 1042 or 1942 | Calculus II | 4 |
| | BIOL 1111 or 1911 | Introduction to Biology I | 4 |
| | Select one of the following: | | 4 |
| | CHEM 1032 & CHEM 1034 | General Chemistry II | |
CHEM 1952 & CHEM 1954
Honors General Chemical Science II

Major / General Education / Elective Credits 3

**Term Credit Hours** 15

**Year 2**

**Fall**

BIOL 2112 or 2912
Introduction to Biology II 4

Select one of the following:

CHEM 2201 & CHEM 2203
Organic Chemistry I 4

CHEM 2211 & CHEM 2213
Organic Chemistry for Majors I

CHEM 2921 & CHEM 2923
Organic Chemistry for Honors I

Major / General Education / Elective Credits 9

**Term Credit Hours** 17

**Spring**

Select one of the following:

CHEM 2202 & CHEM 2204
Organic Chemistry II 4

CHEM 2212 & CHEM 2214
Organic Chemistry for Majors II

CHEM 2922 & CHEM 2924
Organic Chemistry for Honors II

PHYS 2021 or 2921
General Physics I 4

Major / General Education / Elective Credits 9

**Term Credit Hours** 17

**Year 3**

**Fall**

PHYS 2022 or 2922
General Physics II 4

Major / General Education / Elective Credits 11

Must take MCAT by January

**Term Credit Hours** 15

**Spring**

Major / General Education / Elective Credits 15

**Term Credit Hours** 15

**Total Credit Hours:** 94

**First Year - Medical School**

Approximately 34 credits of course work completed during the first year of Medical School will be applied to the CST major’s total number of earned hours needed for the completion of the degree requirements for graduation. For some majors, course work will count as elective hours in the major; for all others, course work counts as elective hours toward the completion of the minimum of 123 credits for the undergraduate degree. In planning an undergraduate schedule it is essential to consult with an academic advisor.

Notes:

1. Students in the Accelerated Program must have entered Temple University as Health Scholars through Pre-Professional Health Studies (PPHS) and have signed an “Intent to Pursue” form during their first semester. This form must be on file with PPHS.

2. Because students in an accelerated program must meet both the course requirements for entry to professional school and the course requirements for their major, it is necessary for these students to consult with an advisor in their major as well as PPHS as early in their academic career as possible. Failure to do so may make completing the required courses in the first 90 hours impossible.

1. Students must also complete a Biochemistry prerequisite course prior to entering Lewis Katz School of Medicine at Temple University. They may choose from either CHEM 4401 or BIOL 4375. Although not a requirement for taking the MCAT, it is recommended that students complete Biochemistry prior to taking the MCAT. In addition, students must also complete an Introduction to Psychology (PSY 1001) AND Introduction to Sociology (SOC 1176) course prior to taking the MCAT.
3. The academic plan presented here is a generic plan; the actual plan will depend on choice of major and number of Advanced Placement (AP) credits applied from the high school transcript.

4. With some exceptions, CST students must complete the requirements for their major within their first 90 hours; course work in the first year of professional school counts as elective hours toward degree completion.

5. Biology Majors - Some of the course work during the first year of Medical School can be counted for Biology electives as well as general electives for degree completion. Certain electives are excluded. Be sure to consult with an academic advisor.

6. Non Life-Science Majors - In order to complete the required courses in 3 years, majors that do not overlap with pre-medical course requirements must have AP credit, take an overload, or enroll in summer session classes.

Pharmaceutical Sciences, B.S.

College of Science and Technology
Office of Student Services
1810 Liacouras Walk, Suite 203
215-204-2890
cstadv@temple.edu

Office of Pre-Professional Health Studies
1810 Liacouras Walk, Suite 100
215-204-2513
healthadvising@temple.edu

The Bachelor of Science in Pharmaceutical Sciences is designed for students who are planning to obtain both a Bachelor of Science in Pharmaceutical Sciences and a Doctor of Pharmacy degree in seven years. It provides a solid science foundation and broad liberal arts education while preparing students for careers in the areas of research/laboratory work, quality control, and administration in pharmaceutics, biotechnology, and healthcare industries.

This major is only open to incoming freshman who are direct admits to the Temple University School of Pharmacy. Current students who have been admitted to the Pharmacy School and can complete this major within their first year of Temple University School of Pharmacy are welcome to declare this major.

The B.S. in Pharmaceutical Sciences is a 4-year, non-licensure, undergraduate bachelor’s degree program, and does not qualify the student for state board examination to become a registered pharmacist.

Students must meet the admissions requirements (http://pharmacy.temple.edu/admissions) for early admission to the Temple University School of Pharmacy.

Bachelor of Science

Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)
   - MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
   - All Temple students must take a minimum of two writing-intensive courses at Temple as part of their major. ENG 2696 and one other Writing Intensive course will satisfy the writing-intensive requirement.
   - Students must complete the General Education (GenEd) requirements.
     - The General Education Curriculum consists of approximately 25-26 s.h. See the General Education (p. 143) section of the Undergraduate Bulletin for the GenEd curriculum.
     - Students who complete CST majors typically receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.

2. College Requirements
   - 45 Upper Level (2000+) credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA). School of Pharmacy courses may be used for up to 33 of these credits.
   - 90 credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA). School of Pharmacy courses may be used for up to 33 of these credits.

3. Major Requirements for Bachelor of Science (41 s.h.)
   - (F) - Fall only course
   - (S) - Spring only course

Chemistry
Select one of the following:
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1031</td>
<td>General Chemistry I</td>
</tr>
<tr>
<td>&amp; CHEM 1033</td>
<td>and General Chemistry Laboratory I</td>
</tr>
<tr>
<td>CHEM 1951</td>
<td>Honors General Chemical Science I</td>
</tr>
<tr>
<td>&amp; CHEM 1953</td>
<td>and Honors Chemical Science Laboratory I (F)</td>
</tr>
</tbody>
</table>

**Select one of the following:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1032</td>
<td>General Chemistry II</td>
</tr>
<tr>
<td>&amp; CHEM 1034</td>
<td>and General Chemistry Laboratory II</td>
</tr>
<tr>
<td>CHEM 1952</td>
<td>Honors General Chemical Science II</td>
</tr>
<tr>
<td>&amp; CHEM 1954</td>
<td>and Honors Chemical Science Laboratory II (S)</td>
</tr>
</tbody>
</table>

**Select one of the following:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 2201</td>
<td>Organic Chemistry I</td>
</tr>
<tr>
<td>&amp; CHEM 2203</td>
<td>and Organic Chemistry Laboratory I</td>
</tr>
<tr>
<td>CHEM 2211</td>
<td>Organic Chemistry for Majors I</td>
</tr>
<tr>
<td>&amp; CHEM 2213</td>
<td>and Organic Majors Laboratory I (F)</td>
</tr>
<tr>
<td>CHEM 2921</td>
<td>Organic Chemistry for Honors I</td>
</tr>
<tr>
<td>&amp; CHEM 2923</td>
<td>and Organic Honors Laboratory I (F)</td>
</tr>
</tbody>
</table>

**Select one of the following:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 2202</td>
<td>Organic Chemistry II</td>
</tr>
<tr>
<td>&amp; CHEM 2204</td>
<td>and Organic Chemistry Laboratory II</td>
</tr>
<tr>
<td>CHEM 2212</td>
<td>Organic Chemistry for Majors II</td>
</tr>
<tr>
<td>&amp; CHEM 2214</td>
<td>and Organic Majors Laboratory II (S)</td>
</tr>
<tr>
<td>CHEM 2922</td>
<td>Organic Chemistry for Honors II</td>
</tr>
<tr>
<td>&amp; CHEM 2924</td>
<td>and Organic Honors Laboratory II (S)</td>
</tr>
</tbody>
</table>

**Biology**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1111</td>
<td>Introduction to Biology I</td>
</tr>
<tr>
<td>or BIOL 1911</td>
<td>Honors Introduction to Biology I</td>
</tr>
<tr>
<td>BIOL 2112</td>
<td>Introduction to Biology II</td>
</tr>
<tr>
<td>or BIOL 2912</td>
<td>Honors Introduction to Biology II</td>
</tr>
</tbody>
</table>

**Mathematics**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
</tr>
<tr>
<td>or MATH 1941</td>
<td>Honors Calculus I</td>
</tr>
</tbody>
</table>

**Physics**

**Select one of the following:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I</td>
</tr>
<tr>
<td>PHYS 2021</td>
<td>General Physics I</td>
</tr>
<tr>
<td>PHYS 2921</td>
<td>Honors General Physics I (F)</td>
</tr>
</tbody>
</table>

**Anatomy & Physiology**

**Select one of the following:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>KINS 1221</td>
<td>Principles of Anatomy and Physiology I</td>
</tr>
<tr>
<td>KINS 1223</td>
<td>Human Anatomy and Physiology I</td>
</tr>
<tr>
<td>BIOL 2233</td>
<td>Mammalian Anatomy (F)</td>
</tr>
</tbody>
</table>

**Select one of the following:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>KINS 1222</td>
<td>Principles of Anatomy and Physiology II</td>
</tr>
<tr>
<td>KINS 1224</td>
<td>Human Anatomy and Physiology II</td>
</tr>
<tr>
<td>BIOL 3334</td>
<td>Mammalian Physiology (S)</td>
</tr>
</tbody>
</table>

**Economics**

**Select one of the following:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 1101</td>
<td>Macroeconomic Principles</td>
</tr>
<tr>
<td>ECON 1102</td>
<td>Microeconomic Principles</td>
</tr>
<tr>
<td>ECON 1901</td>
<td>Honors Macroeconomic Principles</td>
</tr>
<tr>
<td>ECON 1902</td>
<td>Honors Microeconomic Principles</td>
</tr>
</tbody>
</table>

**Total Credit Hours**

41-43
The anatomy and physiology courses must either both be KINS courses or BIOL courses. Students may not mix and match these courses.

4. School of Pharmacy requirements (33 s.h.)

Suggested Academic Plan

Bachelor of Science in Pharmaceutical Sciences

Requirements for New Students Starting in the 2015-2016 Academic Year

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td>Calculus I</td>
</tr>
<tr>
<td></td>
<td>MATH 1041 or 1941</td>
<td>General Chemistry I</td>
</tr>
<tr>
<td></td>
<td>Select one of the following:</td>
<td>Honors General Chemical Science I (F)</td>
</tr>
<tr>
<td></td>
<td>CHEM 1031 &amp; CHEM 1033</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CHEM 1951 &amp; CHEM 1953</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Term Credit Hours</td>
<td>15</td>
</tr>
<tr>
<td>Spring</td>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
</tr>
<tr>
<td></td>
<td>Select one of the following:</td>
<td>General Chemistry II</td>
</tr>
<tr>
<td></td>
<td>CHEM 1032 &amp; CHEM 1034</td>
<td>Honors General Chemical Science II (S)</td>
</tr>
<tr>
<td></td>
<td>CHEM 1952 &amp; CHEM 1954</td>
<td>Introduction to Biology I</td>
</tr>
<tr>
<td></td>
<td>BIOL 1111 or 1911</td>
<td>GenEd Breadth Course</td>
</tr>
<tr>
<td></td>
<td>Term Credit Hours</td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BIOL 2112 or 2912</td>
<td>Introduction to Biology II</td>
</tr>
<tr>
<td></td>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
</tr>
<tr>
<td></td>
<td>Select one of the following:</td>
<td>Organic Chemistry I</td>
</tr>
<tr>
<td></td>
<td>CHEM 2201 &amp; CHEM 2203</td>
<td>Organic Chemistry for Majors I (F)</td>
</tr>
<tr>
<td></td>
<td>CHEM 2211 &amp; CHEM 2213</td>
<td>Organic Chemistry for Honors I (F)</td>
</tr>
<tr>
<td></td>
<td>CHEM 2921 &amp; CHEM 2923</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Term Credit Hours</td>
<td>14</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Select one of the following:</td>
</tr>
<tr>
<td></td>
<td>CHEM 2202 &amp; CHEM 2204</td>
</tr>
<tr>
<td></td>
<td>CHEM 2212 &amp; CHEM 2214</td>
</tr>
<tr>
<td></td>
<td>CHEM 2922 &amp; CHEM 2924</td>
</tr>
<tr>
<td></td>
<td>Select one of the following:</td>
</tr>
<tr>
<td></td>
<td>PHYS 1061</td>
</tr>
<tr>
<td></td>
<td>PHYS 2021</td>
</tr>
<tr>
<td>Term</td>
<td>Credit Hours</td>
</tr>
<tr>
<td>--------------</td>
<td>--------------</td>
</tr>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3-4</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3-4</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Year 4</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>School of Pharmacy courses</td>
<td>16</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>School of Pharmacy courses</td>
<td>17</td>
</tr>
<tr>
<td><strong>Total Credit Hours:</strong></td>
<td>123</td>
</tr>
</tbody>
</table>

1 The anatomy and physiology courses must either both be KINS courses or BIOL courses. Students may not mix and match these courses.

(F) - Fall only course
(S) - Spring only course

NOTES:
- 62-65 credits - required undergraduate prerequisites for admission to the Pharmacy Program.
- 28-25 credits - required to fulfill undergraduate degree requirements including GenEd and Writing Intensive requirements.
- 33 credits - School of Pharmacy credits.

**Pharmacy, 3+N Program**

College of Science and Technology
Office of Student Services
1810 Liacouras Walk, Suite 203
215-204-2890
cstadv@temple.edu
Students must meet the admissions requirements (http://pharmacy.temple.edu/admissions) for early admission to the Temple University School of Pharmacy. If you are applying to other pharmacy schools, please use the web to find admissions requirements.

**Guidelines for Completion of the Bachelor of Arts Degree in the College of Science & Technology**

- Bachelor of Arts candidates in the College of Science and Technology (CST) must complete all requirements for the major before entering the School of Pharmacy with the exception of the following:

  1. Biology majors may count up to three of the following first year Temple University School of Pharmacy's Pharmaceutical Sciences courses as Biology electives:

     PS P158 Ant. Infective Agents;
     PS P155 Principles of Infectious Diseases so long as the student has not previously earned credit for BIOL 3317;
     PS P151 Medicinal Chemistry I or PS P164 Pharmacology so long as the student has not previously earned credit for BIOL 4375;
     PS P152 Medicinal Chemistry II so long as the student has not previously earned credit for BIOL 4376.

  2. Chemistry majors may count the following first year Temple University School of Pharmacy course as a Chemistry elective:

     PS P151 Medicinal Chemistry I so long as the student has not previously earned credit for BIOL 4375/CHEM 4401.

- College of Science and Technology students may count up to 33 equivalent credit hours from the first year at the School of Pharmacy as equivalents of upper-level credits in the College of Science and Technology or College of Liberal Arts.

- College of Science and Technology students may count up to 33 equivalent credit hours from the first year at the School of Pharmacy to fulfill their general credit hour requirements for the Bachelor of Arts degree in the College of Science and Technology.

- Appropriate course sequences for majors offered by the College of Science and Technology will be available in the Office of Student Services (1810 Liacouras Walk, Suite 203) or Pre-Professional Health Studies (1810 Liacouras Walk, Suite 100) and will be shared with prospective and current students.

**Suggested Academic Plan for CST + Pharmacy School 3+4 Program**

Below is a suggested academic plan. Individual plans will vary based on previous course work, AP credits, performance on University placement tests, and specific undergraduate major. Students who qualify for the 3+4 program will develop an individual academic plan with Pre-Professional Health Studies during their first semester at the University.

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td></td>
</tr>
<tr>
<td>MATH 1041 or 1941</td>
<td>Calculus I</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
</tr>
<tr>
<td>CHEM 1031</td>
<td>General Chemistry I</td>
</tr>
<tr>
<td>&amp; CHEM 1033</td>
<td></td>
</tr>
<tr>
<td>CHEM 1951</td>
<td>Honors General Chemical Science I</td>
</tr>
<tr>
<td>&amp; CHEM 1953</td>
<td></td>
</tr>
<tr>
<td>Major / General Education / Elective Credits</td>
<td></td>
</tr>
<tr>
<td>Term Credit Hours</td>
<td>15</td>
</tr>
<tr>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td>MATH 1042 or 1942</td>
<td>Calculus II</td>
</tr>
<tr>
<td>BIOL 1111 or 1111</td>
<td>Introduction to Biology I</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
</tr>
<tr>
<td>CHEM 1032</td>
<td>General Chemistry II</td>
</tr>
<tr>
<td>&amp; CHEM 1034</td>
<td></td>
</tr>
<tr>
<td>CHEM 1952</td>
<td>Honors General Chemical Science II</td>
</tr>
<tr>
<td>&amp; CHEM 1954</td>
<td></td>
</tr>
<tr>
<td>Major / General Education / Elective Credits</td>
<td></td>
</tr>
<tr>
<td>Apply to 3+4 Program</td>
<td></td>
</tr>
<tr>
<td>Term Credit Hours</td>
<td>15</td>
</tr>
<tr>
<td>Year 2</td>
<td>Fall</td>
</tr>
<tr>
<td>--------</td>
<td>------</td>
</tr>
<tr>
<td>BIOL 2112 or 2912</td>
<td>Introduction to Biology II</td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
</tr>
<tr>
<td>CHEM 2201 &amp; CHEM 2203</td>
<td>Organic Chemistry I</td>
</tr>
<tr>
<td>CHEM 2211 &amp; CHEM 2213</td>
<td>Organic Chemistry for Majors I</td>
</tr>
<tr>
<td>CHEM 2921 &amp; CHEM 2923</td>
<td>Organic Chemistry for Honors I</td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Major / General Education / Elective Credits</td>
<td>7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
</tr>
<tr>
<td>CHEM 2202 &amp; CHEM 2204</td>
<td>Organic Chemistry II</td>
</tr>
<tr>
<td>CHEM 2212 &amp; CHEM 2214</td>
<td>Organic Chemistry for Majors II</td>
</tr>
<tr>
<td>CHEM 2922 &amp; CHEM 2924</td>
<td>Organic Chemistry for Honors II</td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Major / General Education / Elective Credits</td>
<td>11</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 3</td>
<td>Fall</td>
</tr>
<tr>
<td>PHYS 2021 or 2921</td>
<td>General Physics I</td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
</tr>
<tr>
<td>BIOL 2233</td>
<td>Mammalian Anatomy</td>
</tr>
<tr>
<td>KINS 1221</td>
<td>Principles of Anatomy and Physiology I</td>
</tr>
<tr>
<td>KINS 1223</td>
<td>Human Anatomy and Physiology I</td>
</tr>
<tr>
<td>3-4</td>
<td></td>
</tr>
<tr>
<td>Major / General Education / Elective Credits</td>
<td>8-7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td>PHYS 2022 or 2922</td>
<td>General Physics II</td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
</tr>
<tr>
<td>BIOL 3334</td>
<td>Mammalian Physiology</td>
</tr>
<tr>
<td>KINS 1222</td>
<td>Principles of Anatomy and Physiology II</td>
</tr>
<tr>
<td>KINS 1224</td>
<td>Human Anatomy and Physiology II</td>
</tr>
<tr>
<td>3-4</td>
<td></td>
</tr>
<tr>
<td>Major / General Education / Elective Credits</td>
<td>8-7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Credit Hours:</td>
<td>90</td>
</tr>
</tbody>
</table>

First Year - Pharmacy School
Approximately 33 credits of course work completed during the first year of Pharmacy School will be applied to the CST major's total number of earned hours needed for the completion of the degree requirements for graduation. For some majors, course work will count as elective hours in the major; for all others, course work counts as elective hours toward the completion of the minimum of 123 credits for the undergraduate degree. In planning an undergraduate schedule it is essential to consult with an academic advisor.

Students may take one of the following course sequences for the Anatomy & Physiology requirement:
KINS 1221 & KINS 1222
KINS 1223 & KINS 1224
BIOL 2233 & BIOL 3334
Students may NOT mix and match these courses.

Notes:
1. Students in the Accelerated Program must have been pre-approved through Pre-Professional Health Studies (PPHS) and have signed an "Intent to Pursue" form by their second semester. This form must be on file with PPHS.

2. Because students in an accelerated program must meet both the course requirements for entry to professional school and the course requirements for their major, it is necessary for these students to consult with an advisor in their major as well as PPHS as early in their academic career as possible. Failure to do so may make completing the required courses in the first 90 hours impossible.

3. The academic plan presented here is a generic plan; the actual plan will depend on choice of major and number of AP credits applied from high school transcript.

4. With some exceptions, CST students must complete the requirements for their major within their first 90 hours; course work in the first year of professional school counts as elective hours toward degree completion.

5. Biology Majors - Some of the course work during the first year of Pharmacy School can be counted for Biology electives as well as general electives for degree completion. Certain electives are excluded. Be sure to consult with an academic advisor.

6. Non Life-Science Majors - In order to complete the required courses in 3 years, majors that do not overlap with pre-medical course requirements must have AP credit, take an overload, or enroll in summer session classes.

Physical Therapy, 3+N Program

College of Science and Technology
Office of Student Services
1810 Liacouras Walk, Suite 203
215-204-2890
cstadv@temple.edu

Office of Pre-Professional Health Studies
1810 Liacouras Walk, Suite 100
215-204-2513
healthadvising@temple.edu

Students must meet the admissions requirements (http://cph.temple.edu/pt/degree-programs/doctor-physical-therapy-dpt/33-accelerated-pre-baccalaureate-admission) for early admission to Temple University's College of Public Health Doctorate of Physical Therapy program. If you are applying to other physical therapy programs, please use the web to find admissions requirements.

Guidelines for the Completion of the Bachelor of Arts Degree from the College of Science & Technology

- Bachelor of Arts candidates in the College of Science and Technology (CST) must complete all requirements for their major before entering the Doctor of Physical Therapy (DPT) Program in the College of Public Health (CPH) with the exception of the following:
  - Biology majors may count one of the following first year DPT Program courses as one of their three required Biology electives:
    - PHTH 8521 Neuroscience
    - PHTH 8522 Rehabilitative Pathophysiology
    - PHTH 8523 Movement Science II
  - CST students may count up to 33 equivalent credit hours from the first year at the DPT Program in the CPH as equivalents of upper-level credits in the CST or College of Liberal Arts.
  - CST students may count up to 33 equivalent credit hours from the first year at the DPT Program in the CPH to fulfill their general credit hour requirements for the B.A. degree in the CST.
  - Appropriate course sequences for majors offered by the College of Science and Technology will be available in the Office of Student Services (1810 Liacouras Walk, Suite 203) or Pre-Professional Health Studies (1810 Liacouras Walk, Suite 100) and will be shared with prospective and current students.

Suggested Academic Plan for CST + Doctor of Physical Therapy 3+3 Program

Below is a suggested academic plan. Individual plans will vary based on previous course work, AP credits, performance on University placement tests, and specific undergraduate major. Students who qualify for the 3+4 program will develop an individual academic plan with Pre-Professional Health Studies during their first semester at the University.

<table>
<thead>
<tr>
<th>Year 1</th>
<th></th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td>Select one of the following:</td>
<td>3-4</td>
</tr>
<tr>
<td>MATH 1013</td>
<td>Elements of Statistics</td>
<td></td>
</tr>
<tr>
<td>MATH 1031</td>
<td>Differential and Integral Calculus</td>
<td></td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
<td></td>
</tr>
</tbody>
</table>
Select one of the following:  
**CHEM 1031 & CHEM 1033**  
**CHEM 1951 & CHEM 1953**  
*General Chemistry I*  
*Honors General Chemical Science I*

**Major / General Education / Elective Credits**  
8-7

**Term Credit Hours**  
15

### Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1012 or 1111</td>
<td>4</td>
</tr>
</tbody>
</table>

Select one of the following:  
**CHEM 1032 & CHEM 1034**  
**CHEM 1952 & CHEM 1954**  
*General Chemistry II*  
*Honors General Chemical Science II*

**Major / General Education / Elective Credits**  
7

**Term Credit Hours**  
15

### Year 2

#### Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>KINS 1223 or 1221</td>
<td>3-4</td>
</tr>
</tbody>
</table>

Select one of the following:  
**PHYS 1021**  
**PHYS 1061**  
**PHYS 2021**  
**PHYS 2921**  
*Introduction to General Physics I*  
*Elementary Classical Physics I*  
*General Physics I*  
*Honors General Physics I*

**Major / General Education / Elective Credits**  
8-7

**Term Credit Hours**  
15

### Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>KINS 1224 or 1222</td>
<td>3-4</td>
</tr>
</tbody>
</table>

Select one of the following:  
**PHYS 1022**  
**PHYS 1062**  
**PHYS 2022**  
**PHYS 2922**  
*Introduction to General Physics II*  
*Elementary Classical Physics II*  
*General Physics II*  
*Honors General Physics II*

**Major / General Education / Elective Credits**  
8-7

**Term Credit Hours**  
15

### Year 3

#### Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major / General Education / Elective Credits</td>
<td>15</td>
</tr>
</tbody>
</table>

**Term Credit Hours**  
15

#### Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major / General Education / Elective Credits</td>
<td>15</td>
</tr>
</tbody>
</table>

**Term Credit Hours**  
15

**Total Credit Hours:**  
90

### Notes:

1. Students in the Accelerated Program must have been pre-approved through Pre-Professional Health Studies (PPHS) and have signed an "Intent to Pursue" form by their second semester. This form must be on file with PPHS.

2. Because students in an accelerated program must meet both the course requirements for entry to professional school and the course requirements for their major, it is necessary for these students to consult with an advisor in their major as well as PPHS as early in their academic career as possible. Failure to do so may make completing the required courses in the first 90 hours impossible.

3. The academic plan presented here is a generic plan; the actual plan will depend on choice of major and number of AP credits applied from high school transcript.
4. CST students must complete the requirements for their major within their first 90 hours; course work in the first year of professional school counts as elective hours toward degree completion.

**Physics, B.A./M.Ed.**

**Undergraduate Contact Information:**

Dr. James Napolitano, Acting Chair  
Science Education and Research Center, Room 406  
215-204-7634

Dr. Zbigniew Dziembowski, Faculty Advisor (Last names A-K)  
Science Education and Research Center, Room 412  
215-204-7639  
zbig.dziembowski@temple.edu

Dr. Tan Yuen, Faculty Advisor (Last names L-Z)  
Science Education and Research Center, Room 409  
215-204-5182  
tan.yuen@temple.edu

**Graduate Contact Information:**

Secondary Education Program  
College of Education  
1301 Cecil B. Moore Avenue  
Philadelphia, PA 19122-6091  
educate@temple.edu  
215-204-8011

**Five-Year Combined B.A. and M.Ed. Program**

**Five-Year Master’s/Secondary Education Certification Program**

This is a combined program between the College of Science and Technology and the College of Education. For more information, see the following program pages: Physics B.A. (p. 1154) and Secondary Education/Science Education M.Ed. (http://bulletin.temple.edu/graduate/scd/education/secondary-education-science-education-med)

**Physics, B.A./M.S.**

**Undergraduate Contact Information:**

Dr. James Napolitano, Acting Chair  
Science Education and Research Center, Room 406  
215-204-7634

Dr. Zbigniew Dziembowski, Faculty Advisor (Last names A-K)  
Science Education and Research Center, Room 412  
215-204-7639  
zbig.dziembowski@temple.edu

Dr. Tan Yuen, Faculty Advisor (Last names L-Z)  
Science Education and Research Center, Room 409  
215-204-5182  
tan.yuen@temple.edu

**Graduate Contact Information:**

Peter S. Riseborough, Graduate Chairperson  
Science Education and Research Center, Room 444  
215-204-5655  
prisebor@temple.edu
Five-Year Master’s Program

The Combined Five-Year B.A./M.S.

This program allows a talented student to obtain both a bachelor's and a master's degree in five years. A physics major may apply for the program during the junior or senior year. Please consult the advisor for details. For more information, see the following program pages: Physics B.A. (p. 1154) and Physics M.S. (http://bulletin.temple.edu/graduate/scd/cst/physics-ms)

Physics, B.S./M.Ed.

Undergraduate Contact Information:

Dr. James Napolitano, Acting Chair
Science Education and Research Center, Room 406
215-204-7634

Dr. Zbigniew Dziembowski, Faculty Advisor (Last names A-K)
Science Education and Research Center, Room 412
215-204-7639
zbig.dziembowski@temple.edu

Dr. Tan Yuen, Faculty Advisor (Last names L-Z)
Science Education and Research Center, Room 409
215-204-5182
tan.yuen@temple.edu

Graduate Contact Information:

Secondary Education Program
College of Education
1301 Cecil B. Moore Avenue
Philadelphia, PA 19122-6091
educate@temple.edu
215-204-8011

Five-Year Combined B.S. and M.Ed. Program

Five-Year Master’s/Secondary Education Certification Program

This is a combined program between the College of Science and Technology and the College of Education. For more information, see the following program pages: Physics B.S. (p. 1158) and Secondary Education/Science Education M.Ed. (http://bulletin.temple.edu/graduate/scd/education/secondary-education-science-education-med)

Physics, B.S./M.S.

Undergraduate Contact Information:

Dr. James Napolitano, Acting Chair
Science Education and Research Center, Room 406
215-204-7634

Dr. Zbigniew Dziembowski, Faculty Advisor (Last names A-K)
Science Education and Research Center, Room 412
215-204-7639
zbig.dziembowski@temple.edu

Dr. Tan Yuen, Faculty Advisor (Last names L-Z)
Science Education and Research Center, Room 409
215-204-5182
tan.yuen@temple.edu

Graduate Contact Information:

Peter S. Riseborough, Graduate Chairperson
Science Education and Research Center, Room 444
215-204-5655
**Five-Year Master's Program**

**The Combined Five-Year B.S./M.S.**

This program allows a talented student to obtain both a bachelor's and a master's degree in five years. A physics major may apply for the program during the junior or senior year. Please consult the advisor for details. For more information, see the following program pages: Physics B.S. (p. 1158) and Physics M.S. (http://bulletin.temple.edu/graduate/scd/cst/physics-ms)

**Podiatry, 3+N Program**

College of Science and Technology
Office of Student Services
1810 Liacouras Walk, Suite 203
215-204-2890
cstadv@temple.edu

Office of Pre-Professional Health Studies
1810 Liacouras Walk, Suite 100
215-204-2513
healthadvising@temple.edu

Students must meet the admissions requirements (http://podiatry.temple.edu/admissions/requirements) for early admission to the Temple University School of Podiatric Medicine. If you are applying to other podiatry schools, please use the web to find admissions requirements.

**Guidelines for Completion of the Bachelor of Arts Degree in the College of Science & Technology**

- Bachelor of Arts candidates in the College of Science and Technology (CST) must complete all requirements for the degree program before entering the School of Podiatric Medicine with the exception of the following:
  1. Biology majors may use up to three of the following first year School of Podiatry Biomedical Studies (PBMS) courses as replacements for Biology electives:
     - PBMS P100 Histology as long as the student has not previously earned credit for BIOL 2235;
     - PBMS P102 General Anatomy as long as the student has not previously earned credit for BIOL 2233;
     - PBMS P104 Neurophysiology as long as the student has not previously earned credit for BIOL 3352 or BIOL 3358;
     - PBMS P110 Biochemistry as long as the student has not previously earned credit for BIOL 4375;
     - PBMS P111 Physiology as long as the student has not previously earned credit for BIOL 3334.

  2. Chemistry majors may use up to one of the following first year Temple University School of Podiatry courses as replacements for Chemistry electives:
     - PBMS P110 Biochemistry as long as the student has not previously earned credit for BIOL 4375 or CHEM 4401.

- College of Science and Technology students may count up to 33 equivalent credit hours from the first year at the School of Podiatric Medicine as equivalents of upper-level credits in the College of Science and Technology or the College of Liberal Arts.
- College of Science and Technology students may count up to 33 equivalent credit hours from the first year at the School of Podiatric Medicine to fulfill their general credit hour requirements for the Bachelor of Arts degree in the College of Science and Technology.
- Appropriate course sequences for majors offered by the College of Science and Technology will be available in the Office of Student Services (1810 Liacouras Walk, Suite 203) or Pre-Professional Health Studies (1810 Liacouras Walk, Suite 100) and will be shared with prospective and current students.

**Suggested Academic Plan for CST + Podiatry School 3+4 Program**

Below is a suggested academic plan. Individual plans will vary based on previous course work, AP credits, performance on University placement tests, and specific undergraduate major. Students who qualify for the 3+4 program will develop an individual academic plan with Pre-Professional Health Studies during their first semester at the University.

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>MATH 1041 or 1941 Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>4</td>
</tr>
</tbody>
</table>
### Year 1

#### Term: Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1042 or 1942</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 1111 or 1911</td>
<td>Introduction to Biology I</td>
<td>4</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1032 &amp; CHEM 1034</td>
<td>General Chemistry II</td>
<td></td>
</tr>
<tr>
<td>CHEM 1952 &amp; CHEM 1954</td>
<td>Honors General Chemical Science II</td>
<td></td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 15

#### Term: Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 2112 or 2912</td>
<td>Introduction to Biology II</td>
<td>4</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>CHEM 2201 &amp; CHEM 2203</td>
<td>Organic Chemistry I</td>
<td></td>
</tr>
<tr>
<td>CHEM 2211 &amp; CHEM 2213</td>
<td>Organic Chemistry for Majors I</td>
<td></td>
</tr>
<tr>
<td>CHEM 2921 &amp; CHEM 2923</td>
<td>Organic Chemistry for Honors I</td>
<td></td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 15

#### Term: Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>CHEM 2202 &amp; CHEM 2204</td>
<td>Organic Chemistry II</td>
<td></td>
</tr>
<tr>
<td>CHEM 2212 &amp; CHEM 2214</td>
<td>Organic Chemistry for Majors II</td>
<td></td>
</tr>
<tr>
<td>CHEM 2922 &amp; CHEM 2924</td>
<td>Organic Chemistry for Honors II</td>
<td></td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 15

### Year 2

#### Term: Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 2112 or 2912</td>
<td>Introduction to Biology II</td>
<td>4</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>CHEM 2201 &amp; CHEM 2203</td>
<td>Organic Chemistry I</td>
<td></td>
</tr>
<tr>
<td>CHEM 2211 &amp; CHEM 2213</td>
<td>Organic Chemistry for Majors I</td>
<td></td>
</tr>
<tr>
<td>CHEM 2921 &amp; CHEM 2923</td>
<td>Organic Chemistry for Honors I</td>
<td></td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 15

#### Term: Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>CHEM 2202 &amp; CHEM 2204</td>
<td>Organic Chemistry II</td>
<td></td>
</tr>
<tr>
<td>CHEM 2212 &amp; CHEM 2214</td>
<td>Organic Chemistry for Majors II</td>
<td></td>
</tr>
<tr>
<td>CHEM 2922 &amp; CHEM 2924</td>
<td>Organic Chemistry for Honors II</td>
<td></td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 15

### Year 3

#### Term: Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 2021 or 2921</td>
<td>General Physics I</td>
<td>4</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 15

#### Term: Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 2022 or 2922</td>
<td>General Physics II</td>
<td>4</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 15

**Total Credit Hours:** 90

---

**First Year - Podiatry School**

Approximately 33 credits of course work completed during the first year of Podiatry School will be applied to the CST major's total number of earned hours needed for the completion of the degree requirements for graduation. For some majors, course work will count as elective hours in the major; for all others, course work counts as elective hours toward the completion of the minimum of 123 credits for the undergraduate degree. In planning an undergraduate schedule it is essential to consult with an academic advisor.
Students must also complete a Biochemistry prerequisite prior to entering Temple's School of Podiatric Medicine. They may choose from either CHEM 4401 or BIOL 4375. Although it is not a requirement for taking the MCAT, it is recommended that students complete Biochemistry prior to taking the MCAT. In addition, students must also complete an Introduction to Psychology (PSY 1001) AND Introduction to Sociology (SOC 1176) course prior to taking the MCAT.

Students should be aware that some Podiatry schools will accept either MCAT or DAT (Dental Admissions Test) to meet entrance guidelines.

Notes:

1. Students in the Accelerated Program must have been pre-approved through the Office of Pre-Professional Health Studies (PPHS) and have signed an "Intent to Pursue" form during their first semester. This form must be on file with PPHS.
2. Because students in an accelerated program must meet both the course requirements for entry to professional school and the course requirements for their major, it is necessary for these students to consult with an advisor in their major as well as PPHS as early in their academic career as possible. Failure to do so may make completing the required courses in the first 90 hours impossible.
3. The academic plan presented here is a generic plan; the actual plan will depend on choice of major and number of AP credits applied from high school transcript.
4. With some exceptions, CST students must complete the requirements for their major within their first 90 hours; course work in the first year of professional school counts as elective hours toward degree completion.
5. Biology Majors - Some of the course work during the first year of Podiatry School can be counted for Biology electives as well as general electives for degree completion. Certain electives are excluded. Be sure to consult with an academic advisor.
6. Non Life-Science Majors - In order to complete the required courses in 3 years, majors that do not overlap with pre-medical course requirements, must have AP credit, take an overload, or enroll in summer session classes.

Biology

Dr. Allen Nicholson, Chair
Biology-Life Sciences Building, Room 255
215-204-8851

Dr. Joel Sheffield, Faculty Advisor (Last names A-M)
Biology-Life Sciences Building, Room 311
215-204-8839
joel.sheffield@temple.edu

Ms. Evelyn Vleck, Faculty Advisor (Last names N-Z)
Biology-Life Science Building, Room 248P
215-204-6528
evelyn.vleck@temple.edu

Biology spans a continuum of organization from molecules and cells to individuals and ecosystems. The programs are designed to give students a broad base, while allowing a measure of sub-field specialization. All Biology majors are required to take a two-semester series of “Introduction to Biology” classes, plus separate courses in Genetics, Cell Biology, and Ecology, followed by three (for a B.A. degree) or six (for the B.S. degree) biology electives. There are special programs in Biochemistry, Biology with Teaching, Biophysics, Environmental Science, Natural Science, and Neuroscience that the Biology department offers in conjunction with others.

The Bachelor of Science degree in Biology program provides a strong preparation for those wishing to attend professional or graduate school in biology or related disciplines such as cell or molecular biology, ecology, bioinformatics, biochemistry, biophysics, medicine, pharmacy, dentistry, and allied health fields. It is recommended for those who intend to enter the scientific workforce upon completion of a bachelor’s degree.

The Bachelor of Arts degree in Biology program, which also provides the essential background for professional schools, is appropriate for those who are planning for careers in fields where a science background with additional breadth is advantageous.

The Bachelor of Science degree in Neuroscience - Cellular & Molecular is designed to provide rigorous preparation in scientific knowledge at the molecular and cellular level to those students interested in pursuing advanced studies and professional development in neuroscience, medicine or a related field in life sciences. In addition to neuroscience, graduates in the major will be well prepared for graduate or professional studies in cell or molecular biology, biochemistry, biophysics, biomedical sciences, medicine, pharmacy, dentistry, and many allied health fields. Neuroscience graduates who do not pursue graduate studies will be prepared to accept technical positions in industry (pharmaceutical, biotech) or government and university laboratories. Graduates will be ready to conduct research on a range of neuroscience and related topics at the level of cells or molecules, including nervous system function, development, disease or injury.

The Bachelor of Science degree in Biochemistry prepares students for excellence in graduate or medical school, and employment in the chemical, biotechnological, or pharmaceutical industries. Students learn a wide array of topics in Biology, Chemistry, Mathematics, and Physics. In upper division studies, Biochemistry majors learn to apply biochemical principles to real-life situations via problem-based approaches in their courses. Laboratory
courses give students the tools they will need as biochemists to pursue research. Accomplished majors are encouraged to pursue independent research with a professor, and to present their work internally and at national meetings.

The Bachelor of Science degree in Biophysics fulfills all medical and pharmacy school requirements. Biophysics students interested in research careers can pursue a graduate degree in biophysics, biology, molecular biology or neuroscience, as well as the combined MD/PhD degree in medical physics, health physics or nuclear medicine.

The Bachelor of Arts degree in Natural Sciences provides students more breadth than traditional science programs. Many exciting areas of scientific inquiry, such as the neurosciences, environmental sciences, and biophysical sciences, require general science backgrounds that encompass multiple science disciplines. Students planning graduate study or technical careers in one of these interdisciplinary areas, as well as students preparing for careers in health sciences, legal professions, science education, science-related business, or social service might be well served by the B.A. in the Natural Sciences. However, this program of study will not prepare students for graduate study in a traditional science discipline nor will it prepare students for technical employment in a traditional science discipline.

The Bachelor of Science degree in Biology with Teaching and Bachelor of Science degree in General Science with Teaching are part of Temple's innovative "TUteach" secondary education teacher-training program. The programs prepare students for a career in secondary school teaching with the full content knowledge of their corresponding majors without teaching. The education courses in the B.S. with Teaching include supervised teaching in school district classrooms and emphasize inquiry-based approaches to learning. Students in the B.S. with Teaching degree program become eligible for a Pennsylvania teacher certification when they complete all the requirements for the degree that include theoretical and practical courses in education specifically designed for science and mathematics majors.

Programs

• Biochemistry, B.S. (p. )
• Biology, B.A. (p. 1059)
• Biology, B.S. (p. 1063)
• Biology with Teaching, B.S. (p. )
• Biology, B.A./M.Ed. (p. )
• Biology, B.S./M.Ed. (p. )
• Biology, Minor (p. 1067)
• Biophysics, B.S. (p. )
• Environmental Science, B.S. (p. )
• General Science with Teaching, B.S. (p. )
• Natural Sciences, B.A. (p. 1073)
• Neuroscience - Cellular & Molecular, B.S. (p. 1077)

Biology, B.A.

Dr. Allen Nicholson, Chair
Biology-Life Sciences Building, Room 255
215-204-8851

Dr. Joel Sheffield, Faculty Advisor (Last names A-M)
Biology-Life Sciences Building, Room 311
215-204-8839
joel.sheffield@temple.edu

Ms. Evelyn Vleck, Faculty Advisor (Last names N-Z)
Biology-Life Science Building, Room 248P
215-204-6528
evelyn.vleck@temple.edu

The Bachelor of Arts in Biology, which also provides the essential background for professional schools, is appropriate for those who are planning for careers in fields where a science background with additional breadth is advantageous.

Bachelor of Arts

Summary of Requirements for the Degree

1. University Requirements
   • MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
• All Temple students must take a minimum of two writing-intensive courses at Temple as part of their major. Following is a list of courses that can be used to satisfy the writing-intensive requirement:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 2296</td>
<td>Genetics (S)</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 3096</td>
<td>Cell Structure and Function (F)</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 3396</td>
<td>Scientific Writing for Biology: The Art of Communicating</td>
<td>3</td>
</tr>
</tbody>
</table>

• Students must complete General Education (GenEd) requirements.
  • The General Education Curriculum consists of approximately 25-26 s.h. See the General Education (p. 143) section of the Undergraduate Bulletin for the GenEd curriculum.
  • Students who complete CST majors typically receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) courses.

2. College Requirements
• 45 Upper Level (2000+) credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).
• 90 credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).
• Two (2) Upper Level (2000+) Liberal Art courses.
• Second (2nd) Level of a Foreign Language (1002).

3. Major Requirements for Bachelor of Arts (60-63 s.h.)

**Biology**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1111</td>
<td>Introduction to Biology I</td>
<td>4</td>
</tr>
<tr>
<td>or BIOL 1911</td>
<td>Honors Introduction to Biology I</td>
<td></td>
</tr>
<tr>
<td>BIOL 2112</td>
<td>Introduction to Biology II</td>
<td>4</td>
</tr>
<tr>
<td>or BIOL 2912</td>
<td>Honors Introduction to Biology II</td>
<td></td>
</tr>
<tr>
<td>BIOL 2227</td>
<td>Principles of Ecology (S)</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 2296</td>
<td>Genetics (S)</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 3096</td>
<td>Cell Structure and Function (F)</td>
<td>4</td>
</tr>
</tbody>
</table>

Select 3 Biology electives 2200 or above (see course descriptions for exceptions) 9-12

**Chemistry**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1031</td>
<td>General Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 1033</td>
<td>and General Chemistry Laboratory I</td>
<td></td>
</tr>
<tr>
<td>CHEM 1951</td>
<td>Honors General Chemical Science I</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 1953</td>
<td>and Honors Chemical Science Laboratory I (F)</td>
<td></td>
</tr>
</tbody>
</table>

Select 1 of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1032</td>
<td>General Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 1034</td>
<td>and General Chemistry Laboratory II</td>
<td></td>
</tr>
<tr>
<td>CHEM 1952</td>
<td>Honors General Chemical Science II</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 1954</td>
<td>and Honors Chemical Science Laboratory II (S)</td>
<td></td>
</tr>
</tbody>
</table>

Select 1 of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 2201</td>
<td>Organic Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 2203</td>
<td>and Organic Chemistry Laboratory I</td>
<td></td>
</tr>
<tr>
<td>CHEM 2211</td>
<td>Organic Chemistry for Majors I</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 2213</td>
<td>and Organic Majors Laboratory I (F)</td>
<td></td>
</tr>
<tr>
<td>CHEM 2921</td>
<td>Organic Chemistry for Honors I</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 2923</td>
<td>and Organic Honors Laboratory I (F)</td>
<td></td>
</tr>
</tbody>
</table>

Select 1 of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 2202</td>
<td>Organic Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 2204</td>
<td>and Organic Chemistry Laboratory II</td>
<td></td>
</tr>
<tr>
<td>CHEM 2212</td>
<td>Organic Chemistry for Majors II</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 2214</td>
<td>and Organic Majors Laboratory II (S)</td>
<td></td>
</tr>
<tr>
<td>CHEM 2922</td>
<td>Organic Chemistry for Honors II</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 2924</td>
<td>and Organic Honors Laboratory II (S)</td>
<td></td>
</tr>
</tbody>
</table>

**Mathematics**

Select 1 of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1038</td>
<td>Calculus I with Lab</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
<td></td>
</tr>
<tr>
<td>MATH 1941</td>
<td>Honors Calculus I</td>
<td></td>
</tr>
</tbody>
</table>
### Schools, Colleges, and Divisions

#### MATH 1042
Calculus II
4
or MATH 1942
Honors Calculus II

#### PHYS 2021
General Physics I
4
or PHYS 2921
Honors General Physics I

#### PHYS 2022
General Physics II
4
or PHYS 2922
Honors General Physics II

**Total Credit Hours**

60-63

(F) - Fall only course
(S) - Spring only course

1. Students who choose MATH 1038 must also take the linked course MATH 1039.

**Note:** A grade of C or higher in CHEM 1031 and CHEM 1032 is required to take BIOL 1111 and BIOL 2112, respectively. A grade of C or higher in BIOL 1111 and BIOL 2112 is required to take upper-level Biology courses, and a C- or higher is required unless otherwise specified in all other courses for the major, including course prerequisites. Most research and Independent Study courses are not available for major credit, such as:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 2082</td>
<td>Independent Research I</td>
<td>2-4</td>
</tr>
<tr>
<td>BIOL 3082</td>
<td>Independent Research II</td>
<td>1-4</td>
</tr>
<tr>
<td>BIOL 3091</td>
<td>Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 3183</td>
<td>Junior Independent Research</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 3681</td>
<td>Cooperative Studies</td>
<td>2-4</td>
</tr>
<tr>
<td>BIOL 4291</td>
<td>Extradepartmental Research</td>
<td>1-4</td>
</tr>
<tr>
<td>BIOL 4483</td>
<td>Accelerated Research in Biochemistry</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 4491</td>
<td>Research in Biochemistry</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 4591</td>
<td>Research in Neuroscience</td>
<td>1-4</td>
</tr>
</tbody>
</table>

A GPA of 2.0 or better is required in Biology courses in order to graduate.

### Distinction in the Major

To be eligible for distinction in the major, a student must retain a grade point average of 3.2 or better (overall and in the major); should register for BIOL 4391 Accelerated Research in Biology or BIOL 4291 Extradepartmental Research for a total of 6 s.h. over two semesters; and must write a final research paper and present his/her research at a departmental research poster session before graduation. A student, however, does not have to enroll in the distinction program in order to participate in departmental research. Other courses (BIOL 2082 Independent Research I and BIOL 3082 Independent Research II), provide credit toward graduation and research experience, and are available to undergraduate students from their sophomore through their senior year. A student may register for BIOL 3082 more than one semester, however only one semester may be completed for a grade. The additional semester may be taken for credit/no credit. In all cases, permission of the faculty and application to the department Honors Committee is required before registering for research credits.

### Calculation of Major GPA

The list of courses that are used to calculate major GPA is determined by the department. Students should consult with their academic advising unit for the applicable courses. In general, courses that could not apply toward the major as an elective or a required course are not counted for the major GPA. This would include BIOL 1011, for example.

A total of up to 3 s.h. of Biology research courses numbered lower than 4000 (to include: BIOL 3082, BIOL 3181, BIOL 3183, BIOL 3281, BIOL 3681, and BIOL 3781) may be taken for a letter grade. Any additional credits in research courses in this category can be taken only on a CR/NC basis. No research courses numbered lower than 4000 may be used for Biology elective credit.

### Suggested Academic Plan

#### Bachelor of Arts in Biology

**Requirements for New Students starting in the 2015-2016 Academic Year**

**Year 1**

**Fall**

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 2082</td>
<td>Independent Research I</td>
<td>2-4</td>
</tr>
<tr>
<td>BIOL 2082</td>
<td>Independent Research II</td>
<td>1-4</td>
</tr>
<tr>
<td>BIOL 3091</td>
<td>Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 3183</td>
<td>Junior Independent Research</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 3681</td>
<td>Cooperative Studies</td>
<td>2-4</td>
</tr>
<tr>
<td>BIOL 4291</td>
<td>Extradepartmental Research</td>
<td>1-4</td>
</tr>
<tr>
<td>BIOL 4483</td>
<td>Accelerated Research in Biochemistry</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 4491</td>
<td>Research in Biochemistry</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 4591</td>
<td>Research in Neuroscience</td>
<td>1-4</td>
</tr>
<tr>
<td>Course(s)</td>
<td>Title</td>
<td></td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>---------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>CHEM 1031 &amp; CHEM 1033</td>
<td>General Chemistry I</td>
<td></td>
</tr>
<tr>
<td>CHEM 1951 &amp; CHEM 1953</td>
<td>Honors General Chemical Science I (F)</td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 1038</td>
<td>Calculus I with Lab^1</td>
<td></td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
<td></td>
</tr>
<tr>
<td>MATH 1941</td>
<td>Honors Calculus I</td>
<td></td>
</tr>
</tbody>
</table>

**General Education/Elective Credits** 7

**Term Credit Hours** 15

### Spring

<table>
<thead>
<tr>
<th>Course(s)</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1111 or 1911</td>
<td>Introduction to Biology I</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
</tr>
<tr>
<td>CHEM 1032 &amp; CHEM 1034</td>
<td>General Chemistry II</td>
</tr>
<tr>
<td>CHEM 1952 &amp; CHEM 1954</td>
<td>Honors General Chemical Science II (S)</td>
</tr>
<tr>
<td>MATH 1042 or 1942</td>
<td>Calculus II</td>
</tr>
</tbody>
</table>

**General Education/Elective Credits** 3

### Term Credit Hours 15

### Year 2

#### Fall

<table>
<thead>
<tr>
<th>Course(s)</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 2112 or 2912</td>
<td>Introduction to Biology II</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
</tr>
<tr>
<td>CHEM 2201 &amp; CHEM 2203</td>
<td>Organic Chemistry I</td>
</tr>
<tr>
<td>CHEM 2211 &amp; CHEM 2213</td>
<td>Organic Chemistry for Majors I (F)</td>
</tr>
<tr>
<td>CHEM 2921 &amp; CHEM 2923</td>
<td>Organic Chemistry for Honors I (F)</td>
</tr>
</tbody>
</table>

**General Education/Elective Credits** 7

### Term Credit Hours 15

### Spring

<table>
<thead>
<tr>
<th>Course(s)</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 2227 &amp; BIOL 2296</td>
<td>Principles of Ecology (S)</td>
</tr>
<tr>
<td>BIOL 2227 &amp; BIOL 2296</td>
<td>Genetics [WI] (S)</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
</tr>
<tr>
<td>CHEM 2202 &amp; CHEM 2204</td>
<td>Organic Chemistry II</td>
</tr>
<tr>
<td>CHEM 2212 &amp; CHEM 2214</td>
<td>Organic Chemistry for Majors II (S)</td>
</tr>
<tr>
<td>CHEM 2922 &amp; CHEM 2924</td>
<td>Organic Chemistry for Honors II (S)</td>
</tr>
</tbody>
</table>

**General Education/Elective Credits** 9-8

### Term Credit Hours 16

### Year 3

#### Fall

<table>
<thead>
<tr>
<th>Course(s)</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 3096</td>
<td>Cell Structure and Function [WI] (F)</td>
</tr>
<tr>
<td>PHYS 2021 or 2921</td>
<td>General Physics I</td>
</tr>
</tbody>
</table>

**General Education/Elective Credits** 8

### Term Credit Hours 16

### Spring

<table>
<thead>
<tr>
<th>Course(s)</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select one of the following:</td>
<td></td>
</tr>
<tr>
<td>Course</td>
<td>Title</td>
</tr>
<tr>
<td>---------------</td>
<td>-----------------------------------------</td>
</tr>
<tr>
<td>BIOL 2227</td>
<td>Principles of Ecology</td>
</tr>
<tr>
<td>BIOL 2296</td>
<td>Genetics [WI] (S)</td>
</tr>
<tr>
<td>PHYS 2022 or 2922</td>
<td>General Physics II</td>
</tr>
<tr>
<td></td>
<td>General Education/Elective Credits</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
</table>

**Year 4**

<table>
<thead>
<tr>
<th>Period</th>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>Upper-Level 2200+ Biology Elective</td>
<td>3-4</td>
</tr>
<tr>
<td></td>
<td>Upper-Level 2200+ Biology Elective</td>
<td>3-4</td>
</tr>
<tr>
<td></td>
<td>General Education/Elective Credits</td>
<td>9-7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Period</th>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring</td>
<td>Upper-Level 2200+ Biology Elective</td>
<td>3-4</td>
</tr>
<tr>
<td></td>
<td>General Education/Elective Credits</td>
<td>13-12</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>16</th>
</tr>
</thead>
</table>

(F) - Fall only course
(S) - Spring only course

1. Students who choose MATH 1038 must also take the linked course MATH 1039.
2. If the student has taken the necessary prerequisite courses, some of the Biology elective courses may be taken before the Fall semester of Year 4.

**Biology, B.S.**

Dr. Allen Nicholson, Chair
Biology-Life Sciences Building, Room 255
215-204-8851

Dr. Joel Sheffield, Faculty Advisor (Last names A-M)
Biology-Life Sciences Building, Room 311
215-204-8839
joel.sheffield@temple.edu

Ms. Evelyn Vleck, Faculty Advisor (Last names N-Z)
Biology-Life Science Building, Room 248P
215-204-6528
evelyn.vleck@temple.edu

The Bachelor of Science in Biology provides a strong preparation for those wishing to attend professional or graduate school in biology or related disciplines such as cell or molecular biology, ecology, bioinformatics, biochemistry, biophysics, medicine, pharmacy, dentistry, and allied health fields. It is recommended for those who intend to enter the scientific workforce upon completion of a bachelor’s degree.

**Bachelor of Science**

**Summary of Requirements for the Degree**

1. University Requirements
   - MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
   - All Temple students must take a minimum of two writing-intensive courses at Temple as part of their major. Following is a list of courses that can be used to satisfy the writing-intensive requirement:
     - BIOL 2296 Genetics 4
     - BIOL 3096 Cell Structure and Function 4
     - BIOL 3396 Scientific Writing for Biology: The Art of Communicating 3
   - Students must complete the General Education (Gen Ed) requirements.
• The General Education Curriculum consists of approximately 25-26 s.h. See the General Education (p. 143) section of the Undergraduate Bulletin for the Gen Ed curriculum.

• Students who complete CST majors typically receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) Gen Ed courses.

2. College Requirements

• 45 Upper Level (2000+) credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).

• 90 credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).

3. Major Requirements for Bachelor of Science (69-75 s.h.)

**Biology**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1111</td>
<td>Introduction to Biology I</td>
<td>4</td>
</tr>
<tr>
<td>or BIOL 1911</td>
<td>Honors Introduction to Biology I</td>
<td></td>
</tr>
<tr>
<td>BIOL 2112</td>
<td>Introduction to Biology II</td>
<td>4</td>
</tr>
<tr>
<td>or BIOL 2912</td>
<td>Honors Introduction to Biology II</td>
<td></td>
</tr>
<tr>
<td>BIOL 2227</td>
<td>Principles of Ecology (S)</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 2296</td>
<td>Genetics (S)</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 3096</td>
<td>Cell Structure and Function (F)</td>
<td>4</td>
</tr>
</tbody>
</table>

Select 6 Biology electives 2200 or above

18-24

**Chemistry**

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1031 &amp; CHEM 1033</td>
<td>General Chemistry I and General Chemistry Laboratory I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1951 &amp; CHEM 1953</td>
<td>Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)</td>
<td></td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1032 &amp; CHEM 1034</td>
<td>General Chemistry II and General Chemistry Laboratory II</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1952 &amp; CHEM 1954</td>
<td>Honors General Chemical Science II and Honors Chemical Science Laboratory II (S)</td>
<td></td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 2201 &amp; CHEM 2203</td>
<td>Organic Chemistry I and Organic Chemistry Laboratory I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 2211 &amp; CHEM 2213</td>
<td>Organic Chemistry for Majors I and Organic Majors Laboratory I (F)</td>
<td></td>
</tr>
<tr>
<td>CHEM 2921 &amp; CHEM 2923</td>
<td>Organic Chemistry for Honors I and Organic Honors Laboratory I (F)</td>
<td></td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 2202 &amp; CHEM 2204</td>
<td>Organic Chemistry II and Organic Chemistry Laboratory II</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 2212 &amp; CHEM 2214</td>
<td>Organic Chemistry for Majors II and Organic Majors Laboratory II (S)</td>
<td></td>
</tr>
<tr>
<td>CHEM 2922 &amp; CHEM 2924</td>
<td>Organic Chemistry for Honors II and Organic Honors Laboratory II (S)</td>
<td></td>
</tr>
</tbody>
</table>

**Mathematics**

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1038</td>
<td>Calculus I with Lab ²</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
<td></td>
</tr>
<tr>
<td>MATH 1941</td>
<td>Honors Calculus I</td>
<td></td>
</tr>
<tr>
<td>MATH 1042</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 1942</td>
<td>Honors Calculus II</td>
<td></td>
</tr>
</tbody>
</table>

**Physics**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 2021</td>
<td>General Physics I</td>
<td>4</td>
</tr>
<tr>
<td>or PHYS 2921</td>
<td>Honors General Physics I</td>
<td></td>
</tr>
</tbody>
</table>
Schools, Colleges, and Divisions

PHYS 2022
General Physics II
or PHYS 2922
Honors General Physics II

Total Credit Hours 69-75

(F) - Fall only course
(S) - Spring only course

1 Up to two (2) Biology Electives (6-8 s.h.) may be replaced by Cognate electives selected from the following (B.S. degree only): ANTH 2764; CHEM 3301, CHEM 3302; MATH 2043; PHYS 2501, PHYS 4301; STAT 5002 (if substituted for BIOL 3312; students are not allowed to use both BIOL 3312 and STAT 5002 as upper-level electives).

2 Students who choose MATH 1038 must also take the linked course MATH 1039.

Note: A grade of C or higher in CHEM 1031 is required to take BIOL 1111. Grades of C or higher in both CHEM 1031 and CHEM 1032 are required to take BIOL 2112. A grade of C or higher in BIOL 1111 and BIOL 2112 is required to take upper-level Biology courses, and a C- or higher is required unless otherwise specified in all other courses for the major, including course prerequisites. Most research and Independent Study courses are not available for major credit, such as:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 2082</td>
<td>Independent Research I</td>
<td>2 to 4</td>
</tr>
<tr>
<td>BIOL 3082</td>
<td>Independent Research II</td>
<td>1 to 4</td>
</tr>
<tr>
<td>BIOL 3091</td>
<td>Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 3183</td>
<td>Junior Independent Research</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 3681</td>
<td>Cooperative Studies</td>
<td>2 to 4</td>
</tr>
<tr>
<td>BIOL 4291</td>
<td>Extradepartmental Research</td>
<td>1 to 4</td>
</tr>
<tr>
<td>BIOL 4483</td>
<td>Accelerated Research in Biochemistry</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 4491</td>
<td>Research in Biochemistry</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 4591</td>
<td>Research in Neuroscience</td>
<td>1 to 4</td>
</tr>
</tbody>
</table>

A GPA of 2.0 or better is required in Biology courses in order to graduate.

Distinction in the Major

To be eligible for distinction in the major, a student must retain a grade point average of 3.2 or better (overall and in the major); should register for BIOL 4391 Accelerated Research in Biology or BIOL 4291 Extradepartmental Research for a total of 6 s.h. over two semesters; and must write a final research paper and present his/her research at a departmental research poster session before graduation. A student, however, does not have to enroll in the distinction program in order to participate in departmental research. Other courses (BIOL 2082 Independent Research I and BIOL 3082 Independent Research II), provide credit toward graduation and research experience, and are available to undergraduate students from their sophomore through their senior year. A student may register for BIOL 3082 more than one semester, however only one semester may be completed for a grade. The additional semester may be taken for credit/no credit. In all cases, permission of the faculty and application to the department Honors Committee is required before registering for research credits.

Calculation of Major GPA

The list of courses that are used to calculate major GPA is determined by the department. Students should consult with their academic advising unit for the applicable courses. In general, courses that could not apply toward the major as an elective or a required course are not counted for the major GPA. This would include BIOL 1011, for example.

A total of up to 3 s.h. of Biology research courses numbered lower than 4000 (to include: BIOL 3082, BIOL 3181, BIOL 3183, BIOL 3281, BIOL 3681, and BIOL 3781) may be taken for a letter grade. Any additional credits in research courses in this category can be taken only on a CR/NC basis. No research courses numbered lower than 4000 may be used for Biology elective credit.

Suggested Academic Plan

Bachelor of Science in Biology

Requirements for New Students starting in the 2015-2016 Academic Year

Year 1

Fall 4

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1031</td>
<td>General Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 1033</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Suggested Academic Plan
<table>
<thead>
<tr>
<th>Year 1</th>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring</td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BIOL 1111 or 1911</th>
<th>Introduction to Biology I</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>MATH 1038</th>
<th>Calculus I with Lab¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
</tr>
<tr>
<td>MATH 1941</td>
<td>Honors Calculus I</td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

General Education/Elective Credits

General Education/Elective Credits

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>7</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Spring</th>
<th>16</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>BIOL 2112 or 2912</th>
<th>Introduction to Biology II</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>CHEM 1032</th>
<th>General Chemistry II</th>
</tr>
</thead>
<tbody>
<tr>
<td>&amp; CHEM 1034</td>
<td></td>
</tr>
<tr>
<td>CHEM 1952</td>
<td>Honors General Chemical Science II (S)</td>
</tr>
<tr>
<td>&amp; CHEM 1954</td>
<td></td>
</tr>
<tr>
<td>MATH 1042 or 1942</td>
<td>Calculus II</td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

General Education/Elective Credits

General Education/Elective Credits

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BIOL 2227</th>
<th>Principles of Ecology (S)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 2296</td>
<td>Genetics [WI] (S)</td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>CHEM 2201</th>
<th>Organic Chemistry I</th>
</tr>
</thead>
<tbody>
<tr>
<td>&amp; CHEM 2203</td>
<td></td>
</tr>
<tr>
<td>CHEM 2211</td>
<td>Organic Chemistry for Majors I (F)</td>
</tr>
<tr>
<td>&amp; CHEM 2213</td>
<td></td>
</tr>
<tr>
<td>CHEM 2921</td>
<td>Organic Chemistry for Honors I (F)</td>
</tr>
<tr>
<td>&amp; CHEM 2923</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

General Education/Elective Credits

General Education/Elective Credits

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>8</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Year 3</th>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BIOL 3096</th>
<th>Cell Structure and Function [WI] (F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 2021 or 2921</td>
<td>General Physics I</td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

General Education/Elective Credits

General Education/Elective Credits

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>16</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Spring</th>
<th>15</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Upper-Level 2200+ Biology Elective²</th>
<th>3-4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper-Level 2200+ Biology Elective²</td>
<td>3-4</td>
</tr>
<tr>
<td>PHYS 2022 or 2922</td>
<td>4</td>
</tr>
</tbody>
</table>
General Education/Elective Credits 5-3

Term Credit Hours 15

Year 4

Fall

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper-Level 2200+ Biology Elective</td>
<td>3-4</td>
</tr>
<tr>
<td>Upper-Level 2200+ Biology Elective</td>
<td>3-4</td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td>9-7</td>
</tr>
</tbody>
</table>

Term Credit Hours 15

Spring

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper-Level 2200+ Biology Elective or Cognate Elective</td>
<td>3-4</td>
</tr>
<tr>
<td>Upper-Level 2200+ Biology Elective or Cognate Elective</td>
<td>3-4</td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td>10-8</td>
</tr>
</tbody>
</table>

Term Credit Hours 16

Total Credit Hours: 123

1. Students who choose MATH 1038 must also take the linked course MATH 1039.
2. If the student has taken the necessary prerequisite courses, some of the Biology or Cognate elective courses may be taken before the Spring semester of Year 3.

(F) - Fall only course

(S) - Spring only course

Biology, Minor

Dr. Allen Nicholson, Chair
Biology-Life Sciences Building, Room 255
215-204-8851

Dr. Joel Sheffield, Faculty Advisor (Last names A-M)
Biology-Life Sciences Building, Room 311
215-204-8839
joel.sheffield@temple.edu

Ms. Evelyn Vleck, Faculty Advisor (Last names N-Z)
Biology-Life Science Building, Room 248P
215-204-6528
evelyn.vleck@temple.edu

Minor Requirements

Students interested in acquiring basic knowledge in biology but not wishing to major in the subject may pursue a minor by successful completion of BIOL 1111 and BIOL 2112 (Introduction to Biology I and II) or their Honors alternates, BIOL 1911 and BIOL 2912, plus three additional upper-level 2200 or above Biology electives (see course descriptions for exceptions). At least one of these additional Biology electives must have a laboratory component.

Note that CHEM 1031 and CHEM 1032 (with labs) or their Honors alternates are the co-requisites or prerequisites for BIOL 1111 and BIOL 2112, and that a grade of C or higher in BIOL 1111 and BIOL 2112 is required to take Biology electives. BIOL 2227, BIOL 2296, and BIOL 3096 can be taken as electives for the minor. Please consult the Biology Department's advisor when choosing the three additional courses to ensure that prerequisites have been satisfied.

A minimum of 18 credits in Biology is required for the minor.

Environmental Science, B.S.

Dr. Laura Toran, Program Director
Beury Hall, Room 223
215-204-2352
Students will be equipped with the scholarly background and intellectual skills to understand a wide range of pressing environmental issues, and they will come to appreciate the physical, economic, political, demographic, and ethical factors that define those issues. Among the many environmental problems central to our program are groundwater contamination, suburban sprawl, river basin management, environmental justice, and the greening of abandoned urban spaces. Our graduates find employment with government environmental agencies, citizens’ organizations, consulting firms, and corporate environmental affairs departments.

**Bachelor of Science**

**Summary of Requirements for the Degree**

1. University Requirements (123 total s.h.)
   - MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
   - All Temple students must take a minimum of two writing-intensive courses at Temple as part of their major. Following is a list of courses that can be used to satisfy the writing-intensive requirement:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EES 2096</td>
<td>Climate Change: Oceans To Atmosphere (S)</td>
<td>4</td>
</tr>
<tr>
<td>EES 2097</td>
<td>Process Geomorphology (F)</td>
<td>4</td>
</tr>
<tr>
<td>ENST/ECON 3596</td>
<td>Energy, Ecology, and Economy</td>
<td>3</td>
</tr>
<tr>
<td>ENVS 4198</td>
<td>Environmental Science Senior Seminar (S)</td>
<td>3</td>
</tr>
<tr>
<td>ENST 4896</td>
<td>Environmental Physiology</td>
<td>3</td>
</tr>
<tr>
<td>ENST/GUS 3097</td>
<td>Environment and Development</td>
<td>3</td>
</tr>
<tr>
<td>ENST/GUS 4096</td>
<td>Problems of Environmental Quality</td>
<td>3</td>
</tr>
<tr>
<td>HIST/ENST 4297</td>
<td>Social History of American Medicine</td>
<td>3</td>
</tr>
<tr>
<td>PHIL/ENST 2596</td>
<td>Philosophical Perspectives on the Environment</td>
<td>3</td>
</tr>
</tbody>
</table>

   - Students must complete the General Education (GenEd) requirements.
     - The General Education Curriculum consists of approximately 25-26 s.h. See the General Education (p. 143) section of the Undergraduate Bulletin for the GenEd curriculum.
     - Students who complete CST majors typically receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.

2. College Requirements
   - 45 Upper Level (2000+) credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).
   - 90 credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).

3. Major Requirements for Bachelor of Science (72-80 s.h.)

**Biology**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1111</td>
<td>Introduction to Biology I</td>
<td>4</td>
</tr>
<tr>
<td>or BIOL 1911</td>
<td>Honors Introduction to Biology I</td>
<td></td>
</tr>
<tr>
<td>BIOL 2112</td>
<td>Introduction to Biology II</td>
<td>4</td>
</tr>
<tr>
<td>or BIOL 2912</td>
<td>Honors Introduction to Biology II</td>
<td></td>
</tr>
<tr>
<td>BIOL 2227</td>
<td>Principles of Ecology (S)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Chemistry**

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1031</td>
<td>General Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 1033</td>
<td>and General Chemistry Laboratory I</td>
<td></td>
</tr>
<tr>
<td>CHEM 1951</td>
<td>Honors General Chemical Science I</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 1953</td>
<td>and Honors Chemical Science Laboratory I (F)</td>
<td></td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1032</td>
<td>General Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 1034</td>
<td>and General Chemistry Laboratory II</td>
<td></td>
</tr>
<tr>
<td>CHEM 1952</td>
<td>Honors General Chemical Science II</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 1954</td>
<td>and Honors Chemical Science Laboratory II (S)</td>
<td></td>
</tr>
</tbody>
</table>

Select one of the following:
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 2201</td>
<td>Organic Chemistry I</td>
</tr>
<tr>
<td>CHEM 2203</td>
<td>and Organic Chemistry Laboratory I</td>
</tr>
<tr>
<td>CHEM 2211</td>
<td>Organic Chemistry for Majors I</td>
</tr>
<tr>
<td>CHEM 2213</td>
<td>and Organic Majors Laboratory I (F)</td>
</tr>
<tr>
<td>CHEM 2921</td>
<td>Organic Chemistry for Honors I</td>
</tr>
<tr>
<td>CHEM 2923</td>
<td>and Organic Honors Laboratory I (F)</td>
</tr>
</tbody>
</table>

**Earth & Environmental Science**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EES 2001</td>
<td>Physical Geology</td>
<td>4</td>
</tr>
</tbody>
</table>

Select one of the following: 1

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EES 3021</td>
<td>Introduction to Hydrology (F)</td>
<td>4</td>
</tr>
<tr>
<td>EES 3025</td>
<td>Physical Hydrology</td>
<td></td>
</tr>
</tbody>
</table>

Select one of the following: 3-4

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRP 2524</td>
<td>Fundamentals of Geographic Information Systems (GIS)</td>
<td></td>
</tr>
<tr>
<td>EES 3011</td>
<td>Remote Sensing and GIS (S)</td>
<td></td>
</tr>
<tr>
<td>GUS 3062</td>
<td>Fundamentals of Geographic Information Systems</td>
<td></td>
</tr>
</tbody>
</table>

**Economics**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 1102</td>
<td>Microeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>or ECON 1902</td>
<td>Honors Microeconomic Principles</td>
<td></td>
</tr>
<tr>
<td>ENST/ECON 3596</td>
<td>Energy, Ecology, and Economy</td>
<td>3</td>
</tr>
</tbody>
</table>

**Environmental Science**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVS 4198</td>
<td>Environmental Science Senior Seminar (S)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Environmental Sciences electives**

Select six Environmental Sciences electives. 2

**Mathematics**

Select one of the following: 4

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1038</td>
<td>Calculus I with Lab</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
<td></td>
</tr>
<tr>
<td>MATH 1941</td>
<td>Honors Calculus I</td>
<td></td>
</tr>
<tr>
<td>MATH 1042</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 1942</td>
<td>Honors Calculus II</td>
<td></td>
</tr>
</tbody>
</table>

Select one of the following: 3-4

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 2031</td>
<td>Probability and Statistics</td>
<td></td>
</tr>
<tr>
<td>BIOL 3312</td>
<td>Biostatistics</td>
<td></td>
</tr>
<tr>
<td>STAT 2103</td>
<td>Statistical Business Analytics (Only if also in Fox School of Business)</td>
<td></td>
</tr>
</tbody>
</table>

**Total Credit Hours**

72-80

(F) - Fall only course
(S) - Spring only course

1 One hydrology course is a required course. The second course may be taken as an elective.
2 Four of the electives must be Natural Science courses and of these two must be from the same department. One of the electives must be from the social science or policy elective courses.
3 Students who choose MATH 1038 must also take the linked course MATH 1039.

**Natural Science Electives**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 2241</td>
<td>Invertebrate Biology (S)</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 3114</td>
<td>Evolutionary Ecology (F)</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 3225</td>
<td>Evolutionary Genetics (S)</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 3244</td>
<td>Experimental Marine Biology (SS)</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 3245</td>
<td>Marine Ecology (F)</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 3254</td>
<td>Animal Behavior (S)</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 3275</td>
<td>Ecology of Invasive Species (F)</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 3307</td>
<td>Conservation Biology (F)</td>
<td>3</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>BIOL 3311</td>
<td>Herpetology (S)</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 3316</td>
<td>Tropical Marine Biology (Fall of odd years)</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 3321</td>
<td>Plant Community Ecology (F)</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 3336</td>
<td>Freshwater Ecology (Fall of even years)</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 4327</td>
<td>Biological Impacts of Global Climate Change (F)</td>
<td>3</td>
</tr>
<tr>
<td>BOT 1112</td>
<td>Plant Ecology (S)</td>
<td>3</td>
</tr>
<tr>
<td>EES 2021</td>
<td>Facies Models</td>
<td>4</td>
</tr>
<tr>
<td>EES 2097</td>
<td>Process Geomorphology (F)</td>
<td>4</td>
</tr>
<tr>
<td>EES 2061</td>
<td>Introduction to Geochemistry (S)</td>
<td>4</td>
</tr>
<tr>
<td>EES 2065</td>
<td>Nanogeoscience and Technology (F)</td>
<td>4</td>
</tr>
<tr>
<td>EES 2096</td>
<td>Climate Change: Oceans To Atmosphere (S)</td>
<td>4</td>
</tr>
<tr>
<td>EES 3021</td>
<td>Introduction to Hydrology ¹</td>
<td>4</td>
</tr>
<tr>
<td>EES 3025</td>
<td>Physical Hydrology ¹</td>
<td>4</td>
</tr>
<tr>
<td>EES 3042</td>
<td>Coastal Processes and Geomorphology (S)</td>
<td>4</td>
</tr>
<tr>
<td>HORT 2114</td>
<td>Soils (S)</td>
<td>3</td>
</tr>
<tr>
<td>LARC 2758</td>
<td>Summer Field Ecology (SSI)</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I</td>
<td>4</td>
</tr>
<tr>
<td>or PHYS 2021</td>
<td>General Physics I</td>
<td></td>
</tr>
<tr>
<td>or PHYS 2921</td>
<td>Honors General Physics I</td>
<td></td>
</tr>
</tbody>
</table>

**Social Science/Policy Electives**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRP 2114</td>
<td>Urban Form and Design</td>
<td>3</td>
</tr>
<tr>
<td>CRP 2213</td>
<td>Environmental Planning</td>
<td>3</td>
</tr>
<tr>
<td>CRP 2251</td>
<td>Sustainable Food Systems Planning</td>
<td>3</td>
</tr>
<tr>
<td>CRP 3255</td>
<td>Sustainability in Suburban Communities</td>
<td>3</td>
</tr>
<tr>
<td>CRP 3256</td>
<td>Sustainable Community Design and Development</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1101</td>
<td>Macroeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>or ECON 1901</td>
<td>Honors Macroeconomic Principles</td>
<td></td>
</tr>
<tr>
<td>ECON 3512</td>
<td>Public Finance</td>
<td>3</td>
</tr>
<tr>
<td>ECON 3513</td>
<td>Economics of State and Local Governments</td>
<td>3</td>
</tr>
<tr>
<td>ENV 4761</td>
<td>Environmental Regulations</td>
<td>3</td>
</tr>
<tr>
<td>ENST 3025</td>
<td>Environmental Law and Regulation</td>
<td>3</td>
</tr>
<tr>
<td>ASST/ENST/GUS 3052</td>
<td>Environmental Problems in Asia</td>
<td>3</td>
</tr>
<tr>
<td>ENST/GUS 2051</td>
<td>The Urban Environment</td>
<td></td>
</tr>
<tr>
<td>ENST 3004</td>
<td>Geography of Natural Resources</td>
<td>3</td>
</tr>
<tr>
<td>ENST/GUS 3051</td>
<td>Environmental Policy Issues</td>
<td></td>
</tr>
<tr>
<td>ENST/GUS 3054</td>
<td>Energy, Resources, and Conservation</td>
<td></td>
</tr>
<tr>
<td>ENST/GUS 3097</td>
<td>Environment and Development</td>
<td></td>
</tr>
<tr>
<td>ENST/GUS 3314</td>
<td>Food Studies: A Geographical Perspective</td>
<td></td>
</tr>
<tr>
<td>ENST/GUS 4015</td>
<td>The Geographic Basis of Land Use Planning</td>
<td></td>
</tr>
<tr>
<td>ENST/GUS 4051</td>
<td>Geography of Hazards</td>
<td></td>
</tr>
<tr>
<td>ENST/GUS 4056</td>
<td>Political Ecology</td>
<td></td>
</tr>
<tr>
<td>ENST/GUS 4065</td>
<td>Urban Geographic Information Systems</td>
<td></td>
</tr>
<tr>
<td>ENST 4066</td>
<td>Environmental GIS</td>
<td>3</td>
</tr>
<tr>
<td>ENST/GUS 4071</td>
<td>Medical Geography</td>
<td></td>
</tr>
<tr>
<td>ENST/GUS 4096</td>
<td>Problems of Environmental Quality</td>
<td></td>
</tr>
<tr>
<td>HIST/ENST 3214</td>
<td>North American Environmental History</td>
<td></td>
</tr>
<tr>
<td>HIST/ENST 4297</td>
<td>Social History of American Medicine</td>
<td></td>
</tr>
<tr>
<td>PHIL/ENST 2157</td>
<td>Environmental Ethics</td>
<td></td>
</tr>
<tr>
<td>PHIL/ENST 2596</td>
<td>Philosophical Perspectives on the Environment</td>
<td></td>
</tr>
<tr>
<td>POLS/ENST 3152</td>
<td>U.S. Environmental Policy</td>
<td></td>
</tr>
<tr>
<td>POLS/ENST 3265</td>
<td>International Environmental Policy</td>
<td></td>
</tr>
<tr>
<td>PBHL 2102</td>
<td>Environmental Health</td>
<td>3</td>
</tr>
</tbody>
</table>
REL/ENST 3001 Earth Ethics 3
REL/ASST/ENST 3904 Honors Earth Ethics 3
SOC/ENST 3511 Sociology of the Environment 3

**Topic Electives**
ENVS 3000 Special Topics in Environmental Science 3 to 4
ENVS 4082 Independent Study: Environmental Science 1 to 3
ENVS 4085 Internship: Environmental Science 3
ENST 3000 Special Topics in Environmental Studies 3
ENST 4896 Environmental Physiology 3
HORT 2334 Food Crops I 3
HORT 2353 Food Crops II 3
HORT 3514 Landscape Restoration 3

**Note:** EES 3091 is not available for major credit.

1 One hydrology course is a required course. The second course may be taken as an elective.

(F) - Fall only course
(S) - Spring only course
(SS) - Summer session only

**Calculation of Major GPA**
The list of courses that are used to calculate major GPA is determined by the department. Students should consult with their academic advising unit for the applicable courses. In general, courses that could not apply toward the major as an elective or a required course are not counted for the major GPA. This would include CHEM 1027, for example.

**Distinction in Major**
To graduate with Distinction in Major, students are required to achieve a 3.5 GPA for courses required for the major. If the difficulty of courses chosen as electives is high, then a 3.3 GPA will earn Distinction in Major. This determination will be made by the appropriate faculty. In addition, a student graduating with distinction has no grade below C in the remaining courses required for the major.

**Suggested Academic Plan**
Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

**Bachelor of Science in Environmental Science**

**Requirements for New Students starting in the 2015-2016 Academic Year**

**Year 1**

**Fall**
Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1031 &amp; CHEM 1033</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1951 &amp; CHEM 1953</td>
<td>4</td>
</tr>
</tbody>
</table>

General Chemistry I
Honors General Chemical Science I (F)

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1038</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1041</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1941</td>
<td>4</td>
</tr>
</tbody>
</table>

Calculus I with Lab¹
Calculus I
Honors Calculus I

General Education/Elective Credits 7

**Spring**
Select one of the following:

4
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1032</td>
<td>General Chemistry II</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 1034</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 1952</td>
<td>Honors General Chemical Science II (S)</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 1954</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EES 2001</td>
<td>Physical Geology</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1042 or 1942</td>
<td>Calculus II</td>
<td>4</td>
</tr>
</tbody>
</table>

General Education/Elective Credits: 3

**Term Credit Hours:** 15

**Year 2**

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1111 or 1911</td>
<td>Introduction to Biology I</td>
<td>4</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>CHEM 2201 &amp; CHEM 2203</td>
<td>Organic Chemistry I</td>
<td></td>
</tr>
<tr>
<td>CHEM 2211 &amp; CHEM 2213</td>
<td>Organic Chemistry for Majors I (F)</td>
<td></td>
</tr>
<tr>
<td>CHEM 2921 &amp; CHEM 2923</td>
<td>Organic Chemistry for Honors I (F)</td>
<td></td>
</tr>
</tbody>
</table>

General Education/Elective Credits: 7

**Term Credit Hours:** 15

**Spring**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 2227</td>
<td>Principles of Ecology</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>3-4</td>
</tr>
<tr>
<td>MATH 2031</td>
<td>Probability and Statistics</td>
<td></td>
</tr>
<tr>
<td>STAT 2103</td>
<td>Statistical Business Analytics (If also in Fox School of Business)</td>
<td></td>
</tr>
<tr>
<td>BIOL 3312</td>
<td>Biostatistics (F)</td>
<td></td>
</tr>
</tbody>
</table>

Environmental Science Elective - Natural Science (see approved list): 3-4

General Education/Elective Credits: 5-3

**Term Credit Hours:** 15

**Year 3**

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 2112 or 2912</td>
<td>Introduction to Biology II</td>
<td>4</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>EES 3021</td>
<td>Introduction to Hydrology (F)</td>
<td></td>
</tr>
<tr>
<td>EES 3025</td>
<td>Physical Hydrology</td>
<td></td>
</tr>
</tbody>
</table>

Environmental Science Elective (see approved list): 3

General Education/Elective Credits: 3

**Term Credit Hours:** 14

**Spring**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 1102 or 1902</td>
<td>Microeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>3-4</td>
</tr>
<tr>
<td>EES 3011</td>
<td>Remote Sensing and GIS (S)</td>
<td></td>
</tr>
<tr>
<td>GUS 3062</td>
<td>Fundamentals of Geographic Information Systems</td>
<td></td>
</tr>
<tr>
<td>CRP 2524</td>
<td>Fundamentals of Geographic Information Systems (GIS)</td>
<td></td>
</tr>
</tbody>
</table>

Environmental Science Elective - Natural Science (see approved list): 4

General Education/Elective Credits: 6-5

**Term Credit Hours:** 16

**Year 4**

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENST 3596 or ECON 3596</td>
<td>Energy, Ecology, and Economy [WI]</td>
<td>3</td>
</tr>
</tbody>
</table>

Environmental Science Elective - Natural Science (see approved list): 3-4

Environmental Science Elective - Social Science/Policy (see approved list): 3-4

**Term Credit Hours:** 16
Natural Sciences, B.A.

Dr. Susan Varnum, Program Director
Beury Hall, Room 130
215-204-6390
susan.varnum@temple.edu

The Bachelor of Arts (B.A.) in the Natural Sciences provides students more breadth than traditional science programs. Many exciting areas of scientific inquiry, such as the neurosciences, environmental sciences, and biophysical sciences, require general science backgrounds that encompass multiple science disciplines.

Students planning graduate study or technical careers in one of these interdisciplinary areas, as well as students preparing for careers in health sciences, legal professions, science education, science-related business, or social service might be well served by the B.A. in the Natural Sciences.

However, this program of study will not prepare students for graduate study in a traditional science discipline nor will it prepare students for technical employment in a traditional science discipline.

Bachelor of Arts

Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)
   • MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
   • All Temple students must take a minimum of two writing-intensive courses at Temple as part of their major. Following is a list of courses that can be used to satisfy the writing-intensive requirement:
     Select two of the following:
     - BIOL 2296 Genetics (S)
     - BIOL 3096 Cell Structure and Function (F)
     - BIOL 3396 Scientific Writing for Biology: The Art of Communicating
     - CHEM 4196 Techniques of Chemical Measurement II
     - CHEM 3397 & CHEM 3398 Physical Chemistry Laboratory I and Physical Chemistry Laboratory II
     - EES 2096 Climate Change: Oceans To Atmosphere (S - even years)
     - ENG 2696 Technical Writing
     - PHIL 2196 Perspectives on Science and Mathematics
     - PHIL 2596 Philosophical Perspectives on the Environment
     - PHYS 2796 Introduction to Modern Physics (S)
     - PHYS 4796 Experimental Physics (S)
   • Students must complete the General Education (GenEd) requirements.
     • The General Education Curriculum consists of approximately 25-26 s.h. See the General Education (p. 143) section of the Undergraduate Bulletin for the GenEd curriculum.
Students who complete CST majors typically receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.

2. College Requirements

- 90 credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).
- 45 Upper-Level (2000+) credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).
- Second (2nd) Level of a Foreign Language (1002).

3. Major Requirements for Bachelor of Arts (56-64 s.h.)

### Biology

Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1011</td>
<td>General Biology I (F)</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 1111</td>
<td>Introduction to Biology I</td>
<td></td>
</tr>
<tr>
<td>BIOL 1911</td>
<td>Honors Introduction to Biology I (S)</td>
<td></td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1012</td>
<td>General Biology II (S)</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 2112</td>
<td>Introduction to Biology II</td>
<td></td>
</tr>
<tr>
<td>BIOL 2912</td>
<td>Honors Introduction to Biology II (F)</td>
<td></td>
</tr>
</tbody>
</table>

### Chemistry

Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1031</td>
<td>General Chemistry I</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 1033</td>
<td>and General Chemistry Laboratory I</td>
<td></td>
</tr>
<tr>
<td>CHEM 1951</td>
<td>Honors General Chemical Science I</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 1953</td>
<td>and Honors Chemical Science Laboratory I (F)</td>
<td></td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1032</td>
<td>General Chemistry II</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 1034</td>
<td>and General Chemistry Laboratory II</td>
<td></td>
</tr>
<tr>
<td>CHEM 1952</td>
<td>Honors General Chemical Science II</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 1954</td>
<td>and Honors Chemical Science Laboratory II (S)</td>
<td></td>
</tr>
</tbody>
</table>

### Technical Writing

**ENG 2696**  
Technical Writing  

### College of Science & Technology

Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCTC 4351</td>
<td>Paradigms of Scientific Knowledge: Knowledge Discovery from Scientific Data</td>
<td>3</td>
</tr>
<tr>
<td>BIOL/CHEM/EES/PHYS 309I</td>
<td>Research Methods</td>
<td></td>
</tr>
</tbody>
</table>

### Earth & Environmental Science

**EES 2001**  
Physical Geology  

### Mathematics

Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1031</td>
<td>Differential and Integral Calculus</td>
<td></td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
<td></td>
</tr>
<tr>
<td>&amp; MATH 1042</td>
<td>and Calculus II</td>
<td></td>
</tr>
<tr>
<td>MATH 1941</td>
<td>Honors Calculus I</td>
<td></td>
</tr>
<tr>
<td>&amp; MATH 1942</td>
<td>and Honors Calculus II</td>
<td></td>
</tr>
</tbody>
</table>

### Philosophy/History

Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL 2196</td>
<td>Perspectives on Science and Mathematics (WI)</td>
<td>3</td>
</tr>
<tr>
<td>SCTC 3001</td>
<td>History of Science</td>
<td></td>
</tr>
</tbody>
</table>

### Physics

**PHYS 1004**  
Introduction to Astronomy  

Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 1021</td>
<td>Introduction to General Physics I</td>
<td></td>
</tr>
<tr>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I</td>
<td></td>
</tr>
</tbody>
</table>
PHYS 2021 General Physics I
PHYS 2921 Honors General Physics I

Select one of the following:
PHYS 1022 Introduction to General Physics II
PHYS 1062 Elementary Classical Physics II
PHYS 2022 General Physics II
PHYS 2922 Honors General Physics II

Upper Elective Science

Four Upper-Level (2000+) elective science courses ² 12-16

Successful completion of a comprehensive general science exam at the conclusion of the major course requirements.

Total Credit Hours 56-64

¹ Students may choose to take MATH 1038 instead of MATH 1041 as part of the MATH 1041 & MATH 1042 sequence. If so, they must also take the linked course MATH 1039.

² The four science electives chosen to satisfy the science concentration must be taken from the same department. The departments you can choose electives from are: Biology, Chemistry, Earth & Environmental Science or Physics. In the circumstance where a laboratory course is the complement of a lecture course, both must be completed to fulfill the requirement for ONE science elective.

Note: In addition to the overall major residency requirements, half of the concentration area must be completed at Temple.

Note: A grade of C or higher in CHEM 1031 and CHEM 1032 is required to take BIOL 1111 and BIOL 2112. A grade of C or higher in BIOL 1111 and BIOL 2112 is required to take upper-level Biology courses, and a C- or higher is required unless otherwise specified in all other courses for the major, including course prerequisites.

Calculation of Major GPA

The list of courses that are used to calculate major GPA is determined by the department. Students should consult with their academic advising unit for the applicable courses. In general, courses that could not apply toward the major as an elective or a required course are not counted for the major GPA. This would include MATH 1022, for example.

Distinction in Major

To graduate with a Distinction in Natural Sciences a student is required to achieve a 3.33 GPA or higher in all of the content area courses in the major.

Suggested Academic Plan

Bachelor of Arts in Natural Sciences

Requirements for New Students starting in the 2015-2016 Academic Year

Year 1

Fall

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1031 &amp; CHEM 1033</td>
<td>General Chemistry I</td>
</tr>
<tr>
<td>CHEM 1951 &amp; CHEM 1953</td>
<td>Honors General Chemical Science I (F)</td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1031 &amp; MATH 1038</td>
<td>Differential and Integral Calculus</td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
</tr>
<tr>
<td>MATH 1941</td>
<td>Honors Calculus I</td>
</tr>
</tbody>
</table>

General Education/Elective Credits 7

Term Credit Hours 15

Spring

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1032 &amp; CHEM 1034</td>
<td>General Chemistry II</td>
</tr>
<tr>
<td>CHEM 1952 &amp; CHEM 1954</td>
<td>Honors General Chemical Science II (S)</td>
</tr>
<tr>
<td>-----------------------</td>
<td>----------------------------------------</td>
</tr>
<tr>
<td>MATH 1042 or 1942</td>
<td>Calculus II²</td>
</tr>
</tbody>
</table>

General Education/Elective Credits: 12-8

| **Term Credit Hours** | 16 |

**Year 2**

**Fall**

Select one of the following:

- BIOL 1011: General Biology I (F)
- BIOL 1111: Introduction to Biology I
- BIOL 1911: Honors Introduction to Biology I (S)
- EES 2001: Physical Geology

General Education/Elective Credits: 8

| **Term Credit Hours** | 16 |

**Spring**

Select one of the following:

- BIOL 1012: General Biology II (S)
- BIOL 2112: Introduction to Biology II
- BIOL 2912: Honors Introduction to Biology II (F)
- ENG 2696: Technical Writing [WI]

Science Elective²: 3-4

General Education/Elective Credits: 5-4

| **Term Credit Hours** | 15 |

**Year 3**

**Fall**

Select one of the following:

- PHYS 1021: Introduction to General Physics I
- PHYS 1061: Elementary Classical Physics I
- PHYS 2021: General Physics I
- PHYS 2921: Honors General Physics I (F)

Select one of the following:

- PHIL 2196: Perspectives on Science and Mathematics [WI]
- SCTC 3001: History of Science

Science Elective²: 3-4

General Education/Elective Credits: 5-4

| **Term Credit Hours** | 15 |

**Spring**

Select one of the following:

- PHYS 1022: Introduction to General Physics II
- PHYS 1062: Elementary Classical Physics II
- PHYS 2022: General Physics II
- PHYS 2922: Honors General Physics II (S)

General Education/Elective Credits: 11

| **Term Credit Hours** | 15 |

**Year 4**

**Fall**

PHYS 1004: Introduction to Astronomy

Science Elective²: 3-4

General Education/Elective Credits: 9-8

| **Term Credit Hours** | 15 |

**Spring**

Select one of the following:

- 3
Neuroscience - Cellular & Molecular, B.S.

Dr. Allen Nicholson, Chair
Biology-Life Sciences Building, Room 255
215-204-8851

Dr. Joel Sheffield, Faculty Advisor
Biology-Life Sciences Building, Room 311
215-204-8839
jbs@temple.edu

The Bachelor of Science degree in Neuroscience - Cellular & Molecular is designed to provide rigorous preparation in scientific knowledge at the molecular and cellular level to those students interested in pursuing advanced studies and professional development in neuroscience, medicine or a related field in life sciences. In addition to neuroscience, graduates in the major will be well prepared for graduate or professional studies in cell or molecular biology, biochemistry, biophysics, biomedical sciences, medicine, pharmacy, dentistry, and many allied health fields. Neuroscience graduates who do not pursue graduate studies will be prepared to accept technical positions in industry (pharmaceutical, biotech) or government and university laboratories. Graduates will be ready to conduct research on a range of neuroscience and related topics at the level of cells or molecules, including nervous system function, development, disease or injury.

Bachelor of Science

Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)
   - MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
   - All Temple students must take a minimum of two writing-intensive courses at Temple as part of their major. Following is a list of courses that can be used to satisfy the writing-intensive requirement: BIOL 2296 and BIOL 3096.
   - Students must complete the General Education (GenEd) requirements.
     - The General Education Curriculum consists of approximately 25-26 s.h. See the General Education (p. 143) section of the Undergraduate Bulletin for the GenEd curriculum.
     - Students who complete CST majors typically receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.

2. College Requirements
   - 45 Upper Level (2000+) credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).
   - 90 credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).

3. Major Requirements for Bachelor of Science (75-81 s.h.)

   Biology
   - BIOL 1111 Introduction to Biology I 4
   - or BIOL 1911 Honors Introduction to Biology I
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 2112</td>
<td>Introduction to Biology II</td>
<td>4</td>
</tr>
<tr>
<td>or BIOL 2912</td>
<td>Honors Introduction to Biology II</td>
<td></td>
</tr>
<tr>
<td>BIOL 2296</td>
<td>Genetics (S)</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 3096</td>
<td>Cell Structure and Function (F)</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 3352</td>
<td>Systems Neuroscience</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 3358</td>
<td>Cellular and Molecular Neuroscience (S)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Chemistry**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1031 &amp; CHEM 1033</td>
<td>General Chemistry I and General Chemistry Laboratory I</td>
<td>4</td>
</tr>
<tr>
<td>or CHEM 1951 &amp; CHEM 1953</td>
<td>Honors General Chemical Science I and Honors Chemical Science Laboratory I</td>
<td></td>
</tr>
<tr>
<td>CHEM 1032 &amp; CHEM 1034</td>
<td>General Chemistry II and General Chemistry Laboratory II</td>
<td>4</td>
</tr>
<tr>
<td>or CHEM 1952 &amp; CHEM 1954</td>
<td>Honors General Chemical Science II and Honors Chemical Science Laboratory II</td>
<td></td>
</tr>
<tr>
<td>CHEM 2201 &amp; CHEM 2203</td>
<td>Organic Chemistry I and Organic Chemistry Laboratory I</td>
<td>4</td>
</tr>
<tr>
<td>or CHEM 2921 &amp; CHEM 2923</td>
<td>Organic Chemistry for Honors I and Organic Honors Laboratory I</td>
<td></td>
</tr>
<tr>
<td>CHEM 2202 &amp; CHEM 2204</td>
<td>Organic Chemistry II and Organic Chemistry Laboratory II</td>
<td>4</td>
</tr>
<tr>
<td>or CHEM 2922 &amp; CHEM 2924</td>
<td>Organic Chemistry for Honors II and Organic Honors Laboratory II</td>
<td></td>
</tr>
</tbody>
</table>

**Mathematics**

Select one of the following: 4 |

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1038</td>
<td>Calculus I with Lab 1</td>
<td></td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
<td></td>
</tr>
<tr>
<td>MATH 1941</td>
<td>Honors Calculus I</td>
<td></td>
</tr>
<tr>
<td>MATH 1042</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 1942</td>
<td>Honors Calculus II</td>
<td></td>
</tr>
</tbody>
</table>

**Neuroscience**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSCI 1051</td>
<td>Fundamentals of Neuroscience</td>
<td>3</td>
</tr>
<tr>
<td>or NSCI 1951</td>
<td>Honors Fundamentals of Neuroscience</td>
<td></td>
</tr>
<tr>
<td>Neuroscience electives - select four of the following: 2</td>
<td>12-16</td>
<td></td>
</tr>
<tr>
<td>BIOL 3232</td>
<td>Behavioral Genetics (F)</td>
<td></td>
</tr>
<tr>
<td>BIOL 3312</td>
<td>Biostatistics (F)</td>
<td></td>
</tr>
<tr>
<td>BIOL 3325</td>
<td>Research Techniques in Molecular Biology (S)</td>
<td></td>
</tr>
<tr>
<td>BIOL 3333</td>
<td>Advanced Techniques in Microscopy (S)</td>
<td></td>
</tr>
<tr>
<td>BIOL 3334</td>
<td>Mammalian Physiology (S)</td>
<td></td>
</tr>
<tr>
<td>BIOL 3354</td>
<td>Neural Basis of Animal Behavior (F - odd years)</td>
<td></td>
</tr>
<tr>
<td>BIOL 3356</td>
<td>Organization and Development of the Nervous System (F - even years)</td>
<td></td>
</tr>
<tr>
<td>BIOL 3361</td>
<td>Synaptic Neuropharmacology: From Poppies to People</td>
<td></td>
</tr>
<tr>
<td>BIOL 4375</td>
<td>General Biochemistry I</td>
<td></td>
</tr>
<tr>
<td>CIS 1166</td>
<td>Mathematical Concepts in Computing I 3</td>
<td></td>
</tr>
<tr>
<td>or CIS 1966</td>
<td>Honors Mathematical Concepts in Computing I</td>
<td></td>
</tr>
<tr>
<td>NSCI 3087</td>
<td>Techniques in Neuroscience (non-CST course)</td>
<td></td>
</tr>
<tr>
<td>PSY 2501</td>
<td>Foundations of Behavioral Neuroscience (non-CST course)</td>
<td></td>
</tr>
<tr>
<td>PSY 2502</td>
<td>Foundations of Cognitive Neuroscience (non-CST course)</td>
<td></td>
</tr>
</tbody>
</table>

**Neuroscience Research/Independent Study courses** 4 |

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 2021</td>
<td>General Physics I</td>
<td>4</td>
</tr>
<tr>
<td>or PHYS 2921</td>
<td>Honors General Physics I</td>
<td></td>
</tr>
<tr>
<td>PHYS 2022</td>
<td>General Physics II</td>
<td>4</td>
</tr>
</tbody>
</table>
Schools, Colleges, and Divisions

<table>
<thead>
<tr>
<th>Total Credit Hours</th>
<th>75-81</th>
</tr>
</thead>
</table>

1. Students who choose MATH 1038 must also take the linked course MATH 1039.
2. Two of the four electives must be within the College of Science & Technology.
3. CIS 1166 or CIS 1966 may be replaced with CIS 1053.
4. Neuroscience Research/Independent Study courses should be determined in consultation with the Neuroscience faculty advisor. Students are required to have both a B- or above in BIOL 3352 and a Science GPA of 3.0. The Science GPA is to consist of all Biology courses, Chemistry through Organic Chemistry, Calculus, and Physics.

(F) - Fall course only
(S) - Spring only course

Note: A grade of C or higher in CHEM 1031 and CHEM 1032 is required to take BIOL 1111 and BIOL 2112. A grade of C or higher in BIOL 1111 and BIOL 2112 is required to take upper-level Biology courses, and a C- or higher is required unless otherwise specified in all other courses for the major, including course prerequisites.

Calculation of Major GPA

The list of courses that are used to calculate major GPA is determined by the department. Students should consult with their academic advising unit for the applicable courses. In general, courses that could not apply toward the major as an elective or a required course are not counted for the major GPA. This would include BIOL 1011, for example.

A total of up to 3 s.h. of Biology research courses numbered lower than 4000 may be taken for a letter grade, including:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 2082</td>
<td>Independent Research I (not repeatable)</td>
<td>2 to 4</td>
</tr>
<tr>
<td>BIOL 3082</td>
<td>Independent Research II</td>
<td>1 to 4</td>
</tr>
<tr>
<td>BIOL 3181</td>
<td>Cooperative Research in Biochemistry</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 3183</td>
<td>Junior Independent Research</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 3281</td>
<td>Cooperative Research in Biochemistry</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 3681</td>
<td>Cooperative Studies</td>
<td>2 to 4</td>
</tr>
<tr>
<td>BIOL 3781</td>
<td>Cooperative Studies</td>
<td>2 to 4</td>
</tr>
<tr>
<td>BIOL 4291</td>
<td>Extradepartmental Research</td>
<td>1 to 4</td>
</tr>
</tbody>
</table>

Any additional credits in research courses in this category can be taken only on a CR/NC basis. No research courses numbered lower than 4000 may be used for Biology elective credit.

Distinction in the Major

Distinction in Neuroscience is awarded based upon the completion of two semesters of BIOL 4591, submission of a paper, a poster presentation, and maintaining a GPA of 3.2.

Suggested Academic Plan

Bachelor of Science in Neuroscience - Cellular & Molecular

Requirements for New Students starting in the 2015-2016 Academic Year

Year 1

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select one of the following:</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1031</td>
<td>General Chemistry I</td>
</tr>
<tr>
<td>&amp; CHEM 1033</td>
<td></td>
</tr>
<tr>
<td>CHEM 1951</td>
<td>Honors General Chemical Science I (F)</td>
</tr>
<tr>
<td>&amp; CHEM 1953</td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1038</td>
<td>Calculus I with Lab¹</td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
</tr>
<tr>
<td>MATH 1941</td>
<td>Honors Calculus I</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>NSCI 1051</td>
<td>Fundamentals of Neuroscience</td>
</tr>
<tr>
<td>NSCI 1951</td>
<td>Honors Fundamentals of Neuroscience</td>
</tr>
</tbody>
</table>

General Education/Elective Credits 4

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
</table>

Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1111 or 1911</td>
<td>Introduction to Biology I</td>
<td>4</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 1032 &amp; CHEM 1034</td>
<td>General Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1952 &amp; CHEM 1954</td>
<td>Honors General Chemical Science II (S)</td>
<td></td>
</tr>
<tr>
<td>MATH 1042 or 1942</td>
<td>Calculus II</td>
<td>4</td>
</tr>
</tbody>
</table>

General Education/Elective Credits 3

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
</table>

Year 2

Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 2112 or 2912</td>
<td>Introduction to Biology II</td>
<td>4</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 2201 &amp; CHEM 2203</td>
<td>Organic Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 2211 &amp; CHEM 2213</td>
<td>Organic Chemistry for Majors I</td>
<td></td>
</tr>
<tr>
<td>CHEM 2921 &amp; CHEM 2923</td>
<td>Organic Chemistry for Honors I (F)</td>
<td></td>
</tr>
</tbody>
</table>

General Education/Elective Credits 8

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>16</th>
</tr>
</thead>
</table>

Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 2296</td>
<td>Genetics [WI] (S)</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 3352</td>
<td>Systems Neuroscience</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 2202 &amp; CHEM 2204</td>
<td>Organic Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 2212 &amp; CHEM 2214</td>
<td>Organic Chemistry for Majors II</td>
<td></td>
</tr>
<tr>
<td>CHEM 2922 &amp; CHEM 2924</td>
<td>Organic Chemistry for Honors II (S)</td>
<td></td>
</tr>
</tbody>
</table>

General Education/Elective Credits 4

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
</table>

Year 3

Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 3096</td>
<td>Cell Structure and Function [WI] (F)</td>
<td>4</td>
</tr>
<tr>
<td>Neuroscience Elective (from approved list)</td>
<td></td>
<td>3-4</td>
</tr>
<tr>
<td>PHYS 2021 or 2921</td>
<td>General Physics I</td>
<td>4</td>
</tr>
</tbody>
</table>

General Education/Elective Credits 4-3

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
</table>

Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 3358</td>
<td>Cellular and Molecular Neuroscience (S)</td>
<td>3</td>
</tr>
<tr>
<td>Neuroscience Elective (from approved list)</td>
<td></td>
<td>3-4</td>
</tr>
<tr>
<td>PHYS 2022 or 2922</td>
<td>General Physics II</td>
<td>4</td>
</tr>
</tbody>
</table>

General Education/Elective Credits 5-4

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
</table>

Year 4

Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Code</td>
<td>Course Title</td>
</tr>
<tr>
<td>------------</td>
<td>-----------------------------------------------------------</td>
</tr>
<tr>
<td>BIOL 4591</td>
<td>Research in Neuroscience (or Neuroscience Independent Study)</td>
</tr>
<tr>
<td></td>
<td>Neuroscience Elective (from approved list)</td>
</tr>
<tr>
<td></td>
<td>General Education/Elective Credits</td>
</tr>
</tbody>
</table>

| Term Credit Hours | 16 |

### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 4591</td>
<td>Research in Neuroscience (or Neuroscience Independent Study)</td>
<td>3-4</td>
</tr>
<tr>
<td></td>
<td>Neuroscience Elective (from approved list)</td>
<td>3-4</td>
</tr>
<tr>
<td></td>
<td>General Education/Elective Credits</td>
<td>10-8</td>
</tr>
</tbody>
</table>

| Term Credit Hours | 16 |

**Total Credit Hours:** 123

(F) - Fall only course  
(S) - Spring only course

1. Students who choose MATH 1038 must also take the linked course MATH 1039.
2. Neuroscience Research/Independent Study courses should be determined in consultation with the neuroscience faculty advisor. Students are required to have BOTH a B- or above in BIOL 3352 AND a Science GPA of 3.0. The Science GPA is to consist of all Biology courses, Chemistry through Organic Chemistry, Calculus, and Physics.

---

**Chemistry**

Dr. Robert Levis, Chair  
Beury Hall, Room 130  
215-204-7118

Dr. Spiridoula Matsika, Faculty Advisor (Last names A-G)  
Beury Hall, Room 242  
215-204-7703  
spiridoula.matsika@temple.edu

Dr. Robert Stanley, Faculty Advisor (Last names H-N)  
Beury Hall, Room 250B  
215-204-2027  
robert.stanley@temple.edu

Dr. Michael Zdilla, Faculty Advisor (Last names O-Z)  
Beury Hall, Room 440  
215-204-7886  
michael.zdilla@temple.edu

The Department of Chemistry is one of the oldest departments in the university and has a long record of preparing students for careers in science. Both Bachelor of Arts (B.A.) and Bachelor of Science (B.S.) degrees are available, depending upon a student’s career goals. Since a significant portion of America’s chemical industry is centered in the Philadelphia region, there is a wide range of career opportunities locally available. Although most of our students have gone on to medicine, dentistry, or the chemical industry, recent graduates have also gone on to careers in law, forensics, and even art restoration.

All prospective majors should schedule an appointment with one of the departmental advisors (see list above) to plan a program of study.

The Bachelor of Arts in Chemistry is designed for students who are planning for a non-research career in a field related to Chemistry. Students learn a wide array of topics in Chemistry, Mathematics, and Physics. Students learn how to write scientific reports, analyze data, and place these results in a broader scientific context.

The Bachelor of Science in Chemistry prepares students for excellence in graduate or medical school, and employment in the chemical, biotechnological, or pharmaceutical industries. Students learn a wide array of topics in Chemistry, Mathematics, and Physics. The program emphasizes the “hands-on” nature of chemistry in laboratory courses, giving students the tools that chemists need to pursue research. They also learn how to write scientific reports, analyze data, and place these results in a broader scientific context. Accomplished majors are encouraged to pursue independent research with a professor, and to present their work internally and at national meetings.

The Bachelor of Science in Biochemistry prepares students for excellence in graduate or medical school, and employment in the chemical, biotechnological, or pharmaceutical industries. Students learn a wide array of topics in Biology, Chemistry, Mathematics, and Physics. In upper division studies, Biochemistry majors learn to apply biochemical principles to real-life situations via problem-based approaches in their courses. Laboratory
courses give students the tools they will need as biochemists to pursue research. Accomplished majors are encouraged to pursue independent research with a professor, and to present their work internally and at national meetings.

**Programs**

- Biochemistry, B.S. (p. 1082)
- Chemistry with Teaching, B.S. (p. )
- Chemistry, B.A. (p. 1087)
- Chemistry, B.A./M.Ed. (p. )
- Chemistry, B.A./M.A. (p. )
- Chemistry, B.S. (p. 1091)
- Chemistry, B.S./M.Ed. (p. )
- Chemistry, B.S./M.A. (p. )
- General Science with Teaching, B.S. (p. )
- Natural Sciences, B.A. (p. )

**Biochemistry, B.S.**

Dr. Allen Nicholson, Chair  
Biology-Life Sciences Building, Room 255  
215-204-8851

Dr. Robert Levis, Chair  
Beury Hall, Room 130  
215-204-7118

Dr. Spiridoula Matsika, Faculty Advisor (Last names A-G)  
Beury Hall, Room 242  
215-204-7703  
spiridoula.matsika@temple.edu

Dr. Robert Stanley, Faculty Advisor (Last names H-N)  
Beury Hall, Room 250B  
215-204-2027  
robert.stanley@temple.edu

Dr. Michael Zdilla, Faculty Advisor (Last names O-Z)  
Chemistry Department  
Beury Hall, Room 440  
215-204-7886  
michael.zdilla@temple.edu

The Bachelor of Science degree in Biochemistry prepares students for excellence in graduate or medical school, and employment in the chemical, biotechnological, or pharmaceutical industries. Students learn a wide array of topics in Biology, Chemistry, Mathematics, and Physics. In upper division studies, Biochemistry majors learn to apply biochemical principles to real-life situations via problem-based approaches in their courses. Laboratory courses give students the tools they will need as biochemists to pursue research. Accomplished majors are encouraged to pursue independent research with a professor, and to present their work internally and at national meetings.

**Bachelor of Science**

**Summary of Requirements for the Degree**

1. University Requirements (123 total s.h.)
   - MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
   - All Temple students must take a minimum of two writing-intensive courses at Temple as part of their major. Following is a list of courses that can be used to satisfy the writing-intensive requirement:

   - BIOL 2296 Genetics 4
   - BIOL 3096 Cell Structure and Function 4
   - CHEM 4196 Techniques of Chemical Measurement II 5

   - Students must complete the General Education (GenEd) requirements.
The General Education Curriculum consists of approximately 25-26 s.h. See the General Education (p. 143) section of the Undergraduate Bulletin for the GenEd curriculum.

Students who complete CST majors typically receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.

2. College Requirements
   • 45 Upper Level (2000+) credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).
   • 90 credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).

3. Major Requirements for Bachelor of Science (78-81 s.h.)

Chemistry

Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1031</td>
<td>General Chemistry I</td>
</tr>
<tr>
<td>&amp; CHEM 1033</td>
<td>General Chemistry Laboratory I</td>
</tr>
<tr>
<td>CHEM 1951</td>
<td>Honors General Chemical Science I</td>
</tr>
<tr>
<td>&amp; CHEM 1953</td>
<td>Honors Chemical Science Laboratory I (F)</td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1032</td>
<td>General Chemistry II</td>
</tr>
<tr>
<td>&amp; CHEM 1034</td>
<td>General Chemistry Laboratory II</td>
</tr>
<tr>
<td>CHEM 1952</td>
<td>Honors General Chemical Science II</td>
</tr>
<tr>
<td>&amp; CHEM 1954</td>
<td>Honors Chemical Science Laboratory II (S)</td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 2201</td>
<td>Organic Chemistry I</td>
</tr>
<tr>
<td>&amp; CHEM 2203</td>
<td>Organic Chemistry Laboratory I</td>
</tr>
<tr>
<td>CHEM 2211</td>
<td>Organic Chemistry for Majors I</td>
</tr>
<tr>
<td>&amp; CHEM 2213</td>
<td>Organic Majors Laboratory I (F)</td>
</tr>
<tr>
<td>CHEM 2921</td>
<td>Organic Chemistry for Honors I</td>
</tr>
<tr>
<td>&amp; CHEM 2923</td>
<td>Organic Honors Laboratory I (F)</td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 2202</td>
<td>Organic Chemistry II</td>
</tr>
<tr>
<td>&amp; CHEM 2204</td>
<td>Organic Chemistry Laboratory II</td>
</tr>
<tr>
<td>CHEM 2212</td>
<td>Organic Chemistry for Majors II</td>
</tr>
<tr>
<td>&amp; CHEM 2214</td>
<td>Organic Majors Laboratory II (S)</td>
</tr>
<tr>
<td>CHEM 2922</td>
<td>Organic Chemistry for Honors II</td>
</tr>
<tr>
<td>&amp; CHEM 2924</td>
<td>Organic Honors Laboratory II (S)</td>
</tr>
<tr>
<td>CHEM 3103</td>
<td>Techniques of Chemical Measurement I</td>
</tr>
<tr>
<td>&amp; CHEM 3105</td>
<td>Introduction to Chemical Research Techniques</td>
</tr>
<tr>
<td>CHEM 3301</td>
<td>Physical Chemistry Lecture I</td>
</tr>
<tr>
<td>or CHEM 3405</td>
<td>Physical Chemistry of Biomolecules</td>
</tr>
</tbody>
</table>

CHEM 4401 Biochemistry I

Biology

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1111</td>
<td>Introduction to Biology I</td>
</tr>
<tr>
<td>or BIOL 1911</td>
<td>Honors Introduction to Biology I</td>
</tr>
<tr>
<td>BIOL 2112</td>
<td>Introduction to Biology II</td>
</tr>
<tr>
<td>or BIOL 2912</td>
<td>Honors Introduction to Biology II</td>
</tr>
<tr>
<td>BIOL 2296</td>
<td>Genetics (S)</td>
</tr>
<tr>
<td>BIOL 3096</td>
<td>Cell Structure and Function (F)</td>
</tr>
<tr>
<td>BIOL 3324</td>
<td>Molecular Biology (F)</td>
</tr>
<tr>
<td>BIOL 4344</td>
<td>Research Techniques in Biochemistry (S)</td>
</tr>
<tr>
<td>BIOL 4376</td>
<td>General Biochemistry II (F)</td>
</tr>
</tbody>
</table>

Biochemistry Electives

Select two of the following: 1

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 3201</td>
<td>Human Genetics (F)</td>
</tr>
<tr>
<td>BIOL 3265</td>
<td>Developmental Biology (F)</td>
</tr>
<tr>
<td>BIOL 3301</td>
<td>Cell Biology (Not offered every year)</td>
</tr>
<tr>
<td>BIOL 3317</td>
<td>General Microbiology (S)</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
</tr>
<tr>
<td>------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>BIOL 3325</td>
<td>Research Techniques in Molecular Biology (S)</td>
</tr>
<tr>
<td>BIOL 3327</td>
<td>Immunology (S)</td>
</tr>
<tr>
<td>BIOL 3328</td>
<td>Virology (F)</td>
</tr>
<tr>
<td>BIOL 3334</td>
<td>Mammalian Physiology (S)</td>
</tr>
<tr>
<td>BIOL 3352</td>
<td>Systems Neuroscience</td>
</tr>
<tr>
<td>BIOL 3363</td>
<td>Mammalian Development (Not offered every year)</td>
</tr>
<tr>
<td>BIOL 3367</td>
<td>Endocrinology (F)</td>
</tr>
<tr>
<td>BIOL 3368</td>
<td>Biology of Cancer (S)</td>
</tr>
<tr>
<td>BIOL 3371</td>
<td>Cell Proliferation (S)</td>
</tr>
<tr>
<td>BIOL 3374</td>
<td>Physical Biochemistry (S)</td>
</tr>
<tr>
<td>BIOL 3380</td>
<td>Contemporary Biology</td>
</tr>
<tr>
<td>CHEM 3001</td>
<td>Inorganic Chemistry</td>
</tr>
<tr>
<td>CHEM 3302</td>
<td>Physical Chemistry Lecture II</td>
</tr>
<tr>
<td>CHEM 4196</td>
<td>Techniques of Chemical Measurement II</td>
</tr>
<tr>
<td>or CHEM 3397</td>
<td>Physical Chemistry Laboratory I</td>
</tr>
<tr>
<td>&amp; CHEM 3398</td>
<td>and Physical Chemistry Laboratory II</td>
</tr>
<tr>
<td>CHEM 4201</td>
<td>Organic Structure and Mechanisms (F)</td>
</tr>
<tr>
<td>CHEM 4405</td>
<td>Biophysical Chemistry (S)</td>
</tr>
</tbody>
</table>

**Mathematics**

Select one of the following: 4

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1038</td>
<td>Calculus I with Lab 2</td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
</tr>
<tr>
<td>MATH 1941</td>
<td>Honors Calculus I</td>
</tr>
<tr>
<td>MATH 1042</td>
<td>Calculus II</td>
</tr>
<tr>
<td>or MATH 1942</td>
<td>Honors Calculus II</td>
</tr>
<tr>
<td>MATH 2043</td>
<td>Calculus III</td>
</tr>
<tr>
<td>or MATH 2943</td>
<td>Honors Calculus III</td>
</tr>
</tbody>
</table>

**Physics**

Select one of the following: 4

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I</td>
</tr>
<tr>
<td>PHYS 2021</td>
<td>General Physics I</td>
</tr>
<tr>
<td>PHYS 2921</td>
<td>Honors General Physics I (F)</td>
</tr>
</tbody>
</table>

Select one of the following: 4

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 1062</td>
<td>Elementary Classical Physics II</td>
</tr>
<tr>
<td>PHYS 2022</td>
<td>General Physics II</td>
</tr>
<tr>
<td>PHYS 2922</td>
<td>Honors General Physics II (S)</td>
</tr>
</tbody>
</table>

**Total Credit Hours** 78-81

(F) - Fall only course  
(S) - Spring only course

1. With approval from the faculty advisor, two semesters of Undergraduate Research (BIOL 4391/4491 or CHEM 3891/4891) for a minimum of 6 credits can be used to fulfill one of the Biochemistry electives.

2. Students who choose MATH 1038 must also take the linked course MATH 1039.

**Note:** A grade of C or higher in CHEM 1031 and CHEM 1032 is required to take BIOL 1111 and BIOL 2112. A grade of C or higher in BIOL 1111 and BIOL 2112 is required to take upper-level Biology courses, and a C- or higher is required unless otherwise specified in all other courses for the major, including course prerequisites. Most research and Independent Study courses are not available for major credit, such as:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 3091</td>
<td>Research Methods</td>
</tr>
<tr>
<td>BIOL 3183</td>
<td>Junior Independent Research</td>
</tr>
<tr>
<td>BIOL 3681</td>
<td>Cooperative Studies</td>
</tr>
<tr>
<td>BIOL 4291</td>
<td>Extradaepartmental Research</td>
</tr>
<tr>
<td>BIOL 4483</td>
<td>Accelerated Research in Biochemistry</td>
</tr>
</tbody>
</table>
Calculation of Major GPA

The list of courses that are used to calculate major GPA is determined by the department. Students should consult with their academic advising unit for the applicable courses. In general, courses that could not apply toward the major as an elective or a required course are not counted for the major GPA. This would include BIOL 1011, for example.

Distinction in Major

To graduate with Distinction in Major, students are required to achieve a 3.33 GPA or higher in all the Biology and Chemistry courses in their major.

Suggested Academic Plan

All prospective majors should schedule an appointment with one of the departmental advisors (names of current Faculty Advisors are available in the About section) to plan a program of study. The recommended order of courses for the major is listed below; a different order is acceptable as long as the student adheres to prerequisite requirements.

Bachelor of Science in Biochemistry

Requirements for New Students starting in the 2015-2016 Academic Year

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Select one of the following:</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>CHEM 1031 &amp; CHEM 1033</td>
<td>General Chemistry I</td>
</tr>
<tr>
<td></td>
<td>CHEM 1951 &amp; CHEM 1953</td>
<td>Honors General Chemical Science I (F)</td>
</tr>
<tr>
<td></td>
<td>Select one of the following:</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>MATH 1038</td>
<td>Calculus I with Lab¹</td>
</tr>
<tr>
<td></td>
<td>MATH 1041</td>
<td>Calculus I</td>
</tr>
<tr>
<td></td>
<td>MATH 1941</td>
<td>Honors Calculus I</td>
</tr>
<tr>
<td></td>
<td>General Education/Elective Credits</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td></td>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BIOL 1111 or 1911</td>
<td>Introduction to Biology I</td>
</tr>
<tr>
<td></td>
<td>Select one of the following:</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>CHEM 1032 &amp; CHEM 1034</td>
<td>General Chemistry II</td>
</tr>
<tr>
<td></td>
<td>CHEM 1952 &amp; CHEM 1954</td>
<td>Honors General Chemical Science II (S)</td>
</tr>
<tr>
<td></td>
<td>MATH 1042 or 1942</td>
<td>Calculus II</td>
</tr>
<tr>
<td></td>
<td>General Education/Elective Credits</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BIOL 2112 or 2912</td>
<td>Introduction to Biology II</td>
</tr>
<tr>
<td></td>
<td>Select one of the following:</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>CHEM 2201 &amp; CHEM 2203</td>
<td>Organic Chemistry I</td>
</tr>
<tr>
<td></td>
<td>CHEM 2211 &amp; CHEM 2213</td>
<td>Organic Chemistry for Majors I (F)</td>
</tr>
<tr>
<td></td>
<td>CHEM 2921 &amp; CHEM 2923</td>
<td>Organic Chemistry for Honors I (F)</td>
</tr>
<tr>
<td></td>
<td>Select one of the following:</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I</td>
</tr>
</tbody>
</table>

¹ Calculus I with Lab includes a laboratory component.
PHYS 2021 General Physics I  
PHYS 2921 Honors General Physics I (F)

<table>
<thead>
<tr>
<th>General Education/Elective Credits</th>
<th>3</th>
</tr>
</thead>
</table>

**Term Credit Hours**  
15

### Spring

<table>
<thead>
<tr>
<th>BIOL 2296</th>
<th>Genetics [WI] (S)</th>
<th>4</th>
</tr>
</thead>
</table>

Select one of the following:  
CHEM 2202 Organic Chemistry II  
CHEM 2212 Organic Chemistry for Majors II (S)  
CHEM 2922 Organic Chemistry for Honors II (S)

Select one of the following:  
PHYS 1062 Elementary Classical Physics II  
PHYS 2022 General Physics II  
PHYS 2922 Honors General Physics II (S)

<table>
<thead>
<tr>
<th>General Education/Elective Credits</th>
<th>3</th>
</tr>
</thead>
</table>

**Term Credit Hours**  
15

### Year 3

#### Fall

<table>
<thead>
<tr>
<th>BIOL 3096</th>
<th>Cell Structure and Function [WI] (F)</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 3103</td>
<td>Techniques of Chemical Measurement I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 3105</td>
<td>Introduction to Chemical Research Techniques</td>
<td>1</td>
</tr>
<tr>
<td>MATH 2043 or 2943</td>
<td>Calculus III</td>
<td>4</td>
</tr>
</tbody>
</table>

| General Education/Elective Credits | 3 |

**Term Credit Hours**  
15

#### Spring

<table>
<thead>
<tr>
<th>CHEM 4401</th>
<th>Biochemistry I</th>
<th>3</th>
</tr>
</thead>
</table>

Select one of the following:  
CHEM 3301 Physical Chemistry Lecture I  
CHEM 3405 Physical Chemistry of Biomolecules²

| General Education/Elective Credits | 10 |

**Term Credit Hours**  
16

### Year 4

#### Fall

<table>
<thead>
<tr>
<th>BIOL 3324</th>
<th>Molecular Biology (F)</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 4376</td>
<td>General Biochemistry II (F)</td>
<td>3</td>
</tr>
</tbody>
</table>

Biochemistry Elective³  
3-4

| General Education/Elective Credits | 7-6 |

**Term Credit Hours**  
16

#### Spring

<table>
<thead>
<tr>
<th>BIOL 4344</th>
<th>Research Techniques in Biochemistry (S)</th>
<th>4</th>
</tr>
</thead>
</table>

Biochemistry Elective³  
3-5

| General Education/Elective Credits | 9-7 |

**Term Credit Hours**  
16

**Total Credit Hours:**  
123

---

1 Students who choose MATH 1038 must also take the linked course MATH 1039.

2 Biochemistry majors taking CHEM 3405 instead of CHEM 3301 cannot also receive Biochemistry elective credit for it. Biochemistry majors who want to take CHEM 4196 or the combination of CHEM 3397 & CHEM 3398 as a Biochemistry elective must take the CHEM 3301-CHEM 3302 sequence as CHEM 3405 does not serve as a prerequisite for these courses or any other course that has CHEM 3301 as a prerequisite or co-

requisite.
It is strongly encouraged that CHEM 3103/CHEM 3105 be taken prior to any laboratory courses numbered above CHEM 3105.

(F) - Fall only course  
(S) - Spring only course

**Biochemistry Electives**

Students are required to take two advanced biochemistry electives from the following list:

Select two of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 3201</td>
<td>Human Genetics (F)</td>
<td></td>
</tr>
<tr>
<td>BIOL 3265</td>
<td>Developmental Biology (F)</td>
<td></td>
</tr>
<tr>
<td>BIOL 3301</td>
<td>Cell Biology (S)</td>
<td></td>
</tr>
<tr>
<td>BIOL 3317</td>
<td>General Microbiology (S)</td>
<td></td>
</tr>
<tr>
<td>BIOL 3325</td>
<td>Research Techniques in Molecular Biology (S)</td>
<td></td>
</tr>
<tr>
<td>BIOL 3327</td>
<td>Immunology (S)</td>
<td></td>
</tr>
<tr>
<td>BIOL 3328</td>
<td>Virology (F)</td>
<td></td>
</tr>
<tr>
<td>BIOL 3334</td>
<td>Mammalian Physiology (S)</td>
<td></td>
</tr>
<tr>
<td>BIOL 3352</td>
<td>Systems Neuroscience</td>
<td></td>
</tr>
<tr>
<td>BIOL 3363</td>
<td>Mammalian Development</td>
<td></td>
</tr>
<tr>
<td>BIOL 3367</td>
<td>Endocrinology (F)</td>
<td></td>
</tr>
<tr>
<td>BIOL 3368</td>
<td>Biology of Cancer (S)</td>
<td></td>
</tr>
<tr>
<td>BIOL 3371</td>
<td>Cell Proliferation (S)</td>
<td></td>
</tr>
<tr>
<td>BIOL 3374</td>
<td>Physical Biochemistry (S)</td>
<td></td>
</tr>
<tr>
<td>BIOL 3380</td>
<td>Contemporary Biology (F)</td>
<td></td>
</tr>
<tr>
<td>CHEM 3001</td>
<td>Inorganic Chemistry (F)</td>
<td></td>
</tr>
<tr>
<td>CHEM 3302</td>
<td>Physical Chemistry Lecture II</td>
<td></td>
</tr>
<tr>
<td>CHEM 4196</td>
<td>Techniques of Chemical Measurement II</td>
<td></td>
</tr>
<tr>
<td>or CHEM 3397</td>
<td>Physical Chemistry Laboratory I</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 3398</td>
<td>and Physical Chemistry Laboratory II</td>
<td></td>
</tr>
<tr>
<td>CHEM 4201</td>
<td>Organic Structure and Mechanisms (F)</td>
<td></td>
</tr>
<tr>
<td>CHEM 4405</td>
<td>Biophysical Chemistry (S)</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**

1. Other courses may be acceptable with the permission of one of the biochemistry faculty advisors.  
2. With approval from the faculty advisor, two semesters of Undergraduate Research (BIOL 4391/BIOL 4491 or CHEM 3891/CHEM 4891) for a minimum of 6 credits can be used to fulfill one of the Biochemistry electives.

**Chemistry, B.A.**

Dr. Robert Levis, Chair  
Beury Hall, Room 130  
215-204-7118

Dr. Spiridoula Matsika, Faculty Advisor (Last names A-G)  
Beury Hall, Room 242  
215-204-7703  
spiridoula.matsika@temple.edu

Dr. Robert Stanley, Faculty Advisor (Last names H-N)  
Beury Hall, Room 250B  
215-204-2027  
robert.stanley@temple.edu

Dr. Michael Zdilla, Faculty Advisor (Last names O-Z)  
Beury Hall, Room 440  
215-204-7886
The Bachelor of Arts in Chemistry is designed for students who are planning for a non-research career in a field related to Chemistry. Students learn a wide array of topics in Chemistry, Mathematics, and Physics. Students learn how to write scientific reports, analyze data, and place these results in a broader scientific context.

**Bachelor of Arts**

**Summary of Requirements for the Degree**

1. **University Requirements** (123 total s.h.)
   - MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
   - All Temple students must take a minimum of two writing-intensive courses in their major at Temple. For Chemistry majors, one must be CHEM 4196 and the second should be either CHEM 3397 or CHEM 3398.
   - Students must complete the General Education (GenEd) requirements.
     - The General Education Curriculum consists of approximately 25-26 s.h. See the General Education (p. 143) section of the *Undergraduate Bulletin* for the GenEd curriculum.
     - Students who complete CST majors typically receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.

2. **College Requirements**
   - 45 Upper Level (2000+) credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).
   - 90 credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).
   - Second (2nd) Level of a Foreign Language (1002).

3. **Major Requirements for Bachelor of Arts** (53 s.h.)

**Chemistry**

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1031 &amp; CHEM 1033</td>
<td>General Chemistry I and General Chemistry Laboratory I</td>
</tr>
<tr>
<td>CHEM 1951 &amp; CHEM 1953</td>
<td>Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)</td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1032 &amp; CHEM 1034</td>
<td>General Chemistry II and General Chemistry Laboratory II</td>
</tr>
<tr>
<td>CHEM 1952 &amp; CHEM 1954</td>
<td>Honors General Chemical Science II and Honors Chemical Science Laboratory II (S)</td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 2201 &amp; CHEM 2203</td>
<td>Organic Chemistry I and Organic Chemistry Laboratory I</td>
</tr>
<tr>
<td>CHEM 2211 &amp; CHEM 2213</td>
<td>Organic Chemistry for Majors I and Organic Majors Laboratory I (F)</td>
</tr>
<tr>
<td>CHEM 2921 &amp; CHEM 2923</td>
<td>Organic Chemistry for Honors I and Organic Honors Laboratory I (F)</td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 2202 &amp; CHEM 2204</td>
<td>Organic Chemistry II and Organic Chemistry Laboratory II</td>
</tr>
<tr>
<td>CHEM 2212 &amp; CHEM 2214</td>
<td>Organic Chemistry for Majors II and Organic Majors Laboratory II (S)</td>
</tr>
<tr>
<td>CHEM 2922 &amp; CHEM 2924</td>
<td>Organic Chemistry for Honors II and Organic Honors Laboratory II (S)</td>
</tr>
<tr>
<td>CHEM 3103 &amp; CHEM 3105</td>
<td>Techniques of Chemical Measurement I and Introduction to Chemical Research Techniques</td>
</tr>
<tr>
<td>CHEM 3301</td>
<td>Physical Chemistry Lecture I</td>
</tr>
<tr>
<td>CHEM 3302</td>
<td>Physical Chemistry Lecture II</td>
</tr>
<tr>
<td>CHEM 4196</td>
<td>Techniques of Chemical Measurement II</td>
</tr>
<tr>
<td>CHEM 3397</td>
<td>Physical Chemistry Laboratory I</td>
</tr>
<tr>
<td>or CHEM 3398</td>
<td>Physical Chemistry Laboratory II</td>
</tr>
</tbody>
</table>
Mathematics
Select one of the following: 4
- MATH 1038 Calculus I with Lab
- MATH 1041 Calculus I
- MATH 1941 Honors Calculus I
- MATH 1042 Calculus II
- or MATH 1942 Honors Calculus II
- MATH 2043 Calculus III
- or MATH 2943 Honors Calculus III

Physics
Select one of the following: 4
- PHYS 1061 Elementary Classical Physics I
- PHYS 2021 General Physics I
- PHYS 2921 Honors General Physics I (F)
Select one of the following: 4
- PHYS 1062 Elementary Classical Physics II
- PHYS 2022 General Physics II
- PHYS 2922 Honors General Physics II (S)

Total Credit Hours 53

(F) - Fall only course
(S) - Spring only course

1 Students who choose MATH 1038 must also take the linked course MATH 1039.

Calculation of Major GPA
The list of courses that are used to calculate major GPA is determined by the department. Students should consult with their academic advising unit for the applicable courses. In general, courses that could not apply toward the major as an elective or a required course are not counted for the major GPA. This would include CHEM 1027, for example.

Distinction in Major
To graduate with Distinction in Major, students are required to achieve a 3.33 GPA or higher in all the Chemistry courses in their major.

Suggested Academic Plan
All prospective majors should schedule an appointment with one of the departmental advisors (names of current Faculty Advisors are available in the About section) to plan a program of study. The recommended order of courses for the major is listed below; a different order is acceptable as long as the student adheres to prerequisite requirements.

Bachelor of Arts in Chemistry
Requirements for New Students starting in the 2015-2016 Academic Year

Year 1

Fall

Select one of the following: 4
- CHEM 1031 General Chemistry I
& CHEM 1033
- CHEM 1951 Honors General Chemical Science I (F)
& CHEM 1953
Select one of the following: 4
- MATH 1038 Calculus I with Lab
- MATH 1041 Calculus I
- MATH 1941 Honors Calculus I

General Education/Elective Credits 7

Term Credit Hours 15
### Year 2

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1032</td>
<td>General Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 1034</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 1952</td>
<td>Honors General Chemical Science II (S)</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 1954</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 1042 or 1942</td>
<td>Calculus II</td>
<td>4</td>
</tr>
</tbody>
</table>

#### General Education/Elective Credits

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
</tr>
</tbody>
</table>

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 2201</td>
<td>Organic Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 2203</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 2211</td>
<td>Organic Chemistry for Majors I (F)</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 2213</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 2921</td>
<td>Organic Chemistry for Honors I (F)</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 2923</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 2021</td>
<td>General Physics I</td>
<td></td>
</tr>
<tr>
<td>PHYS 2921</td>
<td>Honors General Physics I (F)</td>
<td></td>
</tr>
<tr>
<td>MATH 2043 or 2943</td>
<td>Calculus III</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
</tr>
</tbody>
</table>

### Year 3

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 2202</td>
<td>Organic Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 2204</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 2212</td>
<td>Organic Chemistry for Majors II (S)</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 2214</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 2922</td>
<td>Organic Chemistry for Honors II (S)</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 2924</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYS 1062</td>
<td>Elementary Classical Physics II</td>
<td></td>
</tr>
<tr>
<td>PHYS 2022</td>
<td>General Physics II</td>
<td></td>
</tr>
<tr>
<td>PHYS 2922</td>
<td>Honors General Physics II (S)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
</tr>
</tbody>
</table>

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 3302</td>
<td>Physical Chemistry Lecture II</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
</tr>
</tbody>
</table>

### Year 4

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 3301</td>
<td>Physical Chemistry Lecture I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 3103</td>
<td>Techniques of Chemical Measurement 2</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 3105</td>
<td>Introduction to Chemical Research Techniques 2</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
</tr>
</tbody>
</table>

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 4196</td>
<td>Techniques of Chemical Measurement II [WI]</td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>
### Chemistry, B.S.

Dr. Robert Levis, Chair  
Beury Hall, Room 130  
215-204-7118

Dr. Spiridoula Matsika, Faculty Advisor (Last names A-G)  
Beury Hall, Room 242  
215-204-7703  
spiridoula.matsika@temple.edu

Dr. Robert Stanley, Faculty Advisor (Last names H-N)  
Beury Hall, Room 250B  
215-204-2027  
robert.stanley@temple.edu

Dr. Michael Zdilla, Faculty Advisor (Last names O-Z)  
Beury Hall, Room 440  
215-204-7886  
michael.zdilla@temple.edu

The Bachelor of Science in Chemistry prepares students for excellence in graduate or medical school, and employment in the chemical, biotechnological, or pharmaceutical industries. Students learn a wide array of topics in Chemistry, Mathematics, and Physics. The program emphasizes the "hands-on" nature of chemistry in laboratory courses, giving students the tools that chemists need to pursue research. They also learn how to write scientific reports, analyze data, and place these results in a broader scientific context. Accomplished majors are encouraged to pursue independent research with a professor, and to present their work internally and at national meetings.

### Bachelor of Science

#### Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)
   - MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
   - All Temple students must take a minimum of two writing-intensive courses at Temple as part of their major. Following is a list of courses that can be used to satisfy the writing-intensive requirement:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 2296</td>
<td>Genetics (S)</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 3096</td>
<td>Cell Structure and Function (F)</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 3396</td>
<td>Scientific Writing for Biology: The Art of Communicating</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 4196</td>
<td>Techniques of Chemical Measurement II</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 3397</td>
<td>Physical Chemistry Laboratory I</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 3398</td>
<td>and Physical Chemistry Laboratory II</td>
<td></td>
</tr>
<tr>
<td>Course</td>
<td>Title</td>
<td>Credits</td>
</tr>
<tr>
<td>-------------</td>
<td>----------------------------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>EES 2096</td>
<td>Climate Change: Oceans To Atmosphere (S - even years)</td>
<td>4</td>
</tr>
<tr>
<td>EES 3096</td>
<td>Igneous and Metamorphic Petrology</td>
<td>4</td>
</tr>
<tr>
<td>MATH 3098</td>
<td>Modern Algebra (F)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 4096</td>
<td>Senior Problem Solving</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 2796</td>
<td>Introduction to Modern Physics (S)</td>
<td>4</td>
</tr>
<tr>
<td>or PHYS 4796</td>
<td>Experimental Physics</td>
<td></td>
</tr>
</tbody>
</table>

- Students must complete the General Education (GenEd) requirements.
  - The General Education Curriculum consists of approximately 25-26 s.h. See the General Education (p. 143) section of the Undergraduate Bulletin for the GenEd curriculum.
  - Students who complete CST majors typically receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.

2. College Requirements

- 45 Upper Level (2000+) credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).
- 90 credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).

3. Major Requirements for Bachelor of Science (70-74 s.h.)

**Chemistry**

Select one of the following: 4

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1031</td>
<td>General Chemistry I</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 1033</td>
<td>and General Chemistry Laboratory I</td>
<td></td>
</tr>
<tr>
<td>CHEM 1951</td>
<td>Honors General Chemical Science I</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 1953</td>
<td>and Honors Chemical Science Laboratory I (F)</td>
<td></td>
</tr>
</tbody>
</table>

Select one of the following: 4

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1032</td>
<td>General Chemistry II</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 1034</td>
<td>and General Chemistry Laboratory II</td>
<td></td>
</tr>
<tr>
<td>CHEM 1952</td>
<td>Honors General Chemical Science II</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 1954</td>
<td>and Honors Chemical Science Laboratory II (S)</td>
<td></td>
</tr>
</tbody>
</table>

Select one of the following: 4

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 2201</td>
<td>Organic Chemistry I</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 2203</td>
<td>and Organic Chemistry Laboratory I</td>
<td></td>
</tr>
<tr>
<td>CHEM 2211</td>
<td>Organic Chemistry for Majors I</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 2213</td>
<td>and Organic Majors Laboratory I (F)</td>
<td></td>
</tr>
<tr>
<td>CHEM 2921</td>
<td>Organic Chemistry for Honors I</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 2923</td>
<td>and Organic Honors Laboratory I (F)</td>
<td></td>
</tr>
</tbody>
</table>

Select one of the following: 4

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 2202</td>
<td>Organic Chemistry II</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 2204</td>
<td>and Organic Chemistry Laboratory II</td>
<td></td>
</tr>
<tr>
<td>CHEM 2212</td>
<td>Organic Chemistry for Majors II</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 2214</td>
<td>and Organic Majors Laboratory I (S)</td>
<td></td>
</tr>
<tr>
<td>CHEM 2922</td>
<td>Organic Chemistry for Honors II</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 2924</td>
<td>and Organic Honors Laboratory II (S)</td>
<td></td>
</tr>
<tr>
<td>CHEM 3001</td>
<td>Inorganic Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 3103</td>
<td>Techniques of Chemical Measurement I</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 3105</td>
<td>and Introduction to Chemical Research Techniques</td>
<td></td>
</tr>
<tr>
<td>CHEM 3301</td>
<td>Physical Chemistry Lecture I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 3302</td>
<td>Physical Chemistry Lecture II</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 3397</td>
<td>Physical Chemistry Laboratory I</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 3398</td>
<td>and Physical Chemistry Laboratory II</td>
<td></td>
</tr>
<tr>
<td>CHEM 4196</td>
<td>Techniques of Chemical Measurement II</td>
<td>5</td>
</tr>
</tbody>
</table>

Two Advanced Chemistry courses (4002 or above) 6-8

Advanced Science Courses - select from the following: 6-8
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 3881</td>
<td>Cooperative Research</td>
</tr>
<tr>
<td>CHEM 3891</td>
<td>Undergraduate Research</td>
</tr>
<tr>
<td>CHEM 4891</td>
<td>Undergraduate Research</td>
</tr>
</tbody>
</table>

All other Chemistry courses numbered 4002 and above

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 2296</td>
<td>Genetics (S)</td>
</tr>
<tr>
<td>BIOL 3096</td>
<td>Cell Structure and Function (F)</td>
</tr>
<tr>
<td>BIOL 3265</td>
<td>Developmental Biology (F)</td>
</tr>
<tr>
<td>BIOL 3334</td>
<td>Mammalian Physiology (and above)</td>
</tr>
<tr>
<td>EES 2011</td>
<td>Mineralogy I (and above)</td>
</tr>
<tr>
<td>MATH 2101</td>
<td>Linear Algebra</td>
</tr>
<tr>
<td>MATH 3031</td>
<td>Probability Theory I (and above)</td>
</tr>
<tr>
<td>PHYS 2101</td>
<td>Classical Mechanics (S)</td>
</tr>
<tr>
<td>PHYS 2502</td>
<td>Mathematical Physics (S)</td>
</tr>
<tr>
<td>PHYS 2796</td>
<td>Introduction to Modern Physics (S)</td>
</tr>
<tr>
<td>PHYS 3101</td>
<td>Analytical Mechanics (F)</td>
</tr>
<tr>
<td>PHYS 3301</td>
<td>Electricity and Magnetism (F)</td>
</tr>
<tr>
<td>PHYS 3302</td>
<td>Classical Electromagnetism (S)</td>
</tr>
<tr>
<td>PHYS 4101</td>
<td>Thermodynamics and Kinetic Theory (F)</td>
</tr>
<tr>
<td>PHYS 4301</td>
<td>Electronics (and above)</td>
</tr>
</tbody>
</table>

**Mathematics**

Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1038</td>
<td>Calculus I with Lab</td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
</tr>
<tr>
<td>MATH 1941</td>
<td>Honors Calculus I</td>
</tr>
<tr>
<td>MATH 1042</td>
<td>Calculus II</td>
</tr>
<tr>
<td>or MATH 1942</td>
<td>Honors Calculus II</td>
</tr>
<tr>
<td>MATH 2043</td>
<td>Calculus III</td>
</tr>
<tr>
<td>or MATH 2943</td>
<td>Honors Calculus III</td>
</tr>
</tbody>
</table>

**Physics**

Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I</td>
</tr>
<tr>
<td>PHYS 2021</td>
<td>General Physics I</td>
</tr>
<tr>
<td>PHYS 2921</td>
<td>Honors General Physics I</td>
</tr>
</tbody>
</table>

Select one of the following

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 1062</td>
<td>Elementary Classical Physics II</td>
</tr>
<tr>
<td>PHYS 2022</td>
<td>General Physics II</td>
</tr>
<tr>
<td>PHYS 2922</td>
<td>Honors General Physics II</td>
</tr>
</tbody>
</table>

**Total Credit Hours**

70-74

(F) - Fall only course
(S) - Spring only course

**Note:** CHEM 3091 is not available for major credit.

1 Only one of these may be counted as an advanced science course.

2 Students who choose MATH 1038 must also take the linked course MATH 1039.

**Calculation of Major GPA**

The list of courses that are used to calculate major GPA is determined by the department. Students should consult with their academic advising unit for the applicable courses. In general, courses that could not apply toward the major as an elective or a required course are not counted for the major GPA. This would include CHEM 1027, for example.
**Distinction in Major**

To graduate with Distinction in Major, students are required to achieve a 3.33 GPA or higher in all the Chemistry courses in their major.

**Suggested Academic Plan**

All prospective majors should schedule an appointment with one of the departmental advisors (names of current Faculty Advisors are available in the About section) to plan a program of study. The recommended order of courses for the major is listed below; a different order is acceptable as long as the student adheres to prerequisite requirements.

**Bachelor of Science in Chemistry**

**Requirements for New Students starting in the 2015-2016 Academic Year**

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1031 &amp; CHEM 1033</td>
<td>General Chemistry I</td>
</tr>
<tr>
<td>CHEM 1951 &amp; CHEM 1953</td>
<td>Honors General Chemical Science I (F)</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1038</td>
<td>Calculus I with Lab(^1)</td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
</tr>
<tr>
<td>MATH 1941</td>
<td>Honors Calculus I</td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td>7</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>15</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1032 &amp; CHEM 1034</td>
<td>General Chemistry II</td>
</tr>
<tr>
<td>CHEM 1952 &amp; CHEM 1954</td>
<td>Honors General Chemical Science II (S)</td>
</tr>
<tr>
<td>MATH 1042 or 1942</td>
<td>Calculus II</td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td>8</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>16</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 2201 &amp; CHEM 2203</td>
<td>Organic Chemistry I</td>
</tr>
<tr>
<td>CHEM 2211 &amp; CHEM 2213</td>
<td>Organic Chemistry for Majors I (F)</td>
</tr>
<tr>
<td>CHEM 2921 &amp; CHEM 2923</td>
<td>Organic Chemistry for Honors I (F)</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I</td>
</tr>
<tr>
<td>PHYS 2021</td>
<td>General Physics I</td>
</tr>
<tr>
<td>PHYS 2921</td>
<td>Honors General Physics I (F)</td>
</tr>
<tr>
<td>MATH 2043 or 2943</td>
<td>Calculus III</td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>15</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 2202 &amp; CHEM 2204</td>
<td>Organic Chemistry II</td>
</tr>
<tr>
<td>Semester</td>
<td>Course Code</td>
</tr>
<tr>
<td>----------</td>
<td>-------------</td>
</tr>
<tr>
<td>Year 3</td>
<td></td>
</tr>
<tr>
<td>Fall</td>
<td>CHEM 3103</td>
</tr>
<tr>
<td></td>
<td>CHEM 3105</td>
</tr>
<tr>
<td></td>
<td>CHEM 3301</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
</tr>
<tr>
<td>Spring</td>
<td>CHEM 3302</td>
</tr>
<tr>
<td></td>
<td>CHEM 3397</td>
</tr>
<tr>
<td></td>
<td>CHEM 3001</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
</tr>
<tr>
<td>Year 4</td>
<td></td>
</tr>
<tr>
<td>Fall</td>
<td>CHEM 3398</td>
</tr>
<tr>
<td></td>
<td>Advanced Science Course&lt;sup&gt;4&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>Advanced Chemistry Course - 4002 or above&lt;sup&gt;3,4&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
</tr>
<tr>
<td>Spring</td>
<td>CHEM 4196</td>
</tr>
<tr>
<td></td>
<td>Advanced Science Course&lt;sup&gt;4&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>Advanced Chemistry Course - 4002 or above&lt;sup&gt;3,4&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
</tr>
</tbody>
</table>

**Total Credit Hours:** 123

1. Students who choose MATH 1038 must also take the linked course MATH 1039.
2. It is strongly encouraged that CHEM 3103/CHEM 3105 be taken before all chemistry laboratory courses numbered above 3105.
3. Advanced Chemistry Courses for B.S. students consist of all courses in Chemistry having a number of 4002 or above. If the student has successfully completed the appropriate prerequisite course, a graduate course in Chemistry may be included in this category.
4. In order for the B.S. degree to be certified by the American Chemical Society (ACS), the student must take CHEM 4401 Biochemistry I and either CHEM 4003 Inorganic Synthesis or BIOL 4344 Research Techniques in Biochemistry. Further, two additional advanced courses (CHEM 4002 or higher or BIOL 4376) of at least 3 credits must be successfully completed to fulfill the ACS mandated requirement of four in-depth courses. Finally, in order to fulfill the ACS mandated requirement of 400 laboratory hours excluding General Chemistry, each student must complete either CHEM 4207 Advanced Organic Preparations OR any two (2) of the following: CHEM 4004 Crystallography and Diffraction; CHEM 4103 Instrumental Design; CHEM 4107 Drug Analysis; CHEM 4108 Investigative Chemistry; BIOL 4344 Research Techniques in Biochemistry, or one instance may be a research course of at least 3 credits of (CHEM 3881 Cooperative Research, CHEM 3891 Undergraduate Research, or CHEM 4891 Undergraduate Research).

**Advanced Science Courses**

Only one of the following may be counted as an advanced science course:

**Advanced Science Courses**

Only one of the following may be counted as an advanced science course:
Computer & Information Science

Dr. Jie Wu, Chair
Science Education and Research Center, Room 304
215-204-8450

Sally Kyvernitis, Faculty Advisor, Computer Science
Science Education and Research Center, Room 330
215-204-2030
sallyk@temple.edu

Ms. Wendy Urban, Faculty Advisor, Information Science and Technology
Science Education and Research Center, Room 352
215-204-5236
wendy.urban@temple.edu

Science and technology are the foundations of our future. The Department of Computer and Information Sciences (CIS) is focused on the understanding of fundamental scientific principles and the application of these principles to solving complex problems, using computing technology. In order to meet current and future information and technology needs, the CIS Department offers two undergraduate programs: Computer Science (CS) and Information Science and Technology (IS&T).

The CS curriculum provides an in-depth study of the science of computing, including computer systems, software design and implementation, math and theory. Elective courses are offered in many areas, including mobile and web application development, security (digital forensics, intrusion detection, ethical hacking, network and information security), intelligent systems (artificial intelligence, computer vision, graphics, robotics, game programming), data science (databases, bioinformatics), systems programming (operating systems, high performance computing, distributed and cloud computing), and networks (wireless and sensor networks, ad hoc networks). The program is targeted to students with a strong interest in software design and development with a strong foundation in math, theory, and system software. Our students are involved in innovative research and product development; they have careers in systems and applications development, systems analysis and consulting. Many of our students continue onto graduate study and research in computer and information sciences.

The IS&T curriculum focuses on the skills of applying technologies to solving problems in computing. The technologies and methods include databases, web and mobile application development, client-server computing, network security, project management, software engineering principles, and quality assurance methodologies. The program is targeted for students who have a strong interest in applying computing technologies to solving problems in
science, business, education, and government agencies. Our IS&T graduates are also involved in innovative product developments. They hold jobs as consultants, network engineers, business and systems analysts, database administrators, and web and application developers.

Each of these programs leads to either a BA or a BS degree in order to accommodate students with diverse backgrounds and interests.

The department also offers a Mathematics and Computer Science program intended for students who are interested in computer science and mathematical computing. It provides a solid knowledge of theoretical computer science and its mathematical foundations and compares favorably with other theoretically-oriented computer science programs. The program is particularly recommended to those students who are interested in pursuing a graduate degree in computer science or computational mathematics.

We also offer dual BS, accelerated BS and MS, dual PhD programs, and minors in CS, IS&T and Digital Media that are tailored to students who are interested in cross-disciplinary programs.

Programs

- Computer Science, B.A. (p. 1097)
- Computer Science, B.A./M.S. (p. )
- Computer Science, B.A./M.S. IST (p. )
- Computer Science, B.S. (p. 1101)
- Computer Science, B.S./M.S. (p. )
- Computer Science, B.S./M.S. IST (p. )
- Computer Science, Minor (p. 1105)
- Computer Security & Digital Forensics, Certificate (p. 1106)
- Digital Media Technologies (p. )
- Fundamentals of Programming, Certificate (p. 1106)
- Information Science & Technology, B.A. (p. 1107)
- Information Science & Technology, B.A./M.S. (p. )
- Information Science & Technology, B.S. (p. 1110)
- Information Science & Technology, B.S./M.S. (p. )
- Information Science & Technology, Minor (p. 1115)
- Mathematics & Computer Science, B.S. (p. 1115)
- Mathematics/Computer Science with Teaching, B.S. (p. )

**Computer Science, B.A.**

Dr. Jie Wu, Chair  
Science Education and Research Center, Room 304  
215-204-8450

Sally Kyvernitis, Faculty Advisor  
Science Education and Research Center, Room 330  
215-204-2030  
sallyk@temple.edu

Temple's B.A. in Computer Science provides an in-depth study of the science of computing, including mathematical/theoretical foundations as well as systems and application software development. Students are prepared (but not required) to take electives in topics such as artificial intelligence, machine learning, robotics, computer vision, graphics, game programming, bioinformatics, databases, big data, mobile and web application development, cloud computing, high performance computing, wireless and sensor networks, network and information security, and digital forensics. Students who select the B.A. in Computer Science can often have a second major and still be able to graduate within four years. This program is for students with an interest in the fundamentals of computing, who want to apply their computer science knowledge to a second area of interest and/or contribute to innovative research and product development. Our students have careers in software development, systems analysis, and consulting; they are also prepared for graduate study and research in Computer and Information Sciences.

**Bachelor of Arts**

**Summary of Requirements for the Degree**

1. University Requirements (123 total s.h.)
   - MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
   - All Temple students must take a minimum of two writing intensive courses at Temple as part of their major: ENG 2696 and either CIS 4397 or CIS 4398.
• Students must complete the General Education (GenEd) requirements.
  • The General Education Curriculum consists of approximately 25-26 s.h. See the General Education (p. 143) section of the Undergraduate Bulletin for the GenEd curriculum.
  • Students who complete CST majors typically receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.

2. College Requirements
  • 45 Upper Level (2000+) credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).
  • 90 credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).
  • Two (2) Upper Level (2000+) Liberal Art courses.
  • Second (2nd) Level of a Foreign Language (1002).

3. Major Requirements for Bachelor of Arts (55 s.h.)

**Computer & Information Science courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 1001</td>
<td>Introduction to Academics in Computer Science</td>
<td>1</td>
</tr>
<tr>
<td>CIS 1068</td>
<td>Program Design and Abstraction</td>
<td>4</td>
</tr>
<tr>
<td>or CIS 1968</td>
<td>Honors Program Design and Abstraction</td>
<td></td>
</tr>
<tr>
<td>CIS 1166</td>
<td>Mathematical Concepts in Computing I</td>
<td>4</td>
</tr>
<tr>
<td>or CIS 1966</td>
<td>Honors Mathematical Concepts in Computing I</td>
<td></td>
</tr>
<tr>
<td>CIS 2033</td>
<td>Computational Probability and Statistics</td>
<td>4</td>
</tr>
<tr>
<td>CIS 2107</td>
<td>Computer Systems and Low-Level Programming</td>
<td>4</td>
</tr>
<tr>
<td>CIS 2166</td>
<td>Mathematical Concepts in Computing II</td>
<td>4</td>
</tr>
<tr>
<td>CIS 2168</td>
<td>Data Structures</td>
<td>4</td>
</tr>
<tr>
<td>CIS 3207</td>
<td>Introduction to Systems Programming and Operating Systems</td>
<td>4</td>
</tr>
<tr>
<td>CIS 3238</td>
<td>Software Design</td>
<td>4</td>
</tr>
<tr>
<td>CIS 4397</td>
<td>Independent Research in Computer Science</td>
<td>3</td>
</tr>
<tr>
<td>or CIS 4398</td>
<td>Projects in Computer Science</td>
<td></td>
</tr>
</tbody>
</table>

**Technical Writing course**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 2696</td>
<td>Technical Writing</td>
<td>3</td>
</tr>
</tbody>
</table>

**Mathematics courses**

Select one of the following: 4

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1038</td>
<td>Calculus I with Lab</td>
<td>1</td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
<td></td>
</tr>
<tr>
<td>MATH 1941</td>
<td>Honors Calculus I</td>
<td></td>
</tr>
<tr>
<td>MATH 1042</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 1942</td>
<td>Honors Calculus II</td>
<td></td>
</tr>
</tbody>
</table>

**Laboratory Science courses**

Two (2) laboratory science courses 2 8

**Total Credit Hours**

55

1 Students who choose MATH 1038 must also take the linked course MATH 1039.

2 Must select one Lab Science Sequence from the options listed below. Lab Science A and Lab Science B must be taken from the same department.

**Sequenced Laboratory Science Requirements**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Biology Sequence</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select one Biology Lab Science A:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL 1011</td>
<td>General Biology I (Lab Science A)</td>
<td></td>
</tr>
<tr>
<td>BIOL 1111</td>
<td>Introduction to Biology I</td>
<td></td>
</tr>
<tr>
<td>BIOL 1911</td>
<td>Honors Introduction to Biology I (S)</td>
<td></td>
</tr>
<tr>
<td>Select one Biology Lab Science B:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL 1012</td>
<td>General Biology II (Lab Science B)</td>
<td></td>
</tr>
<tr>
<td>BIOL 2112</td>
<td>Introduction to Biology II</td>
<td></td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td></td>
</tr>
<tr>
<td>-------------</td>
<td>--------------</td>
<td></td>
</tr>
<tr>
<td>BIOL 2912</td>
<td>Honors Introduction to Biology II (F)</td>
<td></td>
</tr>
</tbody>
</table>

**Chemistry Sequence**

Select one Chemistry Lab Science A: 1

- CHEM 1021 & CHEM 1023
  - Introduction to Chemistry I and Introduction to Chemistry Laboratory I (Lab Science A)
- CHEM 1031 & CHEM 1033
  - General Chemistry I and General Chemistry Laboratory I (Lab Science A)
- CHEM 1951 & CHEM 1953
  - Honors General Chemical Science I and Honors Chemical Science Laboratory I (Lab Science A)

Select one Chemistry Lab Science B 1

- CHEM 1022 & CHEM 1024
  - Introduction to Chemistry II and Introduction to Chemistry Laboratory II (Lab Science B)
- CHEM 1032 & CHEM 1034
  - General Chemistry II and General Chemistry Laboratory II (Lab Science B)
- CHEM 1952 & CHEM 1954
  - Honors General Chemical Science II and Honors Chemical Science Laboratory II (Lab Science B)

**Earth & Environmental Science Sequence** 2

Select this Lab Science A

- EES 2001
  - Physical Geology

Select one Lab Science B (both have co-reg) 2

- EES 2011
  - Mineralogy I (Lab Science B with CHEM 1031 corequisite)
- EES 2061
  - Introduction to Geochemistry (Lab Science B with CHEM 1031 corequisite)

**Physics Sequence** 3

Select one Physics Lab Science A

- PHYS 1021
  - Introduction to General Physics I (for non Physics majors)
- PHYS 1061
  - Elementary Classical Physics I (Calculus based, for Physics majors)
- PHYS 2021
  - General Physics I (Calculus based)
- PHYS 2921
  - Honors General Physics I (F)

Select one Physics Lab Science B 3

- PHYS 1022
  - Introduction to General Physics II (for non Physics majors)
- PHYS 1062
  - Elementary Classical Physics II (Calculus based, for Physics majors)
- PHYS 2022
  - General Physics II (Calculus based)
- PHYS 2922
  - Honors General Physics II (S)

---

1. Students can choose to mix-and-match the Chemistry Sequence A and B courses. However, they must take at least 1 course from Chemistry Sequence A and 1 from Chemistry Sequence B. Note: Chemistry courses consist of a three-credit lecture plus a one-credit lab.

2. The Earth & Environmental Science (EES) sequence will require students to take CHEM 1031 as a co-requisite to either of the two EES Sequence B courses.

3. Students can choose to mix-and-match the Physics Sequence A and B courses. However, they must take at least 1 course from Physics Sequence A and 1 from Physics Sequence B.

---

**Calculation of Major GPA**

The list of courses that are used to calculate major GPA is determined by the department. Students should consult with their academic advising unit for the applicable courses. In general, courses that could not apply toward the major as an elective or a required course are not counted for the major GPA. This would include CIS 1056, for example.

**Distinction in Major**

To graduate with Distinction in Major, students are required to have a 3.50 or higher grade point average (GPA) both in the major and overall, as well as be recommended by the department of Computer & Information Science.
# Suggested Academic Plan

## Bachelor of Arts in Computer Science

### Requirements for New Students starting in the 2015-2016 Academic Year

#### Year 1

<table>
<thead>
<tr>
<th>Fall</th>
<th>Course</th>
<th>Description</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 1001</td>
<td>Introduction to Academics in Computer Science</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>CIS 1068 or 1968</td>
<td>Program Design and Abstraction</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>MATH 1038</td>
<td>Calculus I with Lab</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 1941</td>
<td>Honors Calculus I</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| | General Education/Elective Courses | 7 |

**Term Credit Hours**: 16

<table>
<thead>
<tr>
<th>Spring</th>
<th>Course</th>
<th>Description</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 1166 or 1966</td>
<td>Mathematical Concepts in Computing I</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>MATH 1042 or 1942</td>
<td>Calculus II</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>ENG 2696</td>
<td>Technical Writing [WI]</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

| | General Education/Elective Credits | 4 |

**Term Credit Hours**: 15

#### Year 2

<table>
<thead>
<tr>
<th>Fall</th>
<th>Course</th>
<th>Description</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 2168</td>
<td>Data Structures</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>General Education/Elective Credits</td>
<td>11</td>
<td></td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 15

<table>
<thead>
<tr>
<th>Spring</th>
<th>Course</th>
<th>Description</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 2033</td>
<td>Computational Probability and Statistics</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>CIS 2107</td>
<td>Computer Systems and Low-Level Programming</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

| | General Education/Elective Credits | 7 |

**Term Credit Hours**: 15

#### Year 3

<table>
<thead>
<tr>
<th>Fall</th>
<th>Course</th>
<th>Description</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 3207</td>
<td>Introduction to Systems Programming and Operating Systems</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Laboratory Science A</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>General Education/Elective Credits</td>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 15

<table>
<thead>
<tr>
<th>Spring</th>
<th>Course</th>
<th>Description</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 2166</td>
<td>Mathematical Concepts in Computing II</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Laboratory Science B</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

| | General Education/Elective Credits | 7 |

**Term Credit Hours**: 15

#### Year 4

<table>
<thead>
<tr>
<th>Fall</th>
<th>Course</th>
<th>Description</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 3238</td>
<td>Software Design</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>General Education/Elective Credits</td>
<td>12</td>
<td></td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 16

<table>
<thead>
<tr>
<th>Spring</th>
<th>Course</th>
<th>Description</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CIS 4397</td>
<td>Independent Research in Computer Science [WI] (Capstone course)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS 4398</td>
<td>Projects in Computer Science [WI]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
1. University Requirements (123 total s.h.)
   • MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
   • All Temple students must take a minimum of two writing-intensive courses at Temple as part of their major: ENG 2696 and either CIS 4397 or CIS 4398.
   • Students must complete the General Education (GenEd) requirements.
     • The General Education Curriculum consists of 25-26 s.h. See the General Education (p. 143) section of the Undergraduate Bulletin for the GenEd curriculum.
     • Students who complete CST majors typically receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.

2. College Requirements
   • 45 Upper Level (2000+) credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).
   • 90 credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).

3. Major Requirements for Bachelor of Science (72 s.h.)

   **Computer & Information Science courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 1001</td>
<td>Introduction to Academics in Computer Science</td>
<td>1</td>
</tr>
<tr>
<td>CIS 1068</td>
<td>Program Design and Abstraction</td>
<td>4</td>
</tr>
<tr>
<td>or CIS 1968</td>
<td>Honors Program Design and Abstraction</td>
<td></td>
</tr>
<tr>
<td>CIS 1166</td>
<td>Mathematical Concepts in Computing I</td>
<td>4</td>
</tr>
<tr>
<td>or CIS 1966</td>
<td>Honors Mathematical Concepts in Computing I</td>
<td></td>
</tr>
<tr>
<td>CIS 2033</td>
<td>Computational Probability and Statistics</td>
<td>4</td>
</tr>
<tr>
<td>CIS 2107</td>
<td>Computer Systems and Low-Level Programming</td>
<td>4</td>
</tr>
<tr>
<td>CIS 2166</td>
<td>Mathematical Concepts in Computing II</td>
<td>4</td>
</tr>
<tr>
<td>CIS 2168</td>
<td>Data Structures</td>
<td>4</td>
</tr>
<tr>
<td>CIS 3207</td>
<td>Introduction to Systems Programming and Operating Systems</td>
<td>4</td>
</tr>
</tbody>
</table>
CIS 3223  Data Structures and Algorithms  3  
CIS 3238  Software Design  4  
CIS 4397  Independent Research in Computer Science  3  
or CIS 4398  Projects in Computer Science  

**Computer Science Electives**

Select 14 credits from the following CS elective courses:  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 2308</td>
<td>Web Application Programming</td>
<td></td>
</tr>
<tr>
<td>CIS 3203</td>
<td>Introduction to Artificial Intelligence</td>
<td></td>
</tr>
<tr>
<td>CIS 3211</td>
<td>Automata, Computability, and Languages</td>
<td></td>
</tr>
<tr>
<td>CIS 3219</td>
<td>Computer Graphics and Image Processing</td>
<td></td>
</tr>
<tr>
<td>CIS 3242</td>
<td>Discrete Structures</td>
<td></td>
</tr>
<tr>
<td>CIS 3319</td>
<td>Wireless Networks and Security</td>
<td></td>
</tr>
<tr>
<td>CIS 3381</td>
<td>Cooperative Education Experience in Computer Science ¹</td>
<td></td>
</tr>
<tr>
<td>CIS 3515</td>
<td>Introduction to Mobile Application Development</td>
<td></td>
</tr>
<tr>
<td>CIS 3603</td>
<td>User Experience Design</td>
<td></td>
</tr>
<tr>
<td>CIS 3605</td>
<td>Introduction to Digital Forensics</td>
<td></td>
</tr>
<tr>
<td>CIS 3715</td>
<td>Principles of Data Science</td>
<td></td>
</tr>
<tr>
<td>CIS 4282</td>
<td>Independent Study ¹</td>
<td></td>
</tr>
<tr>
<td>CIS 4305</td>
<td>Real Time Computer Systems (Not offered every year)</td>
<td></td>
</tr>
<tr>
<td>CIS 4307</td>
<td>Introduction to Distributed Systems and Networks (Not offered every year)</td>
<td></td>
</tr>
<tr>
<td>CIS 4308</td>
<td>Development of Multi-tier Client/Server Systems (Not offered every year)</td>
<td></td>
</tr>
<tr>
<td>CIS 4319</td>
<td>Computer Networks and Communications</td>
<td></td>
</tr>
<tr>
<td>CIS 4324</td>
<td>Compiler Design (Not offered every year)</td>
<td></td>
</tr>
<tr>
<td>CIS 4331</td>
<td>Principles of Database Systems</td>
<td></td>
</tr>
<tr>
<td>CIS 4350</td>
<td>Seminar on Topics in Computer Science</td>
<td></td>
</tr>
<tr>
<td>CIS 4360</td>
<td>Seminar on Topics in Computer Science</td>
<td></td>
</tr>
<tr>
<td>CIS 4382</td>
<td>Independent Study ¹</td>
<td></td>
</tr>
<tr>
<td>CIS 4397</td>
<td>Independent Research in Computer Science (if not taken as capstone requirement)</td>
<td></td>
</tr>
<tr>
<td>or CIS 4398</td>
<td>Projects in Computer Science</td>
<td></td>
</tr>
<tr>
<td>CIS 4515</td>
<td>Advanced Mobile Application Development</td>
<td></td>
</tr>
<tr>
<td>CIS 4615</td>
<td>Ethical Hacking and Intrusion Forensics</td>
<td></td>
</tr>
</tbody>
</table>

**Technical Writing**

ENG 2696  Technical Writing  3  

**Mathematics**

Select one of the following:  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1038</td>
<td>Calculus I with Lab ²</td>
<td></td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
<td></td>
</tr>
<tr>
<td>MATH 1941</td>
<td>Honors Calculus I</td>
<td></td>
</tr>
<tr>
<td>MATH 1042</td>
<td>Calculus II</td>
<td></td>
</tr>
<tr>
<td>or MATH 1942</td>
<td>Honors Calculus II</td>
<td></td>
</tr>
</tbody>
</table>

**Laboratory Science courses**

Two (2) laboratory science courses ³  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
</table>

**Total Credit Hours**

72  

¹ A maximum of eight (8) credits may be taken from CIS 3381, CIS 4282 and/or CIS 4382 to fulfill Computer Science elective requirements. In addition, a maximum of four (4) credits may be taken from CIS 3381 to fulfill Computer Science elective requirements.  
² Students who choose MATH 1038 must also take the linked course MATH 1039.  
³ Must select one Lab Science Sequence from the options listed below. Lab Science A and Lab Science B must be taken from the same department.
### Sequenced Laboratory Science Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Biology Sequence</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Select one Biology Lab Science A:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL 1011</td>
<td>General Biology I (Lab Science A)</td>
<td></td>
</tr>
<tr>
<td>BIOL 1111</td>
<td>Introduction to Biology I</td>
<td></td>
</tr>
<tr>
<td>BIOL 1911</td>
<td>Honors Introduction to Biology I (S)</td>
<td></td>
</tr>
<tr>
<td><strong>Select one Biology Lab Science B:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL 1012</td>
<td>General Biology II (Lab Science B)</td>
<td></td>
</tr>
<tr>
<td>BIOL 2112</td>
<td>Introduction to Biology II</td>
<td></td>
</tr>
<tr>
<td>BIOL 2912</td>
<td>Honors Introduction to Biology II (F)</td>
<td></td>
</tr>
<tr>
<td><strong>Chemistry Sequence</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select one Chemistry Lab Science A:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 1021</td>
<td>Introduction to Chemistry I</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 1023</td>
<td>and Introduction to Chemistry Laboratory I (Lab Science A)</td>
<td></td>
</tr>
<tr>
<td>CHEM 1031</td>
<td>General Chemistry I</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 1033</td>
<td>and General Chemistry Laboratory I (Lab Science A)</td>
<td></td>
</tr>
<tr>
<td>CHEM 1951</td>
<td>Honors General Chemical Science I</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 1953</td>
<td>and Honors Chemical Science Laboratory I (Lab Science A)</td>
<td></td>
</tr>
<tr>
<td><strong>Select one Chemistry Lab Science B</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 1022</td>
<td>Introduction to Chemistry II</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 1024</td>
<td>and Introduction to Chemistry Laboratory II (Lab Science B)</td>
<td></td>
</tr>
<tr>
<td>CHEM 1032</td>
<td>General Chemistry II</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 1034</td>
<td>and General Chemistry Laboratory II (Lab Science B)</td>
<td></td>
</tr>
<tr>
<td>CHEM 1952</td>
<td>Honors General Chemical Science II</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 1954</td>
<td>and Honors Chemical Science Laboratory II (Lab Science B)</td>
<td></td>
</tr>
<tr>
<td><strong>Earth &amp; Environmental Science Sequence</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Select this Lab Science A</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EES 2001</td>
<td>Physical Geology</td>
<td></td>
</tr>
<tr>
<td><strong>Select one Lab Science B (both have co-req)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EES 2011</td>
<td>Mineralogy I (Lab Science B with CHEM 1031 corequisite)</td>
<td></td>
</tr>
<tr>
<td>EES 2061</td>
<td>Introduction to Geochemistry (Lab Science B with CHEM 1031 corequisite)</td>
<td></td>
</tr>
<tr>
<td><strong>Physics Sequence</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Select one Physics Lab Science A</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYS 1021</td>
<td>Introduction to General Physics I (for non Physics majors)</td>
<td></td>
</tr>
<tr>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I (Calculus based, for Physics majors)</td>
<td></td>
</tr>
<tr>
<td>PHYS 2021</td>
<td>General Physics I (Calculus based)</td>
<td></td>
</tr>
<tr>
<td>PHYS 2921</td>
<td>Honors General Physics I (F)</td>
<td></td>
</tr>
<tr>
<td><strong>Select one Physics Lab Science B</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYS 1022</td>
<td>Introduction to General Physics II (for non Physics majors)</td>
<td></td>
</tr>
<tr>
<td>PHYS 1062</td>
<td>Elementary Classical Physics II (Calculus based, for Physics majors)</td>
<td></td>
</tr>
<tr>
<td>PHYS 2022</td>
<td>General Physics II (Calculus based)</td>
<td></td>
</tr>
<tr>
<td>PHYS 2922</td>
<td>Honors General Physics II (S)</td>
<td></td>
</tr>
</tbody>
</table>

1. Students can choose to mix-and-match the Chemistry Sequence A and B courses. However, they must take at least 1 course from Chemistry Sequence A and 1 from Chemistry Sequence B. Note: Chemistry courses consist of a three-credit lecture plus a one-credit lab.

2. The Earth & Environmental Science (EES) sequence will require students to take CHEM 1031 as a co-requisite to either of the two EES Sequence B courses.

3. Students can choose to mix-and-match the Physics Sequence A and B courses. However, they must take at least 1 course from Physics Sequence A and 1 from Physics Sequence B.
Calculation of Major GPA

The list of courses that are used to calculate major GPA is determined by the department. Students should consult with their academic advising unit for the applicable courses. In general, courses that could not apply toward the major as an elective or a required course are not counted for the major GPA. This would include CIS 1056, for example.

Distinction in Major

To graduate with Distinction in Major, students are required to have a 3.50 or higher grade point average (GPA) both in the major and overall, as well as be recommended by the department of Computer & Information Science.

Suggested Academic Plan

Bachelor of Science in Computer Science

Requirements for New Students starting in the 2015-2016 Academic Year

<table>
<thead>
<tr>
<th>Year 1</th>
<th></th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS 1001</td>
<td>Introduction to Academics in Computer Science</td>
<td>1</td>
</tr>
<tr>
<td>CIS 1068 or 1968</td>
<td>Program Design and Abstraction</td>
<td>4</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>MATH 1038</td>
<td>Calculus I with Lab¹</td>
<td></td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
<td></td>
</tr>
<tr>
<td>MATH 1941</td>
<td>Honors Calculus I</td>
<td></td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>Term Credit Hours</td>
<td></td>
<td>16</td>
</tr>
<tr>
<td>Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS 1166 or 1966</td>
<td>Mathematical Concepts in Computing I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1042 or 1942</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>Term Credit Hours</td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th></th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS 2168</td>
<td>Data Structures</td>
<td>4</td>
</tr>
<tr>
<td>ENG 2696</td>
<td>Technical Writing [WI]</td>
<td>3</td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>Term Credit Hours</td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS 2033</td>
<td>Computational Probability and Statistics</td>
<td>4</td>
</tr>
<tr>
<td>CIS 2107</td>
<td>Computer Systems and Low-Level Programming</td>
<td>4</td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>Term Credit Hours</td>
<td></td>
<td>16</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3</th>
<th></th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS 2166</td>
<td>Mathematical Concepts in Computing II</td>
<td>4</td>
</tr>
<tr>
<td>CIS 3207</td>
<td>Introduction to Systems Programming and Operating Systems</td>
<td>4</td>
</tr>
<tr>
<td>Laboratory Science A</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Term Credit Hours</td>
<td></td>
<td>16</td>
</tr>
<tr>
<td>Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS 3223</td>
<td>Data Structures and Algorithms</td>
<td>3</td>
</tr>
<tr>
<td>Computer &amp; Information Science Elective²</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Laboratory Science B</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Term Credit Hours</td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>
### Computer Science, Minor

Dr. Jie Wu, Chair  
Science Education and Research Center, Room 304  
215-204-8450

Sally Kyvernitis, Faculty Advisor  
Science Education and Research Center, Room 330  
215-204-2030  
sallyk@temple.edu

**Minor Requirements**

Students desiring a minor in Computer Science are required to satisfy the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 1068</td>
<td>Program Design and Abstraction</td>
<td>4</td>
</tr>
<tr>
<td>or CIS 1968</td>
<td>Honors Program Design and Abstraction</td>
<td></td>
</tr>
<tr>
<td>CIS 1166</td>
<td>Mathematical Concepts in Computing I</td>
<td>4</td>
</tr>
<tr>
<td>or CIS 1966</td>
<td>Honors Mathematical Concepts in Computing I</td>
<td></td>
</tr>
<tr>
<td>CIS 2107</td>
<td>Computer Systems and Low-Level Programming</td>
<td>4</td>
</tr>
<tr>
<td>CIS 2168</td>
<td>Data Structures</td>
<td>4</td>
</tr>
</tbody>
</table>

Select one of the following:  

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 2033</td>
<td>Computational Probability and Statistics</td>
</tr>
<tr>
<td>CIS 2082</td>
<td>Independent Research I</td>
</tr>
<tr>
<td>CIS 2166</td>
<td>Mathematical Concepts in Computing II</td>
</tr>
<tr>
<td>CIS 2308</td>
<td>Web Application Programming</td>
</tr>
<tr>
<td>CIS 3203</td>
<td>Introduction to Artificial Intelligence</td>
</tr>
<tr>
<td>CIS 3207</td>
<td>Introduction to Systems Programming and Operating Systems</td>
</tr>
<tr>
<td>CIS 3211</td>
<td>Automata, Computability, and Languages</td>
</tr>
<tr>
<td>CIS 3219</td>
<td>Computer Graphics and Image Processing</td>
</tr>
<tr>
<td>CIS 3319</td>
<td>Wireless Networks and Security</td>
</tr>
<tr>
<td>CIS 4319</td>
<td>Computer Networks and Communications</td>
</tr>
<tr>
<td>CIS 4331</td>
<td>Principles of Database Systems</td>
</tr>
<tr>
<td>CIS 4350</td>
<td>Seminar on Topics in Computer Science</td>
</tr>
<tr>
<td>CIS 4360</td>
<td>Seminar on Topics in Computer Science</td>
</tr>
</tbody>
</table>

**Total Credit Hours:** 19-20
Computer Security & Digital Forensics, Certificate

Dr. Jie Wu, Chair
Science Education and Research Center, Room 304
215-204-8450

Ms. Wendy Urban, Faculty Advisor
Science Education and Research Center, Room 352
215-204-5236
wendy.urban@temple.edu

This certificate is appropriate for CIS majors\(^1\) or experienced industry professionals\(^2\) who are interested in focusing in the security area. Students can add this to their existing CS, IS&T or CS/Math major. At least two of these courses CANNOT count towards the electives for the major. In other words, you need to have two distinct courses for the certificate that are not counting towards any major elective courses; one of the electives can count for both.

\(^1\) Matriculated students are primarily CIS majors due to prerequisites.
\(^2\) Non-matriculated students must have 2+ years of experience in the IT sector working in systems and network administration and/or security domains. Requires instructor permission.

Certificate Requirements

Prerequisites

Students desiring a Certificate in Computer Security & Digital Forensics must have already completed the following or have equivalent industry experience:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 1068</td>
<td>Program Design and Abstraction</td>
<td>4</td>
</tr>
<tr>
<td>or CIS 1968</td>
<td>Honors Program Design and Abstraction</td>
<td></td>
</tr>
<tr>
<td>CIS 1166</td>
<td>Mathematical Concepts in Computing I</td>
<td>4</td>
</tr>
<tr>
<td>or CIS 1966</td>
<td>Honors Mathematical Concepts in Computing I</td>
<td></td>
</tr>
<tr>
<td>CIS 2229</td>
<td>Architecture, Operating Systems and Networking</td>
<td>4</td>
</tr>
<tr>
<td>or CIS 2107</td>
<td>Computer Systems and Low-Level Programming</td>
<td></td>
</tr>
<tr>
<td>CIS 2168</td>
<td>Data Structures</td>
<td></td>
</tr>
</tbody>
</table>

Total Credit Hours: 16

Required Courses

Students desiring a Certificate in Computer Security & Digital Forensics must complete the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 3605</td>
<td>Introduction to Digital Forensics</td>
<td>3</td>
</tr>
<tr>
<td>CJ 1001</td>
<td>Introduction to Criminal Justice</td>
<td>3</td>
</tr>
<tr>
<td>or CJ 4007</td>
<td>Computer Crime</td>
<td></td>
</tr>
<tr>
<td>CIS 4378</td>
<td>Computer and Network Security</td>
<td>4</td>
</tr>
<tr>
<td>or CIS 3319</td>
<td>Wireless Networks and Security</td>
<td></td>
</tr>
</tbody>
</table>

Total Credit Hours: 10

Fundamentals of Programming, Certificate

Dr. Jie Wu, Chair
Science Education and Research Center, Room 304
215-204-8450

Ms. Wendy Urban, Faculty Advisor
Science Education and Research Center, Room 352
215-204-5236
wendy.urban@temple.edu
This certificate is appropriate for anyone interested in adding technology to your existing studies. Computer Science, Information Science and Technology, Math and Computer Science, or Math and Computer Science with Teaching majors cannot get this certificate. The certificate provides knowledge and skills in two programming languages as well as database knowledge.

Certificate Requirements

This certificate program is not open to Computer Science, Information Science and Technology, Math and Computer Science, or Math and Computer Science with Teaching majors. Students desiring a certificate in Fundamentals of Programming are required to satisfy the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 1051</td>
<td>Introduction to Problem Solving and Programming in Python</td>
<td>4</td>
</tr>
<tr>
<td>or CIS 1057</td>
<td>Computer Programming in C</td>
<td>4</td>
</tr>
<tr>
<td>or CIS 1068</td>
<td>Program Design and Abstraction</td>
<td>4</td>
</tr>
<tr>
<td>or CIS 1968</td>
<td>Honors Program Design and Abstraction</td>
<td>4</td>
</tr>
<tr>
<td>CIS 2109</td>
<td>Database and File Management Systems</td>
<td>4</td>
</tr>
</tbody>
</table>

Total Credit Hours: 12

- If a student has taken CIS 1068 and CIS 2168, CIS 2168 should be substituted for CIS 1051/CIS 1057 to prevent backtracking.
- Additional courses needed to complete a CS minor are CIS 1166, CIS 2107, CIS 2168, and one CS elective.
- Additional courses need to complete an IS&T minor are CIS 1048, and two of (CIS 1166, CIS 2168, CIS 2229 or CIS 3xxx class).

Information Science & Technology, B.A.

Dr. Jie Wu, Chair
Science Education and Research Center, Room 304
215-204-8450

Ms. Wendy Urban, Faculty Advisor
Science Education and Research Center, Room 352
215-204-5236
wendy.urban@temple.edu

Students in the IS&T curriculum develop the skills and the knowledge necessary to analyze information problems and to apply current technology to their solution. The emphasis is to develop problem-solving and communication skills.

The technologies and methods include databases, web and mobile application development, client-server computing, network security, project management, software engineering principles, and quality assurance methodologies. A two-semester capstone project course is required. This course is designed to help students integrate what they have learned in other courses and apply this knowledge in the design and implementation of a software application.

The program is targeted for students who have a strong interest in applying computing technologies to solving problems in business, education, science, and government agencies. Our IS&T graduates are also involved in innovative product developments. They hold jobs as consultants, network engineers, business and systems analysts, database administrators, and web and application developers.

Bachelor of Arts

Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)
   - MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
   - All Temple students must take a minimum of two writing intensive courses at Temple as part of their major. Following is a list of courses that can be used to satisfy the writing-intensive requirement: CIS 4296 and CIS 4396.
   - Students must complete the General Education (GenEd) requirement.
     - The General Education Curriculum consists of approximately 25-26 s.h. See the General Education (p. 143) section of the Undergraduate Bulletin for the GenEd curriculum.
     - Students who complete CST majors typically receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.

2. College Requirements
   - 90 credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).
   - 45 Upper Level (2000+) credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).
   - Second (2nd) Level of a Foreign Language (1002).
3. Major Requirements for Bachelor of Arts (60 s.h.)

**Computer & Information Science**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 1001</td>
<td>Introduction to Academics in Computer Science</td>
<td>1</td>
</tr>
<tr>
<td>CIS 1048</td>
<td>Introduction to IS&amp;T</td>
<td>3</td>
</tr>
<tr>
<td>CIS 1068</td>
<td>Program Design and Abstraction</td>
<td>4</td>
</tr>
<tr>
<td>or CIS 1968</td>
<td>Honors Program Design and Abstraction</td>
<td></td>
</tr>
<tr>
<td>CIS 1166</td>
<td>Mathematical Concepts in Computing I</td>
<td>4</td>
</tr>
<tr>
<td>or CIS 1966</td>
<td>Honors Mathematical Concepts in Computing I</td>
<td></td>
</tr>
<tr>
<td>CIS 2033</td>
<td>Computational Probability and Statistics</td>
<td>4</td>
</tr>
<tr>
<td>CIS 2109</td>
<td>Database and File Management Systems</td>
<td>4</td>
</tr>
<tr>
<td>CIS 2168</td>
<td>Data Structures</td>
<td>4</td>
</tr>
<tr>
<td>CIS 2229</td>
<td>Architecture, Operating Systems and Networking</td>
<td>4</td>
</tr>
<tr>
<td>CIS 3309</td>
<td>Component-Based Software Design</td>
<td>4</td>
</tr>
<tr>
<td>CIS 3329</td>
<td>Network Architectures</td>
<td>4</td>
</tr>
<tr>
<td>CIS 3342</td>
<td>Networked Application Systems</td>
<td>4</td>
</tr>
<tr>
<td>CIS 4296</td>
<td>Information Systems Analysis and Design</td>
<td>4</td>
</tr>
<tr>
<td>CIS 4396</td>
<td>Information Systems Implementation</td>
<td>4</td>
</tr>
</tbody>
</table>

**Mathematics**

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1031</td>
<td>Differential and Integral Calculus</td>
<td>1</td>
</tr>
<tr>
<td>MATH 1038</td>
<td>Calculus I with Lab</td>
<td>2</td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
<td></td>
</tr>
<tr>
<td>MATH 1941</td>
<td>Honors Calculus I</td>
<td></td>
</tr>
</tbody>
</table>

**Laboratory Science courses**

Two (2) laboratory science courses

<table>
<thead>
<tr>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
</tr>
</tbody>
</table>

**Total Credit Hours**

60

---

1. IS&T majors are required to have completed MATH 1022. They can then choose either MATH 1031, MATH 1038\(^2\), MATH 1041 or MATH 1941.

2. Students who choose MATH 1038 must also take the linked course MATH 1039.

3. Must select within a Sequence for Laboratory Science A and Laboratory Science B. See the Sequenced Laboratory Science list below for the science options.

---

### Sequenced Laboratory Science Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Biology Sequence</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Select one Biology Lab Science A:</strong></td>
<td></td>
</tr>
<tr>
<td>BIOL 1011</td>
<td>General Biology I (Lab Science A)</td>
<td></td>
</tr>
<tr>
<td>BIOL 1111</td>
<td>Introduction to Biology I</td>
<td></td>
</tr>
<tr>
<td>BIOL 1911</td>
<td>Honors Introduction to Biology I (S)</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Select one Biology Lab Science B:</strong></td>
<td></td>
</tr>
<tr>
<td>BIOL 1012</td>
<td>General Biology II (Lab Science B)</td>
<td></td>
</tr>
<tr>
<td>BIOL 2112</td>
<td>Introduction to Biology II</td>
<td></td>
</tr>
<tr>
<td>BIOL 2912</td>
<td>Honors Introduction to Biology II (F)</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Chemistry Sequence</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Select one Chemistry Lab Science A:</strong></td>
<td></td>
</tr>
<tr>
<td>CHEM 1021</td>
<td>Introduction to Chemistry I</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 1023</td>
<td>Introduction to Chemistry Laboratory I (Lab Science A)</td>
<td></td>
</tr>
<tr>
<td>CHEM 1031</td>
<td>General Chemistry I</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 1033</td>
<td>General Chemistry Laboratory I (Lab Science A)</td>
<td></td>
</tr>
<tr>
<td>CHEM 1951</td>
<td>Honors General Chemical Science I</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 1953</td>
<td>Honors Chemical Science Laboratory I (Lab Science A)</td>
<td></td>
</tr>
</tbody>
</table>
Select one Chemistry Lab Science B

CHEM 1022 & CHEM 1024
Introduction to Chemistry II
and Introduction to Chemistry Laboratory II (Lab Science B)

CHEM 1032 & CHEM 1034
General Chemistry II
and General Chemistry Laboratory II (Lab Science B)

CHEM 1952 & CHEM 1954
Honors General Chemical Science II
and Honors Chemical Science Laboratory II (Lab Science B)

Earth & Environmental Science Sequence

Select this Lab Science A
EES 2001
Physical Geology

Select one Lab Science B (both have co-req)

EES 2011
Mineralogy I (Lab Science B with CHEM 1031 corequisite)

EES 2061
Introduction to Geochemistry (Lab Science B with CHEM 1031 corequisite)

Physics Sequence

Select one Physics Lab Science A

PHYS 1021
Introduction to General Physics I (for non Physics majors)

PHYS 1061
Elementary Classical Physics I (Calculus based, for Physics majors)

PHYS 2021
General Physics I (Calculus based)

PHYS 2921
Honors General Physics I (F)

Select one Physics Lab Science B

PHYS 1022
Introduction to General Physics II (for non Physics majors)

PHYS 1062
Elementary Classical Physics II (Calculus based, for Physics majors)

PHYS 2022
General Physics II (Calculus based)

PHYS 2922
Honors General Physics II (S)

1 Students can choose to mix-and-match the Chemistry Sequence A and B courses. However, they must take at least 1 course from Chemistry Sequence A and 1 from Chemistry Sequence B. Note: Chemistry courses consist of a three-credit lecture plus a one-credit lab.

2 The Earth & Environmental Science (EES) sequence will require students to take CHEM 1031 as a co-requisite to either of the two EES Sequence B courses.

3 Students can choose to mix-and-match the Physics Sequence A and B courses. However, they must take at least 1 course from Physics Sequence A and 1 from Physics Sequence B.

Calculation of Major GPA

The list of courses that are used to calculate major GPA is determined by the department. Students should consult with their academic advising unit for the applicable courses. In general, courses that could not apply toward the major as an elective or a required course are not counted for the major GPA. This would include CIS 1056, for example.

Distinction in Major

To graduate with Distinction in Major, students are required to have a 3.50 or higher grade point average (GPA) both in the major and overall, as well as be recommended by the department of Computer & Information Science.

Suggested Academic Plan

Bachelor of Arts in Information Science & Technology

Requirements for New Students starting in the 2015-2016 Academic Year

Year 1
Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 1001</td>
<td>Introduction to Academics in Computer Science</td>
<td>1</td>
</tr>
<tr>
<td>CIS 1048</td>
<td>Introduction to IST</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1031</td>
<td>Differential and Integral Calculus</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1038</td>
<td>Calculus I with Lab</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1941</td>
<td>Honors Calculus I</td>
<td>4</td>
</tr>
</tbody>
</table>

1 Students can choose one of the following:

- MATH 1031
- MATH 1038
- MATH 1041
- MATH 1941
<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General Education/Elective Credits</strong></td>
<td>7</td>
</tr>
</tbody>
</table>

### Spring
- CIS 1068 or 1968: Program Design and Abstraction (4)
- CIS 1166 or 1966: Mathematical Concepts in Computing I (4)
- General Education/Elective Credits (7)

### Year 2

#### Fall
- CIS 2033: Computational Probability and Statistics (4)
- CIS 2168: Data Structures (4)
- General Education/Elective Credits (7)

### Spring
- CIS 2109: Database and File Management Systems (4)
- CIS 2229: Architecture, Operating Systems and Networking (4)
- General Education/Elective Credits (8)

### Year 3

#### Fall
- CIS 3309: Component-Based Software Design (4)
- Laboratory Science A (4)
- General Education/Elective Credits (8)

### Spring
- CIS 3329: Network Architectures (4)
- CIS 3342: Networked Application Systems (4)
- Laboratory Science B (4)
- General Education/Elective Credits (4)

### Year 4

#### Fall
- CIS 4296: Information Systems Analysis and Design [WI] (4)
- General Education/Elective Credits (12)

### Spring
- CIS 4396: Information Systems Implementation [WI] (4)
- General Education/Elective Credits (10)

---

1 IS&T majors are required to have completed MATH 1022. They can then choose either MATH 1031, MATH 1038\(^2\), MATH 1041 or MATH 1941.
2 Students who choose MATH 1038 must also take the linked course MATH 1039.

### Information Science & Technology, B.S.

Dr. Jie Wu, Chair  
Science Education and Research Center, Room 304  
215-204-8450

Ms. Wendy Urban, Faculty Advisor  
Science Education and Research Center, Room 352  
215-204-5236
Students in the IS&T curriculum develop the skills and the knowledge necessary to analyze information problems and to apply current technology to their solution. The emphasis is to develop problem-solving and communication skills.

The technologies and methods include databases, web and mobile application development, client-server computing, network security, project management, software engineering principles, and quality assurance methodologies. A two-semester capstone project course is required. This course is designed to help students integrate what they have learned in other courses and apply this knowledge in the design and implementation of a software application.

The program is targeted for students who have a strong interest in applying computing technologies to solving problems in business, education, science, and government agencies. Our IS&T graduates are also involved in innovative product developments. They hold jobs as consultants, network engineers, business and systems analysts, database administrators, and web and application developers.

The BS program gives students the further opportunity to explore their interests in the variety of electives available to them.

**Bachelor of Science**

**Summary of Requirements for the Degree**

1. University Requirements (123 total s.h.)
   - MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
   - All Temple students must take a minimum of two writing-intensive courses at Temple as part of their major. Following is a list of courses that can be used to satisfy the writing-intensive requirement: CIS 4296 and CIS 4396.
   - Students must complete the General Education (GenEd) requirement.
     - The General Education Curriculum consists of approximately 25-26 s.h. See the General Education (p. 143) section of the Undergraduate Bulletin for the GenEd curriculum.
     - Students who complete CST majors typically receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.

2. College Requirements
   - 90 credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).
   - 45 Upper Level (2000+) credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).

3. Major Requirements for Bachelor of Science (72-76 s.h.)

**Computer & Information Science**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 1001</td>
<td>Introduction to Academics in Computer Science</td>
<td>1</td>
</tr>
<tr>
<td>CIS 1048</td>
<td>Introduction to IS&amp;T</td>
<td>3</td>
</tr>
<tr>
<td>CIS 1068</td>
<td>Program Design and Abstraction</td>
<td>4</td>
</tr>
<tr>
<td>or CIS 1968</td>
<td>Honors Program Design and Abstraction</td>
<td></td>
</tr>
<tr>
<td>CIS 1166</td>
<td>Mathematical Concepts in Computing I</td>
<td>4</td>
</tr>
<tr>
<td>or CIS 1966</td>
<td>Honors Mathematical Concepts in Computing I</td>
<td></td>
</tr>
<tr>
<td>CIS 2033</td>
<td>Computational Probability and Statistics</td>
<td>4</td>
</tr>
<tr>
<td>CIS 2109</td>
<td>Database and File Management Systems</td>
<td>4</td>
</tr>
<tr>
<td>CIS 2168</td>
<td>Data Structures</td>
<td>4</td>
</tr>
<tr>
<td>CIS 2229</td>
<td>Architecture, Operating Systems and Networking</td>
<td>4</td>
</tr>
<tr>
<td>CIS 3309</td>
<td>Component-Based Software Design</td>
<td>4</td>
</tr>
<tr>
<td>CIS 3329</td>
<td>Network Architectures</td>
<td>4</td>
</tr>
<tr>
<td>CIS 3342</td>
<td>Networked Application Systems</td>
<td>4</td>
</tr>
<tr>
<td>CIS 4296</td>
<td>Information Systems Analysis and Design</td>
<td>4</td>
</tr>
<tr>
<td>CIS 4396</td>
<td>Information Systems Implementation</td>
<td>4</td>
</tr>
</tbody>
</table>

**Mathematics**

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1031</td>
<td>Differential and Integral Calculus</td>
</tr>
<tr>
<td>MATH 1038</td>
<td>Calculus I with Lab</td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
</tr>
<tr>
<td>-------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>MATH 1941</td>
<td>Honors Calculus I</td>
</tr>
</tbody>
</table>

**Information Science & Technology Related Electives**

Select four of the following: 12-16

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 3281</td>
<td>Cooperative Education Experience in Information Science &amp; Technology</td>
</tr>
<tr>
<td>CIS 3344</td>
<td>Advanced Web Application Design and Scripting</td>
</tr>
<tr>
<td>CIS 3374</td>
<td>Quality Assurance &amp; Testing (F)</td>
</tr>
<tr>
<td>CIS 3376</td>
<td>Enterprise Resource Planning (ERP) Design and Implementation</td>
</tr>
<tr>
<td>CIS 3515</td>
<td>Introduction to Mobile Application Development</td>
</tr>
<tr>
<td>CIS 3603</td>
<td>User Experience Design</td>
</tr>
<tr>
<td>CIS 3715</td>
<td>Principles of Data Science</td>
</tr>
<tr>
<td>CIS 3775</td>
<td>Information Technology Project Management</td>
</tr>
<tr>
<td>CIS 4105</td>
<td>Information Technology Process Management (F)</td>
</tr>
<tr>
<td>CIS 4106</td>
<td>System Development Process</td>
</tr>
<tr>
<td>CIS 4108</td>
<td>Emerging Technologies and Tools for Enterprise Management (S)</td>
</tr>
<tr>
<td>CIS 4282</td>
<td>Independent Study</td>
</tr>
<tr>
<td>CIS 4330</td>
<td>Current Topics in Information Science &amp; Technology</td>
</tr>
<tr>
<td>CIS 4340</td>
<td>Seminar in Information Science &amp; Technology (S)</td>
</tr>
<tr>
<td>CIS 4344</td>
<td>Advanced Web Application Design &amp; Scripting</td>
</tr>
<tr>
<td>CIS 4350</td>
<td>Seminar on Topics in Computer Science (F)</td>
</tr>
<tr>
<td>CIS 4362</td>
<td>Application System Development Using Relational Technology (Not offered every year)</td>
</tr>
<tr>
<td>CIS 4376</td>
<td>E-Commerce System Development</td>
</tr>
<tr>
<td>CIS 4378</td>
<td>Computer and Network Security</td>
</tr>
<tr>
<td>CIS 4615</td>
<td>Ethical Hacking and Intrusion Forensics</td>
</tr>
<tr>
<td>CIS 4625</td>
<td>Audit and Compliance for Security and Digital Forensics</td>
</tr>
</tbody>
</table>

Other courses communicated to the students from the IS&T Faculty Advisor.

**Laboratory Science Courses**

Two (2) laboratory science courses 8

**Total Credit Hours**

72-76

(F) - Fall only course

(S) - Spring only course

1 IS&T majors are required to have completed MATH 1022. They can then choose either MATH 1031, MATH 1038, MATH 1041 or MATH 1941.

2 Students who choose MATH 1038 must also take the linked course MATH 1039.

3 A maximum of two sections may be taken from CIS 3281 and CIS 4282. CIS 3281 may be taken once within this two-section sequence.

4 Must select within a Sequence for Laboratory Science A and Laboratory Science B. See the Sequenced Laboratory Science list below for the science options.

- Students may also select other 3000-level Computer & Information Science courses for which they meet the prerequisites as long as that course is not already used for the IS&T degree.
- No more than two courses that do not have formal classes and a text, such as Independent Study, Directed Study, and co-op may be used to satisfy the elective requirement. In addition, the co-op course may only be taken once.
- Students with senior standing and a minimum overall 3.25 GPA may also request permission from both the IS&T advisor and course instructor to use graduate courses (5xxx level) as electives.

**Sequenced Laboratory Science Requirements**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology Sequence</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Select one Biology Lab Science A:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1011</td>
<td>General Biology I (Lab Science A)</td>
<td></td>
</tr>
<tr>
<td>BIOL 1111</td>
<td>Introduction to Biology I</td>
<td></td>
</tr>
<tr>
<td>BIOL 1911</td>
<td>Honors Introduction to Biology I (S)</td>
<td></td>
</tr>
<tr>
<td>-----------</td>
<td>-----------------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>Select one Biology Lab Science B:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL 1012</td>
<td>General Biology II (Lab Science B)</td>
<td></td>
</tr>
<tr>
<td>BIOL 2112</td>
<td>Introduction to Biology II</td>
<td></td>
</tr>
<tr>
<td>BIOL 2912</td>
<td>Honors Introduction to Biology II (F)</td>
<td></td>
</tr>
</tbody>
</table>

**Chemistry Sequence**

<table>
<thead>
<tr>
<th>Select one Chemistry Lab Science A:</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1021 &amp; CHEM 1023</td>
</tr>
<tr>
<td>CHEM 1031 &amp; CHEM 1033</td>
</tr>
<tr>
<td>CHEM 1951 &amp; CHEM 1953</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Select one Chemistry Lab Science B</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1022 &amp; CHEM 1024</td>
</tr>
<tr>
<td>CHEM 1032 &amp; CHEM 1034</td>
</tr>
<tr>
<td>CHEM 1952 &amp; CHEM 1954</td>
</tr>
</tbody>
</table>

**Earth & Environmental Science Sequence**

<table>
<thead>
<tr>
<th>Select this Lab Science A</th>
</tr>
</thead>
<tbody>
<tr>
<td>EES 2001</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Select one Lab Science B (both have co-reg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EES 2011</td>
</tr>
<tr>
<td>EES 2061</td>
</tr>
</tbody>
</table>

**Physics Sequence**

<table>
<thead>
<tr>
<th>Select one Physics Lab Science A</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 1021</td>
</tr>
<tr>
<td>PHYS 1061</td>
</tr>
<tr>
<td>PHYS 2021</td>
</tr>
<tr>
<td>PHYS 2921</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Select one Physics Lab Science B</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 1022</td>
</tr>
<tr>
<td>PHYS 1062</td>
</tr>
<tr>
<td>PHYS 2022</td>
</tr>
<tr>
<td>PHYS 2922</td>
</tr>
</tbody>
</table>

---

1 Students can choose to mix-and-match the Chemistry Sequence A and B courses. However, they must take at least 1 course from Chemistry Sequence A and 1 from Chemistry Sequence B. Note: Chemistry courses consist of a three-credit lecture plus a one-credit lab.

2 The Earth & Environmental Science (EES) sequence will require students to take CHEM 1031 as a co-requisite to either of the two EES Sequence B courses.

3 Students can choose to mix-and-match the Physics Sequence A and B courses. However, they must take at least 1 course from Physics Sequence A and 1 from Physics Sequence B.

---

**Calculation of Major GPA**

The list of courses that are used to calculate major GPA is determined by the department. Students should consult with their academic advising unit for the applicable courses. In general, courses that could not apply toward the major as an elective or a required course are not counted for the major GPA. This would include CIS 1056, for example.

**Distinction in Major**

To graduate with Distinction in Major, students are required to have a 3.50 or higher grade point average (GPA) both in the major and overall, as well as be recommended by the department of Computer & Information Science.
Suggested Academic Plan

Bachelor of Science in Information Science & Technology

Requirements for New Students starting in the 2015-2016 Academic Year

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Credit Hours</td>
</tr>
<tr>
<td>CIS 1001</td>
<td>Introduction to Academics in Computer Science</td>
</tr>
<tr>
<td>CIS 1048</td>
<td>Introduction to IST</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1031</td>
<td>Differential and Integral Calculus&lt;sup&gt;1&lt;/sup&gt;</td>
</tr>
<tr>
<td>MATH 1038</td>
<td>Calculus I with Lab&lt;sup&gt;2&lt;/sup&gt;</td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
</tr>
<tr>
<td>MATH 1941</td>
<td>Honors Calculus I</td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td>7</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Credit Hours</td>
</tr>
<tr>
<td>CIS 1068 or 1968</td>
<td>Program Design and Abstraction</td>
</tr>
<tr>
<td>CIS 1166 or 1966</td>
<td>Mathematical Concepts in Computing I</td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td>7</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Fall</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Credit Hours</td>
</tr>
<tr>
<td>CIS 2033</td>
<td>Computational Probability and Statistics</td>
</tr>
<tr>
<td>CIS 2168</td>
<td>Data Structures</td>
</tr>
<tr>
<td>Laboratory Science A</td>
<td>4</td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td>4</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Credit Hours</td>
</tr>
<tr>
<td>CIS 2109</td>
<td>Database and File Management Systems</td>
</tr>
<tr>
<td>CIS 2229</td>
<td>Architecture, Operating Systems and Networking</td>
</tr>
<tr>
<td>Laboratory Science B</td>
<td>4</td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3</th>
<th>Fall</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Credit Hours</td>
</tr>
<tr>
<td>CIS 3309</td>
<td>Component-Based Software Design</td>
</tr>
<tr>
<td>Information Science &amp; Technology Elective&lt;sup&gt;3&lt;/sup&gt;</td>
<td>3-4</td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td>9-8</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Credit Hours</td>
</tr>
<tr>
<td>CIS 3329</td>
<td>Network Architectures</td>
</tr>
<tr>
<td>Information Science &amp; Technology Elective&lt;sup&gt;3&lt;/sup&gt;</td>
<td>3-4</td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td>8-7</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 4</th>
<th>Fall</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Credit Hours</td>
</tr>
<tr>
<td>CIS 4296</td>
<td>Information Systems Analysis and Design [WI]</td>
</tr>
<tr>
<td>CIS 3342</td>
<td>Networked Application Systems</td>
</tr>
<tr>
<td>Information Science &amp; Technology Elective&lt;sup&gt;3&lt;/sup&gt;</td>
<td>3-4</td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td>5-4</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 4</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Credit Hours</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
</tr>
</tbody>
</table>
Information Science & Technology, Minor

Dr. Jie Wu, Chair
Science Education and Research Center, Room 304
215-204-8450

Ms. Wendy Urban, Faculty Advisor
Science Education and Research Center, Room 352
215-204-5236
wendy.urban@temple.edu

Minor Requirements

Students desiring a minor in Information Science and Technology are required to satisfy the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 1048</td>
<td>Introduction to IS&amp;T</td>
<td>3</td>
</tr>
<tr>
<td>CIS 1068</td>
<td>Program Design and Abstraction</td>
<td>4</td>
</tr>
<tr>
<td>or CIS 1968</td>
<td>Honors Program Design and Abstraction</td>
<td></td>
</tr>
</tbody>
</table>

Plus any 3 courses from (CIS 1166, CIS 2168, CIS 2109, CIS 2229, 3xxx level CIS course with faculty advisor approval). For CS majors who want an IS&T minor, you need to take CIS 2109, CIS 3309 and a 3xxx-level IS&T course distinct from your CS courses (selected with IS&T faculty advisor). If you took CIS 4331, you cannot take CIS 2109 and will need to see the faculty advisor for a replacement course. You need 3 distinct courses from your CS major and CIS 1048 does not count.

Total Credit Hours: 16-19

Mathematics & Computer Science, B.S.

Dr. Jie Wu, Chair, Computer & Information Science
Science Education and Research Center, Room 304
215-204-8450

Dr. Anthony Hughes, Faculty Advisor for Mathematics & Computer Science
Science Education and Research Center, Room 341
215-204-7910
anthony.hughes@temple.edu

Dr. Edward Letzter, Chair, Mathematics
Wachman Hall, Room 638
215-204-7841

Dr. Boris Datskovsky, Director of Undergraduate Studies, Mathematics
Wachman Hall, Room 632
215-204-7847
bdats@temple.edu

This program is intended for students who are interested in computer science and mathematical computing. It provides a solid knowledge of theoretical computer science and its mathematical foundations and compares favorably with other theoretically-oriented computer science programs. The program is particularly recommended to those students who are interested in pursuing a graduate degree in computer science or computational mathematics.
Bachelor of Science

Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)
   - MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
   - All Temple students must take a minimum of two writing-intensive courses at Temple as part of their major. Following is a list of courses that can be used to satisfy the writing-intensive requirement:
     - CIS 4397 Independent Research in Computer Science
     - CIS 4398 Projects in Computer Science
     - MATH 3098 Modern Algebra
     - MATH 4096 Senior Problem Solving
   - Students must complete the General Education (GenEd) requirements.
   - The General Education Curriculum consists of approximately 25-26 s.h. See the General Education (p. 143) section of the Undergraduate Bulletin for the GenEd curriculum.
   - Students who complete CST majors typically receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.

2. College Requirements
   - 90 credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).
   - 45 Upper Level (2000+) credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).

3. Major Requirements for Bachelor of Science (72-73 s.h.)

   **Computer & Information Science courses**
   - CIS 1068 Program Design and Abstraction
   - or CIS 1968 Honors Program Design and Abstraction
   - CIS 1166 Mathematical Concepts in Computing I
   - or CIS 1966 Honors Mathematical Concepts in Computing I
   - CIS 2107 Computer Systems and Low-Level Programming
   - CIS 2166 Mathematical Concepts in Computing II
   - CIS 2168 Data Structures
   - CIS 3207 Introduction to Systems Programming and Operating Systems
   - CIS 3223 Data Structures and Algorithms
   - Select one of the following:
     - CIS 3238 Software Design (S)
     - 3000+ CIS Elective

   **Mathematics courses**
   - MATH 1038 Calculus I with Lab
   - MATH 1041 Calculus I
   - MATH 1941 Honors Calculus I
   - MATH 1042 Calculus II
   - or MATH 1942 Honors Calculus II
   - MATH 2043 Calculus III
   - or MATH 2943 Honors Calculus III
   - Select one of the following:
     - MATH 2101 Linear Algebra
     - MATH 2103 Linear Algebra with Computer Lab
     - MATH 2111 Basic Concepts of Math
     - MATH 3031 Probability Theory I
     - MATH 3096 Introduction to Modern Algebra
     - or MATH 3098 Modern Algebra
     - MATH 3137 Real & Complex Analysis I (F)
     - or MATH 3043 Numerical Analysis I
   - Select one of the following:
<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 3138</td>
<td>Real &amp; Complex Analysis II (S)</td>
</tr>
<tr>
<td>3000+ MATH Elective</td>
<td></td>
</tr>
</tbody>
</table>

### Science courses

Select one of the following sequences: 8

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1031</td>
<td>General Chemistry I</td>
</tr>
<tr>
<td>&amp; CHEM 1033</td>
<td>and General Chemistry Laboratory I</td>
</tr>
<tr>
<td>&amp; CHEM 1032</td>
<td>and General Chemistry II</td>
</tr>
<tr>
<td>&amp; CHEM 1034</td>
<td>and General Chemistry Laboratory II</td>
</tr>
<tr>
<td>CHEM 1951</td>
<td>Honors General Chemical Science I</td>
</tr>
<tr>
<td>&amp; CHEM 1953</td>
<td>and Honors Chemical Science Laboratory I</td>
</tr>
<tr>
<td>&amp; CHEM 1952</td>
<td>and Honors General Chemical Science II</td>
</tr>
<tr>
<td>&amp; CHEM 1954</td>
<td>and Honors Chemical Science Laboratory II</td>
</tr>
<tr>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I</td>
</tr>
<tr>
<td>&amp; PHYS 1062</td>
<td>and Elementary Classical Physics II</td>
</tr>
<tr>
<td>PHYS 2021</td>
<td>General Physics I</td>
</tr>
<tr>
<td>&amp; PHYS 2022</td>
<td>and General Physics II</td>
</tr>
<tr>
<td>PHYS 2921</td>
<td>Honors General Physics I</td>
</tr>
<tr>
<td>&amp; PHYS 2922</td>
<td>and Honors General Physics II</td>
</tr>
</tbody>
</table>

### Capstone course

Select one of the following: 3

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 4397</td>
<td>Independent Research in Computer Science 3</td>
</tr>
<tr>
<td>CIS 4398</td>
<td>Projects in Computer Science 3</td>
</tr>
<tr>
<td>MATH 4096</td>
<td>Senior Problem Solving 3</td>
</tr>
</tbody>
</table>

### Total Credit Hours

72-73

(F) - Fall only course  
(S) - Spring only course

1. Must be approved by Computer & Information Science faculty advisor.
2. Students who choose MATH 1038 must also take the linked course MATH 1039.
3. CIS 3238 is the prerequisite for CIS 4397 and CIS 4398 and should be taken as a 3000+ Computer & Information Science elective, if you plan to take CIS 4397 or CIS 4398 as the capstone course. MATH 3138 is one of the prerequisites for MATH 4096 and should be selected as a 3000+ Math elective if you plan to take MATH 4096 as the capstone course.

### Calculation of Major GPA

The list of courses that are used to calculate major GPA is determined by the department. Students should consult with their academic advising unit for the applicable courses. In general, courses that could not apply toward the major as an elective or a required course are not counted for the major GPA. This would include MATH 1022, for example.

### Distinction in Major

To graduate with Distinction in Mathematics & Computer Science, a student should meet the following requirements:

1. At the time of graduation, the student's overall grade point average (GPA), including all college-level courses, must be at least 3.50.
2. Students must have a 3.50 or higher grade point average in the 3000+ level Computer Science courses.
3. Students must have a GPA of 3.50 or higher in their 3000+ level Mathematics courses.
4. Students must complete MATH 3098 and one of the following two-semester analysis sequences:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 3043</td>
<td>Numerical Analysis I</td>
</tr>
<tr>
<td>&amp; MATH 3044</td>
<td>and Numerical Analysis II</td>
</tr>
<tr>
<td>MATH 3137</td>
<td>Real &amp; Complex Analysis I</td>
</tr>
<tr>
<td>&amp; MATH 3138</td>
<td>and Real &amp; Complex Analysis II</td>
</tr>
<tr>
<td>MATH 3141</td>
<td>Advanced Calculus I</td>
</tr>
<tr>
<td>&amp; MATH 3142</td>
<td>and Advanced Calculus II</td>
</tr>
</tbody>
</table>
## Suggested Academic Plan

### Bachelor of Science in Mathematics & Computer Science

#### Requirements for New Students starting in the 2015-2016 Academic Year

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 1068 or 1968</td>
<td>Program Design and Abstraction</td>
<td>4</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 1038</td>
<td>Calculus I with Lab</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
<td></td>
</tr>
<tr>
<td>MATH 1941</td>
<td>Honors Calculus I</td>
<td></td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td>Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS 1166 or 1966</td>
<td>Mathematical Concepts in Computing I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1042 or 1942</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 2168</td>
<td>Data Structures</td>
<td>4</td>
</tr>
<tr>
<td>MATH 2043 or 2943</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>3-4</td>
</tr>
<tr>
<td>MATH 2101</td>
<td>Linear Algebra</td>
<td></td>
</tr>
<tr>
<td>MATH 2103</td>
<td>Linear Algebra with Computer Lab</td>
<td></td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td></td>
<td>4-3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td>Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS 2107</td>
<td>Computer Systems and Low-Level Programming</td>
<td>4</td>
</tr>
<tr>
<td>CIS 2166</td>
<td>Mathematical Concepts in Computing II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 2111</td>
<td>Basic Concepts of Math</td>
<td>3</td>
</tr>
<tr>
<td>MATH 3031</td>
<td>Probability Theory I</td>
<td>3</td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 3207</td>
<td>Introduction to Systems Programming and Operating Systems</td>
<td>4</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>MATH 3043</td>
<td>Numerical Analysis I</td>
<td></td>
</tr>
<tr>
<td>MATH 3137</td>
<td>Real Complex Analysis I (F)</td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1031</td>
<td>General Chemistry I</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 1033</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 1951</td>
<td>Honors General Chemical Science I</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 1953</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I</td>
<td></td>
</tr>
<tr>
<td>PHYS 2021</td>
<td>General Physics I</td>
<td></td>
</tr>
<tr>
<td>PHYS 2921</td>
<td>Honors General Physics I</td>
<td></td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td>Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS 3223</td>
<td>Data Structures and Algorithms</td>
<td>3</td>
</tr>
</tbody>
</table>
Select one of the following:  
MATH 3138 Real Complex Analysis II (S)  
3000+ MATH Elective\textsuperscript{2}  

Select one of the following:  
CHEM 1032 General Chemistry II  
& CHEM 1034  
CHEM 1952 Honors General Chemical Science II  
& CHEM 1954  
PHYS 1062 Elementary Classical Physics II  
PHYS 2022 General Physics II  
PHYS 2922 Honors General Physics II  

General Education/Elective Credits  

<table>
<thead>
<tr>
<th>Year 4</th>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>CIS 3238 Software Design (S)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3000+ CIS Elective\textsuperscript{2} |  
Select one of the following: | 3 |
| MATH 3096 Introduction to Modern Algebra [WI] |  
MATH 3098 Modern Algebra [WI] |  
General Education/Elective Credits | 8 |

<table>
<thead>
<tr>
<th>Spring</th>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select one of the following:</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CIS 4398 or 4397 Projects in Computer Science [WI]\textsuperscript{3}</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
MATH 4096 Senior Problem Solving [WI]\textsuperscript{3} |  
General Education/Elective Credits | 13 |

| Total Credit Hours: | 123 |

(F) - Fall only course  
(S) - Spring only course

1 Students who choose MATH 1038 must also take the linked course MATH 1039.  
2 Mathematics electives must be 3000 or higher, and they must be approved by the mathematics program advisor. MATH 3138 is one of the prerequisites for MATH 4096 and should be selected as a 3000+ Math elective if you plan to take MATH 4096 as the capstone course.  
3 Computer & Information Science electives must be 3000 or higher, and they must be approved by the Computer & Information Science program advisor. CIS 3238 is the prerequisite for CIS 4397 and CIS 4398 and should be taken as a 3000+ Computer & Information Science elective, if you plan to take CIS 4397 or CIS 4398 as the capstone course.

**Earth & Environmental Science**

Dr. Jonathan Nyquist, Chair  
Beury Hall, Room 326  
215-204-7172

Dr. Allison Tumarkin-Deratzian, Faculty Advisor  
Beury Hall, Room 315B  
215-204-2321  
altd@temple.edu
The Department of Earth and Environmental Science offers students the opportunity to study the Earth with a variety of traditional and environmental geology course work. The faculty work closely with students to give a combination of field-based experience and current laboratory and computational techniques. The Department offers B.A. and B.S. degrees in Geology and advises students receiving the B.S. degree in Environmental Science.

Programs

- Earth & Space Science with Teaching, B.S. (p. )
- Environmental Science, B.S. (p. 1067)
- General Science with Teaching, B.S. (p. )
- Geology, B.A. (p. 1125)
- Geology, B.A./M.Ed. (p. )
- Geology, B.S. (p. 1129)
- Geology, B.S./M.Ed. (p. )
- Geology, Minor (p. 1133)
- Natural Sciences, B.A. (p. )

Environmental Science, B.S.

Dr. Laura Toran, Program Director
Beury Hall, Room 223
215-204-2352
ltoran@temple.edu

Dr. Allison Tumarkin-Deratzian, Faculty Advisor
Beury Hall, Room 315B
215-204-2321
altd@temple.edu

Students will be equipped with the scholarly background and intellectual skills to understand a wide range of pressing environmental issues, and they will come to appreciate the physical, economic, political, demographic, and ethical factors that define those issues. Among the many environmental problems central to our program are groundwater contamination, suburban sprawl, river basin management, environmental justice, and the greening of abandoned urban spaces. Our graduates find employment with government environmental agencies, citizens’ organizations, consulting firms, and corporate environmental affairs departments.

Bachelor of Science

Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)
   - MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
   - All Temple students must take a minimum of two writing-intensive courses at Temple as part of their major. Following is a list of courses that can be used to satisfy the writing-intensive requirement:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EES 2096</td>
<td>Climate Change: Oceans To Atmosphere (S)</td>
<td>4</td>
</tr>
<tr>
<td>EES 2097</td>
<td>Process Geomorphology (F)</td>
<td>4</td>
</tr>
<tr>
<td>ENST/ECON 3596</td>
<td>Energy, Ecology, and Economy</td>
<td>3</td>
</tr>
<tr>
<td>ENVS 4198</td>
<td>Environmental Science Senior Seminar (S)</td>
<td>3</td>
</tr>
<tr>
<td>ENST 4896</td>
<td>Environmental Physiology</td>
<td>3</td>
</tr>
<tr>
<td>ENST/GUS 3097</td>
<td>Environment and Development</td>
<td>3</td>
</tr>
<tr>
<td>ENST/GUS 4096</td>
<td>Problems of Environmental Quality</td>
<td>3</td>
</tr>
<tr>
<td>HIST/ENST 4297</td>
<td>Social History of American Medicine</td>
<td>3</td>
</tr>
<tr>
<td>PHIL/ENST 2596</td>
<td>Philosophical Perspectives on the Environment</td>
<td>3</td>
</tr>
</tbody>
</table>

   - Students must complete the General Education (GenEd) requirements.
     - The General Education Curriculum consists of approximately 25-26 s.h. See the General Education (p. 143) section of the Undergraduate Bulletin for the GenEd curriculum.
     - Students who complete CST majors typically receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.

2. College Requirements
- 45 Upper Level (2000+) credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).
- 90 credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).

3. Major Requirements for Bachelor of Science (72-80 s.h.)

**Biology**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1111</td>
<td>Introduction to Biology I</td>
<td>4</td>
</tr>
<tr>
<td>or BIOL 1911</td>
<td>Honors Introduction to Biology I</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 2112</td>
<td>Introduction to Biology II</td>
<td>4</td>
</tr>
<tr>
<td>or BIOL 2912</td>
<td>Honors Introduction to Biology II</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 2227</td>
<td>Principles of Ecology (S)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Chemistry**

Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1031</td>
<td>General Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 1033</td>
<td>General Chemistry Laboratory I</td>
<td></td>
</tr>
<tr>
<td>CHEM 1951</td>
<td>Honors General Chemical Science I</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 1953</td>
<td>Honors Chemical Science Laboratory I (F)</td>
<td></td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1032</td>
<td>General Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 1034</td>
<td>General Chemistry Laboratory II</td>
<td></td>
</tr>
<tr>
<td>CHEM 1952</td>
<td>Honors General Chemical Science II</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 1954</td>
<td>Honors Chemical Science Laboratory II (S)</td>
<td></td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 2201</td>
<td>Organic Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 2203</td>
<td>Organic Chemistry Laboratory I</td>
<td></td>
</tr>
<tr>
<td>CHEM 2211</td>
<td>Organic Chemistry for Majors I</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 2213</td>
<td>Organic Majors Laboratory I (F)</td>
<td></td>
</tr>
<tr>
<td>CHEM 2921</td>
<td>Organic Chemistry for Honors I</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 2923</td>
<td>Organic Honors Laboratory I (F)</td>
<td></td>
</tr>
</tbody>
</table>

**Earth & Environmental Science**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EES 2001</td>
<td>Physical Geology</td>
<td>4</td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EES 3021</td>
<td>Introduction to Hydrology (F)</td>
<td>4</td>
</tr>
<tr>
<td>EES 3025</td>
<td>Physical Hydrology</td>
<td></td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRP 2524</td>
<td>Fundamentals of Geographic Information Systems (GIS)</td>
<td>3-4</td>
</tr>
<tr>
<td>EES 3011</td>
<td>Remote Sensing and GIS (S)</td>
<td></td>
</tr>
<tr>
<td>GUS 3062</td>
<td>Fundamentals of Geographic Information Systems</td>
<td></td>
</tr>
</tbody>
</table>

**Economics**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 1102</td>
<td>Microeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>or ECON 1902</td>
<td>Honors Microeconomic Principles</td>
<td></td>
</tr>
<tr>
<td>ENST/ECON 3596</td>
<td>Energy, Ecology, and Economy</td>
<td>3</td>
</tr>
</tbody>
</table>

**Environmental Science**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVS 4198</td>
<td>Environmental Science Senior Seminar (S)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Environmental Sciences electives**

Select six Environmental Sciences electives.  

**Mathematics**

Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1038</td>
<td>Calculus I with Lab</td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
</tr>
<tr>
<td>MATH 1941</td>
<td>Honors Calculus I</td>
</tr>
<tr>
<td>MATH 1042</td>
<td>Calculus II</td>
</tr>
<tr>
<td>or MATH 1942</td>
<td>Honors Calculus II</td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 2031</td>
<td>Probability and Statistics</td>
</tr>
</tbody>
</table>

1. Required for students planning to attend law school.
2. 18-24 credits required.
3. May be applied toward major.
4. May be applied toward major.
5. May be applied toward major.
6. May be applied toward major.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 3312</td>
<td>Biostatistics</td>
<td></td>
</tr>
<tr>
<td>STAT 2103</td>
<td>Statistical Business Analytics (Only if also in Fox School of Business)</td>
<td></td>
</tr>
</tbody>
</table>

**Total Credit Hours: 72-80**

(F) - Fall only course
(S) - Spring only course

1. One hydrology course is a required course. The second course may be taken as an elective.
2. Four of the electives must be Natural Science courses and of these two must be from the same department. One of the electives must be from the social science or policy elective courses.
3. Students who choose MATH 1038 must also take the linked course MATH 1039.

### Natural Science Electives

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 2241</td>
<td>Invertebrate Biology (S)</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 3114</td>
<td>Evolutionary Ecology (F)</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 3225</td>
<td>Evolutionary Genetics (S)</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 3244</td>
<td>Experimental Marine Biology (SS)</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 3245</td>
<td>Marine Ecology (F)</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 3254</td>
<td>Animal Behavior (S)</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 3275</td>
<td>Ecology of Invasive Species (F)</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 3307</td>
<td>Conservation Biology (F)</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 3311</td>
<td>Herpetology (S)</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 3316</td>
<td>Tropical Marine Biology (Fall of odd years)</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 3321</td>
<td>Plant Community Ecology (F)</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 3336</td>
<td>Freshwater Ecology (Fall of even years)</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 4327</td>
<td>Biological Impacts of Global Climate Change (F)</td>
<td>3</td>
</tr>
<tr>
<td>BOT 1112</td>
<td>Plant Ecology (S)</td>
<td>3</td>
</tr>
<tr>
<td>EES 2021</td>
<td>Facies Models</td>
<td>4</td>
</tr>
<tr>
<td>EES 2097</td>
<td>Process Geomorphology (F)</td>
<td>4</td>
</tr>
<tr>
<td>EES 2061</td>
<td>Introduction to Geochemistry (S)</td>
<td>4</td>
</tr>
<tr>
<td>EES 2065</td>
<td>Nanogeoscience and Technology (F)</td>
<td>4</td>
</tr>
<tr>
<td>EES 2096</td>
<td>Climate Change: Oceans To Atmosphere (S)</td>
<td>4</td>
</tr>
<tr>
<td>EES 3021</td>
<td>Introduction to Hydrology ¹</td>
<td>4</td>
</tr>
<tr>
<td>EES 3025</td>
<td>Physical Hydrology ¹</td>
<td>4</td>
</tr>
<tr>
<td>EES 3042</td>
<td>Coastal Processes and Geomorphology (S)</td>
<td>4</td>
</tr>
<tr>
<td>HORT 2114</td>
<td>Soils (S)</td>
<td>3</td>
</tr>
<tr>
<td>LARC 2758</td>
<td>Summer Field Ecology (SSI)</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I</td>
<td>4</td>
</tr>
<tr>
<td>or PHYS 2021</td>
<td>General Physics I</td>
<td></td>
</tr>
<tr>
<td>or PHYS 2921</td>
<td>Honors General Physics I</td>
<td></td>
</tr>
</tbody>
</table>

### Social Science/Policy Electives

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRP 2114</td>
<td>Urban Form and Design</td>
<td>3</td>
</tr>
<tr>
<td>CRP 2213</td>
<td>Environmental Planning</td>
<td>3</td>
</tr>
<tr>
<td>CRP 2251</td>
<td>Sustainable Food Systems Planning</td>
<td>3</td>
</tr>
<tr>
<td>CRP 3255</td>
<td>Sustainability in Suburban Communities</td>
<td>3</td>
</tr>
<tr>
<td>CRP 3256</td>
<td>Sustainable Community Design and Development</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1101</td>
<td>Macroeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>or ECON 1901</td>
<td>Honors Macroeconomic Principles</td>
<td></td>
</tr>
<tr>
<td>ECON 3512</td>
<td>Public Finance</td>
<td>3</td>
</tr>
<tr>
<td>ECON 3513</td>
<td>Economics of State and Local Governments</td>
<td>3</td>
</tr>
<tr>
<td>ENVT 4761</td>
<td>Environmental Regulations</td>
<td>3</td>
</tr>
<tr>
<td>ENST 3025</td>
<td>Environmental Law and Regulation</td>
<td>3</td>
</tr>
<tr>
<td>ASST/ENST/GUS 3052</td>
<td>Environmental Problems in Asia</td>
<td>3</td>
</tr>
</tbody>
</table>
ENST/GUS 2051  The Urban Environment  3
ENST 3004  Geography of Natural Resources  3
ENST/GUS 3051  Environmental Policy Issues  3
ENST/GUS 3054  Energy, Resources, and Conservation  3
ENST/GUS 3097  Environment and Development  3
ENST/GUS 3314  Food Studies: A Geographical Perspective  3
ENST/GUS 4015  The Geographic Basis of Land Use Planning  3
ENST/GUS 4051  Geography of Hazards  3
ENST/GUS 4056  Political Ecology  3
ENST/GUS 4065  Urban Geographic Information Systems  3
ENST 4066  Environmental GIS  3
ENST/GUS 4071  Medical Geography  3
ENST/GUS 4096  Problems of Environmental Quality  3
HIST/ENST 3214  North American Environmental History  3
HIST/ENST 4297  Social History of American Medicine  3
PHIL/ENST 2157  Environmental Ethics  3
PHIL/ENST 2596  Philosophical Perspectives on the Environment  3
POLS/ENST 3152  U.S. Environmental Policy  3
POLS/ENST 3265  International Environmental Policy  3
PBHL 2102  Environmental Health  3
REL/ENST 3001  Earth Ethics  3
REL/ASST/ENST 3904  Honors Earth Ethics  3
SOC/ENST 3511  Sociology of the Environment  3

**Topic Electives**
ENVS 3000  Special Topics in Environmental Science  3 to 4
ENVS 4082  Independent Study: Environmental Science  1 to 3
ENVS 4085  Internship: Environmental Science  3
ENST 3000  Special Topics in Environmental Studies  3
ENST 4896  Environmental Physiology  3
HORT 2334  Food Crops I  3
HORT 2353  Food Crops II  3
HORT 3514  Landscape Restoration  3

**Note:** EES 3091 is not available for major credit.

1. One hydrology course is a required course. The second course may be taken as an elective.

(F) - Fall only course
(S) - Spring only course
(SS) - Summer session only

**Note:** A grade of C or higher in CHEM 1031 and CHEM 1032 is required to take BIOL 1111 and BIOL 2112. A grade of C or higher in BIOL 1111 and BIOL 2112 is required to take upper-level Biology courses, and a C- or higher is required unless otherwise specified in all other courses for the major, including course prerequisites.

**Calculation of Major GPA**
The list of courses that are used to calculate major GPA is determined by the department. Students should consult with their academic advising unit for the applicable courses. In general, courses that could not apply toward the major as an elective or a required course are not counted for the major GPA. This would include CHEM 1027, for example.

**Distinction in Major**
To graduate with Distinction in Major, students are required to achieve a 3.5 GPA for courses required for the major. If the difficulty of courses chosen as electives is high, then a 3.3 GPA will earn Distinction in Major. This determination will be made by the appropriate faculty. In addition, a student graduating with distinction has no grade below C in the remaining courses required for the major.
Suggested Academic Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

Bachelor of Science in Environmental Science
Requirements for New Students starting in the 2015-2016 Academic Year

<table>
<thead>
<tr>
<th>Year 1</th>
<th></th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1031 &amp; CHEM 1033</td>
<td>General Chemistry I</td>
<td></td>
</tr>
<tr>
<td>CHEM 1951 &amp; CHEM 1953</td>
<td>Honors General Chemical Science I (F)</td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>MATH 1038</td>
<td>Calculus I with Lab(^1)</td>
<td></td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
<td></td>
</tr>
<tr>
<td>MATH 1941</td>
<td>Honors Calculus I</td>
<td></td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td></td>
<td>7</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

<table>
<thead>
<tr>
<th>Year 2</th>
<th></th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL 1111 or 1911</td>
<td>Introduction to Biology I</td>
<td>4</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>CHEM 2201 &amp; CHEM 2203</td>
<td>Organic Chemistry I</td>
<td></td>
</tr>
<tr>
<td>CHEM 2211 &amp; CHEM 2213</td>
<td>Organic Chemistry for Majors I (F)</td>
<td></td>
</tr>
<tr>
<td>CHEM 2921 &amp; CHEM 2923</td>
<td>Organic Chemistry for Honors I (F)</td>
<td></td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td></td>
<td>7</td>
</tr>
</tbody>
</table>

**Term Credit Hours**

<table>
<thead>
<tr>
<th>Year 3</th>
<th></th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL 2112 or 2912</td>
<td>Introduction to Biology II</td>
<td>4</td>
</tr>
</tbody>
</table>
Select one of the following:²

- EES 3021: Introduction to Hydrology (F)
- EES 3025: Physical Hydrology

Environmental Science Elective (see approved list) 3
General Education/Elective Credits 3

| Term Credit Hours | 14 |

**Spring**

- ECON 1102 or 1902: Microeconomic Principles 3

Select one of the following: 3-4

- EES 3011: Remote Sensing and GIS (S)
- GUS 3062: Fundamentals of Geographic Information Systems

Environmental Science Elective - Natural Science (see approved list) 4
General Education/Elective Credits 6-5

| Term Credit Hours | 16 |

**Year 4**

**Fall**

- ENST 3596 or ECON 3596: Energy, Ecology, and Economy [WI] 3

Environmental Science Elective - Natural Science (see approved list) 3-4
Environmental Science Elective - Social Science/Policy (see approved list) 3-4
General Education/Elective Credits 7-5

| Term Credit Hours | 17 |

**Spring**

- ENVS 4198: Environmental Science Senior Seminar [WI] (S) 3

Environmental Science Elective - Natural Science (see approved list) 3-4
General Education/Elective Credits 9

| Term Credit Hours | 16 |

| Total Credit Hours: | 123 |

¹ Students who choose MATH 1038 must also take the linked course MATH 1039.
² Either EES 3021 or EES 3025 can be taken. One will be offered in the Fall and one in the Spring.

(F) - Fall only course
(S) - Spring only course

---

**Geology, B.A.**

Dr. Jonathan Nyquist, Chair  
Beury Hall, Room 326  
215-204-7172

Dr. Allison Tumarkin-Deratzian, Faculty Advisor  
Beury Hall, Room 315B  
215-204-2321  
altd@temple.edu

The B.A. program is not intended for prospective geologists. The B.A. program is suitable for pre-medicine or pre-law students or for students planning to teach earth science in secondary schools.

**Bachelor of Arts**

**Summary of Requirements for the Degree**

1. **University Requirements (123 total s.h.)**
   - MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
• All Temple students must take a minimum of two writing-intensive courses at Temple as part of their major. Following is a list of courses that can be used to satisfy the writing-intensive requirement: EES 2096, EES 2097, EES 3096, or EES 4696.

• Students must complete the General Education (GenEd) requirements.
  • The General Education Curriculum consists of approximately 25-26 s.h. See the General Education (p. 143) section of the Undergraduate Bulletin for the GenEd curriculum.
  • Students who complete CST majors typically receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.

2. College Requirements
• 90 credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).
• 45 Upper Level (2000+) credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).
• Two (2) Upper-Level (2000+) Liberal Arts courses.
• Second (2nd) Level of a Foreign Language (1002).

3. Major Requirements for Bachelor of Arts (55-56 s.h.)

Chemistry
Select one of the following: 4
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1031 &amp; CHEM 1033</td>
<td>General Chemistry I and General Chemistry Laboratory I</td>
</tr>
<tr>
<td>CHEM 1951 &amp; CHEM 1953</td>
<td>Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)</td>
</tr>
</tbody>
</table>

Mathematics
Select one of the following: 4
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1038</td>
<td>Calculus I with Lab ¹</td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
</tr>
<tr>
<td>MATH 1941</td>
<td>Honors Calculus I</td>
</tr>
</tbody>
</table>

Physics
Select one of the following: 4
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I</td>
</tr>
<tr>
<td>PHYS 2021</td>
<td>General Physics I</td>
</tr>
<tr>
<td>PHYS 2921</td>
<td>Honors General Physics I (F)</td>
</tr>
</tbody>
</table>

Earth & Environmental Science
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EES 2001</td>
<td>Physical Geology</td>
</tr>
<tr>
<td>EES 2011</td>
<td>Mineralogy I (F)</td>
</tr>
</tbody>
</table>

Select one EES course between 3020-3025: 4
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EES 3021</td>
<td>Introduction to Hydrology (F)</td>
</tr>
<tr>
<td>EES 3025</td>
<td>Physical Hydrology (S)</td>
</tr>
</tbody>
</table>

Five EES electives 2002 or above ² 20

Science/Math Foundation
Select three of the following: ³ 11-12
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1111</td>
<td>Introduction to Biology I</td>
</tr>
<tr>
<td>or BIOL 1911</td>
<td>Honors Introduction to Biology I</td>
</tr>
<tr>
<td>BIOL 2112</td>
<td>Introduction to Biology II</td>
</tr>
<tr>
<td>or BIOL 2912</td>
<td>Honors Introduction to Biology II</td>
</tr>
<tr>
<td>CHEM 1032 &amp; CHEM 1034</td>
<td>General Chemistry II and General Chemistry Laboratory II</td>
</tr>
<tr>
<td>or CHEM 1952 &amp; CHEM 1954</td>
<td>Honors General Chemical Science II and Honors Chemical Science Laboratory II</td>
</tr>
<tr>
<td>CHEM 2201 &amp; CHEM 2203</td>
<td>Organic Chemistry I and Organic Chemistry Laboratory I</td>
</tr>
<tr>
<td>or CHEM 2921 &amp; CHEM 2923</td>
<td>Organic Chemistry for Honors I and Organic Honors Laboratory I</td>
</tr>
<tr>
<td>MATH 1042 &amp; MATH 1942</td>
<td>Calculus II and Honors Calculus II</td>
</tr>
<tr>
<td>MATH 2031</td>
<td>Probability and Statistics</td>
</tr>
<tr>
<td>STAT 2103</td>
<td>Statistical Business Analytics</td>
</tr>
</tbody>
</table>
1 Students who choose MATH 1038 must also take the linked course MATH 1039.
2 Two (2) of the five (5) EES electives must be writing-intensive and one (1) of the five (5) EES elective courses can be outside of the department with faculty advisor approval.
3 One foundation course must be within mathematics and two foundation courses must be within science.

Calculation of Major GPA
The list of courses that are used to calculate major GPA is determined by the department. Students should consult with their academic advising unit for the applicable courses. In general, courses that could not apply toward the major as an elective or a required course are not counted for the major GPA. This would include CHEM 1027, for example.

Senior Research Project
Students whose cumulative GPA is at least 3.25 at the end of the first semester of their junior year are eligible to undertake a senior research project. In the second semester of their junior year, students must select a faculty research advisor and, with the advisor, prepare a written research proposal. After the research advisor and the undergraduate Earth & Environmental Science advisor approve the proposal, the student may register for up to four (4) hours of EES 4082 Individual Study Program for a grade. Additional credits may be offered in subsequent semesters, but only for Credit/Non-Credit (CR/NC), to carry out the research project. Normally, the project will involve field or laboratory work in the summer between the junior and senior years and lead to presentation of the results at a departmental seminar.

Distinction in Major
To graduate with distinction in the major, students are required to achieve a 3.5 GPA in EES and Upper Level Science Electives for the major. In addition, a student graduating with distinction has no grade below C in the remaining courses required for the major.

Suggested Academic Plan
Bachelor of Arts in Geology
Requirements for New Students starting in the 2015-2016 Academic Year

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EES 2001</td>
<td>Physical Geology</td>
<td>4</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>MATH 1038</td>
<td>Calculus I with Lab\textsuperscript{1}</td>
<td></td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
<td></td>
</tr>
<tr>
<td>MATH 1941</td>
<td>Honors Calculus I</td>
<td></td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EES 2011</td>
<td>Mineralogy I (F)</td>
<td>4</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>
### Phys 1061
Elementary Classical Physics I

### Phys 2021
General Physics I

### Phys 2921
Honors General Physics I (F)

<table>
<thead>
<tr>
<th>General Education/Elective Credits</th>
<th>7</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
</table>

#### Spring

| 2002+ Earth & Environmental Science Elective | 4 |
| Science Foundation Elective - Math (see list below) | 3-4 |
| General Education/Elective Credits | 8-7 |

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
</table>

#### Year 3

#### Fall

Select one EES course between 3020-3025:

<table>
<thead>
<tr>
<th>EES 3021</th>
<th>Introduction to Hydrology (F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EES 3025</td>
<td>Physical Hydrology (S)</td>
</tr>
</tbody>
</table>

| Science Foundation Elective - Science (see list below) | 4 |
| General Education/Elective Credits | 8 |

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>16</th>
</tr>
</thead>
</table>

#### Spring

| 2002+ Earth & Environmental Science Elective [WI] | 4 |
| Science Foundation Elective - Science (see list below) | 4 |
| General Education/Elective Credits | 7 |

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
</table>

#### Year 4

#### Fall

| 2002+ Earth & Environmental Science Elective | 4 |
| General Education/Elective Credits | 12 |

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>16</th>
</tr>
</thead>
</table>

#### Spring

| 2002+ Earth & Environmental Science Elective [WI] | 4 |
| 2002+ Earth & Environmental Science Elective | 4 |
| General Education/Elective Credits | 7 |

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>15</th>
</tr>
</thead>
</table>

| Total Credit Hours: | 123 |

(F) - Fall only course  
(S) - Spring only course

---

1. Students who choose MATH 1038 must also take the linked course MATH 1039.

### Earth & Environmental Science Electives

Earth & Environmental Science electives must be above 2001, and at least two of the Earth & Environmental Science electives must be writing-intensive courses. One of the five EES elective courses can be outside of the department with faculty advisor approval.

### Science Foundation Electives

NOTE: One course from the approved list of Science Foundation Electives must be a Mathematics course and two courses must be science courses.

| BIOL 1111 | Introduction to Biology I | 4 |
| BIOL 1911 | Honors Introduction to Biology I |
| BIOL 2112 | Introduction to Biology II | 4 |
| BIOL 2912 | Honors Introduction to Biology II |
| CHEM 1032 | General Chemistry II | 4 |
| CHEM 1034 & | and General Chemistry Laboratory II |
Schools, Colleges, and Divisions

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title &amp; Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1952</td>
<td>Honors General Chemical Science II and Honors Chemical Science Laboratory II</td>
</tr>
<tr>
<td>or CHEM 1954 &amp; CHEM 1953</td>
<td>Organic Chemistry I and Organic Chemistry Laboratory I</td>
</tr>
<tr>
<td>CHEM 2201</td>
<td>Organic Chemistry for Honors I and Organic Honors Laboratory I</td>
</tr>
<tr>
<td>or CHEM 2921 &amp; CHEM 2923</td>
<td>Organic Chemistry for Honors I and Organic Honors Laboratory I</td>
</tr>
<tr>
<td>MATH 1042</td>
<td>Calculus II</td>
</tr>
<tr>
<td>or MATH 1942</td>
<td>Honors Calculus II</td>
</tr>
<tr>
<td>MATH 2031</td>
<td>Probability and Statistics</td>
</tr>
<tr>
<td>PHYS 1062</td>
<td>Elementary Classical Physics II</td>
</tr>
<tr>
<td>or PHYS 2022</td>
<td>General Physics II</td>
</tr>
</tbody>
</table>

Geology, B.S.

Dr. Jonathan Nyquist, Chair
Beury Hall, Room 326
215-204-7172

Dr. Allison Tumarkin-Deratzian, Faculty Advisor
Beury Hall, Room 315B
215-204-2321
altd@temple.edu

The B.S. program prepares students for immediate entry into a career in geology or for graduate studies. Career opportunities for geologists in industry and government include environmental and geohazard assessment, evaluation of waste disposal sites, groundwater modeling, and exploration for natural resources. The B.S. program is excellent preparation for graduate study and ultimately for a career in research, teaching, industry, or government.

The B.S. program includes an intensive 4-6 week summer course in Field Geology, typically taken in the summer following the Junior or Senior year.

Bachelor of Science

Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)
   - MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
   - All Temple students must take a minimum of two writing-intensive courses at Temple as part of their major. Following is a list of courses that can be used to satisfy the writing intensive requirement: EES 2096, EES 2097, EES 3096, or EES 4696.
   - Students must complete the General Education (GenEd) requirements.
     - The General Education Curriculum consists of approximately 25-26 s.h. See the General Education (p. 143) section of the Undergraduate Bulletin for the GenEd curriculum.
     - Students who complete CST majors typically receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.

2. College Requirements
   - 90 credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).
   - 45 Upper Level (2000+) credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).

3. Major Requirements for Bachelor of Science (70-73 s.h.)

   Chemistry
   Select one of the following: 4
   - CHEM 1031 & CHEM 1033: General Chemistry I and General Chemistry Laboratory I
   - CHEM 1951 & CHEM 1953: Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)

   Mathematics
   Select one of the following: 4
   - MATH 1038: Calculus I with Lab
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
</tr>
<tr>
<td>MATH 1941</td>
<td>Honors Calculus I</td>
</tr>
<tr>
<td>MATH 1042</td>
<td>Calculus II</td>
</tr>
<tr>
<td>or MATH 1942</td>
<td>Honors Calculus II</td>
</tr>
</tbody>
</table>

### Physics

Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I</td>
</tr>
<tr>
<td>PHYS 2021</td>
<td>General Physics I</td>
</tr>
<tr>
<td>PHYS 2921</td>
<td>Honors General Physics I (F)</td>
</tr>
</tbody>
</table>

### Earth & Environmental Science

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>EES 2001</td>
<td>Physical Geology</td>
</tr>
<tr>
<td>EES 2011</td>
<td>Mineralogy I (F)</td>
</tr>
<tr>
<td>Two EES courses between 2020-2029</td>
<td>8</td>
</tr>
<tr>
<td>EES 2021</td>
<td>Facies Models</td>
</tr>
<tr>
<td>EES 2022</td>
<td>Paleontology and Stratigraphy (S)</td>
</tr>
<tr>
<td>One EES course between 3020-3025</td>
<td>4</td>
</tr>
<tr>
<td>EES 3021</td>
<td>Introduction to Hydrology (F)</td>
</tr>
<tr>
<td>EES 3025</td>
<td>Physical Hydrology (S)</td>
</tr>
<tr>
<td>One EES course between 3096-3099</td>
<td>4</td>
</tr>
<tr>
<td>EES 3096</td>
<td>Igneous and Metamorphic Petrology (S)</td>
</tr>
<tr>
<td>One EES course between 4101-4109</td>
<td>4</td>
</tr>
<tr>
<td>EES 4101</td>
<td>Structural Geology (S)</td>
</tr>
<tr>
<td>EES 4589</td>
<td>Field Geology $^2$</td>
</tr>
<tr>
<td>Four Upper-Level (2002+) EES electives</td>
<td>12-15</td>
</tr>
<tr>
<td>Two of the four EES electives may be replaced with science upper-level electives (SUE) from the following list:</td>
<td></td>
</tr>
<tr>
<td>BIOL 2112</td>
<td>Introduction to Biology II (or higher)</td>
</tr>
<tr>
<td>or BIOL 2912</td>
<td>Honors Introduction to Biology II</td>
</tr>
<tr>
<td>CHEM 2201</td>
<td>Organic Chemistry I</td>
</tr>
<tr>
<td>&amp; CHEM 2203</td>
<td>and Organic Chemistry Laboratory I (or higher)</td>
</tr>
<tr>
<td>MATH 2043</td>
<td>Calculus III (or higher)</td>
</tr>
</tbody>
</table>

### Science Foundation Electives (SFE)

Select two of the following: 8

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1111</td>
<td>Introduction to Biology I</td>
</tr>
<tr>
<td>or BIOL 1911</td>
<td>Honors Introduction to Biology I</td>
</tr>
<tr>
<td>BIOL 2112</td>
<td>Introduction to Biology II</td>
</tr>
<tr>
<td>or BIOL 2912</td>
<td>Honors Introduction to Biology II</td>
</tr>
<tr>
<td>CHEM 1032</td>
<td>General Chemistry II</td>
</tr>
<tr>
<td>&amp; CHEM 1034</td>
<td>and General Chemistry Laboratory II</td>
</tr>
<tr>
<td>or CHEM 1952</td>
<td>Honors General Chemical Science II</td>
</tr>
<tr>
<td>&amp; CHEM 1954</td>
<td>and Honors Chemical Science Laboratory II</td>
</tr>
<tr>
<td>CHEM 2201</td>
<td>Organic Chemistry I</td>
</tr>
<tr>
<td>&amp; CHEM 2203</td>
<td>and Organic Chemistry Laboratory I</td>
</tr>
<tr>
<td>or CHEM 2921</td>
<td>Organic Chemistry for Honors I</td>
</tr>
<tr>
<td>&amp; CHEM 2923</td>
<td>and Organic Honors Laboratory I</td>
</tr>
<tr>
<td>PHYS 1062</td>
<td>Elementary Classical Physics II</td>
</tr>
<tr>
<td>or PHYS 2022</td>
<td>General Physics II</td>
</tr>
</tbody>
</table>

### Total Credit Hours

70-73

(F) - Fall only course

(S) - Spring only course

1. Students who choose MATH 1038 must also take the linked course MATH 1039.
2. The B. S. program includes an intensive 4-6 week summer course in Field Geology, typically taken in the summer following the junior or senior year.
One of the four electives must be writing intensive.

**NOTE:** Science Foundation Electives (SFE) and Science Upper-Level Electives (SUE) courses cannot be double-counted.

**Calculation of Major GPA**

The list of courses that are used to calculate major GPA is determined by the department. Students should consult with their academic advising unit for the applicable courses. In general, courses that could not apply toward the major as an elective or a required course are not counted for the major GPA. This would include CHEM 1027, for example.

**Senior Research Project**

Students whose cumulative GPA is at least 3.25 at the end of the first semester of their junior year are eligible to undertake a senior research project. In the second semester of their junior year, students must select a faculty research advisor and, with the advisor, prepare a written research proposal. After the research advisor and the undergraduate Earth & Environmental Science advisor approve the proposal, the student may register for up to four (4) hours of EES 4082 Individual Study Program for a grade. Additional credits may be offered in subsequent semesters, but only for Credit/Non-Credit (CR/NC), to carry out the research project. Normally, the project will involve field or laboratory work in the summer between the junior and senior years and lead to presentation of the results at a departmental seminar.

**Distinction in Major**

To graduate with distinction in the major, students are required to achieve a 3.5 GPA in EES and Upper Level Science Electives for the major. In addition, a student graduating with distinction has no grade below C in the remaining courses required for the major.

**Suggested Academic Plan**

**Bachelor of Science in Geology**

**Requirements for New Students starting in the 2015-2016 Academic Year**

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EES 2001</td>
<td>Physical Geology</td>
<td>4</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>MATH 1038</td>
<td>Calculus I with Lab¹</td>
<td></td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
<td></td>
</tr>
<tr>
<td>MATH 1941</td>
<td>Honors Calculus I</td>
<td></td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

| Spring | | |
|--------| | 4 |
| Select one of the following: | | |
| CHEM 1031 | General Chemistry I | |
| & CHEM 1033 | | |
| CHEM 1951 | Honors General Chemical Science I (F) | |
| & CHEM 1953 | | |
| MATH 1042 or 1942 | Calculus II | |
| General Education/Elective Credits | | 7 |
| **Term Credit Hours** | | 15 |

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EES 2011</td>
<td>Mineralogy I (F)</td>
<td>4</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I</td>
<td></td>
</tr>
<tr>
<td>PHYS 2021</td>
<td>General Physics I</td>
<td></td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
<td>14</td>
</tr>
</tbody>
</table>

| Spring | | |
|--------| | |
| EES 3096-3099 Petrology (or Similar) | | 4 |
### Year 3

#### Fall

- EES 2020-2029 Facies Models (or Similar) 4
- EES 2021 Facies Models 4
- EES 3020-3025 Hydrology (or Similar) 4
  - EES 3021 Introduction to Hydrology (F) 4
  - EES 3025 Physical Hydrology (S) 4
- Science Foundation Elective (see list below) 4
- General Education/Elective Credits 2

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
</tr>
</tbody>
</table>

#### Spring

- EES 2020-2029 Paleontology & Stratigraphy (or Similar) 4
- EES 2022 Paleontology and Stratigraphy (S) 4
- EES 4101-4109 Structural Geology (or Similar) (S) 4
- EES 4101 Structural Geology (S) 4
- Science Foundation Elective (see list below) 4
- General Education/Elective Credits 6

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
</tr>
</tbody>
</table>

#### Summer

- EES 4589 Field Geology (see Advisor) (SS) 6

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
</tr>
</tbody>
</table>

### Year 4

#### Fall

- 2002+ EES Elective or Science Upper-Level Elective (see list below) 3-4
- General Education/Elective Credits 11-10

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
</tr>
</tbody>
</table>

#### Spring

- 2002+ EES Elective [WI] 3-4
- 2002+ EES Elective or Science Upper-Level Elective (see list below) 3-4
- General Education/Elective Credits 9-7

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
</tr>
</tbody>
</table>

Total Credit Hours: 123

(F) - Fall only course  
(S) - Spring only course  
(SS) - Summer Session

1. Students who choose MATH 1038 must also take the linked course MATH 1039.
2. Summer field camp is required of all B.S. geology majors and is usually taken in the summer of the junior or senior year. Students choose summer field camps at other institutions which are typically 4-6 weeks in length with tuition typically ranging from $2,000 to $4,000. The Earth & Environmental Science Department holds fundraisers throughout the year to help defray the costs. Students may also apply for research scholarships at CST and at the university. The Earth & Environmental Science undergraduate advisor must approve the choice of field camp.

### Science Foundation Electives

NOTE: Two courses required from this list.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1111</td>
<td>Introduction to Biology I</td>
<td>4</td>
</tr>
<tr>
<td>or BIOL 1911</td>
<td>Honors Introduction to Biology I</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 2112</td>
<td>Introduction to Biology II</td>
<td>4</td>
</tr>
</tbody>
</table>
or BIOL 2912  
Honors Introduction to Biology II  

Select one of the following:  

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1032</td>
<td>General Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 1034</td>
<td>and General Chemistry Laboratory II</td>
<td></td>
</tr>
<tr>
<td>CHEM 1952</td>
<td>Honors General Chemical Science II</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 1954</td>
<td>and Honors Chemical Science Laboratory II</td>
<td></td>
</tr>
<tr>
<td>CHEM 2201</td>
<td>Organic Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 2203</td>
<td>and Organic Chemistry Laboratory I</td>
<td></td>
</tr>
<tr>
<td>PHYS 1062</td>
<td>Elementary Classical Physics II</td>
<td>4</td>
</tr>
<tr>
<td>or PHYS 2022</td>
<td>General Physics II</td>
<td></td>
</tr>
</tbody>
</table>

**Science Upper Level Electives (SUE)**

The following is the list of courses that you can select from to fulfill the Science Upper-Level Electives (SUEs):

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 2112</td>
<td>Introduction to Biology II (or higher)</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 2201</td>
<td>Organic Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 2203</td>
<td>and Organic Chemistry Laboratory I</td>
<td></td>
</tr>
<tr>
<td>EES 2002 or higher</td>
<td>Calculus III (or higher)</td>
<td>3-4</td>
</tr>
<tr>
<td>MATH 2043</td>
<td>Calculus III (or higher)</td>
<td>4</td>
</tr>
</tbody>
</table>

Science Foundation Electives (SFE) and Science Upper-Level Electives (SUE) courses cannot be double-counted.

Earth & Environmental Science electives must be above 2001, and at least one must be writing-intensive. At most, one of the EES electives or SUEs may be a graduate-level course with permission of the faculty advisor.

**Geology, Minor**

Dr. Jonathan Nyquist, Chair  
Beury Hall, Room 326  
215-204-7172  

Dr. Allison Tumarkin-Deratzian, Faculty Advisor  
Beury Hall, Room 315B  
215-204-2321  
altd@temple.edu

Students interested in acquiring a basic knowledge of Geology but not wishing to major in Geology may pursue a minor in Geology by successfully completing the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EES 2001</td>
<td>Physical Geology</td>
<td>4</td>
</tr>
</tbody>
</table>

Select one of the following:

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1021</td>
<td>Introduction to Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 1023</td>
<td>and Introduction to Chemistry Laboratory I (F)</td>
<td></td>
</tr>
<tr>
<td>CHEM 1031</td>
<td>General Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 1033</td>
<td>and General Chemistry Laboratory I</td>
<td></td>
</tr>
<tr>
<td>CHEM 1951</td>
<td>Honors General Chemical Science I</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 1953</td>
<td>and Honors Chemical Science Laboratory I (F)</td>
<td></td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1022</td>
<td>Precalculus</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1038</td>
<td>Calculus I with Lab</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I (or higher)</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1941</td>
<td>Honors Calculus I</td>
<td>4</td>
</tr>
</tbody>
</table>

Four Earth & Environmental Science electives numbered above 2001, with a minimum of 14 credits, chosen with the approval of the undergraduate Earth & Environmental Science advisor.  

**Total Credit Hours**  
26  

(F) - Fall only course
Students who choose MATH 1038 must also take the linked course MATH 1039.

Mathematics

Dr. Edward Letzter, Chair
Wachman Hall, Room 638
215-204-7841

Dr. Boris Datskovsky, Associate Chair
Wachman Hall, Room 632
215-204-7847
mathadvising@temple.edu

Dr. Maria E. Lorenz, Undergraduate Chair
Wachman Hall, Room 542
215-204-6764
mathadvising@temple.edu

The mathematics major prepares students for careers, graduate study, and professional programs requiring solid mathematical, quantitative, or analytical skills.

There are several degree programs from which to choose:

• Bachelor of Arts in Mathematics,
• Bachelor of Science in Mathematics,
• Bachelor of Science in Applied Mathematics,
• Bachelor of Science in Mathematics with Teaching, and
• Joint programs with Computer and Information Science, Economics, and Physics

The Bachelor of Arts in Mathematics provides a solid mathematical foundation and also allows for the most flexibility.

The Bachelor of Science in Mathematics provides an in-depth theoretical background focusing on the traditional core areas of mathematics. This program provides a foundation for graduate study or careers in fields using sophisticated quantitative and mathematical analysis. In particular, this program is suitable preparation for graduate study in mathematics.

The Bachelor of Science in Applied Mathematics focuses on mathematical and computational methods applicable in the sciences, engineering, and industry. In particular, this degree is suitable preparation for professions featuring sophisticated mathematical modeling and/or scientific computing. This degree is also suitable preparation for graduate study in applied mathematics or related disciplines.

The Bachelor of Science in Mathematics with Teaching program is aimed at students interested in teaching mathematics at the high school level. This program combines a solid mathematical foundation with the pedagogical training necessary for success as a high school teacher. This program also satisfies Pennsylvania's teacher certification requirements.

Five-year combined bachelor's and master's programs are also available.

Students should consult with an advisor to design a program best fitted to their interests and goals.

Programs

• Applied Mathematics, B.S. (p. 1135)
• Mathematical Economics, B.A. (p. 1138)
• Mathematics & Computer Science, B.S. (p.  )
• Mathematics & Physics, B.S. (p.  )
• Mathematics & Technology with Teaching, B.S. (p.  )
• Mathematics with Teaching, B.S. (p.  )
• Mathematics, B.A. (p. 1138)
• Mathematics, B.A./M.Ed. (p.  )
• Mathematics, B.A./M.S. (p.  )
• Mathematics, B.S. (p. 1142)
• Mathematics, B.S./M.Ed. (p.  )
• Mathematics, B.S./M.S. (p. 1135)
• Mathematics, Minor (p. 1145)
• Mathematics/Computer Science with Teaching, B.S. (p. 1145)

## Applied Mathematics, B.S.

Dr. Edward Letzter, Chair, Mathematics  
Wachman Hall, Room 638  
215-204-7841

Dr. Boris Datskovsky, Associate Chair  
Wachman Hall, Room 632  
215-204-7847  
mathadvising@temple.edu

Dr. Maria E. Lorenz, Undergraduate Chair  
Wachman Hall, Room 542  
215-204-6764  
mathadvising@temple.edu

The Bachelor of Science in Applied Mathematics focuses on mathematical and computational methods applicable in the sciences, engineering, and industry. In particular, this degree is suitable preparation for professions featuring sophisticated mathematical modeling and/or scientific computing. This degree is also suitable preparation for graduate study in applied mathematics or related disciplines.

Students should consult with an advisor to design a program best fitted to their interests and goals.

## Bachelor of Science

### Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)
   - MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
   - All Temple students must take a minimum of two writing-intensive courses at Temple as part of their major. Following is a list of courses that can be used to satisfy the writing-intensive requirement:
     - MATH 3096: Introduction to Modern Algebra 3 s.h.
     - or MATH 3098: Modern Algebra 3 s.h.
     - MATH 4096: Senior Problem Solving 3 s.h.
   - Students must complete the General Education (GenEd) requirements.
     - The General Education Curriculum consists of approximately 25-26 s.h. See the General Education (p. 143) section of the Undergraduate Bulletin for the GenEd curriculum.
     - Students who complete CST majors typically receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.

2. College Requirements
   - 90 credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).
   - 45 Upper-Level (2000+) credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).

3. Major Requirements for Bachelor of Science (66-67 s.h.)

#### Computer & Information Science course

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 1053</td>
<td>Programming in Matlab</td>
<td>4</td>
</tr>
<tr>
<td>or CIS 1057</td>
<td>Computer Programming in C</td>
<td></td>
</tr>
</tbody>
</table>

#### Mathematics courses

Select one of the following: 4 s.h.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1038</td>
<td>Calculus I with Lab²</td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
</tr>
<tr>
<td>MATH 1941</td>
<td>Honors Calculus I</td>
</tr>
<tr>
<td>MATH 1042</td>
<td>Calculus II</td>
</tr>
<tr>
<td>or MATH 1942</td>
<td>Honors Calculus II</td>
</tr>
<tr>
<td>MATH 2043</td>
<td>Calculus III</td>
</tr>
</tbody>
</table>
or MATH 2943 Honors Calculus III
MATH 2103 Linear Algebra with Computer Lab 4
MATH 2111 Basic Concepts of Math 3
MATH 3031 Probability Theory I 3
MATH 3043 Numerical Analysis I (F) 4
MATH 3044 Numerical Analysis II (S) 3
MATH 3046 Differential Equations with Computer Lab (S) 4
MATH 3096 Introduction to Modern Algebra 3
or MATH 3098 Modern Algebra
MATH 3141 Advanced Calculus I (F) 3
MATH 3142 Advanced Calculus II (S) 3
MATH 4043 Applied Mathematics (F) 3
MATH 4051 Complex Analysis (F) 3
MATH 4096 Senior Problem Solving 3
Mathematics elective at the 3000+ level or above 3-4

Physics courses
Select one of the following: 4
PHYS 1061 Elementary Classical Physics I
PHYS 2021 General Physics I
PHYS 2921 Honors General Physics I (F)
Select one of the following: 4
PHYS 1062 Elementary Classical Physics II
PHYS 2022 General Physics II
PHYS 2922 Honors General Physics II (S)

Total Credit Hours 66-67

(F) - Fall only course
(S) - Spring only course

1 Students who choose MATH 1038 must also take the linked course MATH 1039.

Calculation of Major GPA
The list of courses that are used to calculate major GPA is determined by the department. Students should consult with their academic advising unit for the applicable courses. In general, courses that could not apply toward the major as an elective or a required course are not counted for the major GPA. This would include MATH 1022, for example.

Distinction in Major
To graduate with Distinction in Applied Mathematics a student should meet the following requirements:

1. All requirements for the degree in Applied Mathematics must be met with a GPA of at least 3.50 in the Mathematics courses.
2. At the time of graduation, the student's overall GPA, including all college-level courses, must be at least 3.25.
3. Students must complete MATH 3098 instead of MATH 3096 in order to qualify for a Distinction in Major.
4. A student must have a GPA of 3.50 or higher in MATH 3141, MATH 3142, MATH 3098, MATH 4051 and any additional courses from the following list:
   MATH 3043 Numerical Analysis I 4
   MATH 3044 Numerical Analysis II 3
   MATH 3101 Topics in Modern Algebra 3

Any 4000-level course other than individual study
# Suggested Academic Plan

## Bachelor of Science in Applied Mathematics

### Requirements for New Students starting in the 2015-2016 Academic Year

<table>
<thead>
<tr>
<th>Year 1</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Fall</strong></td>
<td><strong>Credit Hours</strong></td>
<td><strong>Spring</strong></td>
<td><strong>Credit Hours</strong></td>
<td><strong>Term Credit Hours</strong></td>
</tr>
<tr>
<td></td>
<td>Select one of the following:</td>
<td></td>
<td>Select one of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MATH 1038</td>
<td>Calculus I with Lab¹</td>
<td>MATH 1042 or 1942</td>
<td>Calculus II</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>MATH 1041</td>
<td>Calculus I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MATH 1941</td>
<td>Honors Calculus I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I</td>
<td>PHYS 1062</td>
<td>Elementary Classical Physics II</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PHYS 2021</td>
<td>General Physics I</td>
<td>PHYS 2022</td>
<td>General Physics II</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PHYS 2921</td>
<td>Honors General Physics I (F)</td>
<td>PHYS 2922</td>
<td>Honors General Physics II (S)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CIS 1053</td>
<td>Programming in Matlab</td>
<td>CIS 1057</td>
<td>Computer Programming in C</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CIS 1057</td>
<td>Computer Programming in C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>General Education/Elective Credits</td>
<td>4</td>
<td>General Education/Elective Credits</td>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Fall</strong></td>
<td><strong>Credit Hours</strong></td>
<td><strong>Spring</strong></td>
<td><strong>Credit Hours</strong></td>
<td><strong>Term Credit Hours</strong></td>
</tr>
<tr>
<td></td>
<td>MATH 2043 or 2943</td>
<td>Calculus III</td>
<td>MATH 3031</td>
<td>Probability Theory I</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>MATH 2103</td>
<td>Linear Algebra with Computer Lab (F)</td>
<td>MATH 3046</td>
<td>Differential Equations with Computer Lab (S)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>MATH 2111</td>
<td>Basic Concepts of Math</td>
<td></td>
</tr>
<tr>
<td></td>
<td>General Education/Elective Credits</td>
<td>8</td>
<td>General Education/Elective Credits</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Fall</strong></td>
<td><strong>Credit Hours</strong></td>
<td><strong>Spring</strong></td>
<td><strong>Credit Hours</strong></td>
<td><strong>Term Credit Hours</strong></td>
</tr>
<tr>
<td></td>
<td>MATH 3043</td>
<td>Numerical Analysis I (F)</td>
<td>MATH 3044</td>
<td>Numerical Analysis II (S)</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>MATH 3141</td>
<td>Advanced Calculus I (F)</td>
<td>MATH 3142</td>
<td>Advanced Calculus II (S)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>General Education/Elective Credits</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>General Education/Elective Credits</td>
<td>8</td>
<td>General Education/Elective Credits</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 4</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Fall</strong></td>
<td><strong>Credit Hours</strong></td>
<td><strong>Spring</strong></td>
<td><strong>Credit Hours</strong></td>
<td><strong>Term Credit Hours</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

¹ Lab work may include a small fee.
MATH 4051  Complex Analysis (F)  3
MATH 4043  Applied Mathematics (F)  3

Select one of the following:  3
MATH 3096  Introduction to Modern Algebra [WI]
MATH 3098  Modern Algebra [WI]

General Education/Elective Credits  6

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring</td>
</tr>
<tr>
<td>MATH 4096  Senior Problem Solving [WI]  3</td>
</tr>
<tr>
<td>3000+ Math Elective  3-4</td>
</tr>
<tr>
<td>General Education/Elective Credits  9-8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring</td>
</tr>
<tr>
<td>Total Credit Hours:  15</td>
</tr>
</tbody>
</table>

(F) - Fall only course
(S) - Spring only course

1 Students who choose MATH 1038 must also take the linked course MATH 1039.

Mathematical Economics, B.A.

Intercollegial B.A. Degree in Mathematical Economics

Dr. Edward Letzter, Chair, Mathematics
Wachman Hall, Room 638
215-204-7841

Dr. Boris A. Datskovsky, Associate Chair, Mathematics
Wachman Hall, Room 632
215-204-7847
bdats@temple.edu

Dr. Michael Bognanno, Chair, Economics
Ritter Annex, Room 873
215-204-8880

Dr. Dimitrios Diamantaras, Advisor, Economics
Ritter Annex, Room 813
215-204-8169
dimitrios.diamantaras@temple.edu

The Departments of Economics and Mathematics offer the Mathematical Economics program as a platform for systematic concentration in the mathematical approach to economics. Economics has progressed in the last several decades by making extensive use of mathematical techniques. As a result, students who wish to pursue graduate study in economics, finance, accounting and other disciplines that make an extensive use of economics need a thorough grounding in both economics and mathematics. The Mathematical Economics curriculum provides this grounding with a broad selection of courses that cover all important areas of economics and the mathematical tools required for a critical, deep mastery of these areas. This program is especially recommended for those students who intend to pursue graduate studies in Economics. The program and its requirements are described in full in the Intercollegial Programs (p. 161) section of this Bulletin.

Mathematics, B.A.

Dr. Edward Letzter, Chair
Wachman Hall, Room 638
215-204-7841

Dr. Boris Datskovsky, Associate Chair
Wachman Hall, Room 632
215-204-7847
mathadvising@temple.edu

Dr. Maria E. Lorenz, Undergraduate Chair
Wachman Hall, Room 542
215-204-6764
mathadvising@temple.edu

The Bachelor of Arts in Mathematics provides a solid mathematical foundation and also allows for the most flexibility. Students should consult with an advisor to design a program best fitted to their interests and goals.

**Bachelor of Arts**

**Summary of Requirements for the Degree**

1. University Requirements (123 total s.h.)
   - MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
   - All Temple students must take a minimum of two writing-intensive courses at Temple as part of their major. Following is a list of courses that can be used to satisfy the writing-intensive requirement: MATH 3096 and MATH 4096.
   - Students must complete the General Education (GenEd) requirements.
     - The General Education Curriculum consists of approximately 25-26 s.h. See the General Education (p. 143) section of the *Undergraduate Bulletin* for the GenEd curriculum.
     - Students who complete CST majors typically receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) Gen Ed courses.

2. College Requirements
   - 90 credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).
   - 45 Upper Level (2000+) credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).
   - Second (2nd) Level of a Foreign Language (1002).

3. Major Requirements for Bachelor of Arts (54-55 s.h.)

**Computer and Information Science course**

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 1053</td>
<td>Programming in Matlab</td>
</tr>
<tr>
<td>CIS 1057</td>
<td>Computer Programming in C</td>
</tr>
<tr>
<td>CIS 1068</td>
<td>Program Design and Abstraction</td>
</tr>
<tr>
<td>CIS 1968</td>
<td>Honors Program Design and Abstraction</td>
</tr>
</tbody>
</table>

**Mathematics courses**

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1038</td>
<td>Calculus I with Lab¹</td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
</tr>
<tr>
<td>MATH 1941</td>
<td>Honors Calculus I</td>
</tr>
<tr>
<td>MATH 1042</td>
<td>Calculus II</td>
</tr>
<tr>
<td>or MATH 1942</td>
<td>Honors Calculus II</td>
</tr>
<tr>
<td>MATH 2043</td>
<td>Calculus III</td>
</tr>
<tr>
<td>or MATH 2943</td>
<td>Honors Calculus III</td>
</tr>
<tr>
<td>MATH 2101</td>
<td>Linear Algebra</td>
</tr>
<tr>
<td>or MATH 2103</td>
<td>Linear Algebra with Computer Lab</td>
</tr>
<tr>
<td>MATH 2111</td>
<td>Basic Concepts of Math</td>
</tr>
<tr>
<td>MATH 3031</td>
<td>Probability Theory I</td>
</tr>
<tr>
<td>MATH 3096</td>
<td>Introduction to Modern Algebra</td>
</tr>
<tr>
<td>MATH 3137</td>
<td>Real &amp; Complex Analysis I (F)</td>
</tr>
<tr>
<td>MATH 3138</td>
<td>Real &amp; Complex Analysis II (S)</td>
</tr>
<tr>
<td>MATH 4096</td>
<td>Senior Problem Solving</td>
</tr>
</tbody>
</table>

3 Mathematics electives at the 3000 level or above

**Physics courses**

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I</td>
</tr>
</tbody>
</table>
PHYS 2021  General Physics I  
PHYS 2921  Honors General Physics I (F)  
Select one of the following:  
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 1062</td>
<td>Elementary Classical Physics II</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 2022</td>
<td>General Physics II</td>
<td></td>
</tr>
<tr>
<td>PHYS 2922</td>
<td>Honors General Physics II (S)</td>
<td></td>
</tr>
</tbody>
</table>

Total Credit Hours 54-55

(F) - Fall only course  
(S) - Spring only course

1 Students who choose MATH 1038 must also take the linked course MATH 1039.

**Calculation of Major GPA**

The list of courses that are used to calculate major GPA is determined by the department. Students should consult with their academic advising unit for the applicable courses. In general, courses that could not apply toward the major as an elective or a required course are not counted for the major GPA. This would include MATH 1022, for example.

**Distinction in Major**

To graduate with Distinction in Mathematics a student should meet the following requirements:

1. All requirements for the B.A. degree in Mathematics must be met with a GPA of at least 3.50 in the Mathematics courses.

2. At the time of graduation, the student’s overall GPA, including all college-level courses, must be at least 3.25.

3. Bachelor of Arts students must complete MATH 3141, MATH 3142 and MATH 4051 instead of MATH 3137 and MATH 3138, as well as MATH 3098 instead of MATH 3096 in order to qualify for a Distinction in Major.

4. A student must have a GPA of 3.50 or higher in the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 3141</td>
<td>Advanced Calculus I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 3142</td>
<td>Advanced Calculus II</td>
<td>3</td>
</tr>
<tr>
<td>MATH 3098</td>
<td>Modern Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MATH 4051</td>
<td>Complex Analysis</td>
<td>3</td>
</tr>
</tbody>
</table>

Any additional courses from the following list:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 3043</td>
<td>Numerical Analysis I</td>
<td>3-4</td>
</tr>
<tr>
<td>MATH 3044</td>
<td>Numerical Analysis II</td>
<td>3</td>
</tr>
<tr>
<td>MATH 3101</td>
<td>Topics in Modern Algebra</td>
<td>3</td>
</tr>
</tbody>
</table>

Any 4000-level course other than individual study

**Suggested Academic Plan**

**Bachelor of Arts in Mathematics**

**Requirements for New Students starting in the 2015-2016 Academic Year**

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>MATH 1038</td>
<td>Calculus I with Lab¹</td>
<td></td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
<td></td>
</tr>
<tr>
<td>MATH 1941</td>
<td>Honors Calculus I</td>
<td></td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 1053</td>
<td>Programming in Matlab</td>
</tr>
<tr>
<td>CIS 1057</td>
<td>Computer Programming in C</td>
</tr>
<tr>
<td>CIS 1068</td>
<td>Program Design and Abstraction</td>
</tr>
<tr>
<td>CIS 1968</td>
<td>Honors Program Design and Abstraction</td>
</tr>
<tr>
<td>Term</td>
<td>Credits</td>
</tr>
<tr>
<td>----------</td>
<td>---------</td>
</tr>
<tr>
<td>Spring</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Spring</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Spring</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Spring</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Credit Hours: 123

(F) - Fall only course
(S) - Spring only course
Students who choose MATH 1038 must also take the linked course MATH 1039.

Mathematics, B.S.

Dr. Edward Letzter, Chair
Wachman Hall, Room 638
215-204-7841

Dr. Boris Datskovsky, Associate Chair
Wachman Hall, Room 632
215-204-7847
mathadvising@temple.edu

Dr. Maria E. Lorenz, Undergraduate Chair
Wachman Hall, Room 542
215-204-6764
mathadvising@temple.edu

The Bachelor of Science in Mathematics provides an in-depth theoretical background focusing on the traditional core areas of mathematics. This program provides a foundation for graduate study or careers in fields using sophisticated quantitative and mathematical analysis. In particular, this program is suitable preparation for graduate study in mathematics.

Students should consult with an advisor to design a program best fitted to their interests and goals.

Bachelor of Science

Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)
   • MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
   • All Temple students must take a minimum of two writing-intensive courses at Temple as part of their major. Following is a list of courses that can be used to satisfy the writing-intensive requirement: MATH 3098 and MATH 4096.
   • Students must complete the General Education (GenEd) requirements.
     • The General Education Curriculum consists of approximately 25-26 s.h. See the General Education (p. 143) section of the Undergraduate Bulletin for the Gen Ed curriculum.
     • Students who complete CST majors typically receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) Gen Ed courses.

2. College Requirements
   • 90 credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).
   • 45 Upper-Level (2000+) credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).

3. Major Requirements for Bachelor of Science (65 s.h.)
   Computer & Technology Science course
   Select one of the following:
   
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 1053</td>
<td>Programming in Matlab</td>
</tr>
<tr>
<td>CIS 1057</td>
<td>Computer Programming in C</td>
</tr>
<tr>
<td>CIS 1068</td>
<td>Program Design and Abstraction</td>
</tr>
<tr>
<td>CIS 1968</td>
<td>Honors Program Design and Abstraction</td>
</tr>
</tbody>
</table>

   Mathematics courses
   Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1038</td>
<td>Calculus I with Lab ¹</td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
</tr>
<tr>
<td>MATH 1941</td>
<td>Honors Calculus I</td>
</tr>
<tr>
<td>MATH 1042</td>
<td>Calculus II</td>
</tr>
<tr>
<td>or MATH 1942</td>
<td>Honors Calculus II</td>
</tr>
</tbody>
</table>
MATH 2043  Calculus III  4  
or MATH 2943  Honors Calculus III  
MATH 2111  Basic Concepts of Math  3  
MATH 3031  Probability Theory I  3  
MATH 3045  Differential Equations with Linear Algebra (F)  4  
MATH 3051  Theoretical Linear Algebra (S)  4  
MATH 3098  Modern Algebra (F)  3  
MATH 3101  Topics in Modern Algebra (S)  3  
MATH 3141  Advanced Calculus I (F)  3  
MATH 3142  Advanced Calculus II (S)  3  
MATH 4051  Complex Analysis (F)  3  
MATH 4096  Senior Problem Solving  3  
Three Mathematics electives at the 3000-level or above  9  

Physics courses  
Select one of the following:  4  
    PHYS 1061  Elementary Classical Physics I  
    PHYS 2021  General Physics I  
    PHYS 2921  Honors General Physics I (F)  
Select one of the following:  4  
    PHYS 1062  Elementary Classical Physics II  
    PHYS 2022  General Physics II  
    PHYS 2922  Honors General Physics II (S)  

Total Credit Hours  65  

(F) - Fall only course  
(S) - Spring only course  

1  Students who choose MATH 1038 must also take the linked course MATH 1039.  

Calculation of Major GPA  
The list of courses that are used to calculate major GPA is determined by the department. Students should consult with their academic advising unit for the applicable courses. In general, courses that could not apply toward the major as an elective or a required course are not counted for the major GPA. This would include MATH 1022, for example.  

Distinction in Major  
To graduate with Distinction in Mathematics a student should meet the following requirements:  

1. All requirements for the B.S. degree in Mathematics must be met with a GPA of at least 3.50 in the Mathematics courses.  
2. At the time of graduation, the student's overall GPA, including all college-level courses, must be at least 3.25.  
3. A student must have a GPA of 3.50 or higher in the following courses:  

   MATH 3141  Advanced Calculus I  3  
   MATH 3142  Advanced Calculus II  3  
   MATH 3098  Modern Algebra  3  
   MATH 4051  Complex Analysis  3  

Any additional courses from the following list:  

   MATH 3043  Numerical Analysis I  3 or 4  
   MATH 3044  Numerical Analysis II  3  
   MATH 3101  Topics in Modern Algebra  3  

Any 4000-level course other than individual study
# Suggested Academic Plan

## Bachelor of Science in Mathematics

### Requirements for New Students starting in the 2015-2016 Academic Year

#### Year 1

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select one of the following:</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1038</td>
<td>Calculus I with Lab¹</td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
</tr>
<tr>
<td>MATH 1941</td>
<td>Honors Calculus I</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>4</td>
</tr>
<tr>
<td>CIS 1053</td>
<td>Programming in Matlab</td>
</tr>
<tr>
<td>CIS 1057</td>
<td>Computer Programming in C</td>
</tr>
<tr>
<td>CIS 1068</td>
<td>Program Design and Abstraction</td>
</tr>
<tr>
<td>CIS 1968</td>
<td>Honors Program Design and Abstraction</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I</td>
</tr>
<tr>
<td>PHYS 2021</td>
<td>General Physics I</td>
</tr>
<tr>
<td>PHYS 2921</td>
<td>Honors General Physics I (F)</td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td>4</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1042 or 1942</td>
<td>Calculus II</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1062</td>
<td>Elementary Classical Physics II</td>
</tr>
<tr>
<td>PHYS 2022</td>
<td>General Physics II</td>
</tr>
<tr>
<td>PHYS 2922</td>
<td>Honors General Physics II (S)</td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td>7</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

#### Year 2

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 2043 or 2943</td>
<td>Calculus III</td>
</tr>
<tr>
<td>MATH 2111</td>
<td>Basic Concepts of Math</td>
</tr>
<tr>
<td>MATH 3045</td>
<td>Differential Equations with Linear Algebra (F)</td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td>6</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 3031</td>
<td>Probability Theory I</td>
</tr>
<tr>
<td>MATH 3051</td>
<td>Theoretical Linear Algebra (S)</td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td>8</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

#### Year 3

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 3098</td>
<td>Modern Algebra [WI] (F)</td>
</tr>
<tr>
<td>MATH 3141</td>
<td>Advanced Calculus I (F)</td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td>9</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 3101</td>
<td>Topics in Modern Algebra (S)</td>
</tr>
<tr>
<td>MATH 3142</td>
<td>Advanced Calculus II (S)</td>
</tr>
<tr>
<td>3000+ Mathematics Elective</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>
### Mathematics, Minor

Dr. Edward Letzter, Chair  
Wachman Hall, Room 638  
215-204-7841

Dr. Boris Datskovsky, Associate Chair  
Wachman Hall, Room 632  
215-204-7847  
mathadvising@temple.edu

Dr. Maria E. Lorenz, Undergraduate Chair  
Wachman Hall, Room 542  
215-204-6764  
mathadvising@temple.edu

#### Minor Requirements

<table>
<thead>
<tr>
<th>Three semesters of calculus</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Select one of the following:</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1038</td>
<td>Calculus I with Lab $^1$</td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
</tr>
<tr>
<td>MATH 1941</td>
<td>Honors Calculus I</td>
</tr>
<tr>
<td>MATH 1042</td>
<td>Calculus II</td>
</tr>
<tr>
<td>or MATH 1942</td>
<td>Honors Calculus II</td>
</tr>
<tr>
<td>MATH 2043</td>
<td>Calculus III</td>
</tr>
<tr>
<td>or MATH 2943</td>
<td>Honors Calculus III</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Linear algebra</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 2101</td>
<td>Linear Algebra</td>
</tr>
<tr>
<td>or MATH 2103</td>
<td>Linear Algebra with Computer Lab</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Additional mathematics courses</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Select one of the following:</td>
<td>12-16</td>
</tr>
<tr>
<td>Four additional mathematics courses numbered 3000 or above</td>
<td></td>
</tr>
</tbody>
</table>
MATH 2111 and three mathematics courses numbered 3000 or above

Total Credit Hours 27-32

1 Students who choose MATH 1038 must also take the linked course MATH 1039.

Physics

Dr. James Napolitano, Acting Chair
Science Education and Research Center, Room 406
215-204-7634

Dr. Zbigniew Dziembowski, Faculty Advisor (Last names A-K)
Science Education and Research Center, Room 412
215-204-7639
zbig.dziembowski@temple.edu

Dr. Tan Yuen, Faculty Advisor (Last names L-Z)
Science Education and Research Center, Room 409
215-204-5182
tan.yuen@temple.edu

Physics students learn how the natural world works. The laboratory, math and problem-solving skills they pick up are great for the job market. Physics majors teach, work on Wall Street, and serve in the military. They also perform well on the admission tests for law and medical schools.

There are several physics degree programs from which to choose:

- Bachelor of Arts in Physics,
- Bachelor of Science in Physics,
- Bachelor of Science in Biophysics,
- Bachelor of Science in Physics with Teaching, and
- Bachelor of Science in Mathematics & Physics

The Bachelor of Arts (B.A.) program is designed for those who are planning for a non-research career in a field which nevertheless has an important science component. Examples include patent law, environmental law enforcement, medicine or sales or management in a high-technology industry.

The Bachelor of Science in Physics provides strong preparation for those wishing to attend graduate school in physics or related disciplines and is recommended for those who intend to enter the scientific workforce upon completion of a bachelor's degree.

The Bachelor of Science in Biophysics fulfills all medical and pharmacy school requirements. Biophysics students interested in research careers can pursue a graduate degree in biophysics, biology, molecular biology or neuroscience, as well as the combined MD/PhD degree in medical physics, health physics or nuclear medicine.

The Bachelor of Science in Physics with Teaching program is aimed at students interested in teaching physics at the high school level. This program satisfies Pennsylvania's teacher certification requirements.

The Bachelor of Science in Mathematics & Physics (jointly administered with Mathematics department), is an interdisciplinary program providing a foundation in physical sciences with a strong emphasis on the mathematical techniques needed for analysis and modeling. It prepares the student for science or analysis careers which use these math tools along with problem-solving skills.

Five-year combined bachelor's and master's programs are also available.

Programs

- Biophysics, B.S. (p. 1147)
- General Science with Teaching, B.S. (p. )
- Mathematics & Physics, B.S. (p. 1151)
- Natural Sciences, B.A. (p. )
- Physics with Teaching, B.S. (p. )
- Physics, B.A. (p. 1154)
- Physics, B.A./M.Ed. (p. )
- Physics, B.A./M.S. (p. )
• Physics, B.S. (p. 1158)
• Physics, B.S./M.Ed. (p. 1158)
• Physics, B.S./M.S. (p. 1158)
• Physics, Minor (p. 1161)

**Biophysics, B.S.**

Dr. James Napolitano, Acting Chair
Science Education and Research Center, Room 406
215-204-7634

Dr. Zbigniew Dziembowski, Faculty Advisor (Last names A-K)
Science Education and Research Center, Room 412
215-204-7639
zbig.dziembowski@temple.edu

Dr. Tan Yuen, Faculty Advisor (Last names L-Z)
Science Education and Research Center, Room 409
215-204-5182
tan.yuen@temple.edu

The Bachelor of Science in Biophysics fulfills all medical and pharmacy school requirements. Biophysics students interested in research careers can pursue a graduate degree in biophysics, biology, molecular biology or neuroscience, as well as the combined MD/PhD degree in medical physics, health physics or nuclear medicine.

**Bachelor of Science**

**Summary of Requirements for the Degree**

1. University Requirements (123 total s.h.)
   - MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
   - All Temple students must take a minimum of two writing-intensive courses at Temple as part of their major. Following is a list of courses that can be used to satisfy the writing-intensive requirement:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 2296</td>
<td>Genetics (S)</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 3096</td>
<td>Cell Structure and Function (F)</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 3396</td>
<td>Scientific Writing for Biology: The Art of Communicating</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 4196</td>
<td>Techniques of Chemical Measurement II</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 3397</td>
<td>Physical Chemistry Laboratory I</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 3398</td>
<td>Physical Chemistry Laboratory II</td>
<td></td>
</tr>
<tr>
<td>MATH 3098</td>
<td>Modern Algebra (F)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 4096</td>
<td>Senior Problem Solving</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 2796</td>
<td>Introduction to Modern Physics (S)</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 4796</td>
<td>Experimental Physics</td>
<td>3</td>
</tr>
</tbody>
</table>

   - Students must complete the General Education (GenEd) requirements.
     - The General Education Curriculum consists of approximately 25-26 s.h. See the General Education (p. 143) section of the *Undergraduate Bulletin* for the GenEd curriculum.
     - Students who complete CST majors typically receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.

2. College Requirements
   - 45 Upper Level (2000+) credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).
   - 90 credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).

3. Major Requirements for Bachelor of Science (75-79 s.h.)

   **Biology**
   - BIOL 2112 | Introduction to Biology II | 4
   - or BIOL 2912 | Honors Introduction to Biology II | |
   - BIOL 2296 | Genetics (S) | 4
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 3096</td>
<td>Cell Structure and Function (F)</td>
<td>4</td>
</tr>
</tbody>
</table>

**Physics**

Select one of the following: 4

- **PHYS 1061**  
  Elementary Classical Physics I
- **PHYS 2021**  
  General Physics I
- **PHYS 2921**  
  Honors General Physics I

Select one of the following: 4

- **PHYS 1062**  
  Elementary Classical Physics II
- **PHYS 2022**  
  General Physics II
- **PHYS 2922**  
  Honors General Physics II
- **PHYS 2502**  
  Mathematical Physics (S)
- **PHYS 2796**  
  Introduction to Modern Physics (S)
- **PHYS 3301**  
  Electricity and Magnetism (F)
- **PHYS 4101**  
  Thermodynamics and Kinetic Theory (F)

**Chemistry**

Select one of the following: 1

- **CHEM 1031**  
  General Chemistry I
- **CHEM 1033**  
  General Chemistry Laboratory I
- **CHEM 1951**  
  Honors General Chemical Science I
- **CHEM 1953**  
  Honors Chemical Science Laboratory I (F)

Select one of the following: 1

- **CHEM 1032**  
  General Chemistry II
- **CHEM 1034**  
  General Chemistry Laboratory II
- **CHEM 1952**  
  Honors General Chemical Science II
- **CHEM 1954**  
  Honors Chemical Science Laboratory II (S)

Select one of the following: 4

- **CHEM 2201**  
  Organic Chemistry I
- **CHEM 2203**  
  Organic Chemistry Laboratory I
- **CHEM 2211**  
  Organic Chemistry for Majors I
- **CHEM 2213**  
  Organic Majors Laboratory I (F)
- **CHEM 2921**  
  Organic Chemistry for Honors I
- **CHEM 2923**  
  Organic Honors Laboratory I (F)

Select one of the following: 4

- **CHEM 2202**  
  Organic Chemistry II
- **CHEM 2204**  
  Organic Chemistry Laboratory II
- **CHEM 2212**  
  Organic Chemistry for Majors II
- **CHEM 2214**  
  Organic Majors Laboratory II (S)
- **CHEM 2922**  
  Organic Chemistry for Honors II
- **CHEM 2924**  
  Organic Honors Laboratory II (S)

**Mathematics**

Select one of the following: 4

- **MATH 1038**  
  Calculus I with Lab
- **MATH 1041**  
  Calculus I
- **MATH 1941**  
  Honors Calculus I
- **MATH 1042**  
  Calculus II
- **MATH 1942**  
  Honors Calculus II
- **MATH 2043**  
  Calculus III
- **MATH 2943**  
  Honors Calculus III

**Biophysics Electives**

Four 2000+ Biophysics Electives chosen in consultation with the Physics faculty advisor.

**Total Credit Hours** 75-79

(F) - Fall only course
A grade of C or higher in CHEM 1031 and CHEM 1032 is required to take BIOL 1111 and BIOL 2112. A grade of C or higher in BIOL 1111 and BIOL 2112 is required to take upper-level Biology courses, and a C- or higher is required unless otherwise specified in all other courses for the major, including course prerequisites.

Students who choose MATH 1038 must also take the linked course MATH 1039.

**Note:** Most research and Independent Study courses are not available for major credit, such as:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 2082</td>
<td>Independent Research I</td>
<td>2-4</td>
</tr>
<tr>
<td>BIOL 3082</td>
<td>Independent Research II</td>
<td>1-4</td>
</tr>
<tr>
<td>BIOL 3091</td>
<td>Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 3183</td>
<td>Junior Independent Research</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 3681</td>
<td>Cooperative Studies</td>
<td>2-4</td>
</tr>
<tr>
<td>BIOL 4291</td>
<td>Extradepartmental Research</td>
<td>1-4</td>
</tr>
<tr>
<td>BIOL 4483</td>
<td>Accelerated Research in Biochemistry</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 4491</td>
<td>Research in Biochemistry</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 4591</td>
<td>Research in Neuroscience</td>
<td>1-4</td>
</tr>
</tbody>
</table>

**Calculation of Major GPA**

The list of courses that are used to calculate major GPA is determined by the department. Students should consult with their academic advising unit for the applicable courses. In general, courses that could not apply toward the major as an elective or a required course are not counted for the major GPA. This would include BIOL 1011, for example.

**Distinction in Major**

A student who wishes to graduate with Distinction in the Major must complete all courses required for the biophysics major with a GPA of 3.5 or better, and carry out an independent study or undergraduate thesis project. Consult the undergraduate physics advisor for more details.

**Suggested Academic Plan**

**Bachelor of Science in Biophysics**

**Requirements for New Students starting in the 2015-2016 Academic Year**

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1031 &amp; CHEM 1033</td>
<td>General Chemistry I</td>
<td></td>
</tr>
<tr>
<td>CHEM 1951 &amp; CHEM 1953</td>
<td>Honors General Chemical Science I (F)</td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>MATH 1038</td>
<td>Calculus I with Lab¹</td>
<td></td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
<td></td>
</tr>
<tr>
<td>MATH 1941</td>
<td>Honors Calculus I</td>
<td></td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Spring</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1032 &amp; CHEM 1034</td>
<td>General Chemistry II</td>
<td></td>
</tr>
<tr>
<td>CHEM 1952 &amp; CHEM 1954</td>
<td>Honors General Chemical Science II (S)</td>
<td></td>
</tr>
<tr>
<td>MATH 1042 or 1942</td>
<td>Calculus II</td>
<td></td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>16</td>
<td></td>
</tr>
</tbody>
</table>
## Year 2
### Fall
Select one of the following: 4
- **CHEM 2201 & CHEM 2203** Organic Chemistry I
- **CHEM 2211 & CHEM 2213** Organic Chemistry for Majors I (F)
- **CHEM 2921 & CHEM 2923** Organic Chemistry for Honors I (F)

**MATH 2043 or 2943** Calculus III 4
Select one of the following: 4
- **PHYS 1061** Elementary Classical Physics I
- **PHYS 2021** General Physics I
- **PHYS 2921** Honors General Physics I

General Education/Elective Credits 3

| Term Credit Hours | 15 |

### Spring
Select one of the following: 4
- **CHEM 2202 & CHEM 2204** Organic Chemistry II
- **CHEM 2212 & CHEM 2214** Organic Chemistry for Majors II (S)
- **CHEM 2922 & CHEM 2924** Organic Chemistry for Honors II (S)

Select one of the following: 4
- **PHYS 1062** Elementary Classical Physics II
- **PHYS 2022** General Physics II
- **PHYS 2922** Honors General Physics II

General Education/Elective Credits 3-4

| Term Credit Hours | 16 |

## Year 3
### Fall
- **BIOL 2112 or 2912** Introduction to Biology II 4
- **PHYS 3301** Electricity and Magnetism (F) 4
- **2000+ Biophysics Elective^2** 3-4

General Education/Elective Credits 4-3

| Term Credit Hours | 15 |

### Spring
- **PHYS 2502** Mathematical Physics (S) 4
- **PHYS 2796** Introduction to Modern Physics [WI] (S) 4
- **2000+ Biophysics Elective^2** 3-4

General Education/Elective Credits 4-3

| Term Credit Hours | 15 |

## Year 4
### Fall
- **BIOL 3096** Cell Structure and Function [WI] (F) 4
- **PHYS 4101** Thermodynamics and Kinetic Theory (F) 3
- **2000+ Biophysics Elective^2** 3-4

General Education/Elective Credits 5-4

| Term Credit Hours | 15 |

### Spring
- **BIOL 2296** Genetics [WI] (S) 4
- **2000+ Biophysics Elective^2** 3-4

| Term Credit Hours | 15 |
General Education/Elective Credits 9-8

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Credit Hours:</td>
<td>123</td>
</tr>
</tbody>
</table>

(F) - Fall only course
(S) - Spring only course

1. Students who choose MATH 1038 must also take the linked course MATH 1039.

2. Four electives must be chosen in consultation with the physics advisor. All courses must be 2000-level or above. At least two electives must be Physics courses. Choose courses in Physics, Biology (Neurobiology, Genetics, Cell Structure, Physiology), Chemistry (Physical Chemistry), Biochemistry and Biophysics. Recommended for graduate school in Physics: PHYS 2101, PHYS 3302, PHYS 3701 and PHYS 4796 and as much of the B.S. program in Physics as time allows. Students planning to go to medical school should complete BIOL 1111 Introduction to Biology I.

Mathematics & Physics, B.S.

Department of Physics

Dr. James Napolitano, Acting Chair
Science Education and Research Center, Room 406
215-204-7634

Dr. Zbigniew Dziembowski, Faculty Advisor (Last names A-K)
Science Education and Research Center, Room 412
215-204-7639
zbig.dziembowski@temple.edu

Dr. Tan Yuen, Faculty Advisor (Last names L-Z)
Science Education and Research Center, Room 409
215-204-5182
tan.yuen@temple.edu

Department of Mathematics

Dr. Edward Letzter, Chair
Wachman Hall, Room 638
215-204-7841

Dr. Boris Datskovsky, Associate Chair
Wachman Hall, Room 632
215-204-7847
mathadvising@temple.edu

Dr. Maria E. Lorenz, Undergraduate Chair
Wachman Hall, Room 542
215-204-6764
mathadvising@temple.edu

The Bachelor of Science in Mathematics & Physics (jointly administered with Mathematics department), is an interdisciplinary program providing a foundation in physical sciences with a strong emphasis on the mathematical techniques needed for analysis and modeling. It prepares the student for science or analysis careers which use these math tools along with problem-solving skills.

Bachelor of Science

Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)
   - MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
   - All Temple students must take a minimum of two writing-intensive courses at Temple as part of their major. Following is a list of courses that can be used to satisfy the writing-intensive requirement:
     - MATH 3098 Modern Algebra  3
     - MATH 4096 Senior Problem Solving  3
PHYS 2796  Introduction to Modern Physics  4
PHYS 4796  Experimental Physics  3

- Students must complete the General Education (GenEd) requirements.
  - The General Education Curriculum consists of approximately 25-26 s.h. See the General Education (p. 143) section of the Undergraduate Bulletin for the GenEd curriculum.
  - Students who complete CST majors typically receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.

2. College Requirements
- 90 credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).
- 45 Upper Level (2000+) credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).

3. Major Requirements for Bachelor of Science (76 s.h.)

**Mathematics courses**

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1038</td>
<td>Calculus I with Lab¹</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1941</td>
<td>Honors Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1042</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 1942</td>
<td>Honors Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 2043</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 2943</td>
<td>Honors Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>MATH 2111</td>
<td>Basic Concepts of Math</td>
<td>3</td>
</tr>
<tr>
<td>MATH 3031</td>
<td>Probability Theory I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 3045</td>
<td>Differential Equations with Linear Algebra (F)</td>
<td>4</td>
</tr>
<tr>
<td>MATH 3051</td>
<td>Theoretical Linear Algebra (S)</td>
<td>4</td>
</tr>
<tr>
<td>MATH 3098</td>
<td>Modern Algebra (F)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 3141</td>
<td>Advanced Calculus I (F)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 3142</td>
<td>Advanced Calculus II (S)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 4051</td>
<td>Complex Analysis (F)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Physics courses**

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 2021</td>
<td>General Physics I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 2921</td>
<td>Honors General Physics I (F)</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 1062</td>
<td>Elementary Classical Physics II</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 2022</td>
<td>General Physics II</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 2922</td>
<td>Honors General Physics II (S)</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 2101</td>
<td>Classical Mechanics (S)</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 2502</td>
<td>Mathematical Physics (S)</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 2796</td>
<td>Introduction to Modern Physics (S)</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 3101</td>
<td>Analytical Mechanics (F)</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 3301</td>
<td>Electricity and Magnetism (F)</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 3302</td>
<td>Classical Electromagnetism (S)</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 3701</td>
<td>Introduction to Quantum Mechanics (S)</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 4101</td>
<td>Thermodynamics and Kinetic Theory (F)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Capstone course**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 4096</td>
<td>Senior Problem Solving</td>
<td>3</td>
</tr>
<tr>
<td>or PHYS 4796</td>
<td>Experimental Physics</td>
<td>3</td>
</tr>
</tbody>
</table>

(F) - Fall only course
Calculation of Major GPA

The list of courses that are used to calculate major GPA is determined by the department. Students should consult with their academic advising unit for the applicable courses. In general, courses that could not apply toward the major as an elective or a required course are not counted for the major GPA. This would include MATH 1022, for example.

Distinction in Major

To graduate with Distinction in Mathematics & Physics, a student should meet the following requirements:

1. Students must have a cumulative grade point average (GPA) of 3.50 or better.
2. Students must have a GPA of 3.50 or better in their Physics courses.
3. Students must have a GPA of 3.50 or better in their Mathematics courses.
4. Students must have a GPA of 3.50 or higher in the following Mathematics courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 3141</td>
<td>Advanced Calculus I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 3142</td>
<td>Advanced Calculus II</td>
<td>3</td>
</tr>
<tr>
<td>MATH 3098</td>
<td>Modern Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MATH 4051</td>
<td>Complex Analysis</td>
<td>3</td>
</tr>
</tbody>
</table>

Any other 4000-level course other than individual study

5. Students must carry out an independent study, undergraduate research or undergraduate thesis project. Consult the undergraduate Physics advisor for more details.

Suggested Academic Plan

Bachelor of Science in Mathematics & Physics

Requirements for New Students starting in the 2015-2016 Academic Year

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>MATH 1038</td>
<td>Calculus I with Lab¹</td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
</tr>
<tr>
<td>MATH 1941</td>
<td>Honors Calculus I</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
</tr>
<tr>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I</td>
</tr>
<tr>
<td>PHYS 2021</td>
<td>General Physics I</td>
</tr>
<tr>
<td>PHYS 2921</td>
<td>Honors General Physics I (F)</td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td>7</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>15</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>MATH 1042 or 1942</td>
<td>Calculus II</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
</tr>
<tr>
<td>PHYS 1062</td>
<td>Elementary Classical Physics II</td>
</tr>
<tr>
<td>PHYS 2022</td>
<td>General Physics II</td>
</tr>
<tr>
<td>PHYS 2922</td>
<td>Honors General Physics II (S)</td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td>8</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>16</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>Course</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>MATH 2043 or 2943</td>
<td>Calculus III</td>
</tr>
<tr>
<td>MATH 2111</td>
<td>Basic Concepts of Math</td>
</tr>
<tr>
<td>MATH 3045</td>
<td>Differential Equations with Linear Algebra (F)</td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td></td>
</tr>
<tr>
<td>Term Credit Hours</td>
<td></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>PHYS 2502</td>
<td>Mathematical Physics (S)</td>
</tr>
<tr>
<td>PHYS 2796</td>
<td>Introduction to Modern Physics [WI] (S)</td>
</tr>
<tr>
<td>MATH 3051</td>
<td>Theoretical Linear Algebra (S)</td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td></td>
</tr>
<tr>
<td>Term Credit Hours</td>
<td></td>
</tr>
<tr>
<td><strong>Year 3</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>MATH 3031</td>
<td>Probability Theory I</td>
</tr>
<tr>
<td>MATH 3141</td>
<td>Advanced Calculus I (F)</td>
</tr>
<tr>
<td>PHYS 3301</td>
<td>Electricity and Magnetism (F)</td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td></td>
</tr>
<tr>
<td>Term Credit Hours</td>
<td></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>MATH 3142</td>
<td>Advanced Calculus II (S)</td>
</tr>
<tr>
<td>PHYS 2101</td>
<td>Classical Mechanics (S)</td>
</tr>
<tr>
<td>PHYS 3701</td>
<td>Introduction to Quantum Mechanics (S)</td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td></td>
</tr>
<tr>
<td>Term Credit Hours</td>
<td></td>
</tr>
<tr>
<td><strong>Year 4</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>MATH 3098</td>
<td>Modern Algebra [WI] (F)</td>
</tr>
<tr>
<td>MATH 4051</td>
<td>Complex Analysis (F)</td>
</tr>
<tr>
<td>PHYS 3101</td>
<td>Analytical Mechanics (F)</td>
</tr>
<tr>
<td>PHYS 4101</td>
<td>Thermodynamics and Kinetic Theory (F)</td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td></td>
</tr>
<tr>
<td>Term Credit Hours</td>
<td></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>MATH 4096 or PHYS 4796</td>
<td>Senior Problem Solving [WI]</td>
</tr>
<tr>
<td>PHYS 3302</td>
<td>Classical Electromagnetism (S)</td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td></td>
</tr>
<tr>
<td>Term Credit Hours</td>
<td></td>
</tr>
<tr>
<td>Total Credit Hours</td>
<td></td>
</tr>
</tbody>
</table>

(F) - Fall only course.
(S) - Spring only course.

1 Students who choose MATH 1038 must also take the linked course MATH 1039.

---

**Physics, B.A.**

Dr. James Napolitano, Acting Chair  
Science Education and Research Center, Room 406  
215-204-7634

Dr. Zbigniew Dziembowski, Faculty Advisor (Last names A-K)  
Science Education and Research Center, Room 412  
215-204-7639
Dr. Tan Yuen, Faculty Advisor (Last names L-Z)
Science Education and Research Center, Room 409
215-204-5182
tan.yuen@temple.edu

The Bachelor of Arts (B.A.) program is designed for those who are planning for a non-research career in a field which nevertheless has an important science component. Examples include patent law, environmental law enforcement, medicine or sales or management in a high-technology industry.

**Bachelor of Arts**

**Summary of Requirements for the Degree**

1. **University Requirements (123 total s.h.)**
   - MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
   - All Temple students must take a minimum of two writing-intensive courses at Temple as part of their major. Following is a list of courses that can be used to satisfy the writing-intensive requirement: PHYS 2796 and PHYS 4796.
   - Students must complete the General Education (GenEd) requirements.
     - The General Education Curriculum consists of approximately 25-26 s.h. See the General Education (p. 143) section of the *Undergraduate Bulletin* for the GenEd curriculum.
     - Students who complete CST majors typically receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.

2. **College Requirements**
   - 90 credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).
   - 45 Upper Level (2000+) credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).
   - Second (2nd) Level of a Foreign Language (1002).

3. **Major Requirements for Bachelor of Arts (55 s.h.)**

   **Mathematics**
   Select one of the following: 4
   
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1038</td>
<td>Calculus I with Lab</td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
</tr>
<tr>
<td>MATH 1941</td>
<td>Honors Calculus I</td>
</tr>
<tr>
<td>MATH 1042</td>
<td>Calculus II</td>
</tr>
<tr>
<td>or MATH 1942</td>
<td>Honors Calculus II</td>
</tr>
<tr>
<td>MATH 2043</td>
<td>Calculus III</td>
</tr>
<tr>
<td>or MATH 2943</td>
<td>Honors Calculus III</td>
</tr>
</tbody>
</table>

   **Sequenced Science Courses** 2
   Select one of the following sequences: 8
   
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1011</td>
<td>General Biology I</td>
</tr>
<tr>
<td>&amp; BIOL 1012</td>
<td>and General Biology II</td>
</tr>
<tr>
<td>BIOL 1111</td>
<td>Introduction to Biology I</td>
</tr>
<tr>
<td>&amp; BIOL 2112</td>
<td>and Introduction to Biology II</td>
</tr>
<tr>
<td>BIOL 1911</td>
<td>Honors Introduction to Biology I</td>
</tr>
<tr>
<td>&amp; BIOL 2912</td>
<td>and Honors Introduction to Biology II</td>
</tr>
<tr>
<td>CHEM 1031</td>
<td>General Chemistry I</td>
</tr>
<tr>
<td>&amp; CHEM 1033</td>
<td>and General Chemistry Laboratory I</td>
</tr>
<tr>
<td>&amp; CHEM 1032</td>
<td>and General Chemistry II</td>
</tr>
<tr>
<td>&amp; CHEM 1034</td>
<td>and General Chemistry Laboratory II</td>
</tr>
<tr>
<td>EES 2001</td>
<td>Physical Geology (and a 2000+ Elective)</td>
</tr>
</tbody>
</table>

   **Physics Courses**
   Select one of the following: 4
   
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I</td>
</tr>
<tr>
<td>PHYS 2021</td>
<td>General Physics I</td>
</tr>
<tr>
<td>PHYS 2921</td>
<td>Honors General Physics I (F)</td>
</tr>
</tbody>
</table>

Select one of the following: 4
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 1062</td>
<td>Elementary Classical Physics II</td>
</tr>
<tr>
<td>PHYS 2022</td>
<td>General Physics II</td>
</tr>
<tr>
<td>PHYS 2922</td>
<td>Honors General Physics II (S)</td>
</tr>
<tr>
<td>PHYS 2101</td>
<td>Classical Mechanics (S)</td>
</tr>
<tr>
<td>PHYS 2502</td>
<td>Mathematical Physics (S)</td>
</tr>
<tr>
<td>PHYS 2796</td>
<td>Introduction to Modern Physics (S)</td>
</tr>
<tr>
<td>PHYS 3301</td>
<td>Electricity and Magnetism (F)</td>
</tr>
<tr>
<td>PHYS 4796</td>
<td>Experimental Physics (S)</td>
</tr>
<tr>
<td>PHYS 2101</td>
<td>Classical Mechanics (S)</td>
</tr>
<tr>
<td>PHYS 2502</td>
<td>Mathematical Physics (S)</td>
</tr>
<tr>
<td>PHYS 2796</td>
<td>Introduction to Modern Physics (S)</td>
</tr>
<tr>
<td>PHYS 3301</td>
<td>Electricity and Magnetism (F)</td>
</tr>
<tr>
<td>PHYS 4796</td>
<td>Experimental Physics (S)</td>
</tr>
</tbody>
</table>

**Physics Electives**

Select three of the following: 9

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 1004</td>
<td>Introduction to Astronomy</td>
</tr>
<tr>
<td>PHYS 2501</td>
<td>Computing for Scientists (F)</td>
</tr>
<tr>
<td>PHYS 3101</td>
<td>Analytical Mechanics (F)</td>
</tr>
<tr>
<td>PHYS 3302</td>
<td>Classical Electromagnetism (S)</td>
</tr>
<tr>
<td>PHYS 3701</td>
<td>Introduction to Quantum Mechanics (S)</td>
</tr>
<tr>
<td>PHYS 4101</td>
<td>Thermodynamics and Kinetic Theory (F)</td>
</tr>
<tr>
<td>PHYS 4301</td>
<td>Electronics (S - odd years)</td>
</tr>
<tr>
<td>PHYS 4302</td>
<td>Optics (F)</td>
</tr>
<tr>
<td>PHYS 4701</td>
<td>Introduction to Solid State Physics (S - even years)</td>
</tr>
<tr>
<td>PHYS 4702</td>
<td>Introduction of Atomic, Nuclear, and Particle Physics (F)</td>
</tr>
</tbody>
</table>

**Total Credit Hours** 55

(F) - Fall only course  
(S) - Spring only course

**Note:** PHYS 3091 is not available for major credit.

1. Students who choose MATH 1038 must also take the linked course MATH 1039.
2. Students are required to take a two-semester sequence of laboratory science electives not within physics.
3. BIOL 1011 is a Fall only course; BIOL 1012 is a Spring only course.

**Distinction in Major**

A student who wishes to graduate with distinction in the major must complete all courses required for the physics major with a GPA of 3.5 or better, and carry out an independent study or undergraduate thesis project. Consult the undergraduate physics advisor for more details.

**Suggested Academic Plan**

**Bachelor of Arts in Physics**

**Requirements for New Students starting in the 2015-2016 Academic Year**

**Year 1**

**Fall**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1038</td>
<td>Calculus I with Lab&lt;sup&gt;1&lt;/sup&gt;</td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
</tr>
<tr>
<td>MATH 1941</td>
<td>Honors Calculus I</td>
</tr>
</tbody>
</table>

Select one of the following: 4

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I</td>
</tr>
<tr>
<td>PHYS 2021</td>
<td>General Physics I</td>
</tr>
<tr>
<td>PHYS 2921</td>
<td>Honors General Physics I (F)</td>
</tr>
</tbody>
</table>

**General Education/Elective Credits** 7

**Spring**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1042 or 1942</td>
<td>Calculus II</td>
</tr>
</tbody>
</table>
Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 1062</td>
<td>Elementary Classical Physics II</td>
</tr>
<tr>
<td>PHYS 2022</td>
<td>General Physics II</td>
</tr>
<tr>
<td>PHYS 2922</td>
<td>Honors General Physics II (S)</td>
</tr>
</tbody>
</table>

General Education/Elective Credits: 7

| Term Credit Hours: 15 |

**Year 2**

**Fall**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 2043 or 2943</td>
<td>Calculus III</td>
</tr>
</tbody>
</table>

General Education/Elective Credits: 12

| Term Credit Hours: 16 |

**Spring**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 2502</td>
<td>Mathematical Physics (S)</td>
</tr>
<tr>
<td>PHYS 2796</td>
<td>Introduction to Modern Physics [WI] (S)</td>
</tr>
</tbody>
</table>

General Education/Elective Credits: 7

| Term Credit Hours: 15 |

**Year 3**

**Fall**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 3301</td>
<td>Electricity and Magnetism (F)</td>
</tr>
<tr>
<td></td>
<td>Sequenced Science Part 1 (see list below)</td>
</tr>
</tbody>
</table>

General Education/Elective Credits: 4

| Term Credit Hours: 15 |

**Spring**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 2101</td>
<td>Classical Mechanics (S)</td>
</tr>
<tr>
<td></td>
<td>Sequenced Science Part 2 (see list below)</td>
</tr>
</tbody>
</table>

General Education/Elective Credits: 9

| Term Credit Hours: 15 |

**Year 4**

**Fall**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Physics Elective (see list below)</td>
</tr>
<tr>
<td></td>
<td>Physics Elective (see list below)</td>
</tr>
</tbody>
</table>

General Education/Elective Credits: 10

| Term Credit Hours: 16 |

**Spring**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 4796</td>
<td>Experimental Physics [WI] (S)</td>
</tr>
<tr>
<td></td>
<td>Physics Elective (see list below)</td>
</tr>
</tbody>
</table>

General Education/Elective Credits: 9

| Term Credit Hours: 15 |

**Total Credit Hours: 123**

(F) - Fall only course

(S) - Spring only course

1 Students who choose MATH 1038 must also take the linked course MATH 1039.

**Sequenced Science Options**

*Students are required to take a two-semester sequence of laboratory science electives not within physics. The science courses can be chosen from Biology, Chemistry, or Earth & Environmental Science from the following list:*

Select one of the following sequences:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1011 &amp; BIOL 1012</td>
<td>General Biology I and General Biology II 1</td>
</tr>
<tr>
<td>BIOL 1111 &amp; BIOL 2112</td>
<td>Introduction to Biology I and Introduction to Biology II</td>
</tr>
</tbody>
</table>
BIOL 1911 & BIOL 2912 Honors Introduction to Biology I and Honors Introduction to Biology II

CHEM 1031 General Chemistry I
& CHEM 1033 and General Chemistry Laboratory I
& CHEM 1032 and General Chemistry II
& CHEM 1034 and General Chemistry Laboratory II

EES 2001 Physical Geology (and 2000+ Geology Elective)

1 BIOL 1011 is Fall only course; BIOL 1012 is Spring only course.

Physics Electives
Advanced physics electives
Select three of the following:

PHYS 1004 Introduction to Astronomy
PHYS 2501 Computing for Scientists (F)
PHYS 3101 Analytical Mechanics (F)
PHYS 3302 Classical Electromagnetism (S)
PHYS 3701 Introduction to Quantum Mechanics (S)
PHYS 4101 Thermodynamics and Kinetic Theory (F)
PHYS 4301 Electronics (S - odd years)
PHYS 4302 Optics (F)
PHYS 4701 Introduction to Solid State Physics (S - even years)
PHYS 4702 Introduction of Atomic, Nuclear, and Particle Physics (F)

Physics, B.S.

Dr. James Napolitano, Acting Chair
Science Education and Research Center, Room 406
215-204-7634

Dr. Zbigniew Dziembowski, Faculty Advisor (Last names A-K)
Science Education and Research Center, Room 412
215-204-7639
zbig.dziembowski@temple.edu

Dr. Tan Yuen, Faculty Advisor (Last names L-Z)
Science Education and Research Center, Room 409
215-204-5182
tan.yuen@temple.edu

The Bachelor of Science in Physics provides strong preparation for those wishing to attend graduate school in physics or related disciplines and is recommended for those who intend to enter the scientific workforce upon completion of a bachelor's degree.

Bachelor of Science
Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)
   • MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
   • All Temple students must take a minimum of two writing-intensive courses at Temple as part of their major. Following is a list of courses that can be used to satisfy the writing-intensive requirement: PHYS 2796 and PHYS 4796.
   • Students must complete the General Education (GenEd) requirements.
     • The General Education Curriculum consists of approximately 25-26 s.h. See the General Education (p. 143) section of the Undergraduate Bulletin for the GenEd curriculum.
• Students who complete CST majors typically receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.

2. College Requirements
• 90 credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).
• 45 Upper Level (2000+) credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).

3. Major Requirements for Bachelor of Science (71-73 s.h.)

**Mathematics**

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1038</td>
<td>Calculus I with Lab ^1</td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
</tr>
<tr>
<td>MATH 1941</td>
<td>Honors Calculus I</td>
</tr>
<tr>
<td>MATH 1042</td>
<td>Calculus II</td>
</tr>
<tr>
<td>or MATH 1942</td>
<td>Honors Calculus II</td>
</tr>
<tr>
<td>MATH 2043</td>
<td>Calculus III</td>
</tr>
<tr>
<td>or MATH 2943</td>
<td>Honors Calculus III</td>
</tr>
<tr>
<td>MATH 3041</td>
<td>Differential Equations I</td>
</tr>
</tbody>
</table>

Two science or mathematics elective courses

These two electives can be chosen from Biology, Chemistry, Engineering, Earth & Environmental Science, Mathematics or Physics in consultation with the faculty advisor.

**Physics Courses**

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I</td>
</tr>
<tr>
<td>PHYS 2021</td>
<td>General Physics I</td>
</tr>
<tr>
<td>PHYS 2921</td>
<td>Honors General Physics I (F)</td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 1062</td>
<td>Elementary Classical Physics II</td>
</tr>
<tr>
<td>PHYS 2022</td>
<td>General Physics II</td>
</tr>
<tr>
<td>PHYS 2922</td>
<td>Honors General Physics II (S)</td>
</tr>
<tr>
<td>PHYS 2101</td>
<td>Classical Mechanics (S)</td>
</tr>
<tr>
<td>PHYS 2501</td>
<td>Computing for Scientists (F)</td>
</tr>
<tr>
<td>PHYS 2502</td>
<td>Mathematical Physics (S)</td>
</tr>
<tr>
<td>PHYS 2796</td>
<td>Introduction to Modern Physics (S)</td>
</tr>
<tr>
<td>PHYS 3101</td>
<td>Analytical Mechanics (F)</td>
</tr>
<tr>
<td>PHYS 3301</td>
<td>Electricity and Magnetism (F)</td>
</tr>
<tr>
<td>PHYS 3302</td>
<td>Classical Electromagnetism (S)</td>
</tr>
<tr>
<td>PHYS 3701</td>
<td>Introduction to Quantum Mechanics (S)</td>
</tr>
<tr>
<td>PHYS 4101</td>
<td>Thermodynamics and Kinetic Theory (F)</td>
</tr>
<tr>
<td>PHYS 4302</td>
<td>Optics (F)</td>
</tr>
<tr>
<td>PHYS 4796</td>
<td>Experimental Physics (S)</td>
</tr>
</tbody>
</table>

Select two of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 4301</td>
<td>Electronics (S (odd years))</td>
</tr>
<tr>
<td>PHYS 4701</td>
<td>Introduction to Solid State Physics (S (even years))</td>
</tr>
<tr>
<td>PHYS 4702</td>
<td>Introduction of Atomic, Nuclear, and Particle Physics (F)</td>
</tr>
</tbody>
</table>

**Total Credit Hours**

71-73

**Note:** PHYS 3091 is not available for major credit.

(F) - Fall only course

(S) - Spring only course

^1 Students who choose MATH 1038 must also take the linked course MATH 1039.
Distinction in Major

A student who wishes to graduate with distinction in the major must complete all courses required for the physics major with a GPA of 3.5 or better, and carry out an independent study or undergraduate thesis project. Consult the undergraduate physics advisor for more details.

Suggested Academic Plan

Bachelor of Science in Physics

Requirements for New Students starting in the 2015-2016 Academic Year

<table>
<thead>
<tr>
<th>Year 1</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td><strong>Credit Hours</strong></td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>MATH 1038</td>
<td>Calculus I with Lab&lt;sup&gt;1&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
<td></td>
</tr>
<tr>
<td>MATH 1941</td>
<td>Honors Calculus I</td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I</td>
<td></td>
</tr>
<tr>
<td>PHYS 2021</td>
<td>General Physics I</td>
<td></td>
</tr>
<tr>
<td>PHYS 2921</td>
<td>Honors General Physics I (F)</td>
<td></td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>15</td>
<td></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 1042 or 1942</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>PHYS 1062</td>
<td>Elementary Classical Physics II</td>
<td></td>
</tr>
<tr>
<td>PHYS 2022</td>
<td>General Physics II</td>
<td></td>
</tr>
<tr>
<td>PHYS 2922</td>
<td>Honors General Physics II (S)</td>
<td></td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>16</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td><strong>Credit Hours</strong></td>
<td></td>
</tr>
<tr>
<td>MATH 2043 or 2943</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>MATH 3041</td>
<td>Differential Equations I</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 2501</td>
<td>Computing for Scientists (F)</td>
<td>3</td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>16</td>
<td></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYS 2101</td>
<td>Classical Mechanics (S)</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 2502</td>
<td>Mathematical Physics (S)</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 2796</td>
<td>Introduction to Modern Physics [WI] (S)</td>
<td>4</td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td><strong>Credit Hours</strong></td>
<td></td>
</tr>
<tr>
<td>PHYS 3101</td>
<td>Analytical Mechanics (F)</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 3301</td>
<td>Electricity and Magnetism (F)</td>
<td>4</td>
</tr>
<tr>
<td>Science Elective&lt;sup&gt;2&lt;/sup&gt;</td>
<td>3-4</td>
<td></td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td>5-4</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>15</td>
<td></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYS 3302</td>
<td>Classical Electromagnetism (S)</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 3701</td>
<td>Introduction to Quantum Mechanics (S)</td>
<td>3</td>
</tr>
<tr>
<td>Science Elective&lt;sup&gt;2&lt;/sup&gt;</td>
<td>3-4</td>
<td></td>
</tr>
</tbody>
</table>
General Education/Elective Credits

Term Credit Hours

Year 4

Fall
PHYS 4101 Thermodynamics and Kinetic Theory (F) 3
PHYS 4702 Introduction of Atomic, Nuclear, and Particle Physics (F) 3
PHYS 4302 Optics (F) 3

General Education/Elective Credits

Term Credit Hours

Spring
PHYS 4701 or 4301 Introduction to Solid State Physics (S) 3
PHYS 4796 Experimental Physics [WI] (S) 3

General Education/Elective Credits

Term Credit Hours

Total Credit Hours:

(F) - Fall only course
(S) - Spring only course

1 Students who choose MATH 1038 must also take the linked course MATH 1039.
2 The elective can be chosen from Biology, Chemistry, Engineering, Earth & Environmental Science, Mathematics or Physics in consultation with the faculty advisor.
3 Complete two of the three courses listed: PHYS 4301, PHYS 4701, PHYS 4702.
4 PHYS 4701 is offered in even-numbered years. PHYS 4301 is offered in odd-numbered years.

Physics, Minor

Dr. James Napolitano, Acting Chair
Science Education and Research Center, Room 406
215-204-7634

Dr. Zbigniew Dziembowski, Faculty Advisor (Last names A-K)
Science Education and Research Center, Room 412
215-204-7639
zbig.dziembowski@temple.edu

Dr. Tan Yuen, Faculty Advisor (Last names L-Z)
Science Education and Research Center, Room 409
215-204-5182
tan.yuen@temple.edu

Minor Requirements

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I (calculus-based physics or equivalent)</td>
</tr>
<tr>
<td>PHYS 2021</td>
<td>General Physics I</td>
</tr>
<tr>
<td>PHYS 2921</td>
<td>Honors General Physics I (F)</td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 1062</td>
<td>Elementary Classical Physics II (calculus-based physics or equivalent)</td>
</tr>
<tr>
<td>PHYS 2022</td>
<td>General Physics II</td>
</tr>
<tr>
<td>PHYS 2922</td>
<td>Honors General Physics II (S)</td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 3301</td>
<td>Electricity and Magnetism (F)</td>
</tr>
<tr>
<td>or ECE 3712</td>
<td>Introduction to Electromagnetic Fields and Waves</td>
</tr>
<tr>
<td>PHYS 2796</td>
<td>Introduction to Modern Physics (S)</td>
</tr>
</tbody>
</table>
TUteach Programs

Dr. Susan Varnum, Program Director
Associate Dean for Science Education
College of Science and Technology
400 Carnell Hall
215-204-6390 or 215-204-4073
susan.varnum@temple.edu

Ms. Kathleen McKinley, Master Teacher/Faculty Advisor
College of Science and Technology
400 Carnell Hall
215-204-9252
kathleen.mc.kinley@temple.edu

Mr. Kenneth Ruff, TUteach Advisor
College of Science and Technology
1810 Liacouras Walk, Suite 203
215-204-2890
kruff@temple.edu

The Bachelor of Science (B.S.) with Teaching programs are part of Temple's innovative secondary education teacher-training program, “TUteach.” The B.S. with teaching provides broad training in the chosen discipline, and prepares students for a career in secondary school teaching. Students who complete the B.S. with Teaching meet Pennsylvania teacher certification requirements via theoretical and practical courses in education specifically designed for science and mathematics majors. The education courses in the B.S. with teaching degree program include practice teaching in school district classrooms and emphasize inquiry-based approaches to learning.

Eight Bachelors of Science programs enable students to prepare for secondary education certification while mastering the content of their field. The programs are:

- Biology with Teaching
- Chemistry with Teaching
- Earth and Space Science with Teaching
- General Science with Teaching
- Mathematics with Teaching
- Mathematics and Computer Science with Teaching
- Mathematics and Technology with Teaching
- Physics with Teaching

The programs require that students complete the collegial Bachelor of Science requirements and a total of 124 credits.

The links below will provide more information with a list of courses required for the particular major.

Programs

- Biology with Teaching, B.S. (p. 1162)
- Chemistry with Teaching, B.S. (p. 1167)
- Earth & Space Science with Teaching, B.S. (p. 1172)
- General Science with Teaching, B.S. (p. 1176)
- Mathematics & Technology with Teaching, B.S. (p. 1181)
- Mathematics with Teaching, B.S. (p. 1186)
- Mathematics/Computer Science with Teaching, B.S. (p. 1191)
- Physics with Teaching, B.S. (p. 1196)

Biology with Teaching, B.S.

Dr. Susan Varnum, Program Director
Associate Dean for Science Education
Biology with Teaching

The B.S. with Teaching in Biology is part of Temple's innovative "TUteach" secondary education teacher-training program. The B.S. with Teaching provides broad training in Biology, and prepares students for a career in secondary school teaching. The education courses in the B.S. with Teaching include supervised teaching in school district classrooms and emphasize inquiry-based approaches to learning. Students in the B.S. with Teaching degree program become eligible for a Pennsylvania teacher certification when they complete all the requirements for the degree that include theoretical and practical courses in education specifically designed for science and mathematics majors. In order to be recommended for Pennsylvania teacher certification, students must graduate with:

1. a B.S with Teaching degree
2. a minimum overall 3.0 GPA and
3. earn passing scores on the state-required SAT/PAPA tests.

Students are encouraged to stay on track to graduate with an overall GPA of 3.0 by meeting once each semester with a TUteach advisor and by meeting the prerequisite GPA for required courses. GPA and prerequisite course requirements insure that students are well prepared for the significant amounts of supervised classroom teaching required in advanced courses. Attention is specifically directed to the prerequisites required to enroll in SCES 4189 Project-Based Instruction, an advanced course required in all TUteach degrees and recommended to be taken in either the fifth or seventh semester. The prerequisites for this course include entering the course with a GPA of 3.0 and having earned passing scores on the PAPA Test ("Basic Knowledge": reading, writing, and mathematics) or SAT.

Summary of Requirements for the Degree

1. University Requirements (124 total s.h.)
   - MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
   - All Temple students must take a minimum of two writing-intensive courses at Temple as part of their major. Following is a list of courses that can be used to satisfy the writing-intensive requirement:
     - BIOL 2296 Genetics (S)
     - BIOL 3096 Cell Structure and Function (F)
     - BIOL 3396 Scientific Writing for Biology: The Art of Communicating
     - PHIL 2196 Perspectives on Science and Mathematics
     - SECE 3796 Differentiated Literacy Instruction in the Disciplines, 7-12
• Students must complete the General Education (GenEd) requirements.
  • The General Education Curriculum consists of approximately 22-23 s.h. See the General Education (p. 143) section of the Undergraduate Bulletin for the GenEd curriculum.
  • Students who complete TUteach majors typically receive a waiver for 1 Human Behavior (GB), 2 Science & Technology (GS), and 1 Quantitative Literacy (GQ) GenEd courses.

2. College Requirements
   • 90 credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).
   • 45 Upper Level (2000+) credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).

3. Major Requirements for Bachelor of Science (90-93 s.h.)

**Biology**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1111</td>
<td>Introduction to Biology I</td>
<td>4</td>
</tr>
<tr>
<td>or BIOL 1911</td>
<td>Honors Introduction to Biology I</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 2112</td>
<td>Introduction to Biology II</td>
<td>4</td>
</tr>
<tr>
<td>or BIOL 2912</td>
<td>Honors Introduction to Biology II</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 2296</td>
<td>Genetics (S)</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 2227</td>
<td>Principles of Ecology (S)</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 3091</td>
<td>Research Methods (S)</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 3096</td>
<td>Cell Structure and Function (F)</td>
<td>4</td>
</tr>
</tbody>
</table>

Three upper level Biology electives at the 2200 level or above 2

**Chemistry**

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1031 &amp; CHEM 1033</td>
<td>General Chemistry I and General Chemistry Laboratory I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1951 &amp; CHEM 1953</td>
<td>Honors General Chemical Science I and Honors Chemical Science Laboratory I</td>
<td>4</td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1032 &amp; CHEM 1034</td>
<td>General Chemistry II and General Chemistry Laboratory II</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1952 &amp; CHEM 1954</td>
<td>Honors General Chemical Science II and Honors Chemical Science Laboratory II</td>
<td>4</td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 2201 &amp; CHEM 2203</td>
<td>Organic Chemistry I and Organic Chemistry Laboratory I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 2211 &amp; CHEM 2213</td>
<td>Organic Chemistry for Majors I and Organic Majors Laboratory I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 2921 &amp; CHEM 2923</td>
<td>Organic Chemistry for Honors I and Organic Honors Laboratory I</td>
<td>4</td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 2202 &amp; CHEM 2204</td>
<td>Organic Chemistry II and Organic Chemistry Laboratory II</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 2212 &amp; CHEM 2214</td>
<td>Organic Chemistry for Majors II and Organic Majors Laboratory II</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 2922 &amp; CHEM 2924</td>
<td>Organic Chemistry for Honors II and Organic Honors Laboratory II</td>
<td>4</td>
</tr>
</tbody>
</table>

**Mathematics**

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1038</td>
<td>Calculus I with Lab</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1941</td>
<td>Honors Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1042</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 1942</td>
<td>Honors Calculus II</td>
<td>4</td>
</tr>
</tbody>
</table>

**Physics**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 2021</td>
<td>General Physics I</td>
<td>4</td>
</tr>
<tr>
<td>or PHYS 2921</td>
<td>Honors General Physics I</td>
<td>4</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credit Hours</td>
</tr>
<tr>
<td>------------</td>
<td>--------------------------------------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>PHYS 2022</td>
<td>General Physics II</td>
<td>4</td>
</tr>
<tr>
<td>or PHYS 2922</td>
<td>Honors General Physics II</td>
<td></td>
</tr>
<tr>
<td><strong>College of Science and Technology</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCTC 1389</td>
<td>Step 1 and 2: Inquiry-Based Lesson Design in Science and Mathematics Modified for English Learners</td>
<td>2</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDUC 2179</td>
<td>Knowing and Learning in Mathematics and Science</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 4388</td>
<td>TUteach Apprentice Teaching</td>
<td>6</td>
</tr>
<tr>
<td>EDUC 4802</td>
<td>TUteach Apprentice Teaching Seminar</td>
<td>1</td>
</tr>
<tr>
<td>SCES 2189</td>
<td>Classroom Interactions (S)</td>
<td>3</td>
</tr>
<tr>
<td>SCES 4189</td>
<td>Project-Based Instruction (F)</td>
<td>3</td>
</tr>
<tr>
<td>SECE 3796</td>
<td>Differentiated Literacy Instruction in the Disciplines, 7-12</td>
<td>3</td>
</tr>
<tr>
<td>SPED 2231</td>
<td>Introduction to Inclusive Education</td>
<td>3</td>
</tr>
<tr>
<td><strong>Philosophy/History</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHIL 2196</td>
<td>Perspectives on Science and Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>SCTC 3001</td>
<td>History of Science</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credit Hours</strong></td>
<td></td>
<td>90-93</td>
</tr>
</tbody>
</table>

(F) - Fall only course  
(S) - Spring only course 

1. The certification requirements need to meet Pennsylvania Department of Education standards and are subject to change. All students are strongly recommended to check with the TUteach Advisor in the College of Science and Technology, to affirm the requirements that pertain to their specific major. In addition, students should check the Undergraduate Bulletin web site for the most current information about these programs or the TUteach web site (http://cst.temple.edu/academics/accelerated-programs/tuteach). It is also recommended that all students meet with an advisor before enrolling in classes specific to these majors and leading to certification as a teacher. This is to assure that a candidate's intended program of study will be compatible with the new requirements.

2. See course descriptions for exceptions.

3. Students who choose MATH 1038 must also take the linked course MATH 1039.

**Note:** A grade of C or higher in CHEM 1031 and CHEM 1032 is required to take BIOL 1111 and BIOL 2112. A grade of C or higher in BIOL 1111 and BIOL 2112 is required to take upper-level Biology courses, and a C- or higher is required unless otherwise specified in all other courses for the major, including course prerequisites. BIOL 3091 is not available for major credit.

**Calculation of Major GPA**

The list of courses that are used to calculate major GPA is determined by the department. Students should consult with their academic advising unit for the applicable courses. In general, courses that could not apply toward the major as an elective or a required course are not counted for the major GPA. This would include BIOL 1011, for example.

**Distinction in Major**

To graduate with a Distinction in Biology with Teaching, students must meet the following requirements:

1. Achieve a 3.50 GPA or better for the aggregate of courses required for the B.S. in Biology with Teaching.

2. Achieve a 3.20 GPA or better in the Biology coursework.

3. Achieve a 3.91 GPA in the following courses:

   SCES 2189 | Classroom Interactions | 3
   SCES 4189 | Project-Based Instruction | 3
   EDUC 4802 | TUteach Apprentice Teaching Seminar | 1
   EDUC 4388 | TUteach Apprentice Teaching | 6

4. Write a final research paper either in a topic combining both major content and pedagogy or a topic focused on research in Biology. They must present their research for evaluation and present at a departmental research poster session before graduation. Consult the undergraduate TUteach advisor for more details.
# Suggested Academic Plan

## Bachelor of Science in Biology with Teaching

### Requirements for New Students starting in the 2015-2016 Academic Year

#### Year 1

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select one of the following:</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1031 &amp; CHEM 1033</td>
<td>General Chemistry I</td>
</tr>
<tr>
<td>&amp; CHEM 1951 &amp; CHEM 1953</td>
<td>Honors General Chemical Science I (F)</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1038</td>
<td>Calculus I with Lab¹</td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
</tr>
<tr>
<td>MATH 1941</td>
<td>Honors Calculus I</td>
</tr>
<tr>
<td>SCTC 1389</td>
<td>Step 1 and 2: Inquiry-Based Lesson Design in Science and Mathematics Modified for English Learners</td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td>6</td>
</tr>
</tbody>
</table>

| Term Credit Hours | 16 |

<table>
<thead>
<tr>
<th>Spring</th>
<th>16</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1111 or 1911</td>
<td>Introduction to Biology I</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1032 &amp; CHEM 1034</td>
<td>General Chemistry II</td>
</tr>
<tr>
<td>&amp; CHEM 1952 &amp; CHEM 1954</td>
<td>Honors General Chemical Science II (S)</td>
</tr>
<tr>
<td>MATH 1042 or 1942</td>
<td>Calculus II</td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td>4</td>
</tr>
</tbody>
</table>

| Term Credit Hours | 16 |

#### Year 2

<table>
<thead>
<tr>
<th>Fall</th>
<th>14</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 2112 or 2912</td>
<td>Introduction to Biology II</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 2201 &amp; CHEM 2203</td>
<td>Organic Chemistry I</td>
</tr>
<tr>
<td>&amp; CHEM 2211 &amp; CHEM 2213</td>
<td>Organic Chemistry for Majors I</td>
</tr>
<tr>
<td>CHEM 2921 &amp; CHEM 2923</td>
<td>Organic Chemistry for Honors I (F)</td>
</tr>
<tr>
<td>EDUC 2179</td>
<td>Knowing and Learning in Mathematics and Science</td>
</tr>
<tr>
<td>SPED 2231</td>
<td>Introduction to Inclusive Education</td>
</tr>
</tbody>
</table>

| Term Credit Hours | 14 |

<table>
<thead>
<tr>
<th>Spring</th>
<th>3-4</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 2227</td>
<td>Principles of Ecology (S)</td>
</tr>
<tr>
<td>BIOL 2296</td>
<td>Genetics [WI] (S)</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 2202 &amp; CHEM 2204</td>
<td>Organic Chemistry II</td>
</tr>
<tr>
<td>&amp; CHEM 2212 &amp; CHEM 2214</td>
<td>Organic Chemistry for Majors II</td>
</tr>
<tr>
<td>CHEM 2922 &amp; CHEM 2924</td>
<td>Organic Chemistry for Honors II (S)</td>
</tr>
<tr>
<td>SECE 3796</td>
<td>Differentiated Literacy Instruction in the Disciplines, 7-12 [WI]</td>
</tr>
</tbody>
</table>
### Year 3

#### Fall
- **BIOL 3096**: Cell Structure and Function [WI] (F)  
- **PHYS 2021 or 2921**: General Physics I  
- Select one of the following:  
  - **PHIL 2196**: Perspectives on Science and Mathematics [WI]  
  - **SCTC 3001**: History of Science

#### General Education/Elective Credits
- **Year 3**: Term Credit Hours 17

#### Spring
- Select one of the following:  
  - **BIOL 2227**: Principles of Ecology (S)  
  - **BIOL 2296**: Genetics [WI] (S)  
  - **BIOL 3091**: Research Methods (S)  
  - **PHYS 2022 or 2922**: General Physics II  
  - **SCES 2189**: Classroom Interactions (S)

#### General Education/Elective Credits
- **Spring**: Term Credit Hours 17

### Year 4

#### Fall
- Upper-Level 2200+ Biology Elective  
- Upper-Level 2200+ Biology Elective  
- **SCES 4189**: Project-Based Instruction (F)

#### General Education/Elective Credits
- **Fall**: Term Credit Hours 16

#### Spring
- Upper-Level 2200+ Biology Elective  
- **EDUC 4388**: TUteach Apprentice Teaching  
- **EDUC 4802**: TUteach Apprentice Teaching Seminar

#### General Education/Elective Credits
- **Spring**: Term Credit Hours 11

#### Total Credit Hours: 124

(F) - Fall only course  
(S) - Spring only course

1. Students who choose MATH 1038 must also take the linked course MATH 1039.
2. If the student has taken the necessary prerequisite courses, some of the Biology elective courses may be taken before the Fall semester of Year 4. While not required, BIOL 3101 Evolution is highly recommended as one of three Biology electives.

---

### Chemistry with Teaching, B.S.

Dr. Susan Varnum, Program Director  
Associate Dean for Science Education  
College of Science and Technology  
400 Carnell Hall  
215-204-6390 or 215-204-4073  
susan.varnum@temple.edu

Ms. Kathleen McKinley, Master Teacher/Faculty Advisor  
College of Science and Technology  
400 Carnell Hall  
215-204-9252
Chemistry with Teaching

The B.S. with Teaching in Chemistry is part of Temple's innovative "TUteach" secondary education teacher-training program. The B.S. with Teaching provides broad training in Chemistry, and prepares students for a career in secondary school teaching. The education courses in the B.S. with Teaching include supervised teaching in school district classrooms and emphasize inquiry-based approaches to learning. Students in the B.S. with Teaching degree program become eligible for a Pennsylvania teacher certification when they complete all the requirements for the degree that include theoretical and practical courses in education specifically designed for science and mathematics majors. In order to be recommended for Pennsylvania teacher certification, students must graduate with:

1. a B.S with Teaching degree
2. a minimum overall 3.0 GPA and
3. earn passing scores on the state-required SAT/PAPA tests.

Students are encouraged to stay on track to graduate with an overall GPA of 3.0 by meeting once each semester with a TUteach advisor and by meeting the prerequisite GPA for required courses. GPA and prerequisite course requirements insure that students are well prepared for the significant amounts of supervised classroom teaching required in advanced courses. Attention is specifically directed to the prerequisites required to enroll in SCES 4189 Project-Based Instruction, an advanced course required in all TUteach degrees and recommended to be taken in either the fifth or seventh semester. The prerequisites for this course include entering the course with a GPA of 3.0 and having earned passing scores on the PAPA Test ("Basic Knowledge:" reading, writing, and mathematics) or SAT.

Summary of Requirements for the Degree

1. University Requirements (124 total s.h.)
   - MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
   - All Temple students must take a minimum of two writing-intensive courses at Temple as part of their major. Following is a list of courses that can be used to satisfy the writing-intensive requirement:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 4196</td>
<td>Techniques of Chemical Measurement II</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 3397</td>
<td>Physical Chemistry Laboratory I</td>
<td>4</td>
</tr>
</tbody>
</table>
   & CHEM 3398 | Physical Chemistry Laboratory II | 4       |
   | PHIL 2196| Perspectives on Science and Mathematics    | 3       |
   | SECE 3796| Differentiated Literacy Instruction in the Disciplines, 7-12 | 3       |

   - Students must complete the General Education (GenEd) requirements.
   - The General Education Curriculum consists of approximately 22-23 s.h. See the General Education (p. 143) section of the Undergraduate Bulletin for the GenEd curriculum.
Students who complete TTeach majors typically receive a waiver for 1 Human Behavior (GB), 2 Science & Technology (GS), and 1 Quantitative Literacy (GQ) GenEd courses.

2. College Requirements
   • 90 credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).
   • 45 Upper-Level (2000+) credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).

3. Major Requirements for Bachelor of Science (83-84 s.h.)

Chemistry
Select one of the following: 4

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1031</td>
<td>General Chemistry I</td>
</tr>
</tbody>
</table>
& CHEM 1033 | and General Chemistry Laboratory I |
| CHEM 1951 | Honors General Chemical Science I |
& CHEM 1953 | and Honors Chemical Science Laboratory I (F) |

Select one of the following: 4

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1032</td>
<td>General Chemistry II</td>
</tr>
</tbody>
</table>
& CHEM 1034 | and General Chemistry Laboratory II |
| CHEM 1952 | Honors General Chemical Science II |
& CHEM 1954 | and Honors Chemical Science Laboratory II (S) |

Select one of the following: 4

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 2201</td>
<td>Organic Chemistry I</td>
</tr>
</tbody>
</table>
& CHEM 2203 | and Organic Chemistry Laboratory I |
| CHEM 2211 | Organic Chemistry for Majors I |
& CHEM 2213 | and Organic Majors Laboratory I (F) |
| CHEM 2921 | Organic Chemistry for Honors I |
& CHEM 2923 | and Organic Honors Laboratory I (F) |

Select one of the following: 4

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 2202</td>
<td>Organic Chemistry II</td>
</tr>
</tbody>
</table>
& CHEM 2204 | and Organic Chemistry Laboratory II |
| CHEM 2212 | Organic Chemistry for Majors II |
& CHEM 2214 | and Organic Majors Laboratory II (S) |
| CHEM 2922 | Organic Chemistry for Honors II |
& CHEM 2924 | and Organic Honors Laboratory II (S) |
| CHEM 3091 | Research Methods (S) |

Select one of the following: 4

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 3103</td>
<td>Techniques of Chemical Measurement I</td>
</tr>
</tbody>
</table>
& CHEM 3105 | and Introduction to Chemical Research Techniques |
| CHEM 3001 | Inorganic Chemistry |
| CHEM 3301 | Physical Chemistry Lecture I |
| CHEM 3302 | Physical Chemistry Lecture II |

Select one of the following: 4-5

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 4196</td>
<td>Techniques of Chemical Measurement II</td>
</tr>
<tr>
<td>CHEM 3397</td>
<td>Physical Chemistry Laboratory I</td>
</tr>
</tbody>
</table>
& CHEM 3398 | and Physical Chemistry Laboratory II |

Mathematics
Select one of the following: 4

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1038</td>
<td>Calculus I with Lab</td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
</tr>
<tr>
<td>MATH 1941</td>
<td>Honors Calculus I</td>
</tr>
<tr>
<td>MATH 1042</td>
<td>Calculus II</td>
</tr>
<tr>
<td>or MATH 1942</td>
<td>Honors Calculus II</td>
</tr>
<tr>
<td>MATH 2043</td>
<td>Calculus III</td>
</tr>
<tr>
<td>or MATH 2943</td>
<td>Honors Calculus III</td>
</tr>
</tbody>
</table>

Physics

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I</td>
</tr>
<tr>
<td>or PHYS 2021</td>
<td>General Physics I</td>
</tr>
<tr>
<td>PHYS 1062</td>
<td>Elementary Classical Physics II</td>
</tr>
</tbody>
</table>
or PHYS 2022

**General Physics II**

<table>
<thead>
<tr>
<th>College of Science &amp; Technology</th>
<th>Education</th>
<th>Philosophy/History</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCTR 1389</td>
<td>EDUC 2179</td>
<td>Select one of the following:</td>
</tr>
<tr>
<td>Step 1 and 2: Inquiry-Based Lesson Design in Science and Mathematics Modified for English Learners</td>
<td>Knowing and Learning in Mathematics and Science</td>
<td></td>
</tr>
<tr>
<td><strong>2</strong></td>
<td><strong>3</strong></td>
<td><strong>3</strong></td>
</tr>
<tr>
<td>TUtach Apprentice Teaching</td>
<td>TUtach Apprentice Teaching Seminar</td>
<td>PHIL 2196</td>
</tr>
<tr>
<td><strong>6</strong></td>
<td><strong>1</strong></td>
<td>Perspectives on Science and Mathematics</td>
</tr>
<tr>
<td>Classroom Interactions (S)</td>
<td>Project-Based Instruction (F)</td>
<td>SCTR 3001</td>
</tr>
<tr>
<td><strong>3</strong></td>
<td><strong>3</strong></td>
<td>History of Science</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SCES 2189</th>
<th>SCES 4189</th>
<th>EDUC 4388</th>
</tr>
</thead>
<tbody>
<tr>
<td>TUtach Apprentice Teaching Seminar</td>
<td>Project-Based Instruction</td>
<td>TUtach Apprentice Teaching</td>
</tr>
<tr>
<td><strong>1</strong></td>
<td><strong>3</strong></td>
<td><strong>6</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SEGE 3796</th>
<th>EDUC 4802</th>
</tr>
</thead>
<tbody>
<tr>
<td>Differentiated Literacy Instruction in the Disciplines, 7-12</td>
<td>TUtach Apprentice Teaching Seminar</td>
</tr>
<tr>
<td><strong>3</strong></td>
<td><strong>1</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SCES 2189</th>
<th>SCES 4189</th>
<th>SECE 3796</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classroom Interactions (S)</td>
<td>Project-Based Instruction (F)</td>
<td>Differentiated Literacy Instruction in the Disciplines, 7-12</td>
</tr>
<tr>
<td><strong>3</strong></td>
<td><strong>3</strong></td>
<td><strong>3</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SPED 2231</th>
<th>PHIL 2196</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to Inclusive Education</td>
<td>Perspectives on Science and Mathematics</td>
</tr>
<tr>
<td><strong>3</strong></td>
<td><strong>3</strong></td>
</tr>
</tbody>
</table>

**Total Credit Hours**

83-84

(F) - Fall only course
(S) - Spring only course

1. The certification requirements need to meet Pennsylvania Department of Education standards and are subject to change. All students are strongly recommended to check with the TUtach Advisor in the College of Science and Technology, to affirm the requirements that pertain to their specific major. In addition, students should check the Undergraduate Bulletin web site for the most current information about these programs, or the TUtach web site (http://cst.temple.edu/academics/accelerated-programs/tuteach).

It is also recommended that all students meet with an advisor before enrolling in classes specific to these majors and leading to certification as a teacher. This is to assure that a candidate’s intended program of study will be compatible with the new requirements.

2. Students who choose MATH 1038 must also take the linked course MATH 1039.

**Calculation of Major GPA**

The list of courses that are used to calculate major GPA is determined by the department. Students should consult with their academic advising unit for the applicable courses. In general, courses that could not apply toward the major as an elective or a required course are not counted for the major GPA. This would include CHEM 1027, for example.

**Distinction in Major**

To graduate with a Distinction in Chemistry with Teaching, students must meet the following requirements:

1. Achieve a 3.50 GPA or better for the aggregate of courses required for the B.S. in Chemistry with Teaching.

2. Achieve a 3.33 GPA or better in all the Chemistry courses in their major.

3. Achieve a 3.91 GPA in the following courses:

<table>
<thead>
<tr>
<th>SCES 2189</th>
<th>SCES 4189</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classroom Interactions</td>
<td>Project-Based Instruction</td>
</tr>
<tr>
<td><strong>3</strong></td>
<td><strong>3</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EDUC 4802</th>
</tr>
</thead>
<tbody>
<tr>
<td>TUtach Apprentice Teaching Seminar</td>
</tr>
<tr>
<td><strong>1</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EDUC 4388</th>
</tr>
</thead>
<tbody>
<tr>
<td>TUtach Apprentice Teaching</td>
</tr>
<tr>
<td><strong>6</strong></td>
</tr>
</tbody>
</table>

**Suggested Academic Plan**

**Bachelor of Science in Chemistry with Teaching**

**Requirements for New Students starting in the 2015-2016 Academic Year**

**Year 1**

**Fall**

Select one of the following:

<table>
<thead>
<tr>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
</tr>
<tr>
<td>Course Code</td>
</tr>
<tr>
<td>------------</td>
</tr>
<tr>
<td>CHEM 1031</td>
</tr>
<tr>
<td>&amp; CHEM 1033</td>
</tr>
<tr>
<td>CHEM 1951</td>
</tr>
<tr>
<td>&amp; CHEM 1953</td>
</tr>
</tbody>
</table>

Select one of the following:  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1038</td>
<td>Calculus I with Lab¹</td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
</tr>
<tr>
<td>MATH 1941</td>
<td>Honors Calculus I</td>
</tr>
<tr>
<td>SCTC 1389</td>
<td>Step 1 and 2: Inquiry-Based Lesson Design in Science and Mathematics Modified for English Learners</td>
</tr>
</tbody>
</table>

General Education/Elective Credits  

Term Credit Hours  7

Year 2  

Fall

Select one of the following:  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 201</td>
<td>Organic Chemistry I</td>
</tr>
<tr>
<td>&amp; CHEM 203</td>
<td></td>
</tr>
<tr>
<td>CHEM 211</td>
<td>Organic Chemistry for Majors I (F)</td>
</tr>
<tr>
<td>&amp; CHEM 213</td>
<td></td>
</tr>
<tr>
<td>CHEM 2921</td>
<td>Organic Chemistry for Honors I (F)</td>
</tr>
<tr>
<td>&amp; CHEM 2923</td>
<td></td>
</tr>
<tr>
<td>MATH 2043 or 2943</td>
<td>Calculus III</td>
</tr>
</tbody>
</table>

Select one of the following:  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 1062</td>
<td>Elementary Classical Physics I</td>
</tr>
<tr>
<td>PHYS 2022</td>
<td>General Physics II</td>
</tr>
<tr>
<td>PHYS 2922</td>
<td>Honors General Physics II (S)</td>
</tr>
<tr>
<td>EDUC 2179</td>
<td>Knowing and Learning in Mathematics and Science</td>
</tr>
</tbody>
</table>

General Education/Elective Credits  3

Term Credit Hours  15

Spring

Select one of the following:  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 202</td>
<td>Organic Chemistry II</td>
</tr>
<tr>
<td>&amp; CHEM 204</td>
<td></td>
</tr>
<tr>
<td>CHEM 212</td>
<td>Organic Chemistry for Majors II (S)</td>
</tr>
<tr>
<td>&amp; CHEM 214</td>
<td></td>
</tr>
<tr>
<td>CHEM 2922</td>
<td>Organic Chemistry for Honors II (S)</td>
</tr>
<tr>
<td>&amp; CHEM 2924</td>
<td></td>
</tr>
<tr>
<td>SECE 3796</td>
<td>Differentiated Literacy Instruction in the Disciplines, 7-12 [WI]</td>
</tr>
</tbody>
</table>

General Education/Elective Credits  10

Term Credit Hours  17

Year 3  

Fall

Select one of the following:  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 202</td>
<td>Organic Chemistry II</td>
</tr>
<tr>
<td>&amp; CHEM 204</td>
<td></td>
</tr>
<tr>
<td>CHEM 212</td>
<td>Organic Chemistry for Majors II (S)</td>
</tr>
<tr>
<td>&amp; CHEM 214</td>
<td></td>
</tr>
<tr>
<td>CHEM 2922</td>
<td>Organic Chemistry for Honors II (S)</td>
</tr>
<tr>
<td>&amp; CHEM 2924</td>
<td></td>
</tr>
<tr>
<td>SECE 3796</td>
<td>Differentiated Literacy Instruction in the Disciplines, 7-12 [WI]</td>
</tr>
</tbody>
</table>

General Education/Elective Credits  10

Term Credit Hours  17
CHEM 3103  Techniques of Chemical Measurement I  3
CHEM 3105  Introduction to Chemical Research Techniques  1
CHEM 3301  Physical Chemistry Lecture I  3
Select one of the following:  3
PHIL 2196  Perspectives on Science and Mathematics [WI]
SCTC 3001  History of Science
General Education/Elective Credits  7

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>17</th>
</tr>
</thead>
</table>

Spring

CHEM 3001  Inorganic Chemistry  3
CHEM 3091  Research Methods (S)  3
CHEM 3302  Physical Chemistry Lecture II  3
SCES 2189  Classroom Interactions (S)  3
General Education/Elective Credits  5

Year 4

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>17</th>
</tr>
</thead>
</table>

Fall

Select one of the following:  4-5
CHEM 4196  Techniques of Chemical Measurement II [WI]
CHEM 3397  Physical Chemistry Laboratory I [WI]
& CHEM 3398
SCES 4189  Project-Based Instruction (F)  3
General Education/Elective Credits  10-9

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>17</th>
</tr>
</thead>
</table>

Spring

EDUC 4388  TUteach Apprentice Teaching  6
EDUC 4802  TUteach Apprentice Teaching Seminar  1
General Education/Elective Credits  1

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>8</th>
</tr>
</thead>
</table>

Total Credit Hours:  124

(F) - Fall only course
(S) - Spring only course

1  Students who choose MATH 1038 must also take the linked course MATH 1039.

Earth & Space Science with Teaching, B.S.

Dr. Susan Varnum, Program Director
Associate Dean for Science Education
College of Science and Technology
400 Carnell Hall
215-204-6390 or 215-204-4073
susan.varnum@temple.edu

Ms. Kathleen McKinley, Master Teacher/Faculty Advisor
College of Science and Technology
400 Carnell Hall
215-204-9252
kathleen.mc.kinley@temple.edu

Mr. Kenneth Ruff, TUteach Advisor
College of Science and Technology
1810 Liacouras Walk, Suite 203
215-204-2890
kruff@temple.edu
Earth & Space Science with Teaching

The B.S. with Teaching in Earth & Space Science is part of Temple’s innovative "TUteach" secondary education teacher-training program. The B.S. with Teaching provides broad training in Earth & Space Science, and prepares students for a career in secondary school teaching. The education courses in the B.S. with Teaching include supervised teaching in school district classrooms and emphasize inquiry-based approaches to learning. Students in the B.S. with Teaching degree program become eligible for a Pennsylvania teacher certification when they complete all the requirements for the degree that include theoretical and practical courses in education specifically designed for science and mathematics majors. In order to be recommended for Pennsylvania teacher certification, students must graduate with:

1. a B.S with Teaching degree
2. a minimum overall 3.0 GPA and
3. earn passing scores on the state-required SAT/PAPA tests.

Students are encouraged to stay on track to graduate with an overall GPA of 3.0 by meeting once each semester with a TUteach advisor and by meeting the prerequisite GPA for required courses. GPA and prerequisite course requirements insure that students are well prepared for the significant amounts of supervised classroom teaching required in advanced courses. Attention is specifically directed to the prerequisites required to enroll in SCES 4189 Project-Based Instruction, an advanced course required in all TUteach degrees and recommended to be taken in either the fifth or seventh semester. The prerequisites for this course include entering the course with a GPA of 3.0 and having earned passing scores on the PAPA Test ("Basic Knowledge:" reading, writing, and mathematics) or SAT.

Summary of Requirements for the Degree

1. University Requirements (124 total s.h.)
   • MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
   • All Temple students must take a minimum of two writing-intensive courses at Temple as part of their major. Following is a list of courses that can be used to satisfy the writing-intensive requirement:
     - EES 2096 Climate Change: Oceans To Atmosphere (S) 4
     - EES 2097 Process Geomorphology (F) 4
     - EES 4696 Vertebrate Paleontology and Taphonomy (Fall of odd years) 3
     - EES 3096 Igneous and Metamorphic Petrology (S) 4
     - PHIL 2196 Perspectives on Science and Mathematics 3
     - SECE 3796 Differentiated Literacy Instruction in the Disciplines, 7-12 3

   • Students must complete the General Education (GenEd) requirements.
     • The General Education Curriculum consists of approximately 22-23 s.h. See the General Education (p. 143) section of the Undergraduate Bulletin for the GenEd curriculum.
     • Students who complete TUteach majors typically receive a waiver for 1 Human Behavior (GB), 2 Science & Technology (GS), and 1 Quantitative Literacy (GQ) GenEd courses.

2. College Requirements
   • 90 credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).
   • 45 Upper Level (2000+) credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).

3. Major Requirements for Bachelor of Science (84-85 s.h.)

   Chemistry
   Select one of the following: 4
   - CHEM 1031 General Chemistry I
   & CHEM 1033 and General Chemistry Laboratory I
   - CHEM 1951 Honors General Chemical Science I
   & CHEM 1953 and Honors Chemical Science Laboratory I (F)

   Earth & Environmental Science
   - EES 2001 Physical Geology 4
EES 2011  Mineralogy I (F)  4  
EES 2096  Climate Change: Oceans To Atmosphere (S)  4  
EES 3091  Research Methods (S)  3  
5 Earth & Environmental Science electives numbered 2002 or above  20  

**Mathematics**
Select one of the following:  4  
- MATH 1038  Calculus I with Lab 2  
- MATH 1041  Calculus I  
- MATH 1941  Honors Calculus I  

**Physics**
PHYS 1004  Introduction to Astronomy  3  
Select one of the following:  4  
- PHYS 1061  Elementary Classical Physics I  
- PHYS 2021  General Physics I  
- PHYS 2921  Honors General Physics I (F)  

**Science foundation courses**
Select two of the following:  7-8  
- BIOL 1111  Introduction to Biology I  
- or BIOL 1911  Honors Introduction to Biology I  
- BIOL 2112  Introduction to Biology II  
- or BIOL 2912  Honors Introduction to Biology II  
- CHEM 1032  General Chemistry II  
- & CHEM 1034  and General Chemistry Laboratory II  
- or CHEM 1952  Honors General Chemical Science II  
- & CHEM 1954  and Honors Chemical Science Laboratory II  
- CHEM 2201  Organic Chemistry I  
- & CHEM 2203  and Organic Chemistry Laboratory I  
- or CHEM 2921  Organic Chemistry for Honors I  
- & CHEM 2923  and Organic Honors Laboratory I  
- MATH 1042  Calculus II  
- or MATH 1942  Honors Calculus II  
- MATH 2031  Probability and Statistics  
- PHYS 1062  Elementary Classical Physics II  
- or PHYS 2022  General Physics II  

**College of Science & Technology**
SCTC 1389  Step 1 and 2: Inquiry-Based Lesson Design in Science and Mathematics Modified for English Learners  2  

**Education**
EDUC 2179  Knowing and Learning in Mathematics and Science  3  
EDUC 4388  TTeach Apprentice Teaching  6  
EDUC 4802  TTeach Apprentice Teaching Seminar  1  
SCES 2189  Classroom Interactions (S)  3  
SCES 4189  Project-Based Instruction (F)  3  
SECE 3796  Differentiated Literacy Instruction in the Disciplines, 7-12  3  
SPECT 2231  Introduction to Inclusive Education  3  

**Philosophy/History**
Select one of the following:  3  
- PHIL 2196  Perspectives on Science and Mathematics  
- SCTC 3001  History of Science  

**Total Credit Hours**  84-85  

(F) - Fall only course  
(S) - Spring only course
The certification requirements need to meet Pennsylvania Department of Education standards and are subject to change. All students are strongly recommended to check with the TUteach Advisor in the College of Science and Technology, to affirm the requirements that pertain to their specific major. In addition, students should check the Undergraduate Bulletin website for the most current information about these programs, or the TUteach web site (http://cst.temple.edu/academics/accelerated-programs/tuteach).

It is also recommended that all students meet with an advisor before enrolling in classes specific to these majors and leading to certification as a teacher. This is to assure that a candidate’s intended program of study will be compatible with the new requirements.

Students who choose MATH 1038 must also take the linked course MATH 1039.

Calculation of Major GPA

The list of courses that are used to calculate major GPA is determined by the department. Students should consult with their academic advising unit for the applicable courses. In general, courses that could not apply toward the major as an elective or a required course are not counted for the major GPA. This would include CHEM 1027, for example.

Distinction in Major

To graduate with a Distinction in Earth & Space Science with Teaching, students must:

• Achieve a 3.50 GPA or better for the aggregate of courses required for the major.

• Achieve a 3.50 GPA or better in the content area courses required for the major.

• Achieve a 3.91 GPA in the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCES 2189</td>
<td>3</td>
<td>Classroom Interactions</td>
</tr>
<tr>
<td>SCES 4189</td>
<td>3</td>
<td>Project-Based Instruction</td>
</tr>
<tr>
<td>EDUC 4802</td>
<td>1</td>
<td>TUteach Apprentice Teaching Seminar</td>
</tr>
<tr>
<td>EDUC 4388</td>
<td>6</td>
<td>TUteach Apprentice Teaching</td>
</tr>
</tbody>
</table>

Suggested Academic Plan

Bachelor of Science in Earth & Space Science with Teaching

Requirements for New Students starting in the 2015-2016 Academic Year

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>EES 2001</td>
<td>Physical Geology</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
</tr>
<tr>
<td>MATH 1038</td>
<td>Calculus I with Lab(^1)</td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
</tr>
<tr>
<td>MATH 1941</td>
<td>Honors Calculus I</td>
</tr>
<tr>
<td>SCTC 1389</td>
<td>Step 1 and 2: Inquiry-Based Lesson Design in Science and Mathematics Modified for English Learners</td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>16</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
</tr>
<tr>
<td>CHEM 1031</td>
<td>General Chemistry I</td>
</tr>
<tr>
<td>CHEM 1033</td>
<td>General Chemistry I</td>
</tr>
<tr>
<td>CHEM 1951</td>
<td>Honors General Chemical Science I (F)</td>
</tr>
<tr>
<td>CHEM 1953</td>
<td>Honors General Chemical Science I (F)</td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td>14</td>
</tr>
<tr>
<td><strong>Year 2</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>EES 2011</td>
<td>Mineralogy I (F)</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
</tr>
<tr>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I</td>
</tr>
<tr>
<td>PHYS 2021</td>
<td>General Physics I</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
</tr>
<tr>
<td>------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>PHYS 2921</td>
<td>Honors General Physics I (F)</td>
</tr>
<tr>
<td>EDUC 2179</td>
<td>Knowing and Learning in Mathematics and Science</td>
</tr>
<tr>
<td>SPED 2231</td>
<td>Introduction to Inclusive Education</td>
</tr>
</tbody>
</table>

**General Education/Elective Credits** 3

| Term Credit Hours | 17 |

**Spring**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EES 2096</td>
<td>Climate Change: Oceans To Atmosphere [WI] (S)²</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Science Foundation Elective (see approved list)</td>
<td>3-4</td>
</tr>
<tr>
<td>SECE 3796</td>
<td>Differentiated Literacy Instruction in the Disciplines, 7-12 [WI]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>General Education/Elective Credits</td>
<td>6-5</td>
</tr>
</tbody>
</table>

| Term Credit Hours | 16 |

**Year 3**

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Earth &amp; Environmental Science 2002+ Elective³</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1004</td>
<td>Introduction to Astronomy</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Science Foundation Elective (see approved list)</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Select one of the following:</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 2196</td>
<td>Perspectives on Science and Mathematics [WI]</td>
<td></td>
</tr>
<tr>
<td>SCTC 3001</td>
<td>History of Science</td>
<td></td>
</tr>
<tr>
<td></td>
<td>General Education/Elective Credits</td>
<td>3</td>
</tr>
</tbody>
</table>

| Term Credit Hours | 17 |

**Spring**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Earth &amp; Environmental Science 2002+ Elective³</td>
<td>4</td>
</tr>
<tr>
<td>Earth &amp; Environmental Science 2002+ Elective³</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EES 3091</td>
<td>Research Methods (S)</td>
<td>3</td>
</tr>
<tr>
<td>SCES 2189</td>
<td>Classroom Interactions (S)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>General Education/Elective Credits</td>
<td>3</td>
</tr>
</tbody>
</table>

| Term Credit Hours | 17 |

**Year 4**

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Earth &amp; Environmental Science 2002+ Elective³</td>
<td>4</td>
</tr>
<tr>
<td>Earth &amp; Environmental Science 2002+ Elective³</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCES 4189</td>
<td>Project-Based Instruction (F)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>General Education/Elective Credits</td>
<td>6</td>
</tr>
</tbody>
</table>

| Term Credit Hours | 17 |

**Spring**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 4388</td>
<td>TUteach Apprentice Teaching</td>
<td>6</td>
</tr>
<tr>
<td>EDUC 4802</td>
<td>TUteach Apprentice Teaching Seminar</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>General Education/Elective Credits</td>
<td>3</td>
</tr>
</tbody>
</table>

| Term Credit Hours | 10 |

| Total Credit Hours: | 124 |

1 Students who choose MATH 1038 must also take the linked course MATH 1039.
2 This course is offered in even Spring terms.
3 Earth & Environmental Science electives must be numbered 2002 or above.

(F) - Fall only course.
(S) - Spring only course.

**General Science with Teaching, B.S.**

Dr. Susan Varnum, Program Director
Associate Dean for Science Education
General Science with Teaching

The B.S. with Teaching in General Science is part of Temple's innovative "TUteach" secondary education teacher-training program. The B.S. with Teaching provides broad training in General Science, and prepares students for a career in secondary school teaching. The education courses in the B.S. with Teaching include supervised teaching in school district classrooms and emphasize inquiry-based approaches to learning. Students in the B.S. with Teaching degree program become eligible for a Pennsylvania teacher certification when they complete all the requirements for the degree that include theoretical and practical courses in education specifically designed for science and mathematics majors. In order to be recommended for Pennsylvania teacher certification, students must graduate with:

1. a B.S with Teaching degree
2. a minimum overall 3.0 GPA and
3. earn passing scores on the state-required SAT/PAPA tests.

Students are encouraged to stay on track to graduate with an overall GPA of 3.0 by meeting once each semester with a TUteach advisor and by meeting the prerequisite GPA for required courses. GPA and prerequisite course requirements insure that students are well prepared for the significant amounts of supervised classroom teaching required in advanced courses. Attention is specifically directed to the prerequisites required to enroll in SCES 4189 Project-Based Instruction, an advanced course required in all TUteach degrees and recommended to be taken in either the fifth or seventh semester. The prerequisites for this course include entering the course with a GPA of 3.0 and having earned passing scores on the PAPA Test ("Basic Knowledge:" reading, writing, and mathematics) or SAT.

Summary of Requirements for the Degree

1. University Requirements (124 total s.h.)
   - MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
   - All Temple students must take a minimum of two writing-intensive courses at Temple as part of their major. Following is a list of courses that can be used to satisfy the writing-intensive requirement:

   | BIOL 2296 | Genetics (S) |
   | BIOL 3096 | Cell Structure and Function (F) |
   | BIOL 3396 | Scientific Writing for Biology: The Art of Communicating |
   | CHEM 4196 | Techniques of Chemical Measurement II |
   | CHEM 3397 | Physical Chemistry Laboratory I |
   | & CHEM 3398 | Physical Chemistry Laboratory II |
   | ENG 2696 | Technical Writing |
   | PHIL 2196 | Perspectives on Science and Mathematics |
   | PHIL 2596 | Philosophical Perspectives on the Environment |
   | PHYS 2796 | Introduction to Modern Physics (S) |
   | PHYS 4796 | Experimental Physics (S) |
   | SECE 3796 | Differentiated Literacy Instruction in the Disciplines, 7-12 |

   - Students must complete the General Education (GenEd) requirements.

   - The General Education Curriculum consists of approximately 22-23 s.h. See the General Education (p. 143) section of the Undergraduate Bulletin for the GenEd curriculum.

   - Students who complete TUteach majors typically receive a waiver for 1 Human Behavior (GB), 2 Science & Technology (GS), and 1 Quantitative Literacy (GQ) GenEd courses.
2. College Requirements

- 90 credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).
- 45 Upper Level (2000+) credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).

3. Major Requirements for Bachelor of Science (80-88 s.h.)

<table>
<thead>
<tr>
<th>Biology</th>
<th>Credit Hours</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1011 General Biology I (F)</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>BIOL 1012 General Biology II (S)</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemistry</th>
<th>Credit Hours</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select one of the following:</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>CHEM 1031 General Chemistry I &amp; CHEM 1033 General Chemistry Laboratory I</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>CHEM 1951 Honors General Chemical Science I &amp; CHEM 1953 Honors Chemical Science Laboratory I (F)</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Technical Writing</th>
<th>Credit Hours</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 2696 Technical Writing</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Earth &amp; Environmental Science</th>
<th>Credit Hours</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>EES 1001 Introductory Geology</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>or EES 2001 Physical Geology</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mathematics</th>
<th>Credit Hours</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select one of the following:</td>
<td>4-8</td>
<td></td>
</tr>
<tr>
<td>MATH 1031 Differential and Integral Calculus</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>MATH 1041 Calculus I &amp; MATH 1042 and Calculus II</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Physics</th>
<th>Credit Hours</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 1004 Introduction to Astronomy</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PHYS 1021 Introduction to General Physics I</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>PHYS 1022 Introduction to General Physics II</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Upper-Level Electives</th>
<th>Credit Hours</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Four Upper-Level (2000+) elective science courses</td>
<td>12-16</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>College of Science and Technology</th>
<th>Credit Hours</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCTC 1389 Step 1 and 2: Inquiry-Based Lesson Design in Science and Mathematics Modified for English Learners</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Education</th>
<th>Credit Hours</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 2179 Knowing and Learning in Mathematics and Science</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>EDUC 4388 TTeach Apprentice Teaching</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>EDUC 4802 TTeach Apprentice Teaching Seminar</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>SCES 2189 Classroom Interactions (S)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>SCES 4189 Project-Based Instruction (F)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>SECE 3796 Differentiated Literacy Instruction in the Disciplines, 7-12</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>SPED 2231 Introduction to Inclusive Education</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Philosophy/History</th>
<th>Credit Hours</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select one of the following:</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PHIL 2196 Perspectives on Science and Mathematics (WI)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>SCTC 3001 History of Science</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Research Methods</th>
<th>Credit Hours</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select one of the following:</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

The certification requirements need to meet Pennsylvania Department of Education standards and are subject to change. All students are strongly recommended to check with the TUteach Advisor in the College of Science and Technology, to affirm the requirements that pertain to their specific major. In addition, students should check the Undergraduate Bulletin website for the most current information about these programs, or the TUteach web site (http://cst.temple.edu/academics/accelerated-programs/tuteach). It is also recommended that all students meet with an advisor before enrolling in classes specific to these majors and leading to certification as a teacher. This is to assure that a candidate's intended program of study will be compatible with the new requirements.

Students may choose to take MATH 1038 instead of MATH 1041 as part of the MATH 1041 & MATH 1042 sequence. If so, they must also take the linked course MATH 1039.

The four science electives chosen to satisfy the science concentration must be taken from the same department. The departments you can choose electives from are: Biology, Chemistry, Earth & Environmental Science or Physics. In the circumstance where a laboratory course is the complement of a lecture course, both must be completed to fulfill the requirement for ONE science elective.

The course must be selected from the same department as the four science electives.

Note: In addition to the overall major residency requirements, half of the concentration area must be completed at Temple.

**Calculation of Major GPA**

The list of courses that are used to calculate major GPA is determined by the department. Students should consult with their academic advising unit for the applicable courses. In general, courses that could not apply toward the major as an elective or a required course are not counted for the major GPA. This would include CHEM 1027, for example.

**Distinction in Major**

To graduate with a Distinction in General Science with Teaching, students must:

1. Achieve a 3.50 GPA or better for the aggregate of courses required for the B.S. in General Science with Teaching.

2. Achieve a 3.33 GPA or better in all the content area courses in the major.

3. Achieve a 3.91 GPA in the following courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCES 2189</td>
<td>Classroom Interactions</td>
<td>3</td>
</tr>
<tr>
<td>SCES 4189</td>
<td>Project-Based Instruction</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 4802</td>
<td>TUteach Apprentice Teaching Seminar</td>
<td>1</td>
</tr>
<tr>
<td>EDUC 4388</td>
<td>TUteach Apprentice Teaching</td>
<td>6</td>
</tr>
</tbody>
</table>

**Suggested Academic Plan**

**Bachelor of Science in General Science with Teaching**

**Requirements for New Students starting in the 2015-2016 Academic Year**

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td></td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1031</td>
<td>General Chemistry I</td>
</tr>
<tr>
<td>&amp; CHEM 1033</td>
<td></td>
</tr>
<tr>
<td>CHEM 1951</td>
<td>Honors General Chemical Science I (F)</td>
</tr>
<tr>
<td>&amp; CHEM 1953</td>
<td></td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1031</td>
<td>Differential and Integral Calculus</td>
</tr>
<tr>
<td>MATH 1038</td>
<td>Calculus I with Lab¹</td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
</tr>
<tr>
<td>MATH 1941</td>
<td>Honors Calculus I</td>
</tr>
</tbody>
</table>
SCTC 1389  
Step 1 and 2: Inquiry-Based Lesson Design in Science and Mathematics Modified for English Learners  
2
General Education/Elective Credits  
6

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
</tr>
</tbody>
</table>

**Spring**

Select one of the following:  
CHEM 1032  
& CHEM 1034  
CHEM 1952  
& CHEM 1954  
MATH 1042 or 1942  
Calculus II  
0-4
General Education/Elective Credits  
11-7

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
</tr>
</tbody>
</table>

**Year 2**

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1011</td>
<td>General Biology I (F)</td>
<td>4</td>
</tr>
<tr>
<td>SPED 2231</td>
<td>Introduction to Inclusive Education</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 2179</td>
<td>Knowing and Learning in Mathematics and Science</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following:  
EES 1001  
Introductory Geology  
EES 2001  
Physical Geology
General Education/Elective Credits  
3

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
</tr>
</tbody>
</table>

**Spring**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1012</td>
<td>General Biology II (S)</td>
<td>4</td>
</tr>
<tr>
<td>Science 2000+ Elective³</td>
<td>Technical Writing [WI]</td>
<td>3</td>
</tr>
<tr>
<td>ENG 2696</td>
<td>Technical Writing [WI]</td>
<td>3</td>
</tr>
<tr>
<td>SECE 3796</td>
<td>Differentiated Literacy Instruction in the Disciplines, 7-12 [WI]</td>
<td>3</td>
</tr>
</tbody>
</table>

General Education/Elective Credits  
4-3

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
</tr>
</tbody>
</table>

**Year 3**

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 1021</td>
<td>Introduction to General Physics I (F)</td>
<td>4</td>
</tr>
<tr>
<td>Science 2000+ Elective³</td>
<td>Perspectives on Science and Mathematics [WI]</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>History of Science</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 2196</td>
<td>Perspectives on Science and Mathematics [WI]</td>
<td>3</td>
</tr>
<tr>
<td>SCTC 3001</td>
<td>History of Science</td>
<td>3</td>
</tr>
</tbody>
</table>

General Education/Elective Credits  
6-5

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
</tr>
</tbody>
</table>

**Spring**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 1022</td>
<td>Introduction to General Physics II (S)</td>
<td>4</td>
</tr>
<tr>
<td>Select one of the following (S):³</td>
<td>Research Methods (S)</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 3091</td>
<td>Research Methods (S)</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 3091</td>
<td>Research Methods (S)</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 3091</td>
<td>Research Methods (S)</td>
<td>3</td>
</tr>
<tr>
<td>EES 3091</td>
<td>Research Methods (S)</td>
<td>3</td>
</tr>
<tr>
<td>SCES 2189</td>
<td>Classroom Interactions (S)</td>
<td>3</td>
</tr>
</tbody>
</table>

General Education/Elective Credits  
6

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
</tr>
</tbody>
</table>

**Year 4**

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 1004</td>
<td>Introduction to Astronomy</td>
<td>3</td>
</tr>
<tr>
<td>Science 2000+ Elective³</td>
<td></td>
<td>3-4</td>
</tr>
</tbody>
</table>
Science 2000+ Elective \(^3\)  
SCES 4189 Project-Based Instruction (F)  
General Education/Elective Credits  

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>17</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>EDUC 4388</td>
<td>TUteach Apprentice Teaching</td>
</tr>
<tr>
<td>EDUC 4802</td>
<td>TUteach Apprentice Teaching Seminar</td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 10

**Total Credit Hours:** 124

---

1. Students who choose MATH 1038 must also take the linked course MATH 1039.
2. Not required if MATH 1031 is completed.
3. The four science electives chosen to satisfy the science concentration must be taken from the same department. The departments you can choose electives from are: Biology, Chemistry, Earth & Environmental Science or Physics. The Research Methods course must also be selected from the same department as the four electives. In the circumstance where a laboratory course is the complement of a lecture course, both must be completed to fulfill the requirement for ONE science elective.

(F) - Fall only course  
(S) - Spring only course

**Mathematics & Technology with Teaching, B.S.**

Dr. Susan Varnum, Program Director  
Associate Dean for Science Education  
College of Science and Technology  
400 Carnell Hall  
215-204-6390 or 215-204-4073  
susan.varnum@temple.edu

Ms. Kathleen McKinley, Master Teacher/Faculty Advisor  
College of Science and Technology  
400 Carnell Hall  
215-204-9252  
kathleen.mc.kinley@temple.edu

Mr. Kenneth Ruff, TUteach Advisor  
College of Science and Technology  
1810 Liacouras Walk, Suite 203  
215-204-2890  
kruff@temple.edu

Dr. Edward Letzter, Chair  
Department of Mathematics  
Wachman Hall, Room 638  
215-204-7841

Dr. Boris Datskovsky, Content Advisor  
Department of Mathematics  
Wachman Hall, Room 632  
215-204-7847  
bdat@temple.edu

Dr. Maria Lorenz, Content Advisor  
Department of Mathematics  
Wachman Hall, Room 524  
215-204-6764  
angelone@temple.edu

Mr. Shawn Fagan, Director of Undergraduate Studies  
College of Engineering, Room 349
Mathematics & Technology with Teaching

The B.S. with Teaching in Mathematics and Technology is part of Temple's innovative "TUteach" secondary education teacher-training program. The B.S. with Teaching provides broad training in Mathematics and Engineering, and prepares students for a career in secondary school teaching. The education courses in the B.S. with Teaching include supervised teaching in school district classrooms and emphasize inquiry-based approaches to learning. Students in the B.S. with Teaching degree program become eligible for a Pennsylvania teacher certification when they complete all the requirements for the degree that include theoretical and practical courses in education specifically designed for science and mathematics majors. In order to be recommended for Pennsylvania teacher certification, students must graduate with:

1. a B.S with Teaching degree
2. a minimum overall 3.0 GPA and
3. earn passing scores on the state-required SAT/PAPA and Praxis II tests.

Students are encouraged to stay on track to graduate with an overall GPA of 3.0 by meeting once each semester with a TUteach advisor and by meeting the prerequisite GPA for required courses. GPA and prerequisite course requirements insure that students are well prepared for the significant amounts of supervised classroom teaching required in advanced courses. Attention is specifically directed to the prerequisites required to enroll in MAES 4189 Project-Based Instruction, an advanced course required in all TUteach degrees and recommended to be taken in either the fifth or seventh semester. The prerequisites for this course include entering the course with a GPA of 3.0 and having earned passing scores on the PAPA Test ("Basic Knowledge:" reading, writing, and mathematics) or SAT.

Summary of Requirements for the Degree

1. University Requirements (124 total s.h.)
   • MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
   • All Temple students must take a minimum of two writing-intensive courses at Temple as part of their major. Following is a list of courses that can be used to satisfy the writing-intensive requirement:
     MATH 3096 Introduction to Modern Algebra 3
     MATH 4096 Senior Problem Solving 3
     PHIL 2196 Perspectives on Science and Mathematics 3
     SECE 3796 Differentiated Literacy Instruction in the Disciplines, 7-12 3
   • Students must complete the General Education (GenEd) requirements.
     • The General Education Curriculum consists of approximately 22-23 s.h.  See the General Education (p. 143) section of the Undergraduate Bulletin for the GenEd curriculum.
     • Students who complete TUteach majors typically receive a waiver for 1 Human Behavior (GB), 2 Science & Technology (GS), and 1 Quantitative Literacy (GQ) GenEd courses.

2. College Requirements

   • 90 credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).
   • 45 Upper Level (2000+) credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).

3. Major Requirements for Bachelor of Science (94-97 s.h.)

Mathematics

Select one of the following: 4

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1038</td>
<td>Calculus I with Lab</td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
</tr>
<tr>
<td>MATH 1941</td>
<td>Honors Calculus I</td>
</tr>
<tr>
<td>MATH 1042</td>
<td>Calculus II</td>
</tr>
<tr>
<td>or MATH 1942</td>
<td>Honors Calculus II</td>
</tr>
<tr>
<td>MATH 2021</td>
<td>Functions and Modeling (S)</td>
</tr>
<tr>
<td>MATH 2043</td>
<td>Calculus III</td>
</tr>
<tr>
<td>or MATH 2943</td>
<td>Honors Calculus III</td>
</tr>
<tr>
<td>MATH 2101</td>
<td>Linear Algebra</td>
</tr>
<tr>
<td>or MATH 2103</td>
<td>Linear Algebra with Computer Lab</td>
</tr>
<tr>
<td>MATH 2111</td>
<td>Basic Concepts of Math</td>
</tr>
<tr>
<td>MATH 3003</td>
<td>Theory of Numbers</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>MATH 3031</td>
<td>Probability Theory I</td>
</tr>
<tr>
<td>MATH 3061</td>
<td>Modern Geometry I (F)</td>
</tr>
<tr>
<td>MATH 3096</td>
<td>Introduction to Modern Algebra</td>
</tr>
<tr>
<td>MATH 3137</td>
<td>Real &amp; Complex Analysis I (F)</td>
</tr>
<tr>
<td>MATH 3138</td>
<td>Real &amp; Complex Analysis II (S)</td>
</tr>
<tr>
<td>MATH 4096</td>
<td>Senior Problem Solving</td>
</tr>
<tr>
<td></td>
<td>One Mathematics 3000+ elective</td>
</tr>
</tbody>
</table>

**Physics or Chemistry**

Select one of the following sets: 3

```
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I</td>
<td></td>
</tr>
<tr>
<td>or PHYS 2921</td>
<td>Honors General Physics I</td>
<td></td>
</tr>
<tr>
<td>&amp; PHYS 1062</td>
<td>and Elementary Classical Physics II</td>
<td></td>
</tr>
<tr>
<td>or PHYS 2922</td>
<td>Honors General Physics II</td>
<td></td>
</tr>
<tr>
<td>CHEM 1031</td>
<td>General Chemistry I</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 1033</td>
<td>and General Chemistry Laboratory I</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 1032</td>
<td>and General Chemistry II</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 1034</td>
<td>and General Chemistry Laboratory II</td>
<td></td>
</tr>
</tbody>
</table>
```

**Engineering Foundation courses**

Select one of the following: 3

```
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 1101</td>
<td>Introduction to Engineering &amp; Engineering Technology</td>
<td></td>
</tr>
<tr>
<td>ENGR 1102</td>
<td>Introduction to Engineering</td>
<td></td>
</tr>
<tr>
<td>ENGR 1901</td>
<td>Honors Introduction to Engineering</td>
<td></td>
</tr>
<tr>
<td>ENGR 1117</td>
<td>Engineering Graphics</td>
<td></td>
</tr>
</tbody>
</table>
```

**Engineering Concentration Courses**

Select two courses within the same track: 3

Track 1 - Environment

```
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EES 2001</td>
<td>Physical Geology</td>
<td></td>
</tr>
<tr>
<td>CEE 2711</td>
<td>Environmental Chemistry &amp; Microbiology</td>
<td></td>
</tr>
<tr>
<td>or CEE 3711</td>
<td>Environmental Engineering</td>
<td></td>
</tr>
</tbody>
</table>
```

Track 2 - Robotics

```
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 2312</td>
<td>Electrical Engineering Science I</td>
<td></td>
</tr>
<tr>
<td>&amp; ECE 2313</td>
<td>and Electrical Engineering Science I Lab</td>
<td></td>
</tr>
<tr>
<td>ECE 2612</td>
<td>Digital Circuit Design</td>
<td></td>
</tr>
<tr>
<td>&amp; ECE 2613</td>
<td>and Digital Circuit Design Laboratory</td>
<td></td>
</tr>
</tbody>
</table>
```

Track 3 - Energy

```
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 3571</td>
<td>Classical and Statistical Thermodynamics</td>
<td></td>
</tr>
<tr>
<td>MEE 4575</td>
<td>Renewable and Alternative Energy</td>
<td></td>
</tr>
<tr>
<td>or MEE 4576</td>
<td>Photovoltaic System Design for Engineers</td>
<td></td>
</tr>
</tbody>
</table>
```

Track 4 - Bioengineering

```
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOE 2001</td>
<td>Frontiers in Bioengineering</td>
<td></td>
</tr>
<tr>
<td>BIOE 3725</td>
<td>Cell Biology for Engineers</td>
<td></td>
</tr>
<tr>
<td>or BIOL 3334</td>
<td>Mammalian Physiology</td>
<td></td>
</tr>
</tbody>
</table>
```

**College of Science & Technology**

```
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCTC 1389</td>
<td>Step 1 and 2: Inquiry-Based Lesson Design in Science and Mathematics Modified for English Learners</td>
<td>2</td>
</tr>
</tbody>
</table>
```

**Education**

```
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 2179</td>
<td>Knowing and Learning in Mathematics and Science</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 4388</td>
<td>TTeach Apprentice Teaching</td>
<td>6</td>
</tr>
<tr>
<td>EDUC 4802</td>
<td>TTeach Apprentice Teaching Seminar</td>
<td>1</td>
</tr>
<tr>
<td>MAES 2189</td>
<td>Classroom Interactions (S)</td>
<td>3</td>
</tr>
<tr>
<td>MAES 4189</td>
<td>Project-Based Instruction (F)</td>
<td>3</td>
</tr>
<tr>
<td>SECE 3796</td>
<td>Differentiated Literacy Instruction in the Disciplines, 7-12</td>
<td>3</td>
</tr>
<tr>
<td>SPED 2231</td>
<td>Introduction to Inclusive Education</td>
<td>3</td>
</tr>
</tbody>
</table>
```

**Philosophy/History**
Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL 2196</td>
<td>Perspectives on Science and Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>SCTC 3001</td>
<td>History of Science</td>
<td></td>
</tr>
</tbody>
</table>

**Research Methods**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL/CHM/EES/PHYS 3091</td>
<td>Research Methods (S)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credit Hours** 94-97

(F) - Fall only course  
(S) - Spring only course

1. The certification requirements need to meet Pennsylvania Department of Education standards and are subject to change. All students are strongly recommended to check with the TTeach Advisor in the College of Science and Technology, to affirm the requirements that pertain to their specific major. In addition, students should check the Undergraduate Bulletin website for the most current information about these programs, or the TTeach web site (http://cst.temple.edu/academics/accelerated-programs/tuteach). It is also recommended that all students meet with an advisor before enrolling in classes specific to these majors and leading to certification as a teacher. This is to assure that a candidate’s intended program of study will be compatible with the new requirements.

2. Students who choose MATH 1038 must also take the linked course MATH 1039.

3. Most engineering concentration courses require either Chemistry or Physics as a prerequisite, so students should choose the course that best prepares them for their intended track. The Environment and Bioengineering tracks cannot be completed without the chemistry sequence, and the Robotics and Energy tracks cannot be completed without the physics sequence.

### Calculation of Major GPA

The list of courses that are used to calculate major GPA is determined by the department. Students should consult with their academic advising unit for the applicable courses. In general, courses that could not apply toward the major as an elective or a required course are not counted for the major GPA. This would include MATH 1022, for example.

### Distinction in Major

To graduate with a Distinction in Mathematics and Technology with Teaching, a student should meet the following requirements:

- Achieve a 3.50 GPA or better for the aggregate of courses required for the B.S. in Mathematics and Technology with Teaching.
- Achieve a 3.50 GPA for the aggregate of CST content courses required for the B.S. in Mathematics and Technology with Teaching.
- Achieve a 3.50 GPA for the aggregate of Engineering content courses required for B.S. in Mathematics and Technology with Teaching.
- Achieve an overall GPA, including all college-level courses, of at least 3.25.
- Complete MATH 3141, MATH 3142 and MATH 4051 instead of MATH 3137 and MATH 3138, as well as MATH 3098 instead of MATH 3096.
- A student must achieve a GPA of 3.50 or higher in:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 3141</td>
<td>Advanced Calculus I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 3142</td>
<td>Advanced Calculus II</td>
<td>3</td>
</tr>
<tr>
<td>MATH 3098</td>
<td>Modern Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MATH 4051</td>
<td>Complex Analysis</td>
<td>3</td>
</tr>
</tbody>
</table>

  Any additional courses from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 3043</td>
<td>Numerical Analysis I</td>
<td>3 to 4</td>
</tr>
<tr>
<td>MATH 3044</td>
<td>Numerical Analysis II</td>
<td>3</td>
</tr>
<tr>
<td>MATH 3101</td>
<td>Topics in Modern Algebra</td>
<td>3</td>
</tr>
</tbody>
</table>

  Any 4000-level course other than individual study

- Achieve a 3.91 GPA in the following courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAES 2189</td>
<td>Classroom Interactions</td>
<td>3</td>
</tr>
<tr>
<td>MAES 4189</td>
<td>Project-Based Instruction</td>
<td></td>
</tr>
<tr>
<td>EDUC 4802</td>
<td>TTeach Apprentice Teaching Seminar</td>
<td>1</td>
</tr>
<tr>
<td>EDUC 4388</td>
<td>TTeach Apprentice Teaching</td>
<td>6</td>
</tr>
</tbody>
</table>
### Suggested Academic Plan

**Bachelor of Science in Mathematics & Technology with Teaching**

**Requirements for New Students starting in the 2015-2016 Academic Year**

#### Year 1

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Select one of the following:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MATH 1038 Calculus I with Lab(^1)</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>MATH 1041 Calculus I</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MATH 1941 Honors Calculus I</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Select one of the following:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CHEM 1031 General Chemistry I</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>&amp; CHEM 1033</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CHEM 1951 Honors General Chemical Science I</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&amp; CHEM 1953</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PHYS 1061 Elementary Classical Physics I</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PHYS 2921 Honors General Physics I (F)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SCTC 1389 Step 1 and 2: Inquiry-Based Lesson Design in Science and Mathematics Modified for English Learners</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>General Education/Elective Credits</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Spring</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MATH 1042 or 1942 Calculus II</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Select one of the following:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CHEM 1032 General Chemistry II</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>&amp; CHEM 1034</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CHEM 1952 Honors General Chemical Science II</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&amp; CHEM 1954</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PHYS 1062 Elementary Classical Physics II</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PHYS 2922 Honors General Physics II (S)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>General Education/Elective Credits</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

#### Year 2

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MATH 2043 or 2943 Calculus III</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>MATH 2101 or 2103 Linear Algebra</td>
<td>3-4</td>
</tr>
<tr>
<td></td>
<td>ENGR 1117 Engineering Graphics</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>EDUC 2179 Knowing and Learning in Mathematics and Science</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>General Education/Elective Credits</td>
<td>5-4</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Spring</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MATH 2021 Functions and Modeling</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MATH 2111 Basic Concepts of Math</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MATH 3031 Probability Theory I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>SPED 2231 Introduction to Inclusive Education</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>General Education/Elective Credits</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

#### Year 3

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
</table>
MATH 3003: Theory of Numbers 3
MATH 3137: Real Complex Analysis I (F) 3
Engineering Concentration Elective 3-4
SECE 3796: Differentiated Literacy Instruction in the Disciplines, 7-12 [WI] 3
Select one of the following:
PHIL 2196: Perspectives on Science and Mathematics [WI] 3
SCTC 3001: History of Science 3

General Education/Elective Credits 1-0

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring</td>
</tr>
<tr>
<td>MATH 3096: Introduction to Modern Algebra [WI] (S) 3</td>
</tr>
<tr>
<td>MATH 3138: Real Complex Analysis II (S) 3</td>
</tr>
<tr>
<td>MAES 2189: Classroom Interactions (S) 3</td>
</tr>
<tr>
<td>Select one of the following: 3</td>
</tr>
<tr>
<td>BIOL 3091: Research Methods (S)</td>
</tr>
<tr>
<td>CHEM 3091: Research Methods (S)</td>
</tr>
<tr>
<td>EES 3091: Research Methods (S)</td>
</tr>
<tr>
<td>PHYS 3091: Research Methods (S)</td>
</tr>
<tr>
<td>Engineering Concentration Elective 3-4</td>
</tr>
<tr>
<td>General Education/Elective Credits 1-0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 4</td>
</tr>
<tr>
<td>Fall</td>
</tr>
<tr>
<td>Mathematics Elective (3000+) 3</td>
</tr>
<tr>
<td>MATH 3061: Modern Geometry I (F) 3</td>
</tr>
<tr>
<td>MATH 4096: Senior Problem Solving [WI] 3</td>
</tr>
<tr>
<td>MAES 4189: Project-Based Instruction (F) 3</td>
</tr>
<tr>
<td>General Education/Elective Credits 4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring</td>
</tr>
<tr>
<td>EDUC 4388: TUtach Apprentice Teaching 6</td>
</tr>
<tr>
<td>EDUC 4802: TUtach Apprentice Teaching Seminar 1</td>
</tr>
<tr>
<td>General Education/Elective Credits 3</td>
</tr>
</tbody>
</table>

Total Credit Hours: 124

1 Students who choose MATH 1038 must also take the linked course MATH 1039.
2 The two (2) Engineering concentration electives must be chosen from the same track. See major requirements for details. Most engineering concentration courses require either Chemistry or Physics as a prerequisite, so students should choose the course that best prepares them for their intended track. The Environment and Bioengineering tracks cannot be completed without the chemistry sequence, and the Robotics and Energy tracks cannot be completed without the physics sequence.

(F) - Fall only course
(S) - Spring only course

Mathematics with Teaching, B.S.

Dr. Susan Varnum, Program Director
Associate Dean for Science Education
College of Science and Technology
400 Carnell Hall
215-204-6390 or 215-204-4073
susan.varnum@temple.edu

Ms. Kathleen McKinley, Master Teacher/Faculty Advisor
Mathematics with Teaching

The B.S. with Teaching in Mathematics is part of Temple’s innovative "TUteach" secondary education teacher-training program. The B.S. with Teaching provides broad training in Mathematics, and prepares students for a career in secondary school teaching. The education courses in the B.S. with Teaching include supervised teaching in school district classrooms and emphasize inquiry-based approaches to learning. Students in the B.S. with Teaching degree program become eligible for a Pennsylvania teacher certification when they complete all the requirements for the degree that include theoretical and practical courses in education specifically designed for science and mathematics majors. In order to be recommended for Pennsylvania teacher certification, students must graduate with:

1. a B.S with Teaching degree
2. a minimum overall 3.0 GPA and
3. earn passing scores on the state-required SAT/PAPA and Praxis II tests.

Students are encouraged to stay on track to graduate with an overall GPA of 3.0 by meeting once each semester with a TUteach advisor and by meeting the prerequisite GPA for required courses. GPA and prerequisite course requirements insure that students are well prepared for the significant amounts of supervised classroom teaching required in advanced courses. Attention is specifically directed to the prerequisites required to enroll in MAES 4189 Project-Based Instruction, an advanced course required in all TUteach degrees and recommended to be taken in either the fifth or seventh semester. The prerequisites for this course include entering the course with a GPA of 3.0 and having earned passing scores on the PAPA Test ("Basic Knowledge:" reading, writing, and mathematics) or SAT.

There are several degree programs in mathematics. The Bachelor of Arts in Mathematics provides a solid mathematical foundation and also allows for the most flexibility. The Bachelor of Science in Mathematics provides an in-depth theoretical background focusing on the traditional core areas of mathematics. This program is suitable preparation for graduate study in mathematics. The Bachelor of Science in Mathematics with Teaching program is aimed at students interested in teaching mathematics at the high school level. This program combines a solid mathematical foundation with the pedagogical training necessary for success as a high school teacher. This program also satisfies Pennsylvania’s teacher certification requirements.

Summary of Requirements for the Degree

1. University Requirements (124 total s.h.)
   - MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
   - All Temple students must take a minimum of two writing-intensive courses at Temple as part of their major. Following is a list of courses that can be used to satisfy the writing-intensive requirement:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 3096</td>
<td>Introduction to Modern Algebra</td>
</tr>
<tr>
<td>MATH 3098</td>
<td>Modern Algebra</td>
</tr>
<tr>
<td>MATH 4096</td>
<td>Senior Problem Solving</td>
</tr>
<tr>
<td>PHIL 2196</td>
<td>Perspectives on Science and Math</td>
</tr>
<tr>
<td>SECE 3796</td>
<td>Differentiated Literacy Instruction in the Disciplines, 7-12</td>
</tr>
</tbody>
</table>
• Students must complete the General Education (GenEd) requirements.
• The General Education Curriculum consists of approximately 22-23 s.h. See the General Education (p. 143) section of the Undergraduate Bulletin for the GenEd curriculum.
• Students who complete TUteach majors typically receive a waiver for 1 Human Behavior (GB), 2 Science & Technology (GS), and 1 Quantitative Literacy (GQ) GenEd courses.

2. College Requirements

• 90 credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).
• 45 Upper Level (2000+) credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).

3. Major Requirements for Bachelor of Science (87-88 s.h.)

**Computer & Information Science**

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 1053</td>
<td>Programming in Matlab</td>
</tr>
<tr>
<td>CIS 1057</td>
<td>Computer Programming in C</td>
</tr>
<tr>
<td>CIS 1068</td>
<td>Program Design and Abstraction</td>
</tr>
<tr>
<td>CIS 1968</td>
<td>Honors Program Design and Abstraction (F)</td>
</tr>
</tbody>
</table>

**Mathematics**

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1038</td>
<td>Calculus I with Lab 2</td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
</tr>
<tr>
<td>MATH 1941</td>
<td>Honors Calculus I</td>
</tr>
<tr>
<td>MATH 1042</td>
<td>Calculus II</td>
</tr>
<tr>
<td>or MATH 1942</td>
<td>Honors Calculus II</td>
</tr>
<tr>
<td>MATH 2021</td>
<td>Functions and Modeling (S)</td>
</tr>
<tr>
<td>MATH 2043</td>
<td>Calculus III</td>
</tr>
<tr>
<td>or MATH 2943</td>
<td>Honors Calculus III</td>
</tr>
<tr>
<td>MATH 2101</td>
<td>Linear Algebra</td>
</tr>
<tr>
<td>or MATH 2103</td>
<td>Linear Algebra with Computer Lab</td>
</tr>
<tr>
<td>MATH 2111</td>
<td>Basic Concepts of Math</td>
</tr>
<tr>
<td>MATH 3003</td>
<td>Theory of Numbers</td>
</tr>
<tr>
<td>MATH 3031</td>
<td>Probability Theory I</td>
</tr>
<tr>
<td>MATH 3061</td>
<td>Modern Geometry I</td>
</tr>
<tr>
<td>MATH 3096</td>
<td>Introduction to Modern Algebra</td>
</tr>
<tr>
<td>MATH 3137</td>
<td>Real &amp; Complex Analysis I (F)</td>
</tr>
<tr>
<td>MATH 3138</td>
<td>Real &amp; Complex Analysis II (S)</td>
</tr>
<tr>
<td>MATH 4096</td>
<td>Senior Problem Solving</td>
</tr>
<tr>
<td>One Mathematics elective at the 3000 level or above</td>
<td></td>
</tr>
</tbody>
</table>

**Physics**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I</td>
</tr>
<tr>
<td>or PHYS 2921</td>
<td>Honors General Physics I</td>
</tr>
<tr>
<td>PHYS 1062</td>
<td>Elementary Classical Physics II</td>
</tr>
<tr>
<td>or PHYS 2922</td>
<td>Honors General Physics II</td>
</tr>
</tbody>
</table>

**College of Science & Technology**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCTC 1389</td>
<td>Step 1 and 2: Inquiry-Based Lesson Design in Science and Mathematics Modified for English Learners</td>
</tr>
</tbody>
</table>

**Education**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 2179</td>
<td>Knowing and Learning in Mathematics and Science</td>
</tr>
<tr>
<td>EDUC 4388</td>
<td>TUteach Apprentice Teaching</td>
</tr>
<tr>
<td>EDUC 4802</td>
<td>TUteach Apprentice Teaching Seminar</td>
</tr>
<tr>
<td>MAES 2189</td>
<td>Classroom Interactions (S)</td>
</tr>
<tr>
<td>MAES 4189</td>
<td>Project-Based Instruction (F)</td>
</tr>
<tr>
<td>SECE 3796</td>
<td>Differentiated Literacy Instruction in the Disciplines, 7-12</td>
</tr>
<tr>
<td>SPED 2231</td>
<td>Introduction to Inclusive Education</td>
</tr>
</tbody>
</table>
Philosophy/History
Select one of the following:  
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL 2196</td>
<td>Perspectives on Science and Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>SCTC 3001</td>
<td>History of Science</td>
<td></td>
</tr>
</tbody>
</table>

Research Methods
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL/CHM/EES/PHYS 3091</td>
<td>Research Methods</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credit Hours 87-88

1. The certification requirements need to meet Pennsylvania Department of Education standards and are subject to change. All students are strongly recommended to check with the TUteach Advisor in the College of Science and Technology, to affirm the requirements that pertain to their specific major. In addition, students should check the Undergraduate Bulletin web site for the most current information about these programs, or the TUteach web site (http://cst.temple.edu/academics/accelerated-programs/tuteach). It is also recommended that all students meet with an advisor before enrolling in classes specific to these majors and leading to certification as a teacher. This is to assure that a candidate’s intended program of study will be compatible with the new requirements.

2. Students who choose MATH 1038 must also take the linked course MATH 1039.

Calculation of Major GPA

The list of courses that are used to calculate major GPA is determined by the department. Students should consult with their academic advising unit for the applicable courses. In general, courses that could not apply toward the major as an elective or a required course are not counted for the major GPA. This would include MATH 1022, for example.

Distinction in Major

To graduate with a Distinction in Mathematics with Teaching, students must:

- Achieve a 3.50 GPA or better in the Mathematics courses required for the B.S. in Mathematics with Teaching.
- Achieve an overall GPA, including all college-level courses, of at least 3.25.
- Complete MATH 3141, MATH 3142 and MATH 4051 instead of MATH 3137 and MATH 3138, as well as MATH 3098 instead of MATH 3096.
- Achieve a GPA of 3.50 or higher in:
  
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 3141</td>
<td>Advanced Calculus I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 3142</td>
<td>Advanced Calculus II</td>
<td>3</td>
</tr>
<tr>
<td>MATH 3098</td>
<td>Modern Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MATH 4051</td>
<td>Complex Analysis</td>
<td>3</td>
</tr>
<tr>
<td>MATH 3043</td>
<td>Numerical Analysis I</td>
<td>3 to 4</td>
</tr>
<tr>
<td>MATH 3044</td>
<td>Numerical Analysis II</td>
<td>3</td>
</tr>
<tr>
<td>MATH 3101</td>
<td>Topics in Modern Algebra</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Any additional courses from the following:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MATH 3043</td>
<td>Numerical Analysis I</td>
</tr>
<tr>
<td></td>
<td>MATH 3044</td>
<td>Numerical Analysis II</td>
</tr>
<tr>
<td></td>
<td>MATH 3101</td>
<td>Topics in Modern Algebra</td>
</tr>
<tr>
<td></td>
<td>Any 4000-level course other than individual study</td>
<td></td>
</tr>
</tbody>
</table>

- Achieve a 3.91 GPA in the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAES 2189</td>
<td>Classroom Interactions</td>
<td>3</td>
</tr>
<tr>
<td>MAES 4189</td>
<td>Project-Based Instruction</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 4802</td>
<td>TUtEach Apprentice Teaching Seminar</td>
<td>1</td>
</tr>
<tr>
<td>EDUC 4388</td>
<td>TUtEach Apprentice Teaching</td>
<td>6</td>
</tr>
</tbody>
</table>

Suggested Academic Plan

Bachelor of Science in Mathematics with Teaching

Requirements for New Students starting in the 2015-2016 Academic Year

Year 1

Fall

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credit Hours</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>MATH 1038</td>
<td>Calculus I with Lab</td>
<td>1</td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
<td>1</td>
</tr>
<tr>
<td>MATH 1941</td>
<td>Honors Calculus I</td>
<td>1</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>CIS 1053</td>
<td>Programming in Matlab</td>
<td></td>
</tr>
<tr>
<td>CIS 1057</td>
<td>Computer Programming in C</td>
<td></td>
</tr>
<tr>
<td>CIS 1068</td>
<td>Program Design and Abstraction</td>
<td></td>
</tr>
<tr>
<td>CIS 1968</td>
<td>Honors Program Design and Abstraction (F)</td>
<td></td>
</tr>
<tr>
<td>SCTC 1389</td>
<td>Step 1 and 2: Inquiry-Based Lesson Design in Science and Mathematics Modified for English Learners</td>
<td>2</td>
</tr>
</tbody>
</table>

General Education/Elective Credits 6

Term Credit Hours 16

Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1042 or 1942</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1061 or 2921</td>
<td>Elementary Classical Physics I</td>
<td>4</td>
</tr>
<tr>
<td>EDUC 2179</td>
<td>Knowing and Learning in Mathematics and Science</td>
<td>3</td>
</tr>
</tbody>
</table>

General Education/Elective Credits 5

Term Credit Hours 16

Year 2

Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 2043 or 2943</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>MATH 2101 or 2103</td>
<td>Linear Algebra</td>
<td>3-4</td>
</tr>
<tr>
<td>PHYS 1062 or 2922</td>
<td>Elementary Classical Physics II</td>
<td>4</td>
</tr>
<tr>
<td>SPED 2231</td>
<td>Introduction to Inclusive Education</td>
<td>3</td>
</tr>
</tbody>
</table>

General Education/Elective Credits 3-2

Term Credit Hours 17

Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 2021</td>
<td>Functions and Modeling (S)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 2111</td>
<td>Basic Concepts of Math</td>
<td>3</td>
</tr>
<tr>
<td>MATH 3031</td>
<td>Probability Theory I</td>
<td>3</td>
</tr>
<tr>
<td>MAES 2189</td>
<td>Classroom Interactions (S)</td>
<td>3</td>
</tr>
</tbody>
</table>

General Education/Elective Credits 4

Term Credit Hours 16

Year 3

Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 3003</td>
<td>Theory of Numbers</td>
<td>3</td>
</tr>
<tr>
<td>MATH 3137</td>
<td>Real Complex Analysis I (F)</td>
<td>3</td>
</tr>
<tr>
<td>SECE 3796</td>
<td>Differentiated Literacy Instruction in the Disciplines, 7-12 [WI]</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>PHIL 2196</td>
<td>Perspectives on Science and Mathematics [WI]</td>
<td></td>
</tr>
<tr>
<td>SCTC 3001</td>
<td>History of Science</td>
<td></td>
</tr>
</tbody>
</table>

General Education/Elective Credits 4

Term Credit Hours 16

Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 3096</td>
<td>Introduction to Modern Algebra [WI] (S)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 3138</td>
<td>Real Complex Analysis II (S)</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>BIOL 3091</td>
<td>Research Methods (S)</td>
<td></td>
</tr>
<tr>
<td>CHEM 3091</td>
<td>Research Methods (S)</td>
<td></td>
</tr>
<tr>
<td>EES 3091</td>
<td>Research Methods (S)</td>
<td></td>
</tr>
<tr>
<td>PHYS 3091</td>
<td>Research Methods (S)</td>
<td></td>
</tr>
</tbody>
</table>

General Education/Elective Credits 7

Term Credit Hours 16
### Year 4

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 3061</td>
<td>Modern Geometry I (F)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 4096</td>
<td>Senior Problem Solving [WI]</td>
<td>3</td>
</tr>
<tr>
<td>3000+ Math Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>MAES 4189</td>
<td>Project-Based Instruction (F)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>General Education/Elective Credits</td>
<td>5</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 17

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 4388</td>
<td>TUteach Apprentice Teaching</td>
<td>6</td>
</tr>
<tr>
<td>EDUC 4802</td>
<td>TUteach Apprentice Teaching Seminar</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>General Education/Elective Credits</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours**: 10

**Total Credit Hours**: 124

(F) - Fall only course  
(S) - Spring only course

---

1. Students who choose MATH 1038 must also take the linked course MATH 1039.

### Mathematics/Computer Science with Teaching, B.S.

Dr. Susan Varnum, Program Director  
Associate Dean for Science Education  
College of Science and Technology  
400 Carnell Hall  
215-204-6390 or 215-204-4073  
susan.varnum@temple.edu

Ms. Kathleen McKinley, Master Teacher/Faculty Advisor  
College of Science and Technology  
400 Carnell Hall  
215-204-9252  
kathleen.mc.kinley@temple.edu

Mr. Kenneth Ruff, TUteach Advisor  
College of Science and Technology  
1810 Liacouras Walk, Suite 203  
215-204-2890  
kruff@temple.edu

Dr. Edward Letzter, Chair  
Department of Mathematics  
Wachman Hall, Room 638  
215-204-7841

Dr. Boris Datskovsky, Content Advisor  
Department of Mathematics  
Wachman Hall, Room 632  
215-204-7847  
bdat@gmail.com

Dr. Maria Lorenz, Content Advisor  
Department of Mathematics  
Wachman Hall, Room 524  
215-204-6764  
angelone@temple.edu

Dr. Jie Wu, Chair  
Department of Computer & Information Science
Mathematics & Computer Science with Teaching

The B.S. with Teaching in Mathematics and Computer Science is part of Temple's innovative "TUteach" teacher-training program. The B.S. with Teaching provides broad training in Mathematics and Computer Science, and prepares students for a career in secondary school teaching. The education courses in the B.S. with Teaching include supervised teaching in school district classrooms and emphasize inquiry-based approaches to learning. Students in the B.S. with Teaching degree program become eligible for a Pennsylvania teacher certification when they complete all the requirements for the degree that include theoretical and practical courses in education specifically designed for science and mathematics majors. In order to be recommended for Pennsylvania teacher certification, students must graduate with:

1. a B.S with Teaching degree
2. a minimum overall 3.0 GPA and
3. earn passing scores on the state-required SAT/PAPA and Praxis II tests.

Students are encouraged to stay on track to graduate with an overall GPA of 3.0 by meeting once each semester with a TUteach advisor and by meeting the prerequisite GPA for required courses. GPA and prerequisite course requirements insure that students are well prepared for the significant amounts of supervised classroom teaching required in advanced courses. Attention is specifically directed to the prerequisites required to enroll in MAES 4189 Project-Based Instruction, an advanced course required in all TUteach degrees and recommended to be taken in either the fifth or seventh semester. The prerequisites for this course include entering the course with a GPA of 3.0 and having earned passing scores on the PAPA Test ("Basic Knowledge:" reading, writing, and mathematics) or SAT.

Summary of Requirements for the Degree

1. University Requirements (124 total s.h.)
   - MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
   - All Temple students must take a minimum of two writing-intensive courses at Temple as part of their major. Following is a list of courses that can be used to satisfy the writing-intensive requirement:
     - MATH 3096 Introduction to Modern Algebra
     - MATH 4096 Senior Problem Solving
     - PHIL 2196 Perspectives on Science and Mathematics
     - SECE 3796 Differentiated Literacy Instruction in the Disciplines, 7-12
   
   - Students must complete the General Education (GenEd) requirements.
     - The General Education Curriculum consists of approximately 22-23 s.h. See the General Education (p. 143) section of the Undergraduate Bulletin for the GenEd curriculum.
     - Students who complete TUteach majors typically receive a waiver for 1 Human Behavior (GB), 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.

2. College Requirements
   - 90 credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).
   - 45 Upper Level (2000+) credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).

3. Major Requirements for Bachelor of Science (93-95 s.h.)

<table>
<thead>
<tr>
<th>Computer &amp; Information Science</th>
<th>Mathematics</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 1068 Program Design and Abstraction</td>
<td>Select one of the following:</td>
</tr>
<tr>
<td>or CIS 1968 Honors Program Design and Abstraction</td>
<td>4</td>
</tr>
<tr>
<td>CIS 1166 Mathematical Concepts in Computing I</td>
<td></td>
</tr>
<tr>
<td>or CIS 1966 Honors Mathematical Concepts in Computing I</td>
<td></td>
</tr>
<tr>
<td>CIS 2107 Computer Systems and Low-Level Programming</td>
<td></td>
</tr>
<tr>
<td>CIS 2168 Data Structures</td>
<td>4</td>
</tr>
</tbody>
</table>

1. Students are encouraged to stay on track to graduate with an overall GPA of 3.0.
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1038</td>
<td>Calculus I with Lab&lt;sup&gt;2&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
<td></td>
</tr>
<tr>
<td>MATH 1941</td>
<td>Honors Calculus I</td>
<td></td>
</tr>
<tr>
<td>MATH 1042</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 1942</td>
<td>Honors Calculus II</td>
<td></td>
</tr>
<tr>
<td>MATH 2021</td>
<td>Functions and Modeling (S)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 2043</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 2943</td>
<td>Honors Calculus III</td>
<td></td>
</tr>
<tr>
<td>MATH 2101</td>
<td>Linear Algebra</td>
<td>3-4</td>
</tr>
<tr>
<td>or MATH 2103</td>
<td>Linear Algebra with Computer Lab</td>
<td></td>
</tr>
<tr>
<td>MATH 2111</td>
<td>Basic Concepts of Math</td>
<td>3</td>
</tr>
<tr>
<td>MATH 3061</td>
<td>Modern Geometry I (F)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 3096</td>
<td>Introduction to Modern Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MATH 3137</td>
<td>Real &amp; Complex Analysis I (F)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 3138</td>
<td>Real &amp; Complex Analysis II (S)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 4096</td>
<td>Senior Problem Solving</td>
<td>3</td>
</tr>
<tr>
<td><strong>Mathematics or Computer &amp; Information Science</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 3003</td>
<td>Theory of Numbers</td>
<td>3-4</td>
</tr>
<tr>
<td>or CIS 2166</td>
<td>Mathematical Concepts in Computing II</td>
<td></td>
</tr>
<tr>
<td><strong>Physics</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I</td>
<td>4</td>
</tr>
<tr>
<td>or PHYS 2921</td>
<td>Honors General Physics I</td>
<td></td>
</tr>
<tr>
<td>PHYS 1062</td>
<td>Elementary Classical Physics II</td>
<td>4</td>
</tr>
<tr>
<td>or PHYS 2922</td>
<td>Honors General Physics II</td>
<td></td>
</tr>
<tr>
<td><strong>College of Science &amp; Technology</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCTC 1389</td>
<td>Step 1 and 2: Inquiry-Based Lesson Design in Science and Mathematics Modified for English Learners</td>
<td>2</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDUC 2179</td>
<td>Knowing and Learning in Mathematics and Science</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 4388</td>
<td>TTeach Apprentice Teaching</td>
<td>6</td>
</tr>
<tr>
<td>EDUC 4802</td>
<td>TTeach Apprentice Teaching Seminar</td>
<td>1</td>
</tr>
<tr>
<td>MAES 2189</td>
<td>Classroom Interactions (S)</td>
<td>3</td>
</tr>
<tr>
<td>MAES 4189</td>
<td>Project-Based Instruction (F)</td>
<td>3</td>
</tr>
<tr>
<td>SECE 3796</td>
<td>Differentiated Literacy Instruction in the Disciplines, 7-12</td>
<td>3</td>
</tr>
<tr>
<td>SPED 2231</td>
<td>Introduction to Inclusive Education</td>
<td>3</td>
</tr>
<tr>
<td><strong>Philosophy/History</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHIL 2196</td>
<td>Perspectives on Science and Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>SCTC 3001</td>
<td>History of Science</td>
<td></td>
</tr>
<tr>
<td><strong>Research Methods</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL/CHEM/EES/PHYS 3091</td>
<td>Research Methods</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credit Hours</strong></td>
<td></td>
<td>93-95</td>
</tr>
</tbody>
</table>

<sup>(F) - Fall only course</sup>

<sup>(S) - Spring only course</sup>

1. The certification requirements need to meet Pennsylvania Department of Education standards and are subject to change. All students are strongly recommended to check with the TTeach Advisor in the College of Science and Technology, to affirm the requirements that pertain to their specific major. In addition, students should check the Undergraduate Bulletin web site for the most current information about these programs, or the TTeach web site (http://cst.temple.edu/academics/accelerated-programs/tuteach). It is also recommended that all students meet with an advisor before enrolling in classes specific to these majors and leading to certification as a teacher. This is to assure that a candidate's intended program of study will be compatible with the new requirements.

2. Students who choose MATH 1038 must also take the linked course MATH 1039.
Calculation of Major GPA

The list of courses that are used to calculate major GPA is determined by the department. Students should consult with their academic advising unit for the applicable courses. In general, courses that could not apply toward the major as an elective or a required course are not counted for the major GPA. This would include MATH 1022, for example.

Distinction in Major

To graduate with a Distinction in Mathematics and Computer Science with Teaching, a student should meet the following requirements:

- Achieve a 3.50 GPA or better for the aggregate of courses required for the B.S. in Mathematics and Computer Science with Teaching.
- Achieve a 3.50 GPA or better in the Mathematics and Computer Science with Teaching content courses required for the major.
- Achieve an overall GPA, including all college-level courses, of at least 3.25.
- Complete MATH 3141, MATH 3142 and MATH 4051 instead of MATH 3137 and MATH 3138, as well as MATH 3098 instead of MATH 3096.
- A student must achieve a GPA of 3.50 or higher in:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 3141</td>
<td>Advanced Calculus I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 3142</td>
<td>Advanced Calculus II</td>
<td>3</td>
</tr>
<tr>
<td>MATH 3098</td>
<td>Modern Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MATH 4051</td>
<td>Complex Analysis</td>
<td>3</td>
</tr>
<tr>
<td>MATH 3043</td>
<td>Numerical Analysis I</td>
<td>3 to 4</td>
</tr>
<tr>
<td>MATH 3044</td>
<td>Numerical Analysis II</td>
<td>3</td>
</tr>
<tr>
<td>MATH 3101</td>
<td>Topics in Modern Algebra</td>
<td>3</td>
</tr>
</tbody>
</table>

Any additional course from the following:

- Achieve a 3.91 GPA in the following courses:
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAES 2189</td>
<td>Classroom Interactions</td>
<td>3</td>
</tr>
<tr>
<td>MAES 4189</td>
<td>Project-Based Instruction</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 4802</td>
<td>TUtach Apprentice Teaching Seminar</td>
<td>1</td>
</tr>
<tr>
<td>EDUC 4388</td>
<td>TUtach Apprentice Teaching</td>
<td>6</td>
</tr>
</tbody>
</table>

Suggested Academic Plan

Bachelor of Science in Mathematics/Computer Science with Teaching

Requirements for New Students starting in the 2015-2016 Academic Year

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td></td>
</tr>
<tr>
<td>CIS 1068</td>
<td>Program Design and Abstraction</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1038</td>
<td>Calculus I with Lab</td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
</tr>
<tr>
<td>MATH 1941</td>
<td>Honors Calculus I</td>
</tr>
<tr>
<td>PHYS 1061 or 2921</td>
<td>Elementary Classical Physics I</td>
</tr>
<tr>
<td>SCTC 1389</td>
<td>Step 1 and 2: Inquiry-Based Lesson Design in Science and Mathematics Modified for English Learners</td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td>3</td>
</tr>
<tr>
<td>Term Credit Hours</td>
<td>17</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 1166 or 1966</td>
<td>Mathematical Concepts in Computing I</td>
</tr>
<tr>
<td>MATH 1042 or 1942</td>
<td>Calculus II</td>
</tr>
<tr>
<td>PHYS 1062 or 2922</td>
<td>Elementary Classical Physics II</td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td>4</td>
</tr>
<tr>
<td>Term Credit Hours</td>
<td>16</td>
</tr>
<tr>
<td>Year 2</td>
<td></td>
</tr>
<tr>
<td>----------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>CIS 2168</td>
<td>Data Structures</td>
</tr>
<tr>
<td>MATH 2043 or 2943</td>
<td>Calculus III</td>
</tr>
<tr>
<td>MATH 2101 or 2103</td>
<td>Linear Algebra</td>
</tr>
<tr>
<td>EDUC 2179</td>
<td>Knowing and Learning in Mathematics and Science</td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>CIS 2107</td>
<td>Computer Systems and Low-Level Programming</td>
</tr>
<tr>
<td>MATH 2021</td>
<td>Functions and Modeling (S)</td>
</tr>
<tr>
<td>MATH 2111</td>
<td>Basic Concepts of Math</td>
</tr>
<tr>
<td>SPED 2231</td>
<td>Introduction to Inclusive Education</td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Year 3</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>MATH 3137</td>
<td>Real Complex Analysis I (F)</td>
</tr>
<tr>
<td>SECE 3796</td>
<td>Differentiated Literacy Instruction in the Disciplines, 7-12 [WI]</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
</tr>
<tr>
<td>PHIL 2196</td>
<td>Perspectives on Science and Mathematics [WI]</td>
</tr>
<tr>
<td>SCTC 3001</td>
<td>History of Science</td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
</tr>
<tr>
<td>MATH 3003</td>
<td>Theory of Numbers</td>
</tr>
<tr>
<td>CIS 2166</td>
<td>Mathematical Concepts in Computing II</td>
</tr>
<tr>
<td>MATH 3096</td>
<td>Introduction to Modern Algebra [WI] (S)</td>
</tr>
<tr>
<td>MATH 3138</td>
<td>Real Complex Analysis II (S)</td>
</tr>
<tr>
<td>MAES 2189</td>
<td>Classroom Interactions (S)</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
</tr>
<tr>
<td>BIOL 3091</td>
<td>Research Methods (S)</td>
</tr>
<tr>
<td>CHEM 3091</td>
<td>Research Methods (S)</td>
</tr>
<tr>
<td>EES 3091</td>
<td>Research Methods (S)</td>
</tr>
<tr>
<td>PHYS 3091</td>
<td>Research Methods (S)</td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Year 4</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>MATH 3061</td>
<td>Modern Geometry I (F)</td>
</tr>
<tr>
<td>MATH 4096</td>
<td>Senior Problem Solving [WI]</td>
</tr>
<tr>
<td>MAES 4189</td>
<td>Project-Based Instruction (F)</td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>EDUC 4388</td>
<td>TUteach Apprentice Teaching</td>
</tr>
<tr>
<td>EDUC 4802</td>
<td>TUteach Apprentice Teaching Seminar</td>
</tr>
<tr>
<td>General Education/Elective Credits</td>
<td></td>
</tr>
<tr>
<td><strong>Term Credit Hours</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Total Credit Hours</strong>:</td>
<td></td>
</tr>
</tbody>
</table>

(F) - Fall only course
Physics with Teaching, B.S.

Dr. Susan Varnum, Program Director
Associate Dean for Science Education
College of Science and Technology
400 Carnell Hall
215-204-6390 or 215-204-4073
susan.varnum@temple.edu

Ms. Kathleen McKinley, Master Teacher/Faculty Advisor
College of Science and Technology
400 Carnell Hall
215-204-9252
kathleen.mc.kinley@temple.edu

Mr. Kenneth Ruff, TUteach Advisor
College of Science and Technology
1810 Liacouras Walk, Suite 203
215-204-2890
kruff@temple.edu

Dr. James Napolitano, Acting Chair
Science Education and Research Center, Room 406
215-204-7634

Dr. Zbigniew Dziembowski, Content Advisor (Last names A-K)
Science Education and Research Center, Room 412
215-204-7639
zbig.dziembowski@temple.edu

Dr. Tan Yuen, Content Advisor (Last names L-Z)
Science Education and Research Center, Room 409
215-204-5182
tan.yuen@temple.edu

Physics with Teaching

The B.S. with Teaching in Physics is part of Temple's innovative "TUteach" teacher-training program. The B.S. with Teaching provides broad training in Physics, and prepares students for a career in secondary school teaching. The education courses in the B.S. with Teaching include supervised teaching in school district classrooms and emphasize inquiry-based approaches to learning. Students in the B.S. with Teaching degree program become eligible for a Pennsylvania teacher certification when they complete all the requirements for the degree that include theoretical and practical courses in education specifically designed for science and mathematics majors. In order to be recommended for Pennsylvania teacher certification, students must graduate with:

1. a B.S with Teaching degree
2. a minimum overall 3.0 GPA and
3. earn passing scores on the state-required SAT/PAPA and Praxis II tests.

Students are encouraged to stay on track to graduate with an overall GPA of 3.0 by meeting once each semester with a TUteach advisor and by meeting the prerequisite GPA for required courses. GPA and prerequisite course requirements insure that students are well prepared for the significant amounts of supervised classroom teaching required in advanced courses. Attention is specifically directed to the prerequisites required to enroll in SCES 4189 Project-Based Instruction, an advanced course required in all TUteach degrees and recommended to be taken in either the fifth or seventh semester. The prerequisites for this course include entering the course with a GPA of 3.0 and having earned passing scores on the PAPA Test ("Basic Knowledge," reading, writing, and mathematics) or SAT.

Summary of Requirements for the Degree

1. University Requirements (124 total s.h.)
   - MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
• All Temple students must take a minimum of two writing-intensive courses at Temple as part of their major. Following is a list of courses that can be used to satisfy the writing-intensive requirement:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EES 2096</td>
<td>Climate Change: Oceans To Atmosphere</td>
</tr>
<tr>
<td>EES 3096</td>
<td>Igneous and Metamorphic Petrology</td>
</tr>
<tr>
<td>EES 4696</td>
<td>Vertebrate Paleontology and Taphonomy</td>
</tr>
<tr>
<td>PHIL 2196</td>
<td>Perspectives on Science and Mathematics</td>
</tr>
<tr>
<td>PHYS 2796</td>
<td>Introduction to Modern Physics</td>
</tr>
<tr>
<td>PHYS 4796</td>
<td>Experimental Physics</td>
</tr>
<tr>
<td>SECE 3796</td>
<td>Differentiated Literacy Instruction in the Disciplines, 7-12</td>
</tr>
</tbody>
</table>

• Students must complete the General Education (GenEd) requirements.
  • The General Education Curriculum consists of approximately 22-23 s.h. See the General Education (p. 143) section of the Undergraduate Bulletin for the GenEd curriculum.
  • Students who complete TTeach majors typically receive a waiver for 1 Human Behavior (GB), 2 Science & Technology (GS), and 1 Quantitative Literacy (GQ) GenEd courses.

2. College Requirements

• 90 credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).
• 45 Upper Level (2000+) credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).

3. Major Requirements for Bachelor of Science (85 s.h.)

**Mathematics**

Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1038</td>
<td>Calculus I with Lab</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1041</td>
<td>Calculus I</td>
<td></td>
</tr>
<tr>
<td>MATH 1941</td>
<td>Honors Calculus I</td>
<td></td>
</tr>
<tr>
<td>MATH 1042</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 1942</td>
<td>Honors Calculus II</td>
<td></td>
</tr>
<tr>
<td>MATH 2043</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 2943</td>
<td>Honors Calculus III</td>
<td></td>
</tr>
</tbody>
</table>

**Physics**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 1061</td>
<td>Elementary Classical Physics I</td>
<td>4</td>
</tr>
<tr>
<td>or PHYS 2021</td>
<td>General Physics I</td>
<td></td>
</tr>
<tr>
<td>or PHYS 2921</td>
<td>Honors General Physics I</td>
<td></td>
</tr>
<tr>
<td>PHYS 1062</td>
<td>Elementary Classical Physics II</td>
<td>4</td>
</tr>
<tr>
<td>or PHYS 2022</td>
<td>General Physics II</td>
<td></td>
</tr>
<tr>
<td>or PHYS 2922</td>
<td>Honors General Physics II</td>
<td></td>
</tr>
<tr>
<td>PHYS 2101</td>
<td>Classical Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 2502</td>
<td>Mathematical Physics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 2796</td>
<td>Introduction to Modern Physics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 3091</td>
<td>Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 3301</td>
<td>Electricity and Magnetism</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 4796</td>
<td>Experimental Physics</td>
<td>3</td>
</tr>
</tbody>
</table>

Physics Electives - Select three of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 1004</td>
<td>Introduction to Astronomy</td>
<td></td>
</tr>
<tr>
<td>PHYS 2501</td>
<td>Computing for Scientists</td>
<td></td>
</tr>
<tr>
<td>PHYS 3101</td>
<td>Analytical Mechanics</td>
<td></td>
</tr>
<tr>
<td>PHYS 3302</td>
<td>Classical Electromagnetism</td>
<td></td>
</tr>
<tr>
<td>PHYS 3701</td>
<td>Introduction to Quantum Mechanics</td>
<td></td>
</tr>
<tr>
<td>PHYS 4101</td>
<td>Thermodynamics and Kinetic Theory</td>
<td></td>
</tr>
<tr>
<td>PHYS 4301</td>
<td>Electronics</td>
<td></td>
</tr>
<tr>
<td>PHYS 4302</td>
<td>Optics</td>
<td></td>
</tr>
<tr>
<td>PHYS 4701</td>
<td>Introduction to Solid State Physics</td>
<td></td>
</tr>
<tr>
<td>PHYS 4702</td>
<td>Introduction of Atomic, Nuclear, and Particle Physics</td>
<td></td>
</tr>
</tbody>
</table>
Sequenced Science courses

Select one of the following sequences:

<table>
<thead>
<tr>
<th>Course Numbers</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1011 &amp; BIOL 1012</td>
<td>General Biology I and General Biology II</td>
<td>8</td>
</tr>
<tr>
<td>BIOL 1111 &amp; BIOL 2112</td>
<td>Introduction to Biology I and Introduction to Biology II</td>
<td>8</td>
</tr>
<tr>
<td>CHEM 1031 &amp; CHEM 1033 &amp; CHEM 1032 &amp; CHEM 1034</td>
<td>General Chemistry I and General Chemistry Laboratory I and General Chemistry II and General Chemistry Laboratory II</td>
<td>8</td>
</tr>
<tr>
<td>EES 2001</td>
<td>Physical Geology (and an Earth &amp; Environmental Science 2002+ Elective)</td>
<td>2</td>
</tr>
</tbody>
</table>

College of Science & Technology

<table>
<thead>
<tr>
<th>Course Numbers</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCTC 1389</td>
<td>Step 1 and 2: Inquiry-Based Lesson Design in Science and Mathematics Modified for English Learners</td>
<td>2</td>
</tr>
</tbody>
</table>

Education

<table>
<thead>
<tr>
<th>Course Numbers</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 2179</td>
<td>Knowing and Learning in Mathematics and Science</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 4388</td>
<td>TUteach Apprentice Teaching</td>
<td>6</td>
</tr>
<tr>
<td>EDUC 4802</td>
<td>TUteach Apprentice Teaching Seminar</td>
<td>1</td>
</tr>
<tr>
<td>SCES 2189</td>
<td>Classroom Interactions (S)</td>
<td>3</td>
</tr>
<tr>
<td>SCES 4189</td>
<td>Project-Based Instruction (F)</td>
<td>3</td>
</tr>
<tr>
<td>SECE 3796</td>
<td>Differentiated Literacy Instruction in the Disciplines, 7-12</td>
<td>3</td>
</tr>
<tr>
<td>SPED 2231</td>
<td>Introduction to Inclusive Education</td>
<td>3</td>
</tr>
</tbody>
</table>

Philosophy/History

Select one of the following:

<table>
<thead>
<tr>
<th>Course Numbers</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL 2196</td>
<td>Perspectives on Science and Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>SCTC 3001</td>
<td>History of Science</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credit Hours 85

1. The certification requirements need to meet Pennsylvania Department of Education standards and are subject to change. All students are strongly recommended to check with the TUteach Advisor in the College of Science and Technology, to affirm the requirements that pertain to their specific major. In addition, students should check the Undergraduate Bulletin web site for the most current information about these programs, or the TUteach web site (http://cst.temple.edu/academics/accelerated-programs/tuteach). It is also recommended that all students meet with an advisor before enrolling in classes specific to these majors and leading to certification as a teacher. This is to assure that a candidate’s intended program of study will be compatible with the new requirements.

2. Students who choose MATH 1038 must also take the linked course MATH 1039.

3. Students are required to take a two-semester sequence of laboratory science electives not within physics. The science courses can be chosen from Biology, Chemistry or Earth & Environmental Science.

Calculation of Major GPA

The list of courses that are used to calculate major GPA is determined by the department. Students should consult with their academic advising unit for the applicable courses. In general, courses that could not apply toward the major as an elective or a required course are not counted for the major GPA. This would include MATH 1022, for example.

Distinction in Major

To graduate with a Distinction in Physics with Teaching, students must:

- Achieve a 3.50 GPA or better for the aggregate of courses required for the major.

- Achieve a 3.50 GPA or better in the content area courses required for the major.

- Achieve a 3.91 GPA in the following courses:

<table>
<thead>
<tr>
<th>Course Numbers</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCES 2189</td>
<td>Classroom Interactions</td>
<td>3</td>
</tr>
<tr>
<td>SCES 4189</td>
<td>Project-Based Instruction</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 4802</td>
<td>TUteach Apprentice Teaching Seminar</td>
<td>1</td>
</tr>
<tr>
<td>EDUC 4388</td>
<td>TUteach Apprentice Teaching</td>
<td>6</td>
</tr>
</tbody>
</table>
• Write a final research paper in a topic combining both major content and pedagogy. They must present their research for evaluation and present at a departmental research poster session before graduation. Consult the undergraduate TTeach advisor for more details.

## Suggested Academic Plan

### Bachelor of Science in Physics with Teaching

#### Requirements for New Students starting in the 2015-2016 Academic Year

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Select one of the following:</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>MATH 1038 Calculus I with Lab</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MATH 1041 Calculus I</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MATH 1941 Honors Calculus I</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Select one of the following:</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>PHYS 1061 Elementary Classical Physics I</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PHYS 2021 General Physics I</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PHYS 2921 Honors General Physics I</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SCTC 1389 Step 1 and 2: Inquiry-Based Lesson Design in Science and Mathematics Modified for English Learners</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>General Education/Elective Credits</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td></td>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MATH 1042 or 1942 Calculus II</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Select one of the following:</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>PHYS 1062 Elementary Classical Physics II</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PHYS 2022 General Physics II</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PHYS 2922 Honors General Physics II</td>
<td></td>
</tr>
<tr>
<td></td>
<td>General Education/Elective Credits</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MATH 2043 or 2943 Calculus III</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>EDUC 2179 Knowing and Learning in Mathematics and Science</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>SPED 2231 Introduction to Inclusive Education</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>General Education/Elective Credits</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td></td>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PHYS 2101 Classical Mechanics (S)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>PHYS 2502 Mathematical Physics (S)</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>PHYS 2796 Introduction to Modern Physics [WI] (S)</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>General Education/Elective Credits</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3</th>
<th>Fall</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PHYS 3301 Electricity and Magnetism (F)</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Physics Elective (see approved list)²</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Sequenced Science Part 1 (see approved list)³</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>SECE 3796 Differentiated Literacy Instruction in the Disciplines, 7-12 [WI]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Select one of the following:</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>PHIL 2196 Perspectives on Science and Mathematics [WI]</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SCTC 3001 History of Science</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>17</strong></td>
</tr>
<tr>
<td></td>
<td>Spring</td>
<td></td>
</tr>
</tbody>
</table>


Physics Elective (see approved list)\(^2\) 3
PHYS 3091 Research Methods (S) 3
PHYS 4796 Experimental Physics [WI] (S) 3
SCES 2189 Classroom Interactions (S) 3
General Education/Elective Credits 4

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>16</th>
</tr>
</thead>
</table>

### Year 4

#### Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physics Elective (see approved list)(^2)</td>
<td>3</td>
</tr>
<tr>
<td>Sequenced Science Part 2 (see approved list)(^3)</td>
<td>4</td>
</tr>
<tr>
<td>SCES 4189 Project-Based Instruction (F)</td>
<td>3</td>
</tr>
</tbody>
</table>

General Education/Elective Credits 6

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>16</th>
</tr>
</thead>
</table>

#### Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 4388 TUteach Apprentice Teaching</td>
<td>6</td>
</tr>
<tr>
<td>EDUC 4802 TUteach Apprentice Teaching Seminar</td>
<td>1</td>
</tr>
</tbody>
</table>

General Education/Elective Credits 3

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>10</th>
</tr>
</thead>
</table>

Total Credit Hours: 124

(F) - Fall only course
(S) - Spring only course

1. Students who choose MATH 1038 must also take the linked course MATH 1039.
2. Students are required to take three advanced physics electives selected from the list in the requirements section.
3. Students are required to take a two-semester sequence of laboratory science electives not within physics. The science courses can be chosen from Biology, Chemistry or Earth & Environmental Science from the list in the requirements section.
School of Tourism & Hospitality Management

Founded 1998

M. Moshe Porat, Dean
Elizabeth H. Barber, Associate Dean
111 Speakman Hall (006-68)
1810 North 13th Street
Philadelphia, PA 19122
215-204-8701
http://sthm.temple.edu/
sthm@temple.edu

Accreditation

Temple University's Sport & Recreation Management Program is accredited by the Council on Accreditation of Parks, Recreation, Tourism and Related Professions (COAPRT). Temple University's School of Tourism and Hospitality Management (STHM) was first accredited in 1978, and the academic program(s) were re-accredited every 5 years since 1978. This means that Temple University was one of the first university programs to become accredited through the National Recreation and Parks Association (NRPA). Other accreditations have been discussed (i.e., North American Society of Sport Management (NASSM), and International – CHRIE, the Council for Tourism and Hospitality Educators), but neither of their accrediting bodies have been recognized by the Council for Higher Education Association (http://www.chea.org) (CHEA (http://youtu.be/8oCC3lVfZd8)). The Council on Accreditation of Parks, Recreation, Tourism and Related Professions (COAPRT) accredits baccalaureate programs in parks, recreation, tourism, sport management, event management, therapeutic recreation, and leisure studies offered at regionally accredited institutions within the United States and its territories, and at nationally accredited institutions in Canada and Mexico.

Goals & Objectives

The total experience within the School of Tourism and Hospitality Management enables students to have an excellent fundamental education and exposure to working professionals, internships, and personalized placement services. As a result, students are given a competitive advantage in a job market projected to double in the next decade.

The School of Tourism and Hospitality Management offers two undergraduate major programs:

- Sport and Recreation Management
- Tourism and Hospitality Management

The focus of the undergraduate programs is to provide a broad educational foundation and to prepare students for entry into the sport and recreation management, leisure service, or tourism and hospitality occupations at the professional level.

The Sport and Recreation Management program prepares students interested in sport and recreation careers in the private/commercial sector, public recreation and park agencies, professional sports, athletics, youth sport agencies, voluntary agencies, campus services, armed forces, and corporate/industrial settings.

The Tourism and Hospitality Management program prepares students for entry-level to mid-level positions in tourism, hospitality, and event management. The program prepares students to work in convention and visitors’ bureaus, destination management organizations, conference centers, resorts, casinos, hotels, theme parks, theaters, and clubs.

Both programs consist of coursework in the university’s General Education (GenEd (p. 143)), the school major course requirements, the supplemental electives from related disciplines, and two supervised field experiences.

Admissions

If you are applying for admission to Temple University as a freshman or a transfer student and wish to major in Sport and Recreation Management or Tourism and Hospitality Management, you should select the School of Tourism and Hospitality Management as your school/college. Then choose your major – Sport and Recreation Management or Tourism and Hospitality Management – as your curriculum. Submit the required materials to the Office of Undergraduate Admissions. Once you apply, you will receive an AccessNet Username and Password to check your application status online on the Student TUportal (https://tuportal4.temple.edu/cp/home/displaylogin) System.

Information regarding the admissions process should be directed to the School’s Manager of Marketing and Enrollment Management at sthm@temple.edu.
Financial Aid & Scholarships
Information regarding financial aid and scholarships is available from the Office of Student Financial Services (http://sfs.temple.edu). For additional information pertaining to specific scholarships within the school's disciplines, refer to the Center for Student Services (http://sthm.temple.edu/cms/main/css).

Special Programs and/or Professional Certification
Honors Community
Students admitted to the University Honors Program are eligible, by invitation only, to be part of the School of Tourism and Hospitality Management's Honors Community. Students participate in pre-approved Fox School of Business and Management Honors courses.

Student Association Information
Professional development begins with membership to associations/organizations for all School of Tourism and Hospitality Management (STHM) students. We encourage our students to consider joining one of the following groups during their academic tenure in the STHM. More information about each STHM Student Professional Organization (SPO) is available at the Center for Student Services (http://sthm.temple.edu/cms/main/css/student-professional-organizations). Scholarship opportunities are available within the associations for those who are active members. Please be reminded that, in most cases, students must be a member of the association for at least one year to be eligible for the available scholarships.

Undergraduate Student Professional Organizations
American Hotel & Lodging Association (AH&LA)
Serving the hospitality industry for nearly a century, AH&LA is the sole national association representing all sectors and stakeholders in the lodging industry, including individual hotel property members, hotel companies, student and faculty members, and industry suppliers. The Temple University chapter strives to set the foundation for the future hospitality careers of students through exposure and networking opportunities with industry professionals, and to open the door for students to delve into the hotel and lodging industry.

Event Planning Association (EPA)
The Event Planning Association of STHM plans and engages all SPO's in social, bonding, and informational activities, to ensure that the students are networking throughout STHM to help better their future careers.

Hospitality Sales and Marketing Association International (HSMAI)
HSMAI.tucc is a collegiate chapter under HSMAI. Members of the HSMAI Temple University Collegiate Chapter are mainly Temple University students and alumni who are interested in the profession of sales and marketing in the hospitality and tourism industries. The organization provides opportunities for students to network with professionals, as well as other collegiate chapters at monthly meetings, annual conferences, and special events. Any Tourism and Hospitality Management student looking to embark upon exposure to the Hospitality industry should join this association.

Meeting Professionals International (MPI)
TempleMPI is a student professional organization in the School of Tourism and Hospitality Management. It is an organization that combines education and networking to assist students to succeed academically and professionally. Through fundraising, networking, and various other opportunities, it helps to create a positive name for itself as well as its organization. TempleMPI feels the need to create opportunities, instead of waiting for them. Join and let it help you shape your future.

National Society of Minorities in Hospitality (NSMH)
NSMH is the premier professional organization for minority hospitality students. It addresses diversity and multiculturalism, as well as the career development of its student members. Temple University NSMH exposes students to opportunities in the industry nationwide. It provides events and programs that bring together college-level students with company sponsors, industry representatives, other hospitality organizations, advisors and mentors, and hospitality high school students. Temple has the primary local student chapter that is supported by the Multicultural Affairs Congress (MAC) of the Philadelphia Convention and Visitors Bureau (PCVB).

Professional Convention Management Association (PCMA)
PCMA members represent about 6,000 meeting industry leaders, including corporate and independent meeting professionals, as well as industry suppliers, faculty, and students. Whether students are looking to build relationships locally or regionally, or to meet professionals in the field, there are a variety of resources, education, and networking events that open the doors to these professionals. The Temple PCMA chapter hosts a variety of events and programs.
Sport and Recreation Professional Association (SRPA)

SRPA is a bridge between sport academia and the sports industry. SRPA is Temple’s original student-run organization designed specifically for Sport and Recreation Management majors. SRPA provides an excellent opportunity to network with students within the major and industry professionals through scheduled events, conferences, and semester meetings.

Sport Marketing Association of Temple University (SMAT)

The purpose of the Sport Marketing Association of Temple University (SMAT) is to expose Sport and Recreation Management and Tourism and Hospitality Management majors in STHM to career professionals, particularly in the Sport Marketing industry. This is accomplished by providing networking opportunities, speakers, and volunteer opportunities to allow members to gain more knowledge about various careers in the Sport Marketing industry.

Sport and Governance Association (SAGA)

Our purpose as the Sport and Governance Association is to expose our members to the following opportunities: networking events with established professionals in the sports law industry, informing our members about the potential careers available in our broad industry through guest speakers and information sessions, providing access to relevant information in preparation for the LSAT, while guiding our students in the process of becoming successful business professionals. As a member of the Sport and Governance Association, individuals will gain an understanding of all the legal implications of business.

Honors Societies

Eta Sigma Delta (ESD)

Eta Sigma Delta is an international honor society that recognizes exceptional academic achievement among hospitality and tourism students. Eta Sigma Delta is administered by the International Council on Hotel, Restaurant and Institutional Education (International CHRIE), the leading international association devoted to hospitality and tourism education. To earn this membership, students have to hold at least a 3.0 minimum in a 4.0 system and are in the top 20% of their class are eligible for this invitation. With the expansion of International CHRIE, membership is no longer limited to those who are studying in the United States.

Rho Phi Lambda (RPL) Professional Honorary Fraternity

Rho Phi Lambda is a National Honorary Recreation, Parks, and Leisure Services Fraternity. Rho Phi Lambda strives to recognize Sport and Recreation Management majors who have exemplified academic excellence in scholarship, leadership, and service. Membership in Rho Phi Lambda cultivates student professional development, through networking opportunities, scholarship eligibility, resume building, and campus and community service initiatives.

Special Facilities & Programs

Center for Student Services (CSS)

The CSS encourages a collaborative relationship between advisor and student, ultimately empowering the student to make sound and responsible decisions concerning his or her education. The student takes an active role in the utilization of the services offered by the school, and the university at large, while the academic advisor strives to assist the student with his or her academic, cultural, emotional, and pre-professional needs.

Center for Student Professional Development (CSPD)

The CSPD links classroom learning to successful career development. The CSPD resources offer students the latest internship and job opportunities through counseling on résumés, cover letters, interviewing skills, and selection criteria.

Sport Industry Research Center (SIRC)

SIRC provides opportunities for academics, students, and practitioners to explore the potential of sport to impact the communities within which they exist. Through a series of initiatives, SIRC attempts to conduct and disseminate research, educate and train executives, and function as a think tank and informational resource for those involved in the sport industry. Included amongst the initiatives that SIRC is involved in are: executive workshops, doctoral student training, community-based programming, event management and program consulting, and academic dissemination of cutting-edge research and managerial best practices.

Student Contact Information

Jeffrey W. Montague
Associate Vice Dean
111 Speakman Hall (006-68)
1810 North 13th Street
Philadelphia, PA 19122
215-204-8701
Academic Policies & Regulations

Please see Undergraduate Academic Policies (p. 81) in this Bulletin. Students are responsible for complying with all university-wide academic policies that apply to their individual academic status. Additional and unique policies, or exceptions for the School of Tourism and Hospitality Management, appear below.

All advising issues regarding academic policies and regulations should be directed to the School of Tourism and Hospitality Management's Center for Student Services (CSS) in Speakman Hall Suite 349, 1810 North 13th Street.

Dean's List

Each fall and spring semester, those undergraduates who have met the credit hour and academic criteria for their school or college are placed on the Dean's List. See the Dean's List (p. 92) policy for specific GPA and credit-hour requirements.

Student Code of Conduct, Good Neighbor Policy, and STHM Students Doctrine of Responsibility

All students in the School of Tourism and Hospitality Management are expected to abide by Temple University's Student Code of Conduct (http://policies.temple.edu/getdoc.asp?policy_no=03.70.12), Good Neighbor Policy (http://www.temple.edu/studentaffairs/deanofstudents/programs/good-neighbor-policy), and the STHM Students Doctrine of Responsibility (http://sthm.temple.edu/cms/wp-content/uploads/2013/10/sthm-student-policy.pdf).

The School of Tourism and Hospitality Management (STHM) represents a high degree of scholastic excellence. In turn, we expect an enhanced level of responsibility and preparation from our students. STHM students represent the school in a variety of forums, including, but not limited to, the classroom, internships and workplace settings. These environments require professionalism, commitment, knowledge and mutual respect. The STHM Students Doctrine of Responsibility policy will assist students in their pursuit of excellence while earning their degrees in Sport and Recreation Management or Tourism and Hospitality Management.

Grievance Procedures and Ombudsperson

University Ombudspersons are designated annually by the provost and vice presidents of the University. They are knowledgeable about harassment matters and trained to assist in understanding and resolving informal complaints. Ombudspersons are sensitive to the feelings, rights, and interests of all parties, and have demonstrated ability to handle confidential and sensitive matters in a discreet manner.

STHM's Academic Grievance Procedures are detailed in the following document: STHM Academic Grievance Procedures (http://sthm.temple.edu/cms/wp-content/uploads/2013/10/sthm-student-grievance.pdf). Additional information can be obtained from Temple University's Student and Faculty Academic Rights and Responsibilities (http://policies.temple.edu/getdoc.asp?policy_no=03.70.02) policy.

For further information, contact:

Dr. Debra Blair
Ombudsperson for Undergraduate and Master's Students
1810 North 13th Street, 314 Speakman Hall
215-204-1077
dblair@temple.edu

Temple University's Statements and Policies can be found on the Office of Institutional Diversity, Equity, Advocacy and Leadership (IDEAL (http://diversity.temple.edu/ideal)) web site.
Program Performance
Students not in good standing are subject to collegial warning and/or probation, or they may be academically dismissed and will be so notified by the Senior Vice Provost for Undergraduate Studies. See the University policy on Academic Standing (p. 83) for details on academic warning, academic probation, academic dismissal and reinstatement.

Transfer Between Colleges Within the University
Students may initiate transfer to STHM from another school or college of the university if they are in academic good standing, holding a minimum cumulative GPA of 2.0.

Change of Program Request
The Change of Program Request form (https://tuportal4.temple.edu/tuc/StudentSSB/files/cop3.pdf) can be picked up at any advising center or on the Senior Vice Provost for Undergraduate Studies (http://www.temple.edu/vpus) web site. Students wishing to transfer into STHM should follow the process below:

- Visit STHM’s Enrollment Manager
  STHM offers students the opportunity to meet with a personal enrollment manager to have questions about the programs and the major-change process answered. Students can meet with him in one of two ways:
  - Walk-In’s
    Students can walk-in to meet with Michael Usino, STHM’s Manager of Marketing and Enrollment Management. Feel free to walk-in to Speakman Hall, Suite 349 during normal business hours.
  - STHM Discovery Days
    STHM Discovery Days are 45-minute information sessions on the last day of every month at which students can explore STHM’s majors and learn about the programs. Visit Discovery Days (http://sthm.temple.edu/cms/sthm-discovery-days) to register.

- Complete a Change of Program Request Form
  After meeting with the STHM enrollment manager or attending an STHM Discovery Day, students can complete a Change of Program Request form (https://tuportal3.temple.edu/tuc/StudentSSB/files/cop3.pdf) and submit the completed form to the STHM Center for Student Services in Speakman Hall, Suite 349.

- Meet with an STHM Academic Advisor
  Once the Change of Program Request form is processed, students should make an individual appointment (http://foxweb.fox.temple.edu/foxdata/sthmadvising/main/login.aspx) with an STHM academic advisor to discuss courses, graduation planning, and the academic advising checklists. Questions can be sent to Michael Usino, Manager of Marketing and Enrollment Management at musino@temple.edu.

Non-Majors
Guidelines for Non-Majors Interested in STHM Coursework

- Non-Major students should, upon expressing interest in STHM coursework, seek advising guidance from their home school/college first to ensure availability within their graduation plan.
- Non-Major students should seek consultation from an STHM academic advisor (http://sthm.temple.edu/cms/main/css/css-contact-us), especially if interested in an STHM Minor and/or Certificate (http://sthm.temple.edu/minors).
- Non-Major students with a senior status at the university may not be allowed to proceed with specific STHM courses. Visit the Center for Student Services web site for details (http://sthm.temple.edu/cms/main/css/major/#non-majors).
- Non-Major students may register for more than one STHM course per semester if seats are available in the section of interest.
- STHM students will take precedence over Non-major students with regard to STHM required coursework and available seats.
- Students who elect to proceed with STHM 0827 and/or STHM 0857 should consult with an STHM academic advisor in reference to the course(s) applicability to their curriculum.

School Graduation Requirements
The information below is for new freshmen and transfer students admitted fall 2015 - spring 2016. For information prior to this time, refer to the catalog year for your matriculation semester and year. Click on the Archives (http://bulletin.temple.edu/archives) link to see Bulletins from previous years.

Center for Student Services (CSS)
School of Tourism and Hospitality Management (STHM)
349 Speakman Hall (006-68)
1810 North 13th Street
Philadelphia, PA 19122
215-204-8905
Students seeking a Bachelor of Science degree from the School of Tourism and Hospitality Management (STHM) must complete 124 semester hours of coursework and have a cumulative GPA of 2.0 and a major GPA of 2.0.

Certain courses may fulfill multiple requirements. In consultation with an advisor, students will be able to plan their curriculum more effectively.

The total number of credit hours at graduation may vary for some students based on initial placement exams, transfer evaluations, individual curricular choices, and academic progress.

Students are required to ensure that they have fulfilled the necessary prerequisites for any given course or course sequence. Students may read the entire policy in the section on university-wide Academic Policies (p. 81).

First Aid and CPR Certification are required.

Completion of 250 Industry-Related Hours is required.

Students must obtain a passport (http://studyabroad.temple.edu/scholarships/passport-scholarship) upon entering their first semester of senior coursework.

Academic Advising

Jarvis Bailey, Student Services/Associate Director
jarvis.bailey@temple.edu
215-204-1754

Advisees:

• All fourth and fifth year Seniors majoring in Sport and Recreation Management or Tourism and Hospitality Management
• All STHM Honors Students

Lauren Nicholson, Student Services/Undergraduate Senior Academic Advisor
lauren.nicholson@temple.edu
215-204-8759

Advisees:

• All Freshman, Sophomores, and Juniors majoring in Sport and Recreation Management
• All Student-Athletes
• Students interested in the Sport Management Certificate
• Students interested in the Sport Marketing Certificate
• Students interested in the Sport Management Minor

Kristen Miah, Student Services/Undergraduate Academic Advisor
kristen.miah@temple.edu
215-204-8738

Advisees:

• All Freshman, Sophomores, and Juniors majoring in Tourism and Hospitality Management
• Students interested in the Event Leadership Certificate
• All Pre-Business Students

Services Provided Through the Center for Student Services (CSS)

Center for Student Services (CSS)
Speakman Hall (006-68), Suite 349
1810 North 13th Street
Philadelphia, PA 19122
215-204-8905

The School of Tourism and Hospitality Management’s advising unit, the CSS, provides individualized information on placement exams and results, majors, minors, course sequence and load, scheduling, career planning, and academic resources. As a result, students are better equipped to make well-informed decisions regarding their futures.
The CSS encourages a collaborative relationship between advisor and student, ultimately empowering the student to make sound and responsible decisions concerning his or her education. The student takes an active role in the utilization of the services offered by the school, and the university at large, while the academic advisor strives to assist the student with his or her academic, cultural, emotional, and pre-professional needs.

**Special Advising Policies and Procedures**

The school utilizes a variety of advising sessions; evening, group, Saturday, virtual, and walk-in sessions; however, students are encouraged to schedule individualized appointments to cater to their specific academic needs.

**Faculty**

*Benjamin Altschuler*, Assistant Professor (Teaching/Instructional), Department of Tourism and Hospitality Management, School of Tourism and Hospitality Management; Ph.D., University of Utah.

*Elizabeth H. Barber*, Associate Professor, Department of Sport Management and Leisure Studies, School of Tourism and Hospitality Management; Ph.D., University of Iowa.

*Debra K. Blair*, Associate Professor (Teaching/Instructional), Department of Sport Management and Leisure Studies, School of Tourism and Hospitality Management; Ed.D., Temple University.

*Joris Drayer*, Associate Professor, Department of Sport Management and Leisure Studies, School of Tourism and Hospitality Management; Ph.D., University of Northern Colorado.

*Daniel C. Funk*, Professor, Department of Sport Management and Leisure Studies, School of Tourism and Hospitality Management; Ph.D., Ohio State University.

*Michael W. Jackson*, Professor, Department of Sport Management and Leisure Studies, School of Tourism and Hospitality Management; H.S.D., Indiana University.

*Jeremy S. Jordan*, Associate Professor, Department of Sport Management and Leisure Studies, School of Tourism and Hospitality Management; Ph.D., Ohio State University.

*R. Aubrey Kent*, Professor, Department of Sport Management and Leisure Studies, School of Tourism and Hospitality Management; Ph.D., Ohio State University.

*Ceridwyn Ann King*, Associate Professor, Department of Tourism and Hospitality Management, School of Tourism and Hospitality Management; Ph.D., Griffith University.

*Thilo Kunkel*, Assistant Professor, Department of Sport Management and Leisure Studies, School of Tourism and Hospitality Management; Ph.D., Griffith University.

*Christopher Lee*, Assistant Professor, Department of Sport Management and Leisure Studies, School of Tourism and Hospitality Management; Ph.D., University of Oregon.

*Xiang Li*, Professor, Department of Tourism and Hospitality Management, School of Tourism and Hospitality Management; Ph.D., Texas A and M University.

*Joseph E. Mahan III*, Associate Professor (Teaching/Instructional), Department of Sport Management and Leisure Studies, School of Tourism and Hospitality Management; Ph.D., University of Maryland College Park.

*Chihyung Michael Ok*, Associate Professor, Department of Tourism and Hospitality Management, School of Tourism and Hospitality Management; Ph.D., Kansas State University.

*Richard Ridall*, Assistant Professor (Teaching/Instructional), Department of Sport Management and Leisure Studies, School of Tourism and Hospitality Management; M.Ed., Temple University.

*Wesley S. Roehl*, Professor, Department of Tourism and Hospitality Management, School of Tourism and Hospitality Management; Ph.D., Texas A and M University.

*Ira L. Rosen*, Assistant Professor (Practice), Department of Tourism and Hospitality Management, School of Tourism and Hospitality Management; M.A., Montclair State University.

*Michael F. Sheridan*, Assistant Professor (Practice), Department of Tourism and Hospitality Management, School of Tourism and Hospitality Management; M.T.H.M., Temple University.

*Brian Soebbing*, Assistant Professor, Department of Sport Management and Leisure Studies, School of Tourism and Hospitality Management; Ph.D., University of Alberta.
Bachelor of Science in Sport & Recreation Management

Jeffrey W. Montague, Associate Vice Dean
215-204-8701
jeffrey.montague@temple.edu

R. Aubrey Kent, Chairperson
215-204-3810
aubkent@temple.edu

Joseph Mahan, Director of Programs in Sport and Recreation Management
215-204-3017
joe.mahan@temple.edu

Sport and Recreation Management Program

The Sport and Recreation Management program prepares students interested in sport and recreation careers in the private/commercial sector, public recreation and park agencies, professional sports, athletics, youth sport agencies, voluntary agencies, campus services, armed forces, and corporate/industrial settings.

University Requirements

All new students starting in the 2015-2016 academic year are required to complete the university’s General Education (GenEd (p. 143)) curriculum (35-36 credits).

School of Tourism & Hospitality Management Foundation Requirements

All students must earn a C- or higher in all courses required in the School of Tourism and Hospitality Management (STHM) curriculum.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STHM 1113</td>
<td>The Business of Leisure</td>
<td>3</td>
</tr>
<tr>
<td>STHM 2114</td>
<td>Leisure and Tourism for a Diverse Society</td>
<td>3</td>
</tr>
<tr>
<td>STHM 3185</td>
<td>Internship I (180 Hours)</td>
<td>3</td>
</tr>
<tr>
<td>STHM 4112</td>
<td>Senior Professional Development Seminar (Capstone course)</td>
<td>3</td>
</tr>
<tr>
<td>STHM 4185</td>
<td>Internship II (600 Hours)</td>
<td>12</td>
</tr>
<tr>
<td><strong>Total Credit Hours</strong></td>
<td></td>
<td><strong>24</strong></td>
</tr>
</tbody>
</table>

Designated Writing Intensive Courses

All Temple students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for this major are as follows:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STHM 3296</td>
<td>Marketing Management in Sport and Recreation</td>
<td>3</td>
</tr>
<tr>
<td>STHM 4296</td>
<td>Current and Ethical Issues in Sport and Recreation Management</td>
<td>3</td>
</tr>
</tbody>
</table>

Major Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STHM 1211</td>
<td>Sport and Society</td>
<td>3</td>
</tr>
<tr>
<td>STHM 2211</td>
<td>Organizational Strategy in Sport and Recreation</td>
<td>3</td>
</tr>
<tr>
<td>STHM 3211</td>
<td>Management in Sport and Recreation</td>
<td>3</td>
</tr>
<tr>
<td>STHM 3213</td>
<td>Budget and Finance Systems in Sport and Recreation</td>
<td>3</td>
</tr>
<tr>
<td>STHM 3216</td>
<td>Economics of Sport and Recreation</td>
<td>3</td>
</tr>
<tr>
<td>STHM 3217</td>
<td>Research in Sport and Recreation</td>
<td>3</td>
</tr>
<tr>
<td>STHM 3296</td>
<td>Marketing Management in Sport and Recreation</td>
<td>3</td>
</tr>
<tr>
<td>STHM 4212</td>
<td>Law &amp; Ethics in Sport and Recreation</td>
<td>3</td>
</tr>
</tbody>
</table>
Major Electives (12 Credits Required)

Students are required to take 12 Major Elective credits. They may take any 12 credits from the Concentration Requirement courses listed below. If students wish to have a "Concentration" designation on their transcripts, they must take 9 credits from one of the three categories listed below, and "declare" the concentration. They must then take one additional course to fulfill the 12-credit Major Elective requirement.

Optional Sport and Recreation Management Concentrations (9 Credits Required)

Please note: If a concentration is declared, students must complete three major management electives within it. In addition, a related capstone and Internship II. A fourth major management elective is still required for a total of twelve credits as stated above. Students can choose any additional major management elective to fulfill the fourth requirement.

Governance and Policy Concentration Requirements

Select three of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>STHM 3215</td>
<td>Stadium/Arena Design and Management</td>
</tr>
<tr>
<td>STHM 3221</td>
<td>Athletics Administration</td>
</tr>
<tr>
<td>STHM 3222</td>
<td>Professional and International Sport</td>
</tr>
<tr>
<td>STHM 3225</td>
<td>Recreation and Leisure Service Management</td>
</tr>
</tbody>
</table>

Sport and Recreation Promotion Concentration Requirements

Select three of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>STHM 3224</td>
<td>Media and Communications in Sport and Recreation</td>
</tr>
<tr>
<td>STHM 3226</td>
<td>Consumer Behavior in Sport and Recreation</td>
</tr>
<tr>
<td>STHM 3227</td>
<td>Advanced Marketing for Sport and Recreation</td>
</tr>
<tr>
<td>STHM 3228</td>
<td>Sales Management in Sport and Recreation</td>
</tr>
</tbody>
</table>

Event Leadership Concentration Requirements

Select three of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>STHM 3412</td>
<td>Foundations of Event Leadership</td>
</tr>
<tr>
<td>STHM 3415</td>
<td>Meetings, Conference, and Convention Management</td>
</tr>
<tr>
<td>STHM 3425</td>
<td>Sustainable Event Management</td>
</tr>
<tr>
<td>STHM 3428</td>
<td>Event Marketing and Sponsorship</td>
</tr>
</tbody>
</table>

Fox School of Business & Management Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 2101</td>
<td>Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BA 2104</td>
<td>Excel for Business Applications</td>
<td>1</td>
</tr>
<tr>
<td>ECON 1101</td>
<td>Macroeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 2101</td>
<td>Marketing Management</td>
<td>3</td>
</tr>
<tr>
<td>HRM 1101</td>
<td>Leadership and Organizational Management</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credit Hours 13

These four classes complete the required lower-division courses of the Business Minor.

School of Tourism & Hospitality Management Non-Credit Requirements

CPR Certification (Community-level or better).

First Aid Certification (Community-level or better).

Industry-Related Experience (Minimum 250 hours of participation required prior to STHM 4112).

Students must obtain a passport upon entering their first semester of senior coursework.
Free Electives (12 Credits)

Students must take at least 12 credits of Free Electives. In some cases, this number may vary to meet the 124 credits required for graduation. Students can use these Free Elective credits to take any courses at Temple University. (Please contact the STHM Center for Student Services [CSS] for additional information.)

Options

Business Minor

See Advisor. (www.fox.temple.edu/cms_academics/dept/advising/minors/)

General Business Studies Minor

See Advisor. (www.fox.temple.edu/cms_academics/dept/advising/minors/)

Suggested Academic Plan

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>STHM 1113</td>
<td>The Business of Leisure 3</td>
</tr>
<tr>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW] 4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>Term Credit Hours</td>
<td>16</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>STHM 1211</td>
<td>Sport and Society 3</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY] 3</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td>4</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>HRM 1101</td>
<td>Leadership and Organizational Management 3</td>
</tr>
<tr>
<td>Term Credit Hours</td>
<td>16</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>STHM 2114</td>
<td>Leisure and Tourism for a Diverse Society 3</td>
</tr>
<tr>
<td>Free Elective 1</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3-4</td>
</tr>
<tr>
<td>IH 0852 or 0952</td>
<td>Mosaic: Humanities Seminar II [GZ] 3</td>
</tr>
<tr>
<td>ECON 1101</td>
<td>Macroeconomic Principles 3</td>
</tr>
<tr>
<td>Term Credit Hours</td>
<td>16</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>STHM 2211</td>
<td>Organizational Strategy in Sport and Recreation 3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 2101</td>
<td>Financial Accounting 3</td>
</tr>
<tr>
<td>MKTG 2101</td>
<td>Marketing Management 3</td>
</tr>
<tr>
<td>BA 2104</td>
<td>Excel for Business Applications 1</td>
</tr>
<tr>
<td>Term Credit Hours</td>
<td>16</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>STHM 3185</td>
<td>Internship I 3</td>
</tr>
<tr>
<td>STHM 3211</td>
<td>Management in Sport and Recreation 3</td>
</tr>
<tr>
<td>STHM 3216</td>
<td>Economics of Sport and Recreation 3</td>
</tr>
<tr>
<td>STHM 3217</td>
<td>Research in Sport and Recreation 3</td>
</tr>
</tbody>
</table>
### Schools, Colleges, and Divisions

#### Bachelor of Science in Tourism & Hospitality Management

**Jeffrey W. Montague, Associate Vice Dean**  
215-204-8701  
jeffrey.montague@temple.edu

**R. Aubrey Kent, Chairperson**  
215-204-3810  
aubkent@temple.edu

**Wesley Roehl, Director of Programs in Tourism and Hospitality Management**  
215-204-5861  
wroehl@temple.edu

**Tourism and Hospitality Management Program**

The Tourism and Hospitality Management program prepares students for entry-level to mid-level positions in tourism, hospitality, and event management. The program prepares students to work in convention and visitors’ bureaus, destination management organizations, conference centers, resorts, casinos, hotels, theme parks, theaters, and clubs.

**University Requirements**

All new students starting in the 2015-2016 academic year and beyond are required to complete the university's General Education (GenEd (p. 143)) curriculum (35-36 credits).

**School of Tourism & Hospitality Management Foundation Requirements**

All students must earn a C- or higher in all courses required in the School of Tourism and Hospitality Management (STHM) curriculum.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STHM 1113</td>
<td>The Business of Leisure</td>
<td>3</td>
</tr>
<tr>
<td>STHM 2114</td>
<td>Leisure and Tourism for a Diverse Society</td>
<td>3</td>
</tr>
<tr>
<td>STHM 3185</td>
<td>Internship I (180 Hours)</td>
<td>3</td>
</tr>
<tr>
<td>STHM 4112</td>
<td>Senior Professional Development Seminar</td>
<td>3</td>
</tr>
</tbody>
</table>
Designated Writing Intensive Courses

All Temple students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for this major are as follows:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STHM 3396</td>
<td>Marketing in Tourism and Hospitality</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>STHM 4396</td>
<td>Hospitality Management Systems</td>
<td>3</td>
</tr>
<tr>
<td>STHM 4397</td>
<td>Designing Tourism Experience</td>
<td></td>
</tr>
</tbody>
</table>

Major Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STHM 1311</td>
<td>The Business of Tourism and Hospitality</td>
<td>3</td>
</tr>
<tr>
<td>STHM 2311</td>
<td>Global Issues in Tourism and Hospitality Management</td>
<td>3</td>
</tr>
<tr>
<td>STHM 3311</td>
<td>Organization Management in Tourism and Hospitality</td>
<td>3</td>
</tr>
<tr>
<td>STHM 3312</td>
<td>Strategic Decision Making in Tourism and Hospitality Management</td>
<td>3</td>
</tr>
<tr>
<td>STHM 3313</td>
<td>Financial Issues in Tourism and Hospitality</td>
<td>3</td>
</tr>
<tr>
<td>STHM 3315</td>
<td>Tourism and Hospitality Sales</td>
<td>3</td>
</tr>
<tr>
<td>STHM 3396</td>
<td>Marketing in Tourism and Hospitality</td>
<td>3</td>
</tr>
<tr>
<td>STHM 4312</td>
<td>Legal Issues in Tourism and Hospitality</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following Capstone courses depending on Concentration:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STHM 4396</td>
<td>Hospitality Management Systems</td>
<td>3</td>
</tr>
<tr>
<td>STHM 4397</td>
<td>Designing Tourism Experience</td>
<td></td>
</tr>
</tbody>
</table>

Total Credit Hours 27

Major Electives (12 Credits Required)

Students are required to take 12 Major Elective credits. They may take any 12 credits from the Concentration Requirement courses listed below. If students wish to have a "Concentration" designation on their transcripts, they must take 9 credits from one of the three categories listed below, and "declare" the Concentration. They must then take one additional course to fulfill the 12-credit Major Elective requirement.

Please note: If a concentration is declared, students must complete three major management electives within it. In addition, a related capstone and Internship II. A fourth major management elective is still required for a total of twelve credits as stated above. Students can choose any additional major management elective to fulfill the fourth requirement.

Optional Tourism and Hospitality Management Concentrations (9 Credits Required)

Hospitality Operations Concentration Requirements

Select three of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STHM 3320</td>
<td>Special Topics in Hospitality Management</td>
<td>9</td>
</tr>
<tr>
<td>STHM 3324</td>
<td>Hospitality Operations</td>
<td></td>
</tr>
<tr>
<td>STHM 3325</td>
<td>Food and Beverage Management</td>
<td></td>
</tr>
<tr>
<td>STHM 3328</td>
<td>Gaming and Casino Management</td>
<td></td>
</tr>
<tr>
<td>STHM 3329</td>
<td>Revenue Management in Tourism and Hospitality Management</td>
<td></td>
</tr>
<tr>
<td>STHM 3425</td>
<td>Sustainable Event Management</td>
<td></td>
</tr>
</tbody>
</table>

Destination Management Concentration Requirements

Select three of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STHM 3321</td>
<td>Tourism Planning and Development</td>
<td>9</td>
</tr>
<tr>
<td>STHM 3322</td>
<td>Destination Management Organizations</td>
<td></td>
</tr>
<tr>
<td>STHM 3327</td>
<td>Advanced Destination Marketing Systems</td>
<td></td>
</tr>
<tr>
<td>STHM 3330</td>
<td>Special Topics in Destination and Event Management</td>
<td></td>
</tr>
</tbody>
</table>

Event Leadership Concentration Requirements

Select three of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STHM 3320</td>
<td>Special Topics in Hospitality Management</td>
<td>9</td>
</tr>
<tr>
<td>STHM 3324</td>
<td>Hospitality Operations</td>
<td></td>
</tr>
<tr>
<td>STHM 3325</td>
<td>Food and Beverage Management</td>
<td></td>
</tr>
<tr>
<td>STHM 3328</td>
<td>Gaming and Casino Management</td>
<td></td>
</tr>
<tr>
<td>STHM 3329</td>
<td>Revenue Management in Tourism and Hospitality Management</td>
<td></td>
</tr>
<tr>
<td>STHM 3425</td>
<td>Sustainable Event Management</td>
<td></td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td></td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>STHM 3412</td>
<td>Foundations of Event Leadership</td>
<td></td>
</tr>
<tr>
<td>STHM 3415</td>
<td>Meetings, Conference, and Convention Management</td>
<td></td>
</tr>
<tr>
<td>STHM 3425</td>
<td>Sustainable Event Management</td>
<td></td>
</tr>
<tr>
<td>STHM 3428</td>
<td>Event Marketing and Sponsorship</td>
<td></td>
</tr>
</tbody>
</table>

**Fox School of Business & Management Requirements**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 2101</td>
<td>Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BA 2104</td>
<td>Excel for Business Applications</td>
<td>1</td>
</tr>
<tr>
<td>ECON 1101</td>
<td>Macroeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 2101</td>
<td>Marketing Management</td>
<td>3</td>
</tr>
<tr>
<td>HRM 1101</td>
<td>Leadership and Organizational Management</td>
<td>3</td>
</tr>
</tbody>
</table>

**Free Electives (12 Credits)**

Students must take at least 12 credits of Free Electives. In some cases, this number may vary to meet the 124 credits required for graduation. Students can use these Free Elective credits to take any courses at Temple University. (Please contact the STHM Center for Student Services [CSS] for additional information.)

**Options**

**Business Minor**

See Advisor. (www.fox.temple.edu/cms_academics/dept/advising/minors/)

**General Business Studies Minor**

See Advisor. (www.fox.temple.edu/cms_academics/dept/advising/minors/)

**Suggested Academic Plan**

**Year 1**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>STHM 1113</td>
<td>The Business of Leisure</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ENG 0802, 0812, or 0902</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Spring**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STHM 1311</td>
<td>The Business of Tourism and Hospitality</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Quantitative Literacy Course [GQ]</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>IH 0851 or 0951</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>HRM 1101</td>
<td>Leadership and Organizational Management</td>
<td>3</td>
</tr>
</tbody>
</table>

**Year 2**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>STHM 2114</td>
<td>Leisure and Tourism for a Diverse Society</td>
<td>3</td>
</tr>
</tbody>
</table>
Free Elective 1 3
GenEd Breadth Course 1 3-4
IH 0852 or 0952  Mosaic: Humanities Seminar II [GZ] 3
ECON 1101  Macroeconomic Principles 3

**Term Credit Hours** 16

**Spring**
- STHM 2311  Global Issues in Tourism and Hospitality Management 3
- GenEd Breadth Course 3
- GenEd Breadth Course 3
- ACCT 2101  Financial Accounting 3
- MKTG 2101  Marketing Management 3
- BA 2104  Excel for Business Applications 1

**Year 3**

**Fall**
- STHM 3185  Internship I 3
- STHM 3311  Organization Management in Tourism and Hospitality 3
- STHM 3312  Strategic Decision Making in Tourism and Hospitality Management 3
- STHM 3315  Tourism and Hospitality Sales 3
- Free Elective 2 3

**Term Credit Hours** 15

**Spring**
- STHM 3313  Financial Issues in Tourism and Hospitality 3
- STHM 3396  Marketing in Tourism and Hospitality [WI] 3
- STHM Major Elective 1 3
- STHM Major Elective 2 3
- Free Elective 3 3

**Year 4**

**Fall**
- STHM 4112  Senior Professional Development Seminar 3
- STHM 4312  Legal Issues in Tourism and Hospitality 3
- STHM Major Elective 3 3
- STHM Major Elective 4 3
- Select one of the following Capstone courses:
  - STHM 4396  Hospitality Management Systems [WI] 3
  - STHM 4397  Designing Tourism Experience [WI] 3

**Term Credit Hours** 15

**Spring**
- STHM 4185  Internship II 12
- Free Elective 3

**Term Credit Hours** 15

**Total Credit Hours:** 124

---

1 If a student takes a 3-credit GenEd Arts course, s/he will be 1-credit short of the 124 total needed to graduate. This means that 1-credit will be added to the Free Elective credit total.

**Pre-Business**

Jeffrey W. Montague, Associate Vice Dean
215-204-8701
jeffrey.montague@temple.edu

Jarvis Bailey, Student Services/Associate Director
The Pre-Business program is a first-time freshman year program operated by the Fox School of Business and Management and the School of Tourism and Hospitality Management (STHM). The program is designed to prepare students to successfully transition to the academic rigors of an undergraduate business degree program.

Pre-Business students will take several foundation courses required by the Bachelor of Business Administration degree program, while gaining access to quality resources and services to help them effectively navigate their first year at Temple. The Pre-Business program leverages a network of assistance programs at the university to provide students a greater opportunity for scholastic achievement.

Pre-Business students will be eligible to submit a Change of Program Request form (https://tuportal4.temple.edu/tuc/StudentSSB/files/cop3.pdf) to the Fox School of Business and Management at the completion of their freshman year, following the successful completion of the following four Fox School of Business and Management foundation courses and achievement of a minimum cumulative grade point average of 2.67:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 1101</td>
<td>Macroeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>ENG 0802</td>
<td>Analytical Reading and Writing</td>
<td>4</td>
</tr>
<tr>
<td>or ENG 0812</td>
<td>Analytical Reading and Writing: ESL</td>
<td></td>
</tr>
<tr>
<td>HRM 1101</td>
<td>Leadership and Organizational Management</td>
<td>3</td>
</tr>
<tr>
<td>STAT 1001</td>
<td>Quantitative Methods for Business I</td>
<td>3</td>
</tr>
</tbody>
</table>

Pre-Business students are also required to complete STHM 1113 and either STHM 1211 or STHM 1311, which will count as free electives if the Pre-Business student transitions to the Fox School of Business and Management after the freshman year.

### STHM Pre-Business Program Two Year Academic Plan

#### First Year:

**Year 1**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>STHM 1113</td>
<td>The Business of Leisure</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ENG 0802 or 0812</td>
<td>Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>STAT 1001</td>
<td>Quantitative Methods for Business I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>HRM 1101</td>
<td>Leadership and Organizational Management</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 16

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring</td>
<td>IH 0851</td>
<td>Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>STAT 1102</td>
<td>Quantitative Methods for Business II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ECON 1101</td>
<td>Macroeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Select one of the following:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>STHM 1211</td>
<td>Sport and Society</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>STHM 1311</td>
<td>The Business of Tourism and Hospitality</td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 15

**Total Credit Hours:** 31

#### Second Year (Optional; if transferring to STHM):

**Year 2**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>STHM 2114</td>
<td>Leisure and Tourism for a Diverse Society</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>IH 0852</td>
<td>Mosaic: Humanities Seminar II [GZ]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MKTG 2101</td>
<td>Marketing Management</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Term Credit Hours:** 15

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Certificate in Event Leadership

The certificate in Event Leadership will allow students across Temple University to augment their major degrees with exposure to a program that prepares students to lead and succeed in the event management industry. This program is based on the "Pinnacle" award-winning, comprehensive events planning program in our Continuing Education program and it is designed to increase student's marketable skills in their events career, and will prepare students for future success in the event planning business.

The certificate in Event Leadership will be open to non-Sport and Recreation Management students only. It will provide a good foundation for students who wish to apply to the School of Tourism and Hospitality Management's Master of Science in Sport Business program, Master of Tourism and Hospitality program, or specialize their expertise in management events. The certificate consists of a total of four required courses (12 credits).

Declare Your Certificate

Students interested in declaring this certificate in the School of Tourism and Hospitality Management (STHM) can do so in 3 easy steps:

2. The form is reviewed by Mr. Bailey. If approved, it will be submitted electronically to the Office of the University Registrar (O.U.R). In 3-5 business days, the request will be processed and then visible within Self-Service Banner (Student Information).
3. To seek assistance in monitoring your progress with the certificate declared, students are asked to meet with Mr. Bailey via Walk-in Hours Advising on Fridays, 11:00 AM – 12:00 PM. Students unavailable on Fridays or who need to have in-depth conversations can utilize the STHM Academic Advising Appointment System (http://foxweb.fox.temple.edu/foxdata/sthmadvising/main/login.aspx). Meetings should take place from the time of declaration to applying for graduation within their home school/college.

Questions? Contact us at sthm@temple.edu or at 215-204-8701.

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STHM 3412</td>
<td>Foundations of Event Leadership</td>
<td>3</td>
</tr>
<tr>
<td>STHM 3415</td>
<td>Meetings, Conference, and Convention Management</td>
<td>3</td>
</tr>
<tr>
<td>STHM 3425</td>
<td>Sustainable Event Management</td>
<td>3</td>
</tr>
<tr>
<td>STHM 3428</td>
<td>Event Marketing and Sponsorship</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credit Hours: 12

Certificate in Sport Management

The certificate in Sport Management will allow students across Temple University to augment their major degrees with exposure to a program that prepares students to lead and succeed in the fast-paced world of sport, recreation and leisure management. The sport management program integrates foundational business principles with innovative concepts related directly to the distinct industry of sport. Temple's Sport and Recreation Management program is one of the oldest and most distinguished programs of its kind in the country.

The certificate in Sport Management will be open to non-Sport and Recreation Management majors only. The certificate will consist of four courses in total (12 credits), with three being required and one to be chosen from a set of electives. Students completing the certificate will have the option to transition into the minor in Sport Management by taking two additional courses.

Declare Your Certificate

Students interested in declaring this certificate in the School of Tourism and Hospitality Management (STHM) can do so in 3 easy steps:

2. The form is reviewed by Ms. Nicholson. If approved, it will be submitted electronically to the Office of the University Registrar (O.U.R). In 3-5 business days, the request will be processed and then visible within Self-Service Banner (Student Information).

3. To seek assistance in monitoring your progress with the certificate declared, students are asked to meet with Ms. Nicholson via Walk-in Hours Advising on Tuesdays, 9:30 AM – 10:30 AM. Students unavailable on Tuesdays or who need to have in-depth conversations can utilize the STHM Academic Advising Appointment System (http://foxweb.fox.temple.edu/foxdata/sthmadvising/main/login.aspx). Meetings should take place from the time of declaration to applying for graduation within their home school/college.

Questions? Contact us at sthm@temple.edu or at 215-204-8701.

### Required Courses

Take the following 3 courses in consultation with an STHM advisor:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STHM 3221</td>
<td>Athletics Administration</td>
<td>3</td>
</tr>
<tr>
<td>STHM 3222</td>
<td>Professional and International Sport</td>
<td>3</td>
</tr>
<tr>
<td>STHM 3225</td>
<td>Recreation and Leisure Service Management</td>
<td>3</td>
</tr>
</tbody>
</table>

### Elective Course

Select one from the following in consultation with an STHM advisor:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STHM 3214</td>
<td>Marketing Management in Sport and Recreation</td>
<td>3</td>
</tr>
<tr>
<td>STHM 3215</td>
<td>Stadium/Arena Design and Management</td>
<td></td>
</tr>
<tr>
<td>STHM 3224</td>
<td>Media and Communications in Sport and Recreation</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credit Hours**

12

1 offered online

### Certificate in Sport Marketing

The certificate in Sport Marketing will allow students across Temple University to augment their major degrees with exposure to a program that prepares students to lead and succeed in the fast-paced world of sport, recreation and leisure management. The sport management program integrates foundational business principles with innovative concepts related directly to the distinct industry of sport. Temple's Sport and Recreation Management program is one of the oldest and most distinguished programs of its kind in the country.

The certificate in Sport Marketing will be open to non-Sport and Recreation Management majors only. The certificate will consist of four courses in total (12 credits), with two being required and two to be chosen from a set of electives.

### Declare Your Certificate

Students interested in declaring this certificate in the School of Tourism and Hospitality Management (STHM) can do so in 3 easy steps:


2. The form is reviewed by Ms. Nicholson. If approved, it will be submitted electronically to the Office of the University Registrar (O.U.R). In 3-5 business days, the request will be processed and then visible within Self-Service Banner (Student Information).

3. To seek assistance in monitoring your progress with the certificate declared, students are asked to meet with Ms. Nicholson via Walk-in Hours Advising on Tuesdays, 9:30 AM – 10:30 AM. Students unavailable on Tuesdays or who need to have in-depth conversations can utilize the STHM Academic Advising Appointment System (http://foxweb.fox.temple.edu/foxdata/sthmadvising/main/login.aspx). Meetings should take place from the time of declaration to applying for graduation within their home school/college.

Questions? Contact us at sthm@temple.edu or at 215-204-8701.

### Required Courses

Must take the following two courses in sequence and in consultation with an STHM advisor:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STHM 3214</td>
<td>Marketing Management in Sport and Recreation</td>
<td>3</td>
</tr>
<tr>
<td>STHM 3227</td>
<td>Advanced Marketing for Sport and Recreation</td>
<td>3</td>
</tr>
</tbody>
</table>

### Elective Courses

Select two of the following in consultation with an STHM advisor:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STHM 3224</td>
<td>Media and Communications in Sport and Recreation</td>
<td></td>
</tr>
<tr>
<td>STHM 3226</td>
<td>Consumer Behavior in Sport and Recreation</td>
<td></td>
</tr>
<tr>
<td>STHM 3228</td>
<td>Sales Management in Sport and Recreation</td>
<td></td>
</tr>
</tbody>
</table>
Certificate in Tourism & Hospitality Management

The Certificate in Tourism and Hospitality Management will allow students across Temple University to enhance their major degrees with exposure to a program that prepares students for success in the hospitality industry as well as the realm of tourism. The Tourism and Hospitality Management Certificate integrates foundational business principles, tourism and destination specific knowledge as well as innovative concepts relevant to success within hospitality operations, food and beverage, gaming and event leadership.

The Certificate in Tourism and Hospitality Management is open to non-Tourism and Hospitality Management students only. The certificate consists of four courses (12 credits); one required course with three additional courses to be selected from the list of electives.

Requirements

Students should select courses in consultation with an STHM advisor.

Required Course

STHM 2311  Global Issues in Tourism and Hospitality Management  3

Electives

Select 3 of the following:  9

- STHM 3321  Tourism Planning and Development
- STHM 3322  Destination Management Organizations
- STHM 3324  Hospitality Operations
- STHM 3325  Food and Beverage Management
- STHM 3328  Gaming and Casino Management
- STHM 3412  Foundations of Event Leadership

Minor in Sport Management

The minor in Sport Management will allow students across Temple University to augment their major degrees with exposure to a program that prepares students to lead and succeed in the fast-paced world of sport, recreation and leisure management. The sport management program integrates foundational business principles with innovative concepts related directly to the distinct industry of sport. Temple’s Sport and Recreation Management program is one of the oldest and most distinguished programs of its kind in the country. The required courses serve to provide students an overview of different sectors of the sport industry; elective courses offer more in-depth exploration of the support segments across multiple industry sectors.

The minor in Sport Management will be open to non-Sport and Recreation Management majors only. It will provide a good foundation for students who wish to apply to the School of Tourism and Hospitality Management's Master of Science in Sport Business program.

Declare Your Minor

Students interested in declaring this minor in the School of Tourism and Hospitality Management (STHM) can do so in 3 easy steps:

2. The form is reviewed by Ms. Nicholson. If approved, it will be submitted electronically to the Office of the University Registrar (O.U.R). In 3-5 business days, the request will be processed and then visible within Self-Service Banner (Student Information).
3. To seek assistance in monitoring your progress with the minor declared, students are asked to meet with Ms. Nicholson via Walk-in Hours Advising on Tuesdays, 9:30 AM – 10:30 AM. Students unavailable on Tuesdays or who need to have in-depth conversations can utilize the STHM Academic Advising Appointment System (http://foxweb.fox.temple.edu/foxdata/sthmadvising/main/login.aspx). Meetings should take place from the time of declaration to applying for graduation within their home school/college.

Questions? Contact us at sthm@temple.edu or at 215-204-8701.

Required Courses

Take the following 3 courses in consultation with an STHM advisor:

STHM 3221  Athletics Administration  3
Schools, Colleges, and Divisions

STHM 3222 Professional and International Sport 3
STHM 3225 Recreation and Leisure Service Management 3

Elective Courses
Select 3 courses from the following list in consultation with an STHM advisor: 9
- STHM 3214 Marketing Management in Sport and Recreation
- STHM 3215 Stadium/Arena Design and Management
- STHM 3224 Media and Communications in Sport and Recreation
- STHM 3226 Consumer Behavior in Sport and Recreation
- STHM 3228 Sales Management in Sport and Recreation
- STHM 3412 Foundations of Event Leadership

Total Credit Hours 18

Minor in Tourism & Hospitality Management

The Minor in Tourism and Hospitality Management will allow students across Temple University to enhance their major degrees with additional exposure to a program that prepares students to lead and succeed in one of the world’s largest and most exciting industries. The tourism and hospitality management program integrates foundational business principles with innovative concepts related directly to the distinct industry of tourism and hospitality. Temple University’s Tourism and Hospitality Management program is one of the most established and distinguished programs of its kind in the country. The required courses serve to provide students an overview of different foundational elements of the industry, while elective courses offer more in-depth exposure of the support segments across a number of sectors within the industry.

The Minor in Tourism and Hospitality Management is open to non-Tourism and Hospitality Management students only. It provides a good foundation for students who wish to apply to STHM’s Master of Tourism and Hospitality Management (MTHM) program. The Minor represents an extension of the Certificate in Tourism and Hospitality Management, consisting of six courses (18 credits); two required courses with four additional courses to be selected from the list of electives.

Requirements

Students should select courses in consultation with an STHM advisor.

Required Courses
- STHM 2311 Global Issues in Tourism and Hospitality Management 3
- STHM 3324 Hospitality Operations 3
  or STHM 3321 Tourism Planning and Development

Electives
Select 4 of the following: 12
- STHM 3321 Tourism Planning and Development (if not taken as required course)
- STHM 3322 Destination Management Organizations
- STHM 3324 Hospitality Operations (if not taken as required course)
- STHM 3325 Food and Beverage Management
- STHM 3328 Gaming and Casino Management
- STHM 3412 Foundations of Event Leadership

Total Credit Hours 18

(Note: This is designed so that any student doing a Certificate in Tourism and Hospitality Management would only need to declare and take two additional courses to earn the Minor in Tourism and Hospitality Management.)
University College

Vicki Lewis McGarvey, Ed. D.
Vice Provost for University College
mcgarvey@temple.edu

1330 Polett Walk
Sullivan Hall, Garden Level
Philadelphia, PA 19122
215-204-8873

The University College offers the following program and certificates:

• Certificate in National Park Service Management (p. 1220)
• Post-Baccalaureate Certificate in National Park Service Management (p. 1221)
• Certificate in Sustainability (p. 1222)
• ProRanger Program (p. 1220)

For information about the University College, go to www.temple.edu/provost/about/portfolio/university-college.html.

ProRanger Program

The ProRanger program is an academic and technical skills training and internship program that is cooperatively administered by the National Park Service and Temple University. The program was established to recruit, train and employ law enforcement park rangers for the National Park Service. Upon graduating from Temple University and successfully completing the ProRanger program, participants are eligible for placement in a permanent career tenure law enforcement park ranger position with the National Park Service.

Upon acceptance into the ProRanger program, a ProRanger intern will become part of an experiential learning cohort of 12 to 20 interns. Participants will take course work during the academic year. During the summer periods, the ProRanger intern will be assigned to an internship at a National Park Service site and participate in an academic course that accompanies the internship. The final experience as a ProRanger intern is the Seasonal Law Enforcement Professional Development Program at Temple University.

While the primary duties of the ProRanger graduate is protecting people and property, prospective ProRanger interns do not have to be Criminal Justice majors, and students from any academic major or background may apply. More importantly, a ProRanger intern will have an aptitude for working with people with diverse backgrounds, have an interest in the outdoors, history and the environment, and have a high standard of ethical behavior.

Please see www.temple.edu/proranger for more information about becoming a ProRanger.

Certificate in National Park Service Management

The University College, in consultation with the National Park Service, has developed a certificate program in National Park Service Management that will provide extensive opportunities for academic study, training and development, and for internship placement as preparation for a career in National Park Service (NPS) law enforcement.

The certificate program is open to students enrolled in bachelor's degree programs who are part of the ProRanger program.

This program includes both classroom and experiential components.

Experiential Components (non-credit):

• Two summer internships
• Seasonal Law Enforcement Training Program, completed after graduation from Temple.

Certificate Components (15 credits):

• PRAN 3001 Professional Preparation Seminar for the ProRanger
• PRAN 1577 Introduction to the ProRanger Program (taken during first summer internship)
• HIST 2214 History of the National Park Service
• HIST XXXX National Park Service - The Imperiled Promise
• CJ 3XXX Land Management and Federal Law Enforcement
• AOD 2218 Leadership and Communication
Students generally will be selected as sophomores in the fall and will begin coursework in the spring. Courses offered by some departments will be alternated in odd and even years so that students from both active cohorts will take courses together. The following academic plan applies to students who begin the program in an odd year.

<table>
<thead>
<tr>
<th>Year 1</th>
<th></th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>Selected into Program</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Term Credit Hours</td>
<td>0</td>
</tr>
<tr>
<td>Spring</td>
<td>PRAN 3001 Professional Preparation Seminar for the ProRanger</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>HIST 2214 History of the National Park Service</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Term Credit Hours</td>
<td>4</td>
</tr>
<tr>
<td>Summer</td>
<td>Summer Internship #1 (not for credit)</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>PRAN 1577 Introduction to the ProRanger Program</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Term Credit Hours</td>
<td>2</td>
</tr>
<tr>
<td>Year 2</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Fall</td>
<td>CJ 3XXX Land Management and Federal Law Enforcement</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Term Credit Hours</td>
<td>3</td>
</tr>
<tr>
<td>Spring</td>
<td>HIST XXXX National Park Service - The Imperiled Promise</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Term Credit Hours</td>
<td>3</td>
</tr>
<tr>
<td>Summer</td>
<td>Summer Internship #2 (not for credit)</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Term Credit Hours</td>
<td>0</td>
</tr>
<tr>
<td>Year 3</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Fall</td>
<td>AOD 2218 Leadership and Communication</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Term Credit Hours</td>
<td>3</td>
</tr>
<tr>
<td>Spring</td>
<td>Graduate from Temple</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Term Credit Hours</td>
<td>0</td>
</tr>
<tr>
<td>Summer</td>
<td>Seasonal Law Enforcement Training Program (non-credit)</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Term Credit Hours</td>
<td>0</td>
</tr>
<tr>
<td>Total Credit Hours:</td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

1 Offered in alternating spring semesters.
2 Offered in alternating fall semesters.

**Post-Baccalaureate Certificate in National Park Service Management**

The University College, in consultation with the National Park Service, has developed a certificate program in National Park Service Management that will provide extensive opportunities for academic study, training and development, and for internship placement as preparation for a career in National Park Service (NPS) law.

The certificate program is open to post-baccalaureate students who are part of the ProRanger program.

This program includes both classroom and experiential components.

**Experiential Components (non-credit):**

- Two summer internships
- Seasonal Law Enforcement Training Program, completed after graduation from Temple.
Certificate Components (15 credits):

- PRAN 3001 Professional Preparation Seminar for the ProRanger
- PRAN 1577 Introduction to the ProRanger Program (taken during first summer internship)
- HIST 2214 History of the National Park Service
- HIST XXXX National Park Service - The Imperiled Promise
- CJ 3XXX Land Management and Federal Law Enforcement
- AOD 2218 Leadership and Communication

Students generally will be selected as sophomores in the fall and will begin coursework in the spring. Courses offered by some departments will be alternated in odd and even years so that students from both active cohorts will take courses together. The following academic plan applies to students who begin the program in an odd year.

### Year 1

#### Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selected into Program</td>
<td></td>
</tr>
</tbody>
</table>

#### Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRAN 3001 Professional Preparation Seminar for the ProRanger</td>
<td>1</td>
</tr>
<tr>
<td>HIST 2214 History of the National Park Service</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Summer

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer Internship #1 (not for credit)</td>
<td></td>
</tr>
<tr>
<td>PRAN 1577 Introduction to the ProRanger Program</td>
<td>2</td>
</tr>
</tbody>
</table>

### Year 2

#### Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CJ 3XXX Land Management and Federal Law Enforcement</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST XXXX National Park Service - The Imperiled Promise</td>
<td>3</td>
</tr>
</tbody>
</table>

### Year 3

#### Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AOD 2218 Leadership and Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduate from Temple</td>
<td>0</td>
</tr>
</tbody>
</table>

### Summer

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seasonal Law Enforcement Training Program (non-credit)</td>
<td>0</td>
</tr>
</tbody>
</table>

| Total Credit Hours: | 15 |

---

1. Offered in alternating spring semesters.
2. Offered in alternating fall semesters.

**Certificate in Sustainability**

sustainabilitycertificate@temple.edu
The University College is offering an undergraduate Certificate in Sustainability. This twelve credit interdisciplinary certificate will provide an opportunity for students to further their knowledge and skills to contribute to sustainable systems from the viewpoint of different disciplines, to help them become effective leaders and agents of change for sustainability, and to make them more competitive in the changing job market as some sectors move to a green collar economy.

The certificate is available to all undergraduate degree seeking students to complete as part of their studies. Consult a school academic advisor about how the required classes fit into academic and career plans.

This credit certificate may be conferred upon a student upon satisfactory completion of the required credits with a minimum cumulative GPA of 2.0.

**Certificate Requirements**

1. The undergraduate Certificate in Sustainability will require four (4) courses and a minimum of twelve (12) credit hours.
2. The courses will be selected among courses in four different departments in at least three different schools and must be outside of the student's own major.
3. General Education courses can be included in the array of courses, but can constitute no more than one of the four courses toward the certificate. If a student chooses a General Education course to count toward the certificate, this same course cannot count toward the General Education requirement in a specific category.
4. The certificate requires that three of the four courses be at the 2000 level or higher.
5. The certificate courses in sustainability can satisfy other minors and/or certificates.

**Approved Courses**

Students will select courses from an existing array of courses in various disciplines. The symbol (F) or (S) after the course number indicates that the class is offered ONLY in the semester indicated: (F) = offered only in fall semester; (S) = offered only in spring semester.

<table>
<thead>
<tr>
<th>Art, Tyler School of</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 1001 Introduction to Design and the Environment (S)</td>
</tr>
<tr>
<td>ARTH 2753 Art and Environment in American Culture</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Business and Management, Fox School of</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRM 2511 Corporate Sustainability: People, Profits &amp; Planet (S)</td>
</tr>
<tr>
<td>LGLS 3511 Environmental Law and Sustainability (F)</td>
</tr>
<tr>
<td>MKTG 2511 Marketing for the Sustainable Enterprise (S)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Media and Communication, School of</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSP 3473 Media and the Environment (S)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Engineering, College of</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEE 0845 The Environment</td>
</tr>
<tr>
<td>or CEE 0945 Honors: The Environment</td>
</tr>
<tr>
<td>or ENVT 0845 The Environment</td>
</tr>
<tr>
<td>or ENVT 0945 Honors: The Environment</td>
</tr>
<tr>
<td>CEE 3711 Environmental Engineering</td>
</tr>
<tr>
<td>CEE 4531 Life Cycle Assessment and Carbon Footprinting (S)</td>
</tr>
<tr>
<td>MEE 4575 Renewable and Alternative Energy (F)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Environmental Design, School of</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRP 0807 People, Places, and Environment</td>
</tr>
<tr>
<td>CRP 1017 Introduction to Community and Regional Planning (F)</td>
</tr>
<tr>
<td>CRP 2114 Urban Form and Design (S)</td>
</tr>
<tr>
<td>CRP 2166 Land Use Planning (F)</td>
</tr>
<tr>
<td>CRP 2213 Environmental Planning</td>
</tr>
<tr>
<td>CRP 2251 Sustainable Food Systems Planning (F)</td>
</tr>
<tr>
<td>CRP 3155 Ecological Planning and Development (F)</td>
</tr>
<tr>
<td>CRP 3255 Sustainability in Suburban Communities (S)</td>
</tr>
<tr>
<td>CRP 3256 Sustainable Community Design and Development (S)</td>
</tr>
<tr>
<td>BOT 1112 Plant Ecology (S)</td>
</tr>
<tr>
<td>HORT 2334 Food Crops I (S)</td>
</tr>
<tr>
<td>LARC 0841 Sustainable Design</td>
</tr>
<tr>
<td>LARC 1013 Natural and the Built Environment (F)</td>
</tr>
<tr>
<td>Course Code</td>
</tr>
<tr>
<td>-------------</td>
</tr>
<tr>
<td>LARC 2758</td>
</tr>
<tr>
<td><strong>Health Professions and Social Work, College of</strong></td>
</tr>
<tr>
<td>PBHL 2102</td>
</tr>
<tr>
<td><strong>Liberal Arts, College of</strong></td>
</tr>
<tr>
<td>ANTH 0814</td>
</tr>
<tr>
<td>or GUS 0814</td>
</tr>
<tr>
<td>ASST 3052</td>
</tr>
<tr>
<td>or ENST 3052</td>
</tr>
<tr>
<td>or GUS 3052</td>
</tr>
<tr>
<td>ASST 3001</td>
</tr>
<tr>
<td>or ASST 3904</td>
</tr>
<tr>
<td>or ENST 3001</td>
</tr>
<tr>
<td>or ENST 3904</td>
</tr>
<tr>
<td>or REL 3001</td>
</tr>
<tr>
<td>or REL 3904</td>
</tr>
<tr>
<td>ECON 3596</td>
</tr>
<tr>
<td>or ENST 3596</td>
</tr>
<tr>
<td>ENST 3025</td>
</tr>
<tr>
<td>ENST 0842</td>
</tr>
<tr>
<td>or GUS 0842</td>
</tr>
<tr>
<td>ENST 1052</td>
</tr>
<tr>
<td>or GUS 1052</td>
</tr>
<tr>
<td>ENST 2051</td>
</tr>
<tr>
<td>or GUS 2051</td>
</tr>
<tr>
<td>ENST 3051</td>
</tr>
<tr>
<td>or GUS 3051</td>
</tr>
<tr>
<td>ENST 3097</td>
</tr>
<tr>
<td>or GUS 3097</td>
</tr>
<tr>
<td>ENST 4056</td>
</tr>
<tr>
<td>or GUS 4056</td>
</tr>
<tr>
<td>ENST 3214</td>
</tr>
<tr>
<td>or HIST 3214</td>
</tr>
<tr>
<td>ENST 2157</td>
</tr>
<tr>
<td>or PHIL 2157</td>
</tr>
<tr>
<td>ENST 2596</td>
</tr>
<tr>
<td>or PHIL 2596</td>
</tr>
<tr>
<td>ENST 3265</td>
</tr>
<tr>
<td>or POLS 3265</td>
</tr>
<tr>
<td><strong>Science and Technology, College of</strong></td>
</tr>
<tr>
<td>BIOL 2227</td>
</tr>
<tr>
<td>BIOL 3307</td>
</tr>
<tr>
<td>BIOL 3316</td>
</tr>
<tr>
<td>BIOL 3321</td>
</tr>
<tr>
<td>BIOL 4327</td>
</tr>
<tr>
<td>EES 0842</td>
</tr>
<tr>
<td>EES 2096</td>
</tr>
<tr>
<td>PHYS 0839</td>
</tr>
<tr>
<td>or PHYS 0939</td>
</tr>
</tbody>
</table>
Division of University Studies

Dr. Peter R. Jones, Senior Vice Provost for Undergraduate Studies
Neal Conley, Director, Academic Advising
1810 Liacouras Walk, Suite 101
Philadelphia, PA 19122-6029
215-204-2500
dus@temple.edu
www.temple.edu/arc

Introductory Information

Recognizing that not all students can or should declare an academic major upon entering college, University Studies is the academic home for students who have not yet decided on a major and students in transition between majors.

Goals and Objectives

University Studies, formed in 1998, serves any Temple student who has not chosen a collegiate home or declared a major or who needs assistance while changing from one college to another. University Studies is not a degree-granting college. Rather it is an academic unit that exists to help students explore academic options and to gain admission to a degree-granting school or college at Temple. Students can remain in University Studies until completion of 60 credits, or approximately their first two years at the university.

Admissions

Transfer students with more than 60 credits cannot be admitted to Temple as an undeclared student in the Division of University Studies. Students admitted to Temple as a University Studies student can remain in the division until they select a school/college major or upon completion of 60 credits.

Financial Aid and Scholarships

Division of University Studies Sophomore Scholarship - The DUS Sophomore Scholarship is awarded each fall to a current or former University Studies student who will be entering the sophomore year with a declared major. Students should be rising sophomores with a cumulative GPA of 3.5 or higher and a minimum of 30 completed credits. For more information and for an application, go to www.temple.edu/arc.

Special Programs

The Major Exploration Living Learning Community is a residential community for students who want to live in an environment that promotes academic and career exploration. Undeclared students in University Studies are eligible to reside together with members of their cohort, with shared goals of exploring major options. Benefits include a resident peer mentor, freshman seminar, workshops and social events.

Honor Societies, Awards for Achievement

Academic Distinctions

Eligibility for the University Studies' Distinguished Honors list is determined by the semester grade point average (GPA) corresponding to cut-off points that will yield the top 16% of GPAs based on the five previous fall and spring semesters for each school or college. Students must have 12 graded credits (A to F grades) in order to be eligible for dean's list for the fall or the spring semesters.

Students who begin in the fall as part-time (i.e., registered for fewer than 12 credits) and continue as part-time in the spring will be eligible for dean's list in the spring if they accumulate at least 12 graded credits (A to F grades) over the fall and spring semesters and meet the GPA criteria listed on the chart for the school or college. If a student is enrolled part-time in the fall but full-time in the spring, eligibility for dean's list will be based on spring semester grades.

The dean's list cut-offs for 2015-2016 are calculated and published in the section on Academic Policies (p. 92).

Special Facilities

The Academic Resource Center houses a study lounge / computer lab where students can access major and career oriented online resources as well as Self-Service Banner.

Academic Policies & Regulations

Please see the Undergraduate Bulletin's Academic Policies (p. 81) section. Students are responsible for complying with all University-wide academic policies that apply to their individual academic status. Additional and unique policies or exceptions for the Division of University Studies appear below.
Academic Course Load

Academic overloads during the fall and spring semesters, students who want to take 19 or more semester hours, need special approval of the Director of Academic Advising.

Dean's List

Each fall and spring semester, those undergraduates who have met the credit hour and academic criteria are placed on the Distinguished Honors list. See the Dean's List (p. 92) policy for specific GPA and credit-hour requirements.

Program Performance

Students who are placed on Academic Warning will be enrolled in the online Back on Track course, and students who are placed on Academic Probation will be enrolled in the online DUS Academic Support Program. These students will also be required to meet with their advisor to discuss and develop alternative academic plans as well as discuss strategies for improving their academic performance. (See Academic Standing, Policy # 02.10.11 (http://policies.temple.edu/getdoc.asp?policy_no=02.10.11))

Transfer between Colleges within the University: Change of Program into the Division of University Studies

Students who have earned fewer than 60 credits currently enrolled in other schools or colleges who are reconsidering their choice of major or who wish to explore other academic options may process a change of program request to enter University Studies as an undeclared major. All students interested in transferring into the Division of University Studies must meet with an academic advisor to discuss this transfer.

Students who are compelled to change their major for exhausting the permitted number of attempts in a required course (See Repeating a Course, Policy # 02.10.12 (http://policies.temple.edu/getdoc.asp?policy_no=02.10.12)) are permitted to enter University Studies as an undeclared major, regardless of the number of credits earned. Division of University Studies students who have earned 60 or more credits must consult with an advisor each term until they declare a degree bearing major.

Grievances

Students can bring grievances to the Director of Academic Advising. Grievances regarding instructors and grades are referred to the grievance protocol for the school/college offering the course.

General Requirements

The Division of University Studies is not a degree-granting college. It is an academic unit which exists to help students explore academic programs.

Individual Program Requirements

• The total number of credit hours needed to graduate may be greater for some students based on initial placement exams, transfer evaluations, individual curricular choices (including declaration of major and students credit totals at time major is declared), and academic progress.
• Certain courses fulfill multiple requirements. Consult your advisor to plan your curriculum more effectively.
• Students must fulfill the necessary prerequisites for any given course or course sequence. See the Prerequisite and Co-requisite Policy (p. 99) in the University-wide Academic Policies section of this Bulletin.

Division of University Studies: Undeclared Option

Recognizing that not all students can or should declare an academic major upon entering college, Temple University established University Studies — the academic home for students who have not yet decided on a school/college or major. University Studies is not a degree-granting college. Rather, it is an academic unit that exists to help students explore academic options. All students must declare a major in one of Temple's degree-granting undergraduate schools and colleges upon completion of 60 credits, including any credits transferred from other institutions.

University Studies offers undeclared students a variety of services and programs to help them select an appropriate major. Students can use online resources in our Academic Information Center to research majors and careers and can participate in student success and academic exploration workshops held throughout the year. Upon declaring a major, students are required to fulfill the school/college and department requirements of that program.

University Studies does not grant degrees and students cannot graduate with an "undeclared" curriculum designation.

Suggested First-Year Academic Plan for the Undecided Student

This sample academic plan allows students to satisfy General Education requirements while exploring academic interests and majors. (Note: Entering students, particularly freshmen, are encouraged to enroll in a learning community. See Learning Communities (p. 42) and University Seminars (p. 42) for more information.)
<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Details</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>ENG 0802, 0812, or 0902 Analytical Reading and Writing [GW]</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>GenEd Quantitative Literacy course [GQ] or Major Math Course</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course or Major Exploration Course</td>
<td>3-4</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course or Major Exploration Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>UNVS 1001 First Year Seminar I</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15-16</strong></td>
</tr>
<tr>
<td>Spring</td>
<td>IH 0851 or 0951 Mosaic: Humanities Seminar I [GY]</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course or Major Exploration Course</td>
<td>3-4</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course or Major Exploration Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course or Major Exploration Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GenEd Breadth Course or Major Exploration Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Term Credit Hours</strong></td>
<td><strong>15-16</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Total Credit Hours:</strong></td>
<td><strong>30-32</strong></td>
</tr>
</tbody>
</table>

1. Depends on placement exam; some students may be required to take ENG 0701 or ENG 0711
2. Depends on placement exam and potential choice of major
3. Select an appropriate GenEd course or a class in potential choice of major in consultation with an academic advisor.
4. Note: Non-native speakers can opt for an ESL version of this course

**Academic Advising**

The Academic Resource Center
1810 Liacouras Walk, Suite 101
215-204-2500
dus@temple.edu

**Goal and Objectives**

Students enrolled in University Studies use the advising services of the Academic Resource Center, an academic support program established in 1997 to meet the needs of deciding students. Any student at Temple, whether enrolled in University Studies or not, is welcome and encouraged to use the services of the Academic Resource Center.

Academic advisors are important sources of information on University policies and procedures, the General Education curriculum (GenEd (p. 143)) requirements, and degree programs. While students must assume primary responsibility for knowing the requirements for their degree and for acquiring information about their academic status, academic advisors are a valuable resource. Advisors introduce students to the various sources of information available on academic programs, enabling students to be well-informed partners in their own education.

At the Academic Resource Center, a staff of professional and peer advisors works closely with students from the time they arrive at Temple through their successful transitions into schools/colleges and declared majors. Advisors meet with students on walk-in and appointment bases in both individual and group advising sessions.

Students are strongly encouraged to meet regularly with academic advisors to discuss academic plans, course selection, and registration. Students not eligible for online registration are required to see an advisor for course selection and registration.

Academic advisors attempt to avoid errors when advising students about their program requirements, but schools and colleges cannot assume liability for errors in advising. Therefore, students must assume primary responsibility for knowing the requirements for their degree and for acquiring current information about their academic status.

**Services Provided through the Advising Office**

- Individualized advising geared towards helping students declare majors and complete the intra-university transfer process (transferring from one Temple school/college to another)
- Making Major Decisions, a self-directed Blackboard course focused on major exploration and decision making
- The Major Exploration Academy, a four-step, non-credit program in which a dedicated academic advisor helps guide students toward selecting a major through self-reflection activities, the completion of major and career worksheets, and investigating career options
- UNVS 1002 First Year Seminar II, a one-credit course designed to help undeclared students explore possible career and major paths at Temple
• Workshops on academic planning and choosing a major
• Assistance with accessing online information regarding Temple schools/colleges and majors

**Special Advising Policies and Procedures**

Enrollment in the Division of University Studies: Beginning fall 2002 and after, undergraduates matriculated in the Division of University Studies as undeclared majors and who entered University Studies as either freshmen, transfer students, or intra-university transfers from another Temple school or college prior to the completion of 45 credits, can remain in University Studies up to the completion of 60 credits. Students entering University Studies having completed between 45-59 credits can remain in University Studies up to two academic-year semesters if enrolled full-time or until completion of 60 credits if attending part-time.

University Studies students can declare majors throughout the year in accordance with the declaration of major standards set forth by the individual schools and colleges and the intra-university transfer guidelines established by the University. University Studies students can also request a change in status from undecided to an academic program within a college during their New Student Orientation visit.

**Note:** University Studies students must meet the University's minimum standard for academic progress to remain enrolled in the Division of University Studies.
Course Descriptions

- Accounting (ACCT) (p. 1232)
- Actuarial Science (AS) (p. 1237)
- Adult & Organizational Development (AOD) (p. 1239)
- Advertising (ADV) (p. 1242)
- Aerospace Studies - AF ROTC (AIRF) (p. 1249)
- African American Studies (AAS) (p. 1250)
- American Studies (AMST) (p. 1256)
- Anthropology (ANTH) (p. 1266)
- Applied Behavior Analysis (ABA) (p. 1283)
- Arabic (ARBC) (p. 1283)
- Architecture (ARCH) (p. 1285)
- Art (ARTU) (p. 1296)
- Art Education (ARTE) (p. 1302)
- Art History (ARTH) (p. 1304)
- Asian Studies (ASST) (p. 1314)
- Bioengineering (BIOE) (p. 1324)
- Biology (BIOL) (p. 1332)
- Botany (BOT) (p. 1352)
- Business Administration (BA) (p. 1353)
- Business Education (BSED) (p. 1356)
- Career and Technical Education (CTE) (p. 1356)
- Center for the Performing and Cinematic Arts (CFA) (p. 1357)
- Chemistry (CHEM) (p. 1357)
- Chinese (CHI) (p. 1371)
- Civil Engineering (CEE) (p. 1373)
- Coll Health Prof & Social Work (CHP) (p. 1383)
- College of Education (COED) (p. 1383)
- College of Liberal Arts (CLA) (p. 1383)
- College of Science and Technology (SCTC) (p. 1386)
- Communication Sciences and Disorders (CSCD) (p. 1390)
- Communication Studies (CMST) (p. 1394)
- Communications and Theater (COMM) (p. 1394)
- Community & Regional Planning (CRP) (p. 1395)
- Community Development (CDEV) (p. 1399)
- Computer & Information Science (CIS) (p. 1401)
- Construction Management Tech (CMT) (p. 1420)
- Counseling Psychology (CPSY) (p. 1422)
- Crafts (CRFT) (p. 1423)
- Criminal Justice (CJ) (p. 1439)
- Critical Languages Center (CRIT) (p. 1447)
- Dance (DANC) (p. 1448)
- Disability Studies (DSST) (p. 1459)
- Early Childhood Education (ECED) (p. 1459)
- Earth & Environmental Science (EES) (p. 1464)
- Economics (ECON) (p. 1470)
- Education (EDUC) (p. 1483)
- Educational Administration (EDAD) (p. 1491)
- Electrical Engineering (ECE) (p. 1491)
- Electrical Engineering Tech (EET) (p. 1499)
• Elementary Education (ELED) (p. 1500)
• Engineering (ENGR) (p. 1501)
• Engineering (General) (ENGG) (p. 1508)
• Engineering Technology (ENGT) (p. 1509)
• English Education (Elementary) (ENEE) (p. 1532)
• English Education (Secondary) (ENES) (p. 1533)
• English (ENG) (p. 1511)
• Environmental Engineering Tech (ENVT) (p. 1533)
• Environmental Science (CST) (ENVS) (p. 1535)
• Environmental Studies (CLA) (ENST) (p. 1537)
• Film and Media Arts (FMA) (p. 1545)
• Finance (FIN) (p. 1558)
• Foundation Program (FDPR) (p. 1565)
• French (FREN) (p. 1566)
• Geography and Urban Studies (GUS) (p. 1571)
• German (GER) (p. 1584)
• Global Studies (GBST) (p. 1589)
• Graphic Arts and Design (GAD) (p. 1590)
• Greek (Ancient) (GRKA) (p. 1605)
• Greek and Roman Classics (GRC) (p. 1607)
• Greek (Modern) (GRKM) (p. 1606)
• Health Information Management (HIM) (p. 1613)
• Health Related Professions (HRPR) (p. 1618)
• Healthcare Management (HCM) (p. 1618)
• Hebrew (HEBR) (p. 1619)
• Hindi (HIN) (p. 1621)
• History (HIST) (p. 1621)
• Horticulture (HORT) (p. 1653)
• Human Resource Management (HRM) (p. 1658)
• Intellectual Heritage (IH) (p. 1663)
• International Business Admn (IB) (p. 1665)
• Italian (ITAL) (p. 1670)
• Japanese (JPNS) (p. 1675)
• Jewish Studies (JST) (p. 1681)
• Journalism (JRN) (p. 1685)
• Kinesiology (KINS) (p. 1695)
• Korean (KRN) (p. 1708)
• Landscape Architecture (LARC) (p. 1709)
• Latin American Studies (LAS) (p. 1715)
• Latin (LAT) (p. 1713)
• Law - Undergraduate Courses (LAWU) (p. 1720)
• Legal Studies (LGLS) (p. 1721)
• Lesbian Gay Bi Trans Gender St (LGBT) (p. 1728)
• Management Information Systems (MIS) (p. 1728)
• Management Science/Op Mgmnt (MSOM) (p. 1733)
• Marketing (MKTG) (p. 1734)
• Math Education (Elementary) (MAEE) (p. 1740)
• Math Education (Secondary) (MAES) (p. 1740)
• Mathematics (MATH) (p. 1742)
• Mechanical Engineering (MEE) (p. 1755)
• Mechanical Engineering Tech (MET) (p. 1760)
• Media Studies & Production (MSP) (p. 1760)
• Medicine Undergraduate Courses (MEDU) (p. 1772)
• Middle Grades Education (MGRE) (p. 1772)
• Military Science (MLSC) (p. 1774)
• Music Education (MUED) (p. 1792)
• Music (MUSC) (p. 1776)
• Music Studies (MUST) (p. 1776)
• Naval Science - Navy ROTC (NAVS) (p. 1812)
• Neuroscience - CLA (NSCI) (p. 1813)
• New Media Interdisciplinary (NMIC) (p. 1816)
• Nursing (NURS) (p. 1817)
• Occupational Therapy (OTHR) (p. 1824)
• Organizational Studies (ORGS) (p. 1824)
• Painting, Drawing & Sculpture (PDS) (p. 1828)
• PHETE (PHTE) (p. 1825)
• Philosophy (PHIL) (p. 1839)
• Physics (PHYS) (p. 1849)
• Political Science (POLS) (p. 1857)
• Portuguese (PORT) (p. 1871)
• ProRanger Program (PRAN) (p. 1873)
• Psychology (PSY) (p. 1874)
• Public Health (PBHL) (p. 1896)
• Real Estate (RE) (p. 1904)
• Religion (REL) (p. 1905)
• Risk Management and Insurance (RMI) (p. 1915)
• Russian (RUS) (p. 1920)
• School of Business and Mgmt (SBM) (p. 1929)
• School of Environmental Design (SED) (p. 1930)
• School of Tourism & Hosp Mgt (STHA) (p. 1930)
• School Psychology (SPSY) (p. 1929)
• Science Education (Elementary) (SCEE) (p. 1930)
• Science Education (Secondary) (SCES) (p. 1930)
• Science, Secondary Education (SCSE) (p. 1931)
• Secondary Education (SECE) (p. 1932)
• Slavic Languages & Literature (SLVC) (p. 1932)
• Social Studies Ed (Elementary) (SSEE) (p. 1933)
• Social Studies Ed (Secondary) (SSES) (p. 1933)
• Social Work - Undergraduate (SSWU) (p. 1933)
• Sociology (SOC) (p. 1940)
• Spanish (SPAN) (p. 1956)
• Special Education (SPED) (p. 1968)
• Statistics (STAT) (p. 1971)
• Strategic Communication (STRC) (p. 1978)
• Strategic Management (SGM) (p. 1984)
• Study Away Non-TU Program (STAW) (p. 1987)
• Supply Chain Management (SCM) (p. 1987)
• Theater (THTR) (p. 1989)
• Therapeutic Recreation (THRC) (p. 2006)
• Topical Studies (TS) (p. 2015)
• Tourism & Hospitality Management (STHM) (p. 2015)
• TUJ International Bus Studies (JIBS) (p. 1988)
• Tyler School of Art (TYLE) (p. 2025)
• Undergraduate Studies Merit Scholar (USMS) (p. 2027)
• University College (UC) (p. 2027)
• University Seminar (UNVS) (p. 2028)
• Upper Division Honors Program (HONS) (p. 2029)
• Urban Education (URBE) (p. 2030)
• Vietnamese (VTNM) (p. 2031)
• Visual Studies (VS) (p. 2031)
• Women's Studies (WMST) (p. 2038)

Accounting (ACCT)

Courses

ACCT 2101. Financial Accounting. 3 Credit Hours.
Basic concepts and principles underlying the preparation and use of financial statements. Among the topics covered are basic accounting theory, transactional analysis, income determination, asset and liability valuation, and the preparation of financial statements. NOTE: Accounting majors who started as freshmen in fall 2008 need a C or better to progress in the Accounting major.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 0701 to 0702|Required Courses:1|Minimum Grade of C-|May not be taken concurrently
OR STA1 Y|May not be taken concurrently
OR STA2 Y|May not be taken concurrently
OR MATH 1011|Minimum Grade of C-|May not be taken concurrently
OR MATH 1021|Minimum Grade of C-|May not be taken concurrently
OR STAT 1001|Minimum Grade of C-|May be taken concurrently
OR STT2 Y|May not be taken concurrently.

ACCT 2102. Managerial Accounting. 3 Credit Hours.
Basic concepts related to the manager's role in making business decisions using accounting data. Topics include cost classification, behavior, and allocation, cost-volume-profit analysis, operating and capital budgeting, variance analysis, performance evaluation and responsibility accounting. NOTE: The Accounting major changed as of fall semester 2008 for freshmen. The changes are effective for transfer students beginning in fall 2010. Accounting majors admitted as freshmen in fall semester 2008 or after should register for Accounting 2521 instead of Accounting 2102 and need a C or better to progress in the major.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ACCT 2101|Minimum Grade of C-|May not be taken concurrently
OR ACCT 2901|Minimum Grade of C-|May not be taken concurrently.

ACCT 2521. Cost Accounting. 3 Credit Hours.
The accumulation and analysis of cost accounting information for the valuation of products and services, internal decision making, and measurement of financial performance. NOTE: The Accounting major changed as of fall semester 2008 for freshmen. The changes are effective for transfer students beginning in fall 2010. New freshmen Accounting majors who were admitted in fall semester 2008 or after are not required to take Accounting 2102. You should register for Accounting 2521.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ACCT 2101|Minimum Grade of C-|May not be taken concurrently
OR ACCT 2901|Minimum Grade of C-|May not be taken concurrently.
ACCT 2901. Honors Financial Accounting. 3 Credit Hours.
Course develops knowledge of financial accounting theory, financial statement preparation, and the use of accounting data by managers and external users. Honors version of 2101 (0001). NOTE: May be used to fulfill the first portion of the accounting requirement for the Fox School of Business and Management. Accounting majors who started as freshmen in fall 2008 need a C or better to progress in the Accounting major.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 0701 to 0702| Required Courses:1|Minimum Grade of C-|May not be taken concurrently
OR STA1 Y|May not be taken concurrently
OR STA2 Y|May not be taken concurrently
OR MATH 1011|Minimum Grade of C-|May not be taken concurrently
OR MATH 1021|Minimum Grade of C-|May not be taken concurrently
OR STAT 1001|Minimum Grade of C-|May be taken concurrently
OR STT2 Y|May not be taken concurrently.

ACCT 2902. Honors Managerial Accounting. 3 Credit Hours.
Course provides an introduction to managerial accounting concepts and techniques and their use by decision makers. Honors version of 2102 (0002). NOTE: May be used to fulfill the second portion of the accounting requirement for the Fox School of Business and Management. The Accounting major has changed beginning fall semester 2008 for freshmen. These changes are effective for transfer students beginning in fall 2010. Accounting majors admitted as freshmen in fall semester 2008 or after are not required to take Accounting 2902. You should register for Accounting 2521.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ACCT 2101|Minimum Grade of C-|May not be taken concurrently
OR ACCT 2901|Minimum Grade of C-|May not be taken concurrently

ACCT 3511. Intermediate Accounting I. 3 Credit Hours.
Accounting principles as they relate to financial reporting. Income determination, asset and liability valuation, and the form and content of financial statements are examined. NOTE: This course meets an upper-level major or business-elective requirement.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ACCT 2101|Minimum Grade of C-|May not be taken concurrently
OR ACCT 2901|Minimum Grade of C-|May not be taken concurrently
OR ACC1 Y|May not be taken concurrently
AND (ACCT 2521|Minimum Grade of C|May be taken concurrently).
ACCT 3512. Intermediate Accounting II. 3 Credit Hours.
A continuation of material begun in Accounting 3511. Stockholders' equity, earnings per share, and long-term investments will be covered along with complex revenue-recognition problems, pensions, leases, inter-period tax allocation, and cash flows. NOTE: This course meets an upper-level major or business-elective requirement.


College Restrictions: Must be enrolled in one of the following Colleges: Business & Mgmt, Fox School

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(ACCT 3511|Minimum Grade of C|May not be taken concurrently
OR ACCT 2511|Minimum Grade of C|May not be taken concurrently
OR ACCT 3911|Minimum Grade of C|May not be taken concurrently)
AND (ACCT 2521|Minimum Grade of C|May not be taken concurrently).

ACCT 3526. Accounting Information Systems. 3 Credit Hours.
An introduction to the evaluation and design of accounting information systems and the documentation and analysis of a client's hardware and software needs. Internal controls, networking options and security issues also are examined. Students receive hands-on experience with accounting software.


Repeatability: This course may not be repeated for additional credits

Pre-requisites:
ACCT 2521|Minimum Grade of C|May not be taken concurrently.

ACCT 3531. Federal Taxes on Income. 3 Credit Hours.
An introduction to the concepts and logic underlying federal income tax law. Emphasis is given to the determination of income and allowable deductions for both individual and business entity taxpayers. The course also integrates some financial accounting and finance theory with federal tax law.


Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(ACCT 3511|Minimum Grade of C|May not be taken concurrently
OR ACCT 2511|Minimum Grade of C|May not be taken concurrently
OR ACCT 3911|Minimum Grade of C|May not be taken concurrently)
AND (ACCT 2521|Minimum Grade of C|May not be taken concurrently).

ACCT 3533. Advanced Accounting. 3 Credit Hours.
The major topics covered in this course include: business combinations, intercompany transactions, and other aspects of inter-corporate stock ownership necessary for the preparation of consolidated financial statements. Foreign currency transactions, foreign currency translation, partnership accounting, governmental accounting and not-for-profit accounting topics are introduced and discussed.


College Restrictions: Must be enrolled in one of the following Colleges: Business & Mgmt, Fox School

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
ACCT 3512|Minimum Grade of C|May not be taken concurrently.

ACCT 3561. International Accounting. 3 Credit Hours.
The purpose of this course is to provide an understanding of accounting issues arising from the increased globalization of business. Topics covered include: comparative cross-national financial reporting; efforts to harmonize cross-national accounting standards and practices and to develop international accounting standards; taxation and transfer pricing issues; and managerial control of global operations.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
ACCT 2521|Minimum Grade of C|May not be taken concurrently.
ACCT 3580. Special Topics - Accounting. 1 to 3 Credit Hour.
Special topics in current developments in the field of accounting.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatability: This course may be repeated for additional credit.

Pre-requisites:
(ACCT 2521|Minimum Grade of C|May not be taken concurrently)
AND (ACCT 3511|Minimum Grade of C|May not be taken concurrently)
AND (ACCT 3512|Minimum Grade of C|May be taken concurrently).

ACCT 3581. Co-operative Experience in Accounting. 3 Credit Hours.
The course is designed for students who have an Accounting Internship or Co-op Experience, either in spring or summer session. The course can also be taken by students accepted into the Volunteer Income Tax Assistance program, which runs each spring semester. Program admittance is selective and requires an interview with the program director. A grade of B or better in Accounting 3531 (0131) is required to apply. NOTE: Arrangements are made through the Accounting Department. This course is for Accounting majors only.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatability: This course may be repeated for additional credit.

Pre-requisites:
ACCT 3511|Minimum Grade of C|May not be taken concurrently
OR ACCT 2511|Minimum Grade of C|May not be taken concurrently
OR ACCT 3911|Minimum Grade of C|May not be taken concurrently.

ACCT 3582. Independent Study. 1 to 6 Credit Hour.
Students will prepare research papers under supervision of a faculty member. NOTE: Students who want to sit for the CPA exam or other professional designations may have to petition to have independent study credit accepted by the examining authority toward satisfying minimum education requirements.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatability: This course may be repeated for additional credit.

ACCT 3596. Auditing. 3 Credit Hours.
A study and critical appraisal of current auditing standards related to the examination of financial statements by an independent auditor. The significance of the audit report; the nature, accumulation, and evaluation of evidence for balances and transaction cycles; and the moral and ethical problems of the auditor are some of the topics covered. An introduction to the provisions of the Sarbanes-Oxley Act and assurance services also is provided. This is a writing intensive course. Students must earn a grade of C in this course if they are using it to fill the writing intensive course requirement for their degree.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(ACCT 3511|Minimum Grade of C|May not be taken concurrently)
OR ACCT 2511|Minimum Grade of C|May not be taken concurrently
OR ACCT 3911|Minimum Grade of C|May not be taken concurrently
AND (BA 2196|Minimum Grade of C|May not be taken concurrently
OR BA 2996|Minimum Grade of C|May not be taken concurrently).
**ACCT 3911. Honors Intermediate Accounting I. 3 Credit Hours.**
Honors version of ACCT 3511 (2511/0011). Accounting principles as they relate to financial reporting. Income determination, asset and liability valuation, and the form and content of financial statements are examined. NOTE: This course meets an upper-level major or business-elective requirement.


**Cohort Restrictions:** Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR

**Course Attributes:** HO

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
(ACCT 2101|Minimum Grade of C|May not be taken concurrently)
OR ACCT 2901|Minimum Grade of C|May not be taken concurrently
OR ACC1 Y|May not be taken concurrently
AND (ACCT 2521|Minimum Grade of C|May be taken concurrently).

**ACCT 3999. Honors Thesis I. 1 to 3 Credit Hour.**
The first of a two-part sequence of courses in which independent research is conducted under the supervision of a thesis advisor from the Accounting department resulting in a substantial piece of original research, roughly 30 to 50 pages in length upon completion of Accounting 4999. The student must publicly present his/her findings at a Temple University Research Forum session or the equivalent during one of the two semesters during which these courses are undertaken.

**Field of Study Restrictions:** Must be enrolled in one of the following Majors: Accounting

**College Restrictions:** Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School

**Cohort Restrictions:** Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR

**Course Attributes:** HO

**Repeatability:** This course may be repeated for additional credit.

**ACCT 4501. Accounting Senior Seminar. 3 Credit Hours.**
Capstone course designed to enable students to evaluate generally accepted accounting principles and to relate accounting theory to accounting practice. The course is intended to serve as a transition from academe to professional practice. NOTE: This course is the non-writing intensive version of Accounting 4596. Students should not take this course if they have already taken and passed Accounting 4596. This course is required for freshmen admitted fall 2008 or after and transfers admitted fall 2010 or after.


**College Restrictions:** Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
(ACCT 3512|Minimum Grade of C|May not be taken concurrently)
AND (ACCT 3596|Minimum Grade of C|May not be taken concurrently).

**ACCT 4502. Senior Seminar - Management Accounting. 3 Credit Hours.**
The senior seminar is a capstone course that builds on the base of the substantial knowledge you have acquired in previous courses in accounting. We will identify current issues in accounting, use the textbook as reference, and supplement it with information from other sources. The course has the following specific objectives: (1) Develop the ability to analyze current issues in accounting and their effects on financial statement analysis and management decision making; (2) Develop an understanding of the ethical issues in accounting and the ability to deal with ethical dilemmas; (3) Develop the communication skills necessary for success as an accounting professional; (4) Prepare students to transition from the Fox Business School to the business world; and (5) Prepare students for the Certified Management Accounting exam (CMA).

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
(ACCT 3512|Minimum Grade of C|May not be taken concurrently)
AND ACCT 3596|Minimum Grade of C|May not be taken concurrently).
ACCT 4999. Honors Senior Thesis II. 1 to 3 Credit Hour.
Independent research conducted under the supervision of a thesis advisor from the Accounting Department resulting in a substantial piece of original research, roughly 30 to 50 pages in length. Student must publicly present his/her findings at a Temple University Research Forum session or the equivalent if this was not done in Accounting 3999.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Accounting
College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.
Pre-requisites: ACCT 3999|Minimum Grade of C-|May not be taken concurrently.

Actuarial Science (AS)

Courses

As 1501. Actuarial Probability and Statistics I. 3 Credit Hours.
In this course, probability theory and its application to insurance and risk management problems are discussed. Among the topics to be covered: counting techniques, conditional probability, Bayes' Theorem, discrete random variables, specific discrete distributions such as Binomial, Poisson, Negative Binomial and Uniform, moment generating functions and functions of two random variables. NOTE: Students need to earn a grade of C or better in this course to be eligible to register for all other required courses in the Actuarial Science major. Prior to spring 2016, the course title was "Introduction to Actuarial Science."

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatability: This course may not be repeated for additional credits
Pre-requisites: MATH 1042|Minimum Grade of C-|May be taken concurrently
OR MATH 1942|Minimum Grade of C-|May be taken concurrently
OR MATH 2043 to 3080| Required Courses:1|Minimum Grade of C-|May be taken concurrently.

As 1901. Honors Introduction to Actuarial Science. 3 Credit Hours.
Honors version of Actuarial Science 1501 (0001). NOTE: Students need to earn a grade of C or better in this course to be eligible to register for all other required courses in the Actuarial Science major.

College Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits
Pre-requisites: MATH 1042|Minimum Grade of C-|May be taken concurrently
OR MATH 1942|Minimum Grade of C-|May be taken concurrently
OR MATH 2043 to 3080| Required Courses:1|Minimum Grade of C-|May be taken concurrently.

As 2101. Actuarial Probability and Statistics II. 3 Credit Hours.
In this course, probability theory and its application to insurance and risk management problems are discussed in the context of continuous random variables. Among the topics to be covered are: Random variables, probabilities, and percentiles on a continuum; specific continuous distributions such as Uniform, Gamma and Exponential, Normal, and Beta; moments and moment generating functions; conditional and marginal distributions; transformations of one or two random variables; order statistics; and the Central Limit Theorem.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatability: This course may not be repeated for additional credits
Pre-requisites: MATH 2043|Minimum Grade of C-|May not be taken concurrently
OR MATH 1942|Minimum Grade of C-|May not be taken concurrently
OR MATH 2043 to 3080| Required Courses:1|Minimum Grade of C-|May not be taken concurrently.

As 1901. Honors Introduction to Actuarial Science. 3 Credit Hours.
Honors version of Actuarial Science 1501 (0001). NOTE: Students need to earn a grade of C or better in this course to be eligible to register for all other required courses in the Actuarial Science major.

College Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits
Pre-requisites: MATH 1042|Minimum Grade of C-|May be taken concurrently
OR MATH 1942|Minimum Grade of C-|May be taken concurrently
OR MATH 2043 to 3080| Required Courses:1|Minimum Grade of C-|May be taken concurrently.

As 2101. Actuarial Probability and Statistics II. 3 Credit Hours.
In this course, probability theory and its application to insurance and risk management problems are discussed in the context of continuous random variables. Among the topics to be covered are: Random variables, probabilities, and percentiles on a continuum; specific continuous distributions such as Uniform, Gamma and Exponential, Normal, and Beta; moments and moment generating functions; conditional and marginal distributions; transformations of one or two random variables; order statistics; and the Central Limit Theorem.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatability: This course may not be repeated for additional credits
Pre-requisites: MATH 2043|Minimum Grade of C-|May not be taken concurrently
OR MATH 1942|Minimum Grade of C-|May not be taken concurrently
OR MATH 2043 to 3080| Required Courses:1|Minimum Grade of C-|May not be taken concurrently.
AS 2502. Theory of Interest. 3 Credit Hours.
In this course, simple, compound and effective interest functions are analyzed and used in the calculation of present value and future values of various investments. Annuities, loan amortization and bonds are discussed and techniques for computing their values at various dates are explored. NOTE: Students will need to earn a minimum grade of C in this course to be eligible to take Actuarial Science 3501.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatability: This course may not be repeated for additional credits
Pre-requisites: MATH 1042|Minimum Grade of C|May not be taken concurrently
OR MATH 1942|Minimum Grade of C|May not be taken concurrently
OR MATH 2043|Minimum Grade of C-|May be taken concurrently
OR MA07 Y|May not be taken concurrently.

AS 2503. Corporate Finance for Actuarial Science. 3 Credit Hours.
This course develops the conceptual framework of corporate finance and financial derivative from an actuarial perspective. It prepares students for the Derivatives Markets material on Exam FM/2 and also offers VEE credit for Corporate Finance. Topics covered in this course include financial statements, asset valuation, capital budgeting, capital structure, the cost of capital and dividend policy. Financial derivatives, such as forwards, futures, swaps, and options, will be discussed in detail and their application in corporate risk management will be examined. NOTE: This course should be taken in place of Finance 3101 and has been approved by the Society of Actuaries/Casualty Actuarial Society for VEE - Corporate Finance. Completion of this course with a minimum grade of B- is required for VEE - Corporate Finance credit.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatability: This course may not be repeated for additional credits
Pre-requisites: (MATH 1042|Minimum Grade of C|May not be taken concurrently
OR MATH 1942|Minimum Grade of C|May not be taken concurrently
OR MATH 2043|Minimum Grade of C-|May be taken concurrently
OR MA07 Y|May not be taken concurrently)
AND (ACCT 2101|Minimum Grade of C|May not be taken concurrently
OR ACCT 2901|Minimum Grade of C|May not be taken concurrently
OR ACC1 Y|May not be taken concurrently)
AND (AS 2502|Minimum Grade of C|May not be taken concurrently).

AS 2504. Advanced Theory of Interest. 3 Credit Hours.
This course develops the theoretical basis of certain actuarial models and the application of those models to insurance and other financial risks. It prepares students for SOA Exam MFE or CAS Exam 3F. Topics covered in this course include Vasicek and Cox-Ingersoll-Ross bond price models, Black-Derman-Toy binomial model, Black-Scholes option-pricing model, exotic options, Itô's lemma in the one-dimensional case. Simulation of lognormal stock prices and variance reduction techniques will be discussed and delta-hedging in risk management will be demonstrated.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatability: This course may not be repeated for additional credits
Pre-requisites: (AS 2502|Minimum Grade of C|May not be taken concurrently
AND AS 2503|Minimum Grade of C|May not be taken concurrently).

AS 3501. Actuarial Modeling I. 3 Credit Hours.
This course introduces the discrete and continuous random variables measuring the future lifetime of a person. Among the topics covered are calculation of the mean, variance and probability functions for these random variables, introduction of a present value random variable measuring the present value of a life insurance and annuity benefit, calculation of premiums for life insurance and annuities using interest rates and calculation of reserves for insurance companies, examining future liabilities and inflow. NOTE: A grade of C or better is required in this course to be eligible to take Actuarial Science 3502.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatability: This course may not be repeated for additional credits
Pre-requisites: (AS 2502|Minimum Grade of C|May not be taken concurrently
AND AS 2503|Minimum Grade of C|May not be taken concurrently).

AS 3502. Actuarial Modeling II. 3 Credit Hours.
This course introduces the evaluation and calculation of reserves for various continuous and discontinuous policies. Multi-state models are presented, with applications in multiple decrement theory and multiple lives. The valuation of life insurance and annuities is then reexamined, allowing for interest rate and mortality adjustments. The profitability of insurance products is then discussed and calculated.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatability: This course may not be repeated for additional credits
Pre-requisites: AS 3501|Minimum Grade of C|May not be taken concurrently.
AS 3503. Actuarial Modeling III. 3 Credit Hours.
Estimation and fitting of survival, frequency and severity, and compound distribution loss models; credibility methods.
College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatability: This course may not be repeated for additional credits
Pre-requisites: STAT 2512|Minimum Grade of C|May not be taken concurrently.

AS 3580. Special Topics: Actuarial Science. 3 Credit Hours.
Special topics in current developments in the field of Actuarial Science and exam preparation.
College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatability: This course may be repeated for additional credit.

AS 3582. Independent Study. 1 to 6 Credit Hour.
Readings and/or research paper under the supervision of a faculty member.
College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatability: This course may be repeated for additional credit.

AS 3596. Casualty Contingencies. 3 Credit Hours.
This highly participative course is designed to broaden perspectives on the business environment in which actuaries work. In addition to analyzing the issues behind daily events, several continuing issues will be analyzed including insurance pricing cycles, regulatory developments, the role of the actuary as an educator, advisor, objective information source and problem solver, insurance company financial rating and solvency issues, accounting fraud and questionable financial transactions, insurance and the financial markets managing insurance operations, professional ethics, and the impact of current developments in underwriting, and reinsurance on the actuarial function. NOTE: This is the writing-intensive course for Actuarial Science majors. Students must earn a grade of C in this course if they are using it to fill the writing intensive course requirement for their degree.
College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(RMI 2101|Minimum Grade of C|May not be taken concurrently
OR RMI 2901|Minimum Grade of C|May not be taken concurrently
OR RMI 1 Y|May not be taken concurrently)
AND (MATH 2043|Minimum Grade of C|May not be taken concurrently
OR MA08 Y|May not be taken concurrently)
AND (AS 1501|Minimum Grade of C|May not be taken concurrently
OR AS 1901|Minimum Grade of C|May not be taken concurrently
OR ACCT 2101|Minimum Grade of C|May not be taken concurrently
OR ACCT 2901|Minimum Grade of C|May not be taken concurrently).

AS 3999. Honors Thesis I. 1 to 3 Credit Hour.
The first of a two-part sequence of courses in which independent research is conducted under the supervision of a thesis advisor from the Actuarial Science department resulting in a substantial piece of original research, roughly 30 to 50 pages in length upon completion of Actuarial Science 4999. The student must publicly present his/her findings at a Temple University Research Forum session or the equivalent during one of the two semesters during which these courses are undertaken.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Actuarial Science
College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.
Pre-requisites: AS 3999|Minimum Grade of C|May not be taken concurrently.

AS 4999. Honors Senior Thesis II. 1 to 3 Credit Hour.
Independent research conducted under the supervision of a thesis advisor from the Actuarial Science Department resulting in a substantial piece of original research, roughly 30 to 50 pages in length. Student must publicly present his/her findings at a Temple University Research Forum session or the equivalent if this was not done in Actuarial Science 3999.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Actuarial Science
College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.
Pre-requisites: AS 3999|Minimum Grade of C|May not be taken concurrently.

Adult & Organizational Development (AOD)
Courses

AOD 0836. Interpersonal Communication: Critical Competencies for Professional and Personal Success. 3 Credit Hours.
The primary goal of this course is to help you enhance your interpersonal communication competence so you have successful interpersonal communication with your family, friends and work colleagues. In the first phase of the course you will assess your own communication skills. You will develop and set personal goals and an action plan by which to create the change you wish to see. In the course you will learn the basic components of interpersonal communication situations (communicators, content, and contexts) and you will investigate how interpersonal communication needs and effectiveness change throughout life (in early childhood, adolescence, young adulthood, middle age, and old age). The course includes frequent small group discussions which will allow you to integrate course and research information for personal skill development. The course will provide a reflective and supportive environment in which to expand your communication skills and knowledge. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core.

Course Attributes: GB
Repeatability: This course may not be repeated for additional credits.

AOD 1016. Introduction to Adult Learning and Training. 3 Credit Hours.
Provides a basis for understanding human behavior in professional and personal settings from a communication perspective. Emphasis is given to skills and analytical abilities related to challenges professionals face in a wide range of settings including: interpersonal and professional relationships, public presentations, team leadership roles and responsibilities, and organizational change in management roles.

Repeatability: This course may not be repeated for additional credits.

AOD 1166. Interpersonal Communication through the Life Span. 3 Credit Hours.
Examines the development of effective communication in relationships in family, work, and social settings. Examines how communication preferences, demands, and skills change across the age spectrum, with an emphasis on talking, thinking, and listening abilities central to communication situations across life situations. Assists students in developing professional skills needed to manage communication challenges in diverse personal and professional settings.

Repeatability: This course may not be repeated for additional credits.

AOD 2115. Conflict Resolution in Education. 3 Credit Hours.
Introduces students to the broad field of conflict resolution education, including social and emotional learning, anti-bullying programs, peer mediation, negotiation processes, expressive arts and conflict resolution education, restorative justice programs, and bias awareness programs. It provides students with examples of programs, gives them an opportunity to interact with experts in the field, and encourages them to consider how they can support these programs as teachers and administrators.

Repeatability: This course may not be repeated for additional credits.

AOD 2117. Nonverbal Communication. 3 Credit Hours.
Examines the role and function of nonverbal communication in a variety of social situations. Focuses on nonverbal codes and the differences between linguistic and nonlinguistic codes. It introduces students to the array of nonverbal cues in areas of kinesics, proxemics, haptics, chronemics, and paralinguistics. It explores the importance of nonverbal communication for creating and maintaining effective personal and professional contexts.

Repeatability: This course may not be repeated for additional credits.

AOD 2176. Team Process in Education. 3 Credit Hours.
Examines ways of managing the communication process in small group, decision-making settings. The course covers core concepts and theories of group interaction and emphasizes their practical implications for understanding and influencing small group decision-making. Topics include cohesion, social influence, facilitation, group tasks, and group/team development. Students develop their personal skills in being effective team members and team leaders.

Repeatability: This course may not be repeated for additional credits.

AOD 2201. Research Methods in Applied Communication. 3 Credit Hours.
Introduces quantitative research methods in applied communication. Covers a variety of study domains including field/descriptive, correlational, survey, clinical, ethnographic, and experimental research designs. Students learn various research methods for addressing particular types of research questions.

Repeatability: This course may not be repeated for additional credits.

AOD 2214. Conflict and Communication. 3 Credit Hours.
Covers conflict process and communication in interpersonal and organizational relationships. Concepts examined include conflict styles, phases of conflict, face-saving, attribution and conflict, cooperative and competitive approaches to negotiation, and methods of third party intervention. This course provides a basis for managing and intervening in difficult conflicts that occur in schools, professional organizations, and interpersonal relationships.

Repeatability: This course may not be repeated for additional credits.

AOD 2215. Mediation: Principles and Practice. 3 Credit Hours.
Provides an overview of the development and use of mediation in diverse conflict settings. Students learn the various models of mediation that third parties rely on to intervene in conflicts in organizational, family, school and community settings. Emphasis is placed on the communication skills and practices that form the basis for the mediator’s role in two-party or multiparty disputes.

Repeatability: This course may not be repeated for additional credits.
AOD 2218. Leadership and Communication. 3 Credit Hours.
Examines the theories and research on effective leadership in organizational, school, and community contexts. Concentrates on communication skills critical for leading change processes in a wide range of organizational environments. Attention is given to the personal leadership development of students enrolled in the course.
**Repeatability:** This course may not be repeated for additional credits.

AOD 2307. Interaction Analysis. 3 Credit Hours.
This course teaches a system of verbal communications that examines individual style and its effect on the listener. The purpose of the system is to teach those in power positions, such as teachers, supervisors, team leaders, psychologists and other medical professionals, how to communicate with others so that their messages are fully understood and the consequences of misunderstandings and misinterpretations are minimized.
**Repeatability:** This course may not be repeated for additional credits.

AOD 2915. Honors Mediation: Principles and Practice. 3 Credit Hours.
This is the Honors version of AOD 2215. Provides an overview of the development and use of mediation in diverse conflict settings. Students learn the various models of mediation that third parties rely on to intervene in conflicts in organizational, family, school and community settings. Emphasis is placed on the communication skills and practices that form the basis for the mediator's role in two-party or multiparty disputes.
**Cohort Restrictions:** Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
**Course Attributes:** HO
**Repeatability:** This course may not be repeated for additional credits.

AOD 3316. Negotiation Processes. 3 Credit Hours.
Teaches students about collaborative and competitive approaches to negotiation. The emphasis is on the integration of negotiation theory and practice as applied to two-party and multi-party negotiation situations. Students learn to diagnose a conflict situation to prepare an effective negotiation strategy. Examples in the class focus on educational contexts to encourage students to apply class material to their work as teachers and administrators.
**Repeatability:** This course may not be repeated for additional credits.

AOD 3376. Facilitating Group Decision-Making. 3 Credit Hours.
Focuses on the various approaches to facilitating decision-making in task-oriented groups. Students learn how to facilitate groups that follow voting and consensus decision-making formats and how to meet the challenges of being an internal or external facilitator in any group process. Special attention is given to learning how to lead groups through difficult conflicts in schools and other professional organizational settings.
**Repeatability:** This course may not be repeated for additional credits.

AOD 3396. Organizational Communication. 3 Credit Hours.
Classical and contemporary theories of organizational structure and management and their relationship to communication processes. Emphasis on organizations as cultures and analysis of cases and real life situations. Supports students’ ability to act as effective managers and change agents in a wide array of school and organizational settings.
**Course Attributes:** WI
**Repeatability:** This course may not be repeated for additional credits.

AOD 4016. Advanced Adult Learning and Training. 3 Credit Hours.
This course is an in-depth study of the methods, tools and techniques employed in facilitating adult learning and designing and implementing training programs. The focus is on the preparation and process of delivering leader led effective group training activities in workshops, seminars, and project meetings. Students will gain the advanced knowledge and skills which are necessary for the professional roles of an instructional specialist such as a facilitator, trainer, or teacher of adults. Students will learn the basics of performing as an internal or external trainer. The course requires that students have completed the AOD 1016, Introduction to Adult Learning and Training course.
**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
AOD 1016|Minimum Grade of C-|May not be taken concurrently.

AOD 4376. Innovation and Mission-Driven Organizations. 3 Credit Hours.
This class will explore the field of Social Entrepreneurship and provide students with a set of skills that will be crucial as participants move into the non-profit sector and become social change agents. We will explore the idea of social entrepreneurship as a way of solving social problems through innovative approaches. Social entrepreneurship is a rapidly developing and changing business field in which business and nonprofit leaders design, grow, and lead mission-driven enterprises. It is important that students understand the opportunities and challenges in this new landscape.
**Repeatability:** This course may not be repeated for additional credits.

AOD 4382. Independent Study. 1 to 3 Credit Hour.
Provides students an opportunity to explore topics not fully covered in coursework. Under faculty supervision, the student will identify and read relevant literature in the theory and research of the topic area.
**Repeatability:** This course may be repeated for additional credit.

AOD 4385. Internship in AOD/Applied Communication. 3 Credit Hours.
Work experience in a communication-related job in schools, business, government, or private agency. Analysis of the work experience in light of the skills and abilities obtained in students’ prior coursework in applied communications.
**Repeatability:** This course may be repeated for additional credit.
AOD 4396. Field Research: Practice in Professional Settings. 3 Credit Hours.
Provides students an opportunity to discover how their knowledge and skills in relationship, team, and organizational change processes are managed by designated professionals in schools, agencies, organizations or other work settings. Students are guided through the design of an individualized professional development plan and an approach to exploring the link between their own backgrounds and the professional roles they seek to obtain. Special attention is given to development of personal presentation in writing, interviewing, and interning roles.
College Restrictions: Must be enrolled in one of the following Colleges: Education
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

Advertising (ADV)

Courses
ADV 0853. Advertising and Globalization. 3 Credit Hours.
Explore the current global scope and reach of advertising in our connected, digital age. Study major interdisciplinary themes related to the spread of consumerism, self and social identity, global consciousness, and cross-cultural effects as a result of the worldwide spread of advertising as part of the free market system. Particular attention is given to cross-cultural issues related to cultural imperialism, legal and societal constraints, ethical questions, universal values and green marketing. Course work includes comprehensive survey of print and broadcast advertising found in other countries. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed ADV 0953.
Course Attributes: GG
Repeatability: This course may not be repeated for additional credits.
ADV 0953. Honors Advertising and Globalization. 3 Credit Hours.
Explore the current global scope and reach of advertising in our connected, digital age. Study major interdisciplinary themes related to the spread of consumerism, self and social identity, global consciousness, and cross-cultural effects as a result of the worldwide spread of advertising as part of the free market system. Particular attention is given to cross-cultural issues related to cultural imperialism, legal and societal constraints, ethical questions, universal values and green marketing. Course work includes comprehensive survey of print and broadcast advertising found in other countries. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed ADV 0853.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GG, HO
Repeatability: This course may not be repeated for additional credits.
ADV 1000. Topics in Advertising 1. 1 to 3 Credit Hour.
This course number is reserved for Special Topics courses.
Repeatability: This course may be repeated for additional credit.
ADV 1001. Introduction to Digital Design Tools. 1 to 3 Credit Hour.
This introductory course of study is computer graphics for advertising majors. Focus is on achieving working knowledge of Adobe Photoshop and Illustrator. The Adobe Creative Suite is a major tool of the art direction trade. We use these tools to execute thoughtful concepts. To be a competitive job candidate, graduates will need proficiency in Photoshop, Illustrator and InDesign with working knowledge of Acrobat and Bridge. Over the course of the semester we will spend approximately 6 weeks each with Illustrator and Photoshop and 1.5 weeks with InDesign at an introductory level. Practice makes perfect. Instruction, exposure and experience with software will lead to mastery. We use course projects as an opportunity to develop portfolio work while practicing software lessons. Although we will discuss and critique design and concept for personal development, it will not be a part of student evaluation.
Repeatability: This course may not be repeated for additional credits.
ADV 1004. Introduction to Marketing. 3 Credit Hours.
Introduction to the marketing process, including defining customer needs and wants, market segmentation strategies, and how organizations develop a strong value proposition. We will also examine the relationship between marketers and advertising agencies.
Repeatability: This course may not be repeated for additional credits.
ADV 1005. Introduction to Computer Graphics for Advertising. 1 to 3 Credit Hour.
The course of study is an introduction to digital design for projects related to advertising. Focus is on the basics of digital workflows and the Adobe Creative Suite: Illustrator, InDesign and Photoshop.
Repeatability: This course may be repeated for additional credit.
ADV 1010. Topics in Advertising 10. 3 Credit Hours.
Arranged each semester. Please consult with the instructor and/or check the course schedule for specific topic.
Repeatability: This course may be repeated for additional credit.
ADV 1101. Introduction to Media and Society. 3 Credit Hours.
The history, organization, creation, economics, control and effects of mass communications in the United States, including the relationships of media to one another and to the community at large with special emphasis on the roles and responsibilities of advertising, advertisers and agencies.
Repeatability: This course may not be repeated for additional credits.
ADV 1102. Introduction to Advertising. 3 Credit Hours.
This course introduces students to the function of advertising in the economy, to the strategic identification of markets and targets, to the creation and placement of advertising, and to the relationship of advertising agencies to advertisers and the media.
Repeatability: This course may not be repeated for additional credits.

ADV 1103. Digital Media and Advertising. 3 Credit Hours.
Explores the development of digital media and their impact on integrated marketing communications and consumer behavior. Analyzes the use of digital media in brand building, advertising communications, direct response and database marketing, and sales promotions. Includes examinations of strategic planning, and communication aspects of websites, online advertising, email marketing, mobile advertising, interactive kiosks, and more. Provides principles such as user experience, content organization, navigation development, and interface design necessary to develop persuasive digital marketing materials. This course is designed to immerse you in the world of interactive media and user-centered design focusing on digital branding and strategy with extreme focus on how marketers leverage this powerful medium for their brands. NOTE: This class is cross listed with ADV 4101. Students cannot receive duplicate credit for both classes.
Repeatability: This course may not be repeated for additional credits.

ADV 1141. Introduction to Advertising Research. 3 Credit Hours.
This course covers the range of areas in which advertising research participates, or has primary responsibility for, in the advertising process. Focus is on the role of research in the advertising process (before, during and after the development of ad campaigns) and the design of research using various methodologies to accomplish effective research. NOTE: Advertising majors only.
College Restrictions: Must be enrolled in one of the following Colleges: Media and Communication
Repeatability: This course may not be repeated for additional credits.

ADV 1196. Persuasive Writing. 3 Credit Hours.
Students learn the rhetoric of writing intended to affect behavior. The basic crafts of grammar and composition are reviewed. Students explore consumer motivation as the focus of powerful, exciting advertising and written argument.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

ADV 2000. Topics in Advertising 2000. 1 to 3 Credit Hour.
This course number is reserved for special topics courses.
Repeatability: This course may be repeated for additional credit.

ADV 2001. Intermediate Digital Design Tools. 1 to 3 Credit Hour.
Focus is on achieving proficiency in Adobe Photoshop, InDesign and Illustrator. The Adobe Creative Suite is a major tool of the art direction trade. We use these tools to execute thoughtful concepts. To be a competitive job candidate, graduates need proficiency in Photoshop, Illustrator, and InDesign with working knowledge of Acrobat and Bridge. Over the course of the semester we will spend 4 weeks each with Illustrator and Photoshop at an intermediate level and 6 weeks with InDesign at a beginner level. Practice makes perfect. Instruction, exposure and experience with the software will lead to mastery. We use course projects as an opportunity to develop portfolio work while practicing software lessons. Although we will discuss and critique design and concept for personal development, it will not be a part of student evaluation.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ADV 1001|Minimum Grade of C|May not be taken concurrently.

ADV 2010. Topics in Advertising 2010. 1 to 3 Credit Hour.
This course number is reserved for special topics courses.
Repeatability: This course may be repeated for additional credit.

ADV 2052. Introduction to Typography. 3 Credit Hours.
This course offers an introduction to the elements of basic typography, including the history of letterforms, recognition and specification of existing typefaces, typographical style, and letterform design. An introduction to web fonts and digital typography practices will also be covered. Students will learn through a number of projects and class critiques. The primary objective of this course is to master the basic typographic principles and then to apply them in the appropriate context. For this introductory course a proficiency in the Adobe Creative Suite is not necessary; however, a working knowledge of Photoshop, Illustrator, and InDesign will certainly enhance your learning experience. The instructor will be available for questions, and will provide you with the requisite online tools to help you improve your skills.
Department restrictions: Must be enrolled in one of the following Departments: SMC:Advertising
Field of Study Restrictions: Must be enrolled in one of the following Concentrations: Art Direction
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(ADV 1001|Minimum Grade of C|May be taken concurrently)
OR ADV 2001|Minimum Grade of C|May be taken concurrently)
AND (ADV 2151|Minimum Grade of C|May not be taken concurrently).
ADV 2057. Creating and Filming Advertising from Script to Screen. 1 to 3 Credit Hour.
This hands-on course is designed to teach students how to take their advertising concepts through to final execution. Starting from the conceptual ideas for television commercials initially put down on paper, students are guided in following the steps toward visualizing how the idea would actually be shot. Students are coached in developing the skill of using their "mind's eye" in picturing the sequential frames of both short and long form television commercials. In addition to producing shooting boards for the commercials for several brands assigned throughout the course, students will learn the process of casting, location scouting, acquiring clearances and permits, and the basic economics related to making a commercial. The intended end product for each student will be a completed 30-second television commercial.
Repeatability: This course may not be repeated for additional credits.

ADV 2101. Advertising Strategy and Positioning. 3 Credit Hours.
Students learn to connect message solutions to marketing problems through an understanding of the relationship of marketing strategy and brand positioning to communication strategies and advertising copy.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Advertising
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CMST 2111|Minimum Grade of C|May not be taken concurrently.

ADV 2102. Introduction to Pharmaceutical Advertising. 1 to 3 Credit Hour.
Many of the advertising and marketing-related jobs in the Philadelphia region are in pharmaceutical ad agencies. This course will introduce students to the pharmaceutical advertising industry and its many opportunities for advertising professionals, and prepares interested students to pursue opportunities in the industry. You'll learn how companies market branded and generic drugs, vaccines, blood products, medical devices and other biologics. You'll learn about targeting health care professionals, patients and other consumers. You'll learn about global conglomerates, Fortune 500 companies, and upstarts and about vital regulatory issues.
Repeatability: This course may not be repeated for additional credits.

ADV 2103. Introduction to Web Design and Development. 1 to 3 Credit Hour.
Web Design and Development will give you the necessary tools to get you ahead of the competition when you graduate. In this class, you will take your skills to the next level by creating interactive websites agencies demand. You will learn the theory of website design: color theory, imagery, layout, typography, etc. and then apply these concepts into a fully functioning website using HTML and CSS. Your final project will become a key component of your portfolio.
Repeatability: This course may not be repeated for additional credits.

ADV 2104. Personal Branding. 1 to 3 Credit Hour.
This course will look at the new channels of communication that make up the social media and Web 2.0 space. The Internet is making personal branding accessible to everyone. Personal branding means promoting your own skills and strengths. Blogging and social networks are ways of reaching your target audience. Through the use of case studies and real-life media examples, you will learn how to embrace social networks, user generated content, and blogs, to name just a few channels. These channels will enable you to manage your online reputations and create your own "personal buzz."
Repeatability: This course may not be repeated for additional credits.

ADV 2111. Introduction to Marketing. 3 Credit Hours.
This course will introduce students to the marketing process, including creating customer value and building profitable customer relationships. Students will learn how organizations develop a strong value proposition to enable them to win, retain and grow their customer base. This course will also examine the relationship between marketers and advertising agencies, and will focus on the role of advertising in the marketing process. Note: Students cannot receive duplicate credit for this course and ADV 1004.
Repeatability: This course may not be repeated for additional credits.

ADV 2121. Introduction to Copywriting. 3 Credit Hours.
This course focuses on writing effective advertising messages for print and broadcast media. Emphasis is on craft, writing ability and style. Composition and the integration of graphic elements are explored. Practical assignments teach students how to use the most common copy techniques effectively to create advertising with stopping power.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ADV 1196|Minimum Grade of C|May not be taken concurrently.

ADV 2131. Introduction to Media Planning. 3 Credit Hours.
In this basic course, students learn the analysis and understanding of communication vehicles as advertising media, the concepts and resources involved in developing media objectives and strategies, as well as media selection criteria and vehicle purchasing. Note: Prior to fall 2015, the course title was Advertising Media Planning I.
Repeatability: This course may not be repeated for additional credits.
ADV 2141. Introduction to Advertising Research and Strategy. 3 Credit Hours.
The course covers the range of areas in which advertising research participates, or has primary responsibility for, in the advertising process. Focus is on the role of research in the development of strategic advertising messages, and the design of research using various methods to acquire useful insights. Identifying key insights can transform clients’ businesses, and ultimately be the foundation of lasting successful brands. We will explore how these insights lead to strategies that form the foundation of more effective and dynamic creative communications. Note: Students cannot receive duplicate credit for this class and ADV 2101.
Repeatability: This course may not be repeated for additional credits.

ADV 2151. Introduction to Art Direction: Visual Communication. 3 Credit Hours.
This course develops an understanding of the methods employed in solving communications problems in advertising with visuals. Students will explore the creative process of making images that can move ideas and information to the minds of others. (Prior to fall 2015, the course title was Visual Communication.)
Repeatability: This course may not be repeated for additional credits.

ADV 3000. Topics in Advertising 3000. 1 to 3 Credit Hour.
This course number is reserved for special topics courses.
Repeatability: This course may be repeated for additional credit.

ADV 3001. Advanced Digital Design Tools. 1 to 3 Credit Hour.
This advanced course of study is web design for advertising majors. Focus is on achieving working knowledge of Adobe Dreamweaver, HTML and CSS. We use these advanced tools to execute thoughtful concepts. The web is a major discipline of advertising art direction. To be a competitive job candidate, graduates need mastery of Photoshop, Illustrator and InDesign as well as a proficient working knowledge of HTML and CSS. As the third in the Digital Design Tools sequence, this challenging course offers a professional level tutoring in mastering the requisite software and platform packages one needs in order to enter the digital realm of advertising. Over the course of the semester we will spend 4 weeks each with Dreamweaver and HTML at an intermediate level and 6 weeks with CSS at a beginner level. Practice makes perfect. Instruction, exposure and experience with the software will lead to mastery. We will use course projects as an opportunity to develop portfolio work while practicing software lessons. Although we will discuss and critique design and concept for personal development, it will not be a part of student evaluation.

Department restrictions: Must be enrolled in one of the following Departments: SMC:Advertising
Field of Study Restrictions: Must be enrolled in one of the following Majors: Advertising
Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts
College Restrictions: Must be enrolled in one of the following Colleges: Media and Communication
Repeatability: This course may not be repeated for additional credits.

ADV 3003. National Student Advertising Competition Preparation. 1 to 3 Credit Hour.
Students begin strategic research and creative thinking related to national competition (NSAC) hosted in spring. This elective serves as a preliminary to ADV 4103.
Repeatability: This course may be repeated for additional credit.

ADV 3010. Topics in Advertising 30. 3 Credit Hours.
Arranged each semester. Please consult with the instructor and/or check the course schedule for specific topic.
Repeatability: This course may be repeated for additional credit.

ADV 3022. Copywriting for Print and Web. 3 Credit Hours.
The emphasis of this advanced writing course is on perfecting copywriting skills, encompassing the web, newspapers, magazines, direct mail, and outdoor posters. Students will learn both short and long body copy applications. Students will also learn the characteristics of each medium allowing them to create compelling advertising for these media. Students will learn to combine words and visuals into one coherent message. A knowledge of QuarkXpress, Adobe Photoshop and/or Adobe Illustrator is suggested. NOTE: Advertising majors only.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Advertising
Repeatability: This course may not be repeated for additional credits
Pre-requisites: ADV 2121|Minimum Grade of C|May not be taken concurrently.

ADV 3023. Copywriting for Radio, TV and Video. 3 Credit Hours.
The emphasis of this advanced writing course is on perfecting copywriting skills specifically for radio and television and video applications. Students are taught conceptual and production aspects of the broadcast media, including the importance of message, music, sound effects and visual storytelling. The course also enhances students’ creative abilities with techniques of script writing, storyboarding and production vocabulary. NOTE: Advertising majors only.

Department restrictions: Must be enrolled in one of the following Departments: SMC:Advertising
Field of Study Restrictions: Must be enrolled in one of the following Majors: Advertising
Repeatability: This course may not be repeated for additional credits
Pre-requisites: ADV 2121|Minimum Grade of C|May not be taken concurrently.
ADV 3031. Digital Analytics and Reporting. 3 Credit Hours.
This course will examine how traditional, internet and mobile advertising differ in their ability to track and analyze responses. What key measurement metrics are used by each form of media? What analytic tools are used? What is the impact of social media and electronic word-of-mouth marketing, and how can these be measured? Students will learn key digital measurement terms and methods of analysis.

Department restrictions: Must be enrolled in one of the following Departments: SMC:Advertising
Field of Study Restrictions: Must be enrolled in one of the following Concentrations: Account Management, Media Planning, Research and Strategy
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ADV 2111|Minimum Grade of C|May be taken concurrently
OR ADV 2131|Minimum Grade of C|May be taken concurrently
OR ADV 2141|Minimum Grade of C|May be taken concurrently.

ADV 3032. Advertising Media Planning II. 3 Credit Hours.
This advanced course focuses on the art and craft of media planning for large budget brands competing in today's complex media environment. Rooted in a concrete understanding of social communications as economic communications, students explore the conceptual foundations of media planning and produce professional quality media plans. NOTE: Advertising majors only.

Repeatability: This course may not be repeated for additional credits.

ADV 3033. Advertising Sales. 3 Credit Hours.
This course focuses on the development and positioning of media franchises for print and video products, plus the marketing and sale of broadcast and web-based products to consumers and advertisers. All media types are addressed. Students will learn how to articulate and present media vehicles, the conduct of sales calls, and negotiation techniques. For students in the Advertising major's Media Planning and Account Management concentrations only. (Prior to fall 2015, the course title was "Marketing Media Products.")

Department restrictions: Must be enrolled in one of the following Departments: SMC:Advertising
Field of Study Restrictions: Must be enrolled in one of the following Concentrations: Account Management, Media Planning
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ADV 2131|Minimum Grade of C|May be taken concurrently
OR ADV 2111|Minimum Grade of C|May be taken concurrently.

ADV 3042. Quantitative Advertising Research. 3 Credit Hours.
Delving more closely into the planning and execution of effective quantitative advertising research, the objective of this course is to provide students with direct learning experience through the use of discussion, case studies and projects. Focus is on understanding the uses of quantitative research in the advertising development and tracking process, and executing projects with a specific goal in mind. This course will investigate the design, execution, and analysis of various kinds of surveying, including copy tests and campaign tracking, and is a foundation for students who wish to pursue a career in advertising research and planning. NOTE: Advertising majors only. Must have prerequisite: ADV 1141 (0070).

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ADV 2141|Minimum Grade of C|May not be taken concurrently.

ADV 3043. Qualitative Advertising Research. 3 Credit Hours.
This course will concentrate on the role of qualitative research in advertising. Through the use of discussion, case studies and projects, it focuses on how advertisers and agencies use qualitative methods like focus groups, in-depth interviews, and ethnography to uncover consumer insights. This course will investigate the design and execution of these various kinds of qualitative research techniques, and is a foundation for students who wish to pursue a career in advertising research and planning. NOTE: Advertising Research and Strategy Majors only. Must have prerequisite: ADV 2141.

Department restrictions: Must be enrolled in one of the following Departments: SMC:Advertising
Field of Study Restrictions: Must be enrolled in one of the following Concentrations: Research and Strategy
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ADV 2141|Minimum Grade of C|May not be taken concurrently.
ADV 3052. Art Direction I: Concept & Layout. 3 Credit Hours.

As the first in the Advertising Art Direction track, students gain a comprehensive understanding of how ideas become branded visual communications that engage, capture and persuade audiences. Through regular lecture, reading and project critique, emphasis is placed on combining the fundamental tools of graphic design with creative brainstorming to arrive at fresh, branded concepts. This course focuses primarily on concept and layout for the print medium, and lays the foundation for Art Direction II. NOTE: Students are expected to be proficient in the computer graphics programs (Adobe Photoshop, Illustrator and InDesign) necessary to produce print work for this course. Students are encouraged to take a computer graphics course before or concurrently with 3052. NOTE: Advertising majors only. REQUIREMENTS: Students must have a working knowledge of Adobe PhotoShop in order to enroll in this course. An overall knowledge of the Adobe Creative Suite is recommended.

Department restrictions: Must be enrolled in one of the following Departments: SMC:Advertising
Field of Study Restrictions: Must be enrolled in one of the following Concentrations: Art Direction
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(ADV 2151|Minimum Grade of C|May not be taken concurrently)
AND (ADV 1001|Minimum Grade of C|May be taken concurrently)
OR ADV 2001|Minimum Grade of C|May be taken concurrently).

ADV 3053. Art Direction II: Narrative and Multimedia. 3 Credit Hours.

This course is designed to increase your fluidity with advertising design and conceptualizing in multiple mediums. As the second level course for your Art Direction concentration, this course again focuses on thinking creatively, cleverly, and unconventionally. We will focus on applying these strengths toward working in a variety of both traditional and non-traditional mediums.

Department restrictions: Must be enrolled in one of the following Departments: SMC:Advertising
Field of Study Restrictions: Must be enrolled in one of the following Concentrations: Art Direction
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(ADV 2151|Minimum Grade of C|May not be taken concurrently)
AND (ADV 3052|Minimum Grade of C|May not be taken concurrently)
AND (ADV 1001|Minimum Grade of C|May be taken concurrently)
OR ADV 2001|Minimum Grade of C|May be taken concurrently).

ADV 3082. Special Projects. 1 to 4 Credit Hour.

A special course of study in a particular area of advertising. Student works under the supervision of faculty, who approves and guides the study.

Repeatability: This course may be repeated for additional credit.

ADV 3101. Creative Thinking for Advertising. 3 Credit Hours.

This course uses team oriented sessions to develop the creative skills necessary for solving advertising problems. A cross discipline approach is utilized and “creatives” from various advertising and non-advertising disciplines participate as guest facilitators and speakers.

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ADV 2000 to 2999| Required Courses:1|Minimum Grade of C|May be taken concurrently
OR CMST 2111|Minimum Grade of C|May not be taken concurrently.

ADV 3171. Diamond Edge Communication. 3 Credit Hours.

Student operation of an advertising agency for nonprofit accounts in the Philadelphia market area with advertising faculty supervision. Hands-on learning in creative, media, research and management. Students work in teams to solve real world advertising and marketing communication problems for real clients.

Department restrictions: Must be enrolled in one of the following Departments: SMC:Advertising
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(ADV 3052|Minimum Grade of C|May not be taken concurrently)
AND ADV 3053|Minimum Grade of C|May not be taken concurrently)
OR (ADV 3022|Minimum Grade of C|May not be taken concurrently)
AND ADV 3023|Minimum Grade of C|May not be taken concurrently)
OR (ADV 3031|Minimum Grade of C|May not be taken concurrently)
AND ADV 3033|Minimum Grade of C|May not be taken concurrently)
OR (ADV 3031|Minimum Grade of C|May not be taken concurrently)
AND ADV 3043|Minimum Grade of C|May not be taken concurrently).

ADV 3185. Advertising Internship. 1 to 4 Credit Hour.

This course offers hands-on, organized, professional work, under supervision in selected advertising agencies, marketing communications or advertising departments within corporations. NOTE: This course may be substituted for ADV 3171. Open to juniors and seniors only.

Department restrictions: Must be enrolled in one of the following Departments: SMC:Advertising
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may be repeated for additional credit.
ADV 4034. Account Management. 3 Credit Hours.
This course teaches the management of the agency-client relationship, involving account executives and brand managers. Students will learn how to adapt to client corporate cultures, cooperative strategy development, account coordination, profit management, people management and the evaluation, presentation and sale of advertising concepts, executions and services. Note: Account Management majors only.

Department restrictions: Must be enrolled in one of the following Departments: SMC:Advertising
Field of Study Restrictions: Must be enrolled in one of the following Concentrations: Account Management
Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(ADV 2111|Minimum Grade of C|May be taken concurrently)
AND (ADV 3031|Minimum Grade of C|May be taken concurrently)
AND (ADV 3033|Minimum Grade of C|May be taken concurrently).

ADV 4044. Account Planning. 3 Credit Hours.
This course will concentrate on the roles and responsibilities of account planners in advertising. It will focus on how research uncovers consumer insights, and probe how these findings are applied throughout the process of developing marketing communications. The course addresses how account planners work with the creative and management teams to ensure that the voice of the consumer is a constant focus in the advertising process. The course replicates this experience in a brand's lifespan, and provides a hands-on exposure to this multi-faceted career. NOTE: Advertising majors only.

Department restrictions: Must be enrolled in one of the following Departments: SMC:Advertising
Field of Study Restrictions: Must be enrolled in one of the following Concentrations: Research and Strategy
Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(ADV 2141|Minimum Grade of C|May not be taken concurrently)
AND (ADV 3031|Minimum Grade of C|May be taken concurrently)
AND (ADV 3043|Minimum Grade of C|May be taken concurrently).

ADV 4054. Advanced Media Planning. 3 Credit Hours.
This advanced course focuses on the art and craft of media planning for large budget brands competing in today's complex media environment. Rooted in a concrete understanding of social communications as economic communications, students explore the conceptual foundations of media planning and produce professional quality media plans. Note: The student cannot receive duplicate credit for this course and ADV 3032.

Department restrictions: Must be enrolled in one of the following Departments: SMC:Advertising
Field of Study Restrictions: Must be enrolled in one of the following Concentrations: Media Planning
Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(ADV 2131|Minimum Grade of C|May not be taken concurrently)
AND (ADV 3031|Minimum Grade of C|May be taken concurrently)
AND (ADV 3033|Minimum Grade of C|May be taken concurrently).

ADV 4064. Advertising Portfolio. 3 Credit Hours.
This course brings together copywriters and art directors in two person teams. They work together to create exciting examples of advertising from initial conceptual schemes to comprehensive finished ads. The ads include full treatments of copy and art executed as take-home assignments and discussed in class.

Department restrictions: Must be enrolled in one of the following Departments: SMC:Advertising
Field of Study Restrictions: Must be enrolled in one of the following Concentrations: Art Direction, Copywriting
Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(ADV 3052|Minimum Grade of C|May not be taken concurrently)
AND ADV 3053|Minimum Grade of C|May not be taken concurrently)
AND (ADV 3032|Minimum Grade of C|May not be taken concurrently).

ADV 4101. Interactive Media, Marketing and Advertising. 3 Credit Hours.
This advanced course explores the dynamic space of Interactive, primarily web-based media. Specifically, we explore how advertisers can use best practices in this space to create branded programs which are seamlessly integrated with offline, general advertising and marketing efforts. Attention is paid to creating interactive tactics that consider the client’s business objectives and audience experience. Lectures and practice focus on information architecture, interaction design, compelling copy and audience usability. Through group and individual projects, test and in-class assignments, students solve brand problems and extend brand personality to interactive media (web, mobile, etc.) in a way that connects with, engages and persuades audiences. NOTE: We will be focusing on process and tactics of brand interactive programs, not building web sites. Students who are interested in understanding how to build web sites are encouraged to take complementary coursework in computer programming (HTML, Dreamweaver, Flash, etc.).

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
ADV 2000 to 2999| Required Courses:3|Minimum Grade of C|May not be taken concurrently.
ADV 4102. Advertising Campaigns. 3 Credit Hours.
This capstone course involves the preparation and production of an advertising campaign for a brand or service. Competing teams of students produce marketing analysis, consumer research, advertising strategies, media plans, and design and produce print advertisements and broadcast commercials.

**Department restrictions:** Must be enrolled in one of the following Departments: SMC:Advertising

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
ADV 3000 to 3999 | Required Courses: 2 | Minimum Grade of C | May be taken concurrently.

ADV 4103. National Student Advertising Competition. 3 Credit Hours.
Students develop a comprehensive marketing and advertising campaign for major advertiser and compete with universities across America for first place in this National College Competition. Teams work under supervision of advertising faculty in researching the account and in developing strategy, creative and media. NOTE: This is an alternative Capstone course.

**Department restrictions:** Must be enrolled in one of the following Departments: SMC:Advertising

**Repeatability:** This course may be repeated for additional credit.

**Pre-requisites:**
ADV 3000 to 3999 | Required Courses: 2 | Minimum Grade of C | May be taken concurrently.

ADV 4196. Morality, Law and Advertising. 3 Credit Hours.
The focus of this course is on the legal and ethical constraints on advertising practice. Federal laws and regulations, media standards and practices and professional ethics establish what can or cannot be said or done in advertising but, after all that, there is corporate and personal social responsibility and morality. Topics include deception, copyright infringement, right of publicity, comparative advertising and moral philosophy.

**Course Attributes:** WI

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
ADV 3000 to 3999 | Required Courses: 2 | Minimum Grade of C | May be taken concurrently
OR CMST 2111 | Minimum Grade of C | May not be taken concurrently.

ADV 4882. Independent Study. 1 to 4 Credit Hour.
Supervised reading, research, report or special project on an advanced level related to advertising management, media, research or creative.

**Repeatability:** This course may be repeated for additional credit.

### Aerospace Studies - AF ROTC (AIRF)

**Courses**

**AIRF 1011. Foundations of the United States Air Force I. 1 Credit Hour.**
A survey course designed to introduce students to the United States Air Force and Air Force Reserve Officer Training Corps. Featured topics include: mission and organization of the Air Force, officership and professionalism, military customs and courtesies, Air Force career opportunities, group leadership problems, and an introduction to communication skills. Leadership Laboratory is mandatory for Air Force ROTC cadets, and it complements this course by providing cadets with hands-on experience. NOTE: This course is taken at Saint Joseph's University. There is a $100 per semester hour fee payable to Saint Joseph's University. Please call 610-660-3190 or visit www.sju.edu/academics/cas/afrotc for more information.

**Repeatability:** This course may not be repeated for additional credits.

**AIRF 1012. Air Force Leadership Laboratory I. 0 Credit Hours.**
LLAB is an interactive environment that constitutes up to 50 percent of the contact hours of the AFROTC college curriculum. It is an integral part of preparing cadets to serve as Air Force officers. LLAB provides the opportunity for cadets to practice their officership and develop leadership and management techniques. LLAB centers on the organized cadet wing where activities are planned and conducted by cadets and supervised by detachment officers. NOTE: This course is taken at Saint Joseph's University. Please call 610-660-3190 or visit www.sju.edu/academics/cas/afrotc for more information.

**Repeatability:** This course may be repeated for additional credit.

**AIRF 1021. The Foundation of the United States Air Force II. 1 Credit Hour.**
A survey course designed to introduce students to the United States Air Force and Air Force Reserve Officer Training Corps. Featured topics include: Air Force Core Values, teambuilding, interpersonal communications, diversity, and the Oath of Office. Leadership Laboratory is mandatory for Air Force ROTC cadets, and it complements this course by providing cadets with followership experiences. NOTE: This course is taken at Saint Joseph's University. There is a $100 per semester hour fee payable to Saint Joseph's University. Please call 610-660-3190 or visit www.sju.edu/academics/cas/afrotc for more information.

**Repeatability:** This course may not be repeated for additional credits.
AIRF 1022. Air Force Leadership Laboratory II. 0 Credit Hours.
LLAB is an interactive environment that constitutes up to 50 percent of the contact hours of the AFROTC college curriculum. It is an integral part of preparing cadets to serve as Air Force officers. LLAB provides the opportunity for cadets to practice their officerhood and develop leadership and management techniques. LLAB centers on the organized cadet wing where activities are planned and conducted by cadets and supervised by detachment officers. NOTE: This course is taken at Saint Joseph’s University. Please call 610-660-3190 or visit www.sju.edu/academics/cas/afrotc for more information.

Repeatability: This course may not be repeated for additional credits.

AIRF 2031. The Evolution of U.S. Aerospace Power I. 1 Credit Hour.
A survey course designed to facilitate the transition from Air Force ROTC cadet to Air Force ROTC officer candidate. Featured topics include: Air Force heritage, Air Force leaders, an introduction to ethics and values, introduction to leadership, group leadership problems, and continuing application of communication skills. Leadership Laboratory is mandatory for Air Force ROTC cadets, and it complements this course by providing cadets with their first opportunity for applied leadership experiences discussed in class. NOTE: This course is taken at Saint Joseph’s University. There is a $100 per semester hour fee payable to Saint Joseph’s University. Please call 610-660-3190 or visit www.sju.edu/academics/cas/afrotc for more information.

Repeatability: This course may not be repeated for additional credits.

AIRF 2041. The Evolution of U.S. Aerospace Power II. 1 Credit Hour.
A survey course designed to facilitate the transition from Air Force ROTC cadet to Air Force ROTC officer candidate. Featured topics include: Air Force heritage, Air Force leaders, an introduction to ethics and values, introduction to leadership, group leadership problems, and continuing application of communication skills. Leadership Laboratory is mandatory for Air Force ROTC cadets, and it complements this course by providing cadets with their first opportunity for applied leadership experiences discussed in class. NOTE: This course is taken at Saint Joseph’s University. There is a $100 per semester hour fee payable to Saint Joseph’s University. Please call 610-660-3190 or visit www.sju.edu/academics/cas/afrotc for more information.

Repeatability: This course may not be repeated for additional credits.

AIRF 3011. Air Force Leadership Studies I. 3 Credit Hours.
This course is a study of leadership and quality management fundamentals, professional knowledge, Air Force doctrine, leadership ethics, and communication skills required of an Air Force junior officer. Case studies are used to examine Air Force leadership and management situations as a means of demonstrating and exercising practical application of the concepts being studied. A mandatory Leadership Laboratory complements this course by providing advanced leadership experiences in officer-type activities, giving students the opportunity to apply leadership and management principles of this course. NOTE: This course is taken at Saint Joseph's University. There is a $100 per semester hour fee payable to Saint Joseph's University. Please call 610-660-3190 or visit www.sju.edu/academics/cas/afrotc for more information.

Repeatability: This course may not be repeated for additional credits.

AIRF 3021. Air Force Leadership Studies II. 3 Credit Hours.
This course is a study of leadership and quality management fundamentals, professional knowledge, Air Force doctrine, leadership ethics, and communication skills required of an Air Force junior officer. Case studies are used to examine Air Force leadership and management situations as a means of demonstrating and exercising practical application of the concepts being studied. A mandatory Leadership Laboratory complements this course by providing advanced leadership experiences in officer-type activities, giving students the opportunity to apply leadership and management principles of this course. NOTE: This course is taken at Saint Joseph's University. There is a $100 per semester hour fee payable to Saint Joseph's University. Please call 610-660-3190 or visit www.sju.edu/academics/cas/afrotc for more information.

Repeatability: This course may not be repeated for additional credits.

AIRF 4031. National Security Affairs I. 3 Credit Hours.
This course examines the national security process, regional studies, advanced leadership ethics, and Air Force doctrine. Special topics of interest focus on the military as a profession, officerhood, military justice, civilian control of the military, preparation for active duty, and current issues affecting military professionalism. Within this structure, continued emphasis is given to refining communication skills. A mandatory Leadership Laboratory complements this course by providing advanced leadership experiences, giving students the opportunity to apply the leadership and management principles of this course.

NOTE: This course is taken at Saint Joseph’s University. There is a $100 per semester hour fee payable to Saint Joseph’s University. Please call 610-660-3190 or visit www.sju.edu/academics/cas/afrotc for more information.

Repeatability: This course may not be repeated for additional credits.

AIRF 4041. National Security Affairs II. 3 Credit Hours.
This course examines the national security process, regional studies, advanced leadership ethics, and Air Force doctrine. Special topics of interest focus on the military as a profession, officerhood, military justice, civilian control of the military, preparation for active duty, and current issues affecting military professionalism. Within this structure, continued emphasis is given to refining communication skills. A mandatory Leadership Laboratory complements this course by providing advanced leadership experiences, giving students the opportunity to apply the leadership and management principles of this course.

NOTE: This course is taken at Saint Joseph’s University. There is a $100 per semester hour fee payable to Saint Joseph’s University. Please call 610-660-3190 or visit www.sju.edu/academics/cas/afrotc for more information.

Repeatability: This course may not be repeated for additional credits.
Courses

AAS 0829. The History & Significance of Race in America. 3 Credit Hours.
Why were relations between Native Americans and whites violent almost from the beginning of European settlement? How could slavery thrive in a society founded on the principle that "all men are created equal"? How comparable were the experiences of Irish, Jewish, and Italian immigrants, and why did people in the early 20th century think of them as separate "races"? What were the causes and consequences of Japanese Americans' internment in military camps during World War II? Are today's Mexican immigrants unique, or do they have something in common with earlier immigrants? Using a variety of written sources and outstanding documentaries, this course examines the racial diversity of America and its enduring consequences. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Duplicate Credit Warning: Students may take only one of the following courses for credit; all other instances will be deducted from their credit totals: African American Studies 0829, Anthropology 0829, Geography and Urban Studies 0829, History 0829, Political Science 0829, Sociology 0829, 0929, 1376, 1396, R059, or X059.

Course Attributes: GD
Repeatability: This course may not be repeated for additional credits.

AAS 0834. Representing Race. 3 Credit Hours.
From classical Greeks and Romans, who saw themselves under siege by the "barbarian hordes," to contemporary America and its war on "Islamic extremism," from "The Birth of a Nation" to "Alien Nation," Western societies have repeatedly represented some group of people as threats to civilization. This course will examine a wide range of representations of non-Western people and cultures in film, literature, scientific and legal writings, popular culture and artistic expression. What is behind this impulse to divide the world into "us" and "them"? How is it bound up with our understanding of race and racial difference? And what happens when the "barbarian hordes" talk back? NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they have successfully completed Anthropology 0834/0934, Asian Studies 0834, English 0834/0934, or History 0834.

Course Attributes: GU
Repeatability: This course may not be repeated for additional credits.

AAS 0857. Sport & Leisure in American Society. 3 Credit Hours.
Explore the complexity and diversity of American society through the study of sport and leisure. To what extent does the way we play or spectate sports, the way we plan or experience leisure time, reflect American values? As we trace a brief history of the United States through the lens of sport and leisure, we will observe how concepts of freedom, democracy and equality are tested through time. Issues of race, ethnicity, gender, age, disability, and socio-economic class will be prominent as we observe American ideals both upheld and contradicted in the context of the way Americans recreate. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed Anthropology 0857, SOC 0857 or REL 0957.

Course Attributes: GU
Repeatability: This course may not be repeated for additional credits.

AAS 1124. Elementary Yoruba. 3 Credit Hours.
An introductory course in the understanding, reading, and speaking of Yoruba, an African language that has had a major impact on the African cultures of Brazil, Haiti, Cuba, Puerto Rico, Jamaica, and the United States. Students will be taught grammar, vocabulary, and conversation in the language.

Repeatability: This course may not be repeated for additional credits.

AAS 1125. Elementary Hausa. 3 Credit Hours.
An introductory course in the understanding, reading and speaking of Hausa, a language spoken by more than 70 million people in West Africa. Students will be taught grammar, vocabulary, and conversation in the language.

Repeatability: This course may not be repeated for additional credits.

AAS 1152. Introduction to African Aesthetics. 3 Credit Hours.
An overview of the cultural experience of African peoples. An examination of the culture of peoples in Africa, America, and the Caribbean in a comprehensive and structurally integrated manner. An introduction to Black aesthetics and the interrelationship of the humanities in African American Studies. Designed to acquaint students with important historical and philosophical investigations of the creative process and to explore interrelationships, similarities, and differences in the various cultural expressions of African peoples.

Repeatability: This course may not be repeated for additional credits.

AAS 1252. Afrocentricity. 3 Credit Hours.

Repeatability: This course may not be repeated for additional credits.

AAS 1253. Blacks in World History. 3 Credit Hours.
Prerequisite for all history courses to be applied to the major. An introduction to the entire field of Black history, both in Africa and the New World. A basic course, comprehensive in scope, to provide a firm grounding for students interested in taking subsequent history courses.

Repeatability: This course may not be repeated for additional credits.
Repeatability: This course may not be repeated for additional credits.

AAS 1261. Africa in the 20th Century. 3 Credit Hours.
A summary of the major political, economic, social, and cultural developments in Africa since 1900. The impact of indigenous and foreign philosophies on industrialization, urbanization, and peasantization during the 20th century. NOTE: This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. In addition to meeting the university Core International Studies requirement, this course meets the Non-Western/Third World IS requirement for Communication Sciences majors. Please note the recent update to the Core IS requirement at www.temple.edu/vpus/resources/coreupdates.htm#coreisupdate.
Course Attributes: IS
Repeatability: This course may not be repeated for additional credits.

AAS 1268. African American History Since 1900. 3 Credit Hours.
A general treatment of the turbulent 20th century in African American history. Attention given to the rise of the Ku Klux Klan, the anti-lynching campaigns, northern migration, the Marcus Garvey Movement, the Harlem Renaissance, and the Civil Rights Movement. NOTE: This course can be used to satisfy the university Core American Culture (AC) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: AC
Repeatability: This course may not be repeated for additional credits.

AAS 1271. Urban Black Politics. 3 Credit Hours.
This course examines Black political activity in cities—the socio-historical condition of Blacks in cities; the city within the larger political arena; the nature of urban politics/politicians, and the place and future of Blacks in urban politics with a particular emphasis on Philadelphia.
Repeatability: This course may not be repeated for additional credits.

AAS 1296. Introduction to African American Studies. 3 Credit Hours.
An introduction to the field of African American Studies and to the historical, philosophic and pedagogical bases, methodology, and relevance of African American Studies within a liberal arts education.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

AAS 1968. Honors Africa in the 20th Century. 3 Credit Hours.
A summary of the major political, economic, social, and cultural developments in Africa since 1900. The impact of indigenous and foreign philosophies on industrialization, urbanization, and peasantization during the 20th century. NOTE: This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. In addition to meeting the university Core International Studies requirement, this course meets the Non-Western/Third World IS requirement for Communication Sciences majors. Please note the recent update to the Core IS requirement at www.temple.edu/vpus/resources/coreupdates.htm#coreisupdate.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO, IS
Repeatability: This course may not be repeated for additional credits.

AAS 2044. The Black Church. 3 Credit Hours.
This course is an exploration of the significant role the Black Church has played in creating an African American response to social, political, and economic obstacles and barriers in America. "Black Church" is defined broadly as African descended communities of spiritual worship, including but not limited to Christian, Islamic and Indigenous/African-derived religious groups. Students will be introduced to some of the African cosmologies that informed the worldview of people who were forcibly removed from their homelands and dispersed across the globe and enslaved in the Americas.
Repeatability: This course may not be repeated for additional credits.

AAS 2058. African American Music I. 3 Credit Hours.
An overview of the history, spirituality and sociology of African/African-American music, with main emphasis on important and dynamic forms, styles and concepts that have formed the core of African and African American music culture. Distinct themes and phenomena that define African/Black music will be presented and discussed. The goal of this course is to develop critical thinking and writing skills during our exploration of the origins, themes, and direction of African/African-American music in the context of Black politics, history and culture.
Repeatability: This course may not be repeated for additional credits.

AAS 2100. Special Topics. 3 Credit Hours.
Arranged each semester. Please consult with the instructor and/or check the course schedule for specific topic.
Repeatability: This course may be repeated for additional credit.

AAS 2111. Tupac Shakur and the Hip Hop Revolution. 3 Credit Hours.
Rapper, Tupac Amaru Shakur (June 16, 1971 – September 13, 1996) has been described as one of the most influential personalities in the history of Hip-Hop music and culture. His early years as a child of The Black Panther Party for Self Defense provided a unique political insight and edge to his music. Posthumously, Shakur continues to sell millions of records and inspire millions of listeners internationally and his increasing reputation as a pivotal figure has been acknowledged by some of the major African American philosophers. This course will explore the charismatic, conscious and controversial artist in terms of his poetic influence on issues such as Black Power, pain, poverty, and the rhetoric of Black Consciousness.
Repeatability: This course may not be repeated for additional credits.
AAS 2131. Creative Writing Workshop. 3 Credit Hours.
This course provides an opportunity for students to explore and develop their writing talents under the influence and direction of an established writer. African and African American subjects, themes, and materials used. Students read works of African American writers.
Repeatability: This course may not be repeated for additional credits.

AAS 2133. The African American Lesbian, Gay, Bisexual, Transgender Experience. 3 Credit Hours.
With advancement made through the modern civil rights movement and the emergence of progressive views on sexuality in contemporary society, African American lesbian, gay, bisexual, transgender, and questioning LGBTQ individuals have made gains in social mobility and recognition. However, homophobia, heterosexism, sexism, and racism continue to intersect within the lives of African American LGBTQs, shaping the way in which they are perceived and interact within the larger society. This upper level undergraduate course explores the experiences of African American (LGBTQ) individuals through an interdisciplinary approach. The course enlists both narratives and empirically based research in conceptualizing the experiences of African American LGBTQs within the United States. While not limited to a specific theoretical perspective; students will be expected to understand the experiences of African American LGBTQs using conceptual frameworks informed by the use of an intersectional analysis.
Repeatability: This course may not be repeated for additional credits.

AAS 2134. The Literature of American Slavery. 3 Credit Hours.
Slaves, slave owners, and abolitionists, men and women, perceived slavery in distinctive ways and recorded those perceptions in songs and poems, folk tales, autobiographical narratives and novels, speeches and tracts, travel accounts, journals, diaries, and letters. Through an examination of this rich oral and written literature, such themes as the character of slave culture, the relations between slaves and masters, the oppression of women under slavery, and the connection between abolitionism and feminism are explored. Lectures provide historical background and a context in which to read the selections.
Repeatability: This course may not be repeated for additional credits.

AAS 2142. The Black Male Experience. 3 Credit Hours.
This course will review and analyze experiences of African American men from a variety of perspectives. This will allow students to look at contemporary African American male and examine factors that have contributed to his present condition including: examination of the black male within the present social system, their role in ghetto and street culture, the status and role performances of black fathers and the historical and contemporary myths about the physiology and biology of African American males.
Repeatability: This course may not be repeated for additional credits.

AAS 2151. History of Blacks in Cinema. 3 Credit Hours.
An overview of the history of Black Cinema and the portrayals of persons of African descent in cinema from the early 1900s to the present, including developments from Hollywood, independent filmmakers, and experimental foreign films. Treats in depth the story of race movies and contemporary trends such as the independent Black film movement in the African Diaspora and the United States.
Repeatability: This course may not be repeated for additional credits.

AAS 2165. History and Culture of the Caribbean. 3 Credit Hours.
This course presents a historical survey of the cultural, economic, and political developments of the Caribbean people from the enslavement and colonial periods to independence and post-independence with particular emphasis on Haiti, Jamaica, Guyana, Trinidad-Tobago, Barbados, and the Bahamas. Students will explore the historical and cultural roots of contemporary Caribbean societies, as well as the main discourses on Caribbean identity, nationality, and culture. It is expected that by the end of the semester students should have a sound knowledge of the history and culture of the Caribbean and should be able to establish parallels between the Caribbean experiences and that of other Diasporic Africans.
Repeatability: This course may not be repeated for additional credits.

AAS 2168. African Americans in Sports. 3 Credit Hours.
This course examines the issues surrounding African Americans in the world of sports. The course will highlight African American pioneers in sports and the historical context of their struggle, study the events which helped break racial barriers in sports, examine the socio-cultural influence of the African American Athlete, study African American culture and the role and significance of sports in it, and observe current African American Athletes. The course will also study the contribution of sports in facilitating change in the larger racial and social context of African Americans in American Society.
Repeatability: This course may not be repeated for additional credits.

AAS 2175. Hip Hop and Black Culture. 3 Credit Hours.
Hip Hop and Black Culture will lead its students into an in-depth analysis of hip-hop culture, hip-hop music, other cultural expressions that contributed to the culture's development and evolution, as well as the relevance of hip-hop's role as the preeminent modern black aesthetic. The primary focus of the course is to provide a comprehensive foundation for understanding the relevance of hip-hop's role in the modern African-American experience, its representation and misrepresentation of African Americans as well as its role as a vehicle of expression that articulates cultural norms translated into socially acceptable sounds.
Repeatability: This course may not be repeated for additional credits.

AAS 2200. Topics in African-American Studies. 3 Credit Hours.
Arranged each semester. Please consult with the instructor and/or check the course schedule for specific topic.
Repeatability: This course may be repeated for additional credit.

AAS 2201. African Civilization. 3 Credit Hours.
A survey of Africa's contributions to world history and civilization from 5000 B.C. to 1800 A.D. An intensive analysis of the major issues in African civilization.
Repeatability: This course may not be repeated for additional credits.
AAS 2205. Black Politics in America. 3 Credit Hours.
An introduction to the fundamental concepts and principles of American government and politics, with a focus on the ways in which American political institutions have influenced and have been influenced by Black Americans’ quest for political self-determination.
Repeatability: This course may not be repeated for additional credits.

AAS 2208. Black Folklore: African and African-American. 3 Credit Hours.
An overview of the folk literature and oratory of African peoples on the African continent and in the Americas. Covers tales, stories, myths, and proverbs, and their function in society. Brer Rabbit, Ananse, the Flying African, High John de Conquerer, John Henry, Shine, and many other characters are examined.
Repeatability: This course may not be repeated for additional credits.

AAS 2211. African Politics. 3 Credit Hours.
This course is intended to provide students with the necessary historical background to understand and analyze socio-political issues in African society. Topics to be covered will include: the pre-colonial political systems, causes and effects of enslavement and colonialism, liberation movements, and independence.
Repeatability: This course may not be repeated for additional credits.

AAS 2218. Psychology of the African American Experience. 3 Credit Hours.
Examines contemporary perspectives and research on the African experience in America and the relationship of that experience to social and psychological functioning among African Americans. The course also examines the origins of some of the traditional psychological theories about persons of African descent, and examines emerging theories shaped by new perspectives.
Repeatability: This course may not be repeated for additional credits.

AAS 2248. Public Policy and the Black Community. 3 Credit Hours.
This course examines the various dimensions of public policies and their impacts on the Black community in the United States. Using historical, economic, political, sociological and psychological analytic lenses, students will analyze policy within a systems framework, being sure to engage the domains of economics, education, criminal justice, housing and health care. Students will engage/interact with Philadelphia participants in the policy-making process, and will debate key policy issues highlighted during this course.
Repeatability: This course may not be repeated for additional credits.

AAS 2251. Mass Media and the Black Community. 3 Credit Hours.
An examination of the role mass media plays in the African American community. Ownership, access, and image making are a few of the topics discussed. The aim is to develop an appreciation and awareness of the role media play in shaping opinions.
Repeatability: This course may not be repeated for additional credits.

AAS 2255. Introduction to Research Methods. 3 Credit Hours.
Introduction to basic methods of research and methodological issues in African American Studies. This course provides an overview of social research methods, addresses sociocultural issues in research conceptualization, operationalization and design, and introduces basic analytic concepts and operations. Students work in small groups to design an original, IRB-compliant multi-method study to address an issue that local communities deem important to their quality of life. NOTE: Offered during Fall semester only. Students should complete AAS 4096 in the Spring immediately after this course.
Repeatability: This course may not be repeated for additional credits.

AAS 2405. Introduction to Afro-Jewish Studies. 3 Credit Hours.
This course will introduce students to the study of African and African-Diaspora Jews. Students will examine and critically assess the various past and present methods used to study Africana Jewish communities. The research and readings will provide students with a basic introduction to Afro-Jewish history, culture and religion. It will also analyze the effects of race and racism on the construction of Afro-Jewish identities.
Repeatability: This course may not be repeated for additional credits.

AAS 2934. Honors Literature of American Slavery. 3 Credit Hours.
Slaves, slave owners, and abolitionists, men and women, perceived slavery in distinctive ways and recorded those perceptions in songs and poems, folk tales, autobiographical narratives and novels, speeches and tracts, travel accounts, journals, diaries, and letters. Through an examination of this rich oral and written literature, themes such as the character of slave culture, the relations between slaves and masters, the oppression of women under slavery, and the connection between abolitionism and feminism are explored. Lectures provide historical background and a context in which to read the selections. NOTE: This course can be used to satisfy the university Core Studies in Race (RS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO, RS
Repeatability: This course may not be repeated for additional credits.

AAS 3010. Special Topics in African Languages. 3 Credit Hours.
Languages vary by semester. Please consult with the instructor and/or check the course schedule for specific topic.
Repeatability: This course may be repeated for additional credit.
AAS 3176. Contemporary Black Poets. 3 Credit Hours.
An examination of the major works of contemporary poets of African descent. Students are introduced to the writings of poets such as Sonia Sanchez, Amiri Baraka, Rita Dove, Askia Toure, Audre Lorde, June Jordan, Quincy Troupe, Michael Harper, Atukwei Okai, Haki Madhubuti, Gwendolyn Brooks, Mari Evans and other selected African American poets.
Repeatability: This course may not be repeated for additional credits.

AAS 3205. The Black Woman. 3 Credit Hours.
This course will review and analyze experience and representation of African American women from a variety of feminist, psychological, and African-centered perspectives. Students will apply theoretical and research findings from selected scholarly and anecdotal sources to understanding the unique challenges of African-American women's treatment and methods of coping, resistance, and survival in legal, educational and social systems steeped in racism, sexism, homophobia and patriarchy. Class assignments (e.g., reaction, papers, group project,) will help students develop the skills necessary to communicate effectively and professionally, in both oral and written form, about these important issues.
Repeatability: This course may not be repeated for additional credits.

AAS 3215. Languages and Cultures of West Africa. 3 Credit Hours.
This course is an introduction to the indigenous languages and cultures of West African peoples. Aspects of their geographical locations, history, social organization, worldview, values, customs, oral traditions, and communities will be discussed. A review of the impact of major historical events on these languages, and on their speakers' life styles, identity, and customs will be undertaken. The role of these languages in the development of African and African-Caribbean languages and cultures will also be examined. In the latter part of the course, students will be introduced to the basic structure of these languages, and will be taught how to read, write, and speak some phrases in each language. The course will focus on location, worldview, history and culture as contexts for the three major languages chosen from Akan, Bamanankan (Bambara/Mande/Mandinka/Mandingo), Ewe, Fulfulde (Fulani), Ga, Hausa, Wolof, and Yoruba. This is not a languages course per se, but a course about the relationship between culture, customs, and language.
Repeatability: This course may not be repeated for additional credits

Pre-requisites:
AAS 2201|Minimum Grade of C-|May not be taken concurrently.

AAS 3257. Black Social and Political Thought. 3 Credit Hours.
The thoughts and philosophies of Black leaders as they relate to the struggle of Black people for liberation. Covers individuals such as Frederick Douglass, Booker T. Washington, W.E.B. DuBois, Huey P. Newton, Ella Baker, Angela Davis, Ida B. Wells, Fannie Lou Hamer, Malcolm X, Marcus Garvey, Nkrumah, Toure, Shirley Chisolm, A. Philip Randolph and Dr. Martin Luther King, Jr. and other Black thinkers.
Repeatability: This course may not be repeated for additional credits.

AAS 3268. Critical Readings in African American History. 3 Credit Hours.
Using primary source material and with special attention to the United States, students will examine the African experience in the Americas from the 14th century to the present. Movements, periods, events and people that represent major social, economic and political African American thought will be surveyed.
Repeatability: This course may not be repeated for additional credits.

AAS 3271. History of Pan African Thought. 3 Credit Hours.
Repeatability: This course may not be repeated for additional credits.

AAS 3296. The Black Family. 3 Credit Hours.
This course examines historical and contemporary issues relevant to the functioning of African American families. Students write critiques of selected text chapters and work in small groups to interview local community members; use interview and other research sources to develop and implement a community action plan (CAP) for improving some aspect of family life.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

AAS 4082. Independent Study. 3 Credit Hours.
Field research in an African American Studies issue. Each student identifies a task in a problem area and develops a research project around it. Student must first find a faculty member to supervise the project and must submit written details about the project to the department chair for approval in advance of registration for the course.
Repeatability: This course may be repeated for additional credit.

AAS 4091. Junior/Senior Directed Research. 1 to 3 Credit Hour.
In-depth study of a specific topic central to the discipline of African American Studies for two consecutive semesters. Culminates in a concise, well-documented senior essay paper.
Repeatability: This course may be repeated for additional credit.
AAS 4096. Senior Seminar. 3 Credit Hours.
A seminar-style course in which seniors demonstrate, through their participation in a variety of activities, their mastery of knowledge bases, skills and concepts central to the discipline and critical to post-baccalaureate opportunity. Students also work in small groups to conduct, analyze, write and publicly present the social research studies they designed in AAS 2255: Introduction to Research Methods and each student submits a Senior Portfolio that contains documents and demonstrates skills commonly expected/demanded of new college graduates. NOTE: Capstone course for majors. Offered in Spring only.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: African American Studies
Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites: AAS 2255|Minimum Grade of C-|May not be taken concurrently.

AAS 4115. Black Aesthetics. 3 Credit Hours.
Repeatability: This course may not be repeated for additional credits.

AAS 4146. Women Writers in Black Literature. 3 Credit Hours.
A comparative exploration of the nature, form, themes, and techniques of major Black women writers from Africa, the U.S., and the Caribbean.
Repeatability: This course may not be repeated for additional credits.

AAS 4161. Studies in African-American Literature. 3 Credit Hours.
This course is an examination of African American literary forms with certain emphasis on poetry, drama, fiction, and autobiography. Texts from earlier decades and contemporary movements are included. The aim is to develop an understanding and appreciation of African American literary experience. Phillis Wheatley, Zora Neale Hurston, Langston Hughes, Richard Wright, Amiri Baraka, Maya Angelou, Toni Morrison, Chester Himes, James Baldwin, Henry Dumas, Paul Laurence Dunbar, John Killens, Wallace Thurman, Ann Petry, Alice Walker, Bebe Moore Campbell, and Nikki Giovanni are among writers whose works are studied.
Repeatability: This course may not be repeated for additional credits.

AAS 4221. The Black Child: Development and Socialization. 3 Credit Hours.
A study of the development and socialization of the African American child. Discussion of family, peer group relationships, formal and informal education, and early racial consciousness.
Repeatability: This course may not be repeated for additional credits.

AAS 4248. Dimensions of Racism. 3 Credit Hours.
The course will explore interracial interactions from an African centered conceptual framework. It will examine various theoretical approaches to racial prejudice and will analyze the prejudiced personality. The course will examine the historical growth of racism and racist thought as well as seek common explanations for and effects of racism on African Americans. NOTE: This course can be used to satisfy the university Core Studies in Race (RS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: RS
Repeatability: This course may not be repeated for additional credits.

AAS 4389. Seminar in Community Service. 3 Credit Hours.
Seminar in Community Service allows African American Studies majors to acquire hands-on experience in, and provide unpaid on-site services to, a community-based agency, organization, or program selected and pre-screened by the instructor. The selected community site must provide a significant social service to the larger community. Students will spend Phase I of the course in class reading and discussing empirical and theory-based literature relevant to the services provided by the instructor-selected site. Students will spend Phase II in service to the agency, and will return to the classroom in Phase III to deliver the final report—an empirically-based research report analyzing agency goals and processes, and where appropriate, making evidence-based suggestions for improving agency policy as it affects successful delivery of services.
Repeatability: This course may be repeated for additional credit.
Pre-requisites: (AAS 2248|Minimum Grade of C-|May not be taken concurrently
AND AAS 2255|Minimum Grade of C-|May not be taken concurrently).

American Studies (AMST)
Courses

AMST 0801. Philadelphia Arts & Culture. 4 Credit Hours.
What and where is the real Philadelphia? How can we get past the clichés to better understand and experience the city’s historic and legendary sense of itself? For more than three centuries, Philadelphia's unique identity has been defined and redefined by a prodigious and prolific creative community: painters, sculptors, writers, performers, architects, planners, thinkers, and more. We'll explore Philadelphia's evolving sense of itself through a broad range of examples of creative works from the 17th through the 20th centuries. And through this prism of expression, and the institutions that present and protect it, we'll develop a deep understanding of Philadelphia as one of the nation's most creative cities. NOTE: This course fulfills the Arts (GA) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed American Studies 0901.

Course Attributes: GA
Repeatability: This course may not be repeated for additional credits.

AMST 0847. American Military Culture. 3 Credit Hours.
You live in a country that possesses the world's strongest military forces. Up through the Vietnam War, Americans viewed military service in wartime as a basic obligation for all adult male citizens - the ultimate test of their patriotism and manhood - but a temporary sacrifice that ceased for most on the return of peace. Today, the American people have outsourced their awesome war-making power to a restricted number of men and women - many of whom consider military service their career. We will explore the distinctive culture that shapes the composition and behavior of America's armed forces and probe it to reflect the strengths and weaknesses of American society. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed History 0847.

Course Attributes: GU
Repeatability: This course may not be repeated for additional credits.

AMST 0848. American Revolutions. 3 Credit Hours.
From the first encounters with Native Americans to the present, a series of pivotal moments have had an enduring influence on American society, culture, and politics. In each class, three modules will focus on three pivotal moments, such as King Philip's War, Nat Turner's Rebellion, the Scopes trial, the Civil Rights movement, the women's movement, the emergence of Elvis Presley, the sexual revolution, the rise of environmentalism, the Reagan Revolution, and 9-11. In each module, students will take the main subject of the module in context, and then seek to understand how it changed American society. The last week of each module will be devoted to a consideration of how the subject of that module has become part of American collective memory. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: ANTH 0848, GUS 0848, History 0848, or SOC 0848.

Course Attributes: GU
Repeatability: This course may not be repeated for additional credits.

AMST 0855. Higher Education and American Life: Mirror to a Nation. 3 Credit Hours.
You have decided to go to college. But why? What role will college and in particular Temple University play in your life? Reflect on this important question by looking at the relationship between higher education and American society. What do colleges and universities contribute to our lives? They are, of course, places for teaching and learning. They are also research centers, sports and entertainment venues, sources of community pride and profit, major employers, settings for coming-of-age rituals (parties, wild times, courtship, etc.), and institutions that create lifetime identities and loyalties. Learn how higher education is shaped by the larger society and how, in turn, it has shaped that society. Become better prepared for the world in which you have chosen to live for the next few years. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed Educational Administration 0855 or English 0855.

Course Attributes: GU
Repeatability: This course may not be repeated for additional credits.

AMST 0859. The Making of American Society: Melting Pot or Culture Wars?. 3 Credit Hours.
Terrorism, illegal immigration, gay marriage, religious conflict, political in-fighting, corporate corruption, racial animosities, civil liberties assaults, media conglomeration, Wal-Mart goes to China and the rich get richer. America in the 21st Century is a contentious society. How did we get to this place in time? Examine what makes American society distinctive from other advanced industrial democracies as we study the philosophical origins of America, the development of social and economic relationships over time, and the political disputes dominating contemporary American life. The course relies heavily on perspectives from History, Sociology and Political Science to explain the challenges facing contemporary American society. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: History 0859, PHIL 0859, POLS 0859, or SOC 0859.

Course Attributes: GU
Repeatability: This course may not be repeated for additional credits.
AMST 0862. First Person America. 3 Credit Hours.
Examine the private and public lives of a diverse cast of Americans over a long sweep of the nation's history. Along the way, look at how fundamental conflicts - between the local and the national, freedom and equality, inclusion and exclusion, community and the individual - have driven U.S. history from its very beginnings, how they have shaped these individual lives and how these individuals have molded the debates. Learn to use a range of sources - including autobiographies, biographies, memoirs, personal narratives, profiles, bio-pics, self-portraits, visual and performance pieces - as you investigate these American stories and American tensions. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed AMST 0962.
Course Attributes: GU
Repeatability: This course may not be repeated for additional credits.

AMST 0864. Sounds of a Revolution. 3 Credit Hours.
This course will explore the history of the Uptown Theater and the North Philadelphia neighborhood just north of Temple University that surrounded the music hall. It will dig deep into the history of the Uptown Theater to help students better understand the complex processes and interactions of urban change and the shifting geographies and meanings of race and popular culture in postwar America. Students will learn about the close connections between music and society, art and commerce, and race and urban change. At the same time, they will explore the processes and politics of recovering the past and reconstructing living histories out of the rubble and silences of yesterday. That is because, in addition to being an interdisciplinary study of the city and popular culture, this course will serve as an introduction to public history - the ideas and issues of preserving the past to use and understand the present. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core.
Course Attributes: GU
Repeatability: This course may not be repeated for additional credits.

AMST 0901. Honors: Philadelphia Arts and Culture. 4 Credit Hours.
What and where is the real Philadelphia? How can we get past the clichés to better understand and experience the city's historic and legendary sense of itself? For more than three centuries, Philadelphia's unique identity has been defined and redefined by a prodigious and prolific creative community: painters, sculptors, writers, performers, architects, planners, thinkers, and more. We'll explore Philadelphia's evolving sense of itself through a broad range of examples of creative works from the 17th through the 20th centuries. And through this prism of expression, and the institutions that present and protect it, we'll develop a deep understanding of Philadelphia as one of the nation's most creative cities. NOTE: This course fulfills the Arts (GA) requirement for students under GenEd and Arts (AR) for students under Core. Students cannot receive credit for this course if they have successfully completed American Studies 0801.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GA, HO
Repeatability: This course may not be repeated for additional credits.

AMST 0962. Honors: First Person America. 3 Credit Hours.
Examine the private and public lives of a diverse cast of Americans over a long sweep of the nation's history. Along the way, look at how fundamental conflicts - between the local and the national, freedom and equality, inclusion and exclusion, community and the individual - have driven U.S. history from its very beginnings, how they have shaped these individual lives and how these individuals have molded the debates. Learn to use a range of sources - including autobiographies, biographies, memoirs, personal narratives, profiles, bio-pics, self-portraits, visual and performance pieces - as you investigate these American stories and American tensions. (This is an Honors course.) NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed AMST 0862.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GU, HO
Repeatability: This course may not be repeated for additional credits.

AMST 0964. Honors: Sounds of a Revolution. 3 Credit Hours.
This course will explore the history of the Uptown Theater and the North Philadelphia neighborhood just north of Temple University that surrounded the music hall. It will dig deep into the history of the Uptown Theater to help students better understand the complex processes and interactions of urban change and the shifting geographies and meanings of race and popular culture in postwar America. Students will learn about the close connections between music and society, art and commerce, and race and urban change. At the same time, they will explore the processes and politics of recovering the past and reconstructing living histories out of the rubble and silences of yesterday. That is because, in addition to being an interdisciplinary study of the city and popular culture, this course will serve as an introduction to public history - the ideas and issues of preserving the past to use and understand the present. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed American Studies 0864.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GU, HO
Repeatability: This course may not be repeated for additional credits.
AMST 1001. American Lives. 3 Credit Hours.
This course is an introduction to American Studies through the study of autobiographical writings--life stories--that give us insight into American values, conditions, aspirations, and conflicts. By looking closely at these American lives, students will meet people of various periods and backgrounds and become familiar with the way history has shaped lives, and the way individuals have both created and resisted the forces of change. The conflicting images and realities of American society will be explored. NOTE: This course can be used to satisfy the university Core American Culture (AC) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: AC
Repeatability: This course may not be repeated for additional credits.

AMST 1002. Key Documents in American Culture Before World War I. 3 Credit Hours.
This introductory class will examine the American past through primary documents. By reading texts like the Declaration of Independence, the Gettysburg Address, the Cross of Gold Speech, and John Wanamaker's tribute to the department store, students will examine past political, social, and cultural worlds through the eyes - really the words - of some of the country's key actors and shaper of public opinions. This class will look closely at these key primary documents, paying keen attention to how arguments were constructed, appeals were made, and the meaning of the public life of the nation was cemented and then contested.
Repeatability: This course may not be repeated for additional credits.

AMST 1042. Work in America. 3 Credit Hours.
A broad discussion of work in the United States, which takes a historical look at worker-management relationships, the organization of workplaces, the experiences of ordinary workers, and the experiences of different groups of people (e.g., ethnic minorities) in the workplace. The course will provide students with a perspective on major historical and cultural developments in the U.S. from the late 19th century to the present, using primary documents, literature, and secondary readings on the nature of work in America. NOTE: This course can be used to satisfy the university Core American Culture (AC) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: AC
Repeatability: This course may not be repeated for additional credits.

AMST 1701. American Lives. 1 Credit Hour.
This course is an introduction to the American Studies. The course uses life stories - oral histories, memoirs, biographies, and autobiographies - to explore the public and private worlds of Americans. By looking closely at a number of American Lives, students will become familiar with the day-to-day lives of different people from different places, groups, and backgrounds. They will learn how the economy and politics, art and commerce, and ideas about race, class, and gender shaped individual lives and outlooks and how these people, in turn, shaped the world around them. In the end, students will see that there is not, and never has been, one America - but that America is the product of conflicting notions of self and community played out over and over again. NOTE: Offered at Temple University Japan only.
Repeatability: This course may not be repeated for additional credits.

AMST 1901. Honors American Lives. 3 Credit Hours.
This course is an introduction to American Studies through the study of autobiographical writings--life stories--that give us insight into American values, conditions, aspirations, and conflicts. By looking closely at these American lives, students will meet people of various periods and backgrounds and become familiar with the way history has shaped lives, and the way individuals have both created and resisted the forces of change. The conflicting images and realities of American society will be explored. NOTE: This course can be used to satisfy the university Core American Culture (AC) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: AC, HO
Repeatability: This course may not be repeated for additional credits.

AMST 2001. Tourism in America. 3 Credit Hours.
A booming multinational industry, tourism is a powerful medium of transnational encounter. There is hardly a place on earth not part of the recreational geography of tourism. In practical terms, tourism is seen as an engine of economic growth both in the cities and in the countryside. While it moves people from one place to another, tourism produces itself with ever-greater complexity. This course will undertake an analysis of tourist productions, including tourist discourse, settings, events, experiences, and artifacts. An exemplary case of cultural invention and commodification, tourism is implicated in the histories of pilgrimage, travel, colonialism, and ethnography, retracing their trips and replicating their discourse. As a result, tourism offers some of the richest material for exploring the semiosis of cultural production on a global scale. In this course, therefore, we will pay special attention to the political economy of tourism as seen through a close analysis of actual sites.
Repeatability: This course may not be repeated for additional credits.
AMST 2003. The American Sexual Past. 3 Credit Hours.
This course will explore the history of sexuality in America. The purpose of this course is to familiarize the student with important historical events/periods in the development of sexuality in the United States and major themes and issues in the American cultural history of sex and sexuality. Its purpose is to survey the ways in which sexuality has changed and shifted over the course of colonial and American history. It will also connect sexuality to the social, political, and economic realities that helped to shape it in different eras. The focus of the course will consist of major themes that illuminate aspects of sexuality in colonial and American culture and history. These may include, but are not limited to: censorship, family and sex, marriage and sex, female sexuality, male sexuality, homosexuality, birth control, bisexuality, the state use of sterilization, transgender/transsexual sexuality, sex workers, sexually transmitted infections, and sex in the media and arts. The approach taken in the class will cut across racial, class, gender, transgender, and ethnic boundaries. In order to better understand our own society, it is necessary to be aware of events that shaped the world as we know it today.
Repeatability: This course may not be repeated for additional credits.

AMST 2011. The Arts in America. 3 Credit Hours.
This course will examine the place of the arts in contemporary America, with an emphasis on the politics of culture. We will take a broad view of "art," encompassing popular arts, high arts, and what's in between. And we will look at some examples of how artists and writers have functioned within the contemporary art environment, and within a popular culture and material environment that undermines distinctions between reality and fantasy and between past and present (e.g., Disneyland). Representative figures will be examined from various art forms (literature, music, architecture, painting, photography) within an interdisciplinary context.
Repeatability: This course may not be repeated for additional credits.

AMST 2012. American Things: Introduction to Material Culture. 3 Credit Hours.
The things we produce are fraught with cultural meaning, from the household object to the building to the automobile. This course explores the meanings of things through a historical examination of objects, both handmade and manufactured. The way things have served as repositories of meaning, and as expressions of social class, gender, and ethnicity, will be explored through discussion and observation.
Repeatability: This course may not be repeated for additional credits.

AMST 2021. Philadelphia Neighborhoods. 3 Credit Hours.
Students will be introduced to the development of the city of Philadelphia as seen from a neighborhood perspective. From Colonial times to the present, neighborhood and community are the primary means by which the city's residents experienced the growth and change of the Philadelphia metropolitan area. Using archival resources over the World Wide Web, as well as the rich historical legacy of the region's museums, students will explore the development of the city's neighborhoods.
Repeatability: This course may not be repeated for additional credits.

AMST 2022. Museums and American Culture. 3 Credit Hours.
The museum holds itself to the preserver of cultural memory, yet museums as we know them are a 19th century invention. Their function as shapers of cultural practice and national identity will be explored through this course, which takes us up to the present, when museums have reached out to represent communities that were previously excluded from the elite culture of museums. How museums work as classifiers of knowledge, how they represent culture, as commodity and experience, will also form part of the course.
Repeatability: This course may not be repeated for additional credits.

AMST 2031. Radicalism in the United States. 3 Credit Hours.
A study of issues and traditions in the history of radical thought and behavior. Emphasizing the 20th century, the course focuses on major social contexts and ideologies such as anarchism, militant unionism, socialism, and communism, each of which has had a long and vibrant history in the U.S.
Repeatability: This course may not be repeated for additional credits.

AMST 2032. Critical Moments in the American Past. 3 Credit Hours.
This course, which will change given the professor's expertise, is designed as a close, detailed interdisciplinary study of a single crucial moment in United States history. Using novels, films, both feature-length and documentaries, art, theater, life histories, and primary documents, this class will examine how the politics, economy, culture, events and movements of a given historical era, for instance the Great Depression or the day of hope and rage of the 1960s, shaped the day-to-day lives of ordinary people and how these individuals and groups struggled to control and grapple with the changes swirling around them. In addition, this class will explore how these personal dramas were represented in literature, architecture, art, and on the stage and screen. Finally, through letters, oral histories and other accounts, this class will look at memory, and see how people's views of the past shaped, and are filtered through, the present.
Repeatability: This course may not be repeated for additional credits.

AMST 2041. Technology and American Culture. 3 Credit Hours.
This course explores the way American values have shaped technology and how technology has shaped American life, placing contemporary problems in a historical perspective. Materials are drawn from social history, literature, visual arts, film, advertising, and polemical prose. May also include working with collections at the Franklin Institute.
Repeatability: This course may not be repeated for additional credits.

AMST 2051. American Places: Home, City, Region. 3 Credit Hours.
This course explores the importance of place in determining the character of American culture. A variety of materials, visual and textual, are used to examine the way our lives are shaped by the home, the design of the city, and the suburban and regional areas beyond the city. The extent to which places hold their identities in the face of mass culture and megalopolis is also explored.
Repeatability: This course may not be repeated for additional credits.
AMST 2052. The Class Experience in America. 3 Credit Hours.
This course surveys the enduring importance of class in the United States as well as the enduring myth of American classlessness. We will start with the myths themselves, where they came from and how they were constructed. From there, we will examine theories of social class (in some ways attempts to explain why the myths weren't true) and efforts to objectively measure poverty, inequality, and the distribution of wealth. At the outset, we will also examine social mobility patterns and how these objective categories of class are related to race, region, sex, and gender. We will then spend time looking at how class is lived and how it is represented in the larger culture. We will explore how social class shapes the daily lives of ordinary Americans in cities, suburbs, small towns, and rural hinterlands through such things as housing, community, work, leisure activities, shopping tastes, dress, diet, language, education, and family. We will examine how class has been represented, reproduced, and contested, in literature, art, music, film, television, and the broader popular culture.
Repeatability: This course may not be repeated for additional credits.

AMST 2061. American Music. 3 Credit Hours.
This class is designed as a survey course that looks at the cultural, historical, technological, industrial, artistic, and mythic attributes of American Music, primarily from after the Civil War until the present. The 20th century is highlighted, with special emphasis on the period from the "Tin Pan Alley" era to today. Definitions of 'American' music and 'Popular' music will be discussed and analyzed. Movie musicals, soundies, concert films, and videos will be studied as well as audio recordings. Attention will be paid to socio-historical ramifications of American popular music as a cultural force and cultural expression.
Repeatability: This course may not be repeated for additional credits.

AMST 2062. UFOs in American Society. 3 Credit Hours.
American society's reaction to the UFO phenomenon. Analyzes UFOs and the controversy that has surrounded them by studying the attitudes of various groups toward the phenomenon, including the military, the scientific community, the national UFO organizations, the "lunatic fringe," cult groups, charlatans, the entertainment industry, and the press.
Repeatability: This course may not be repeated for additional credits.

AMST 2063. American Culture Abroad: Japan. 3 Credit Hours.
In this course we will examine versions and varieties of American life that have become a part of Japanese society and culture. We have seen a tremendous curiosity for "things American" in Japanese daily life - but how is American culture in Japan? What kinds of transformations, reformulations and re-inventions have taken place? We will review Japanese adoptions and adaptations of language, "American" settings, architecture and design, foods and restaurants, clothing and fashions, popular films, television and advertising, and even holidays. Students will review and critically evaluate such films as: The Japanese Version, Mr. Baseball, Black Rain, The Barbarian and the Geisha, Tokyo Pop, the Colonel Comes to Japan.
Repeatability: This course may not be repeated for additional credits.

AMST 2064. America in the 1950's. 3 Credit Hours.
This course will provide a survey of the 1950s, a time of deep, widespread, and lasting social change in the United States. Every aspect of the life of the country - government foreign and domestic policy, the workplace, entertainment, sports, the arts, and so forth - underwent some degree of significant alteration in the fifties. Some of this change resulted from the release of energy held in check by the Great Depression and World War II; some resulted from new technologies such as television and new spatial arrangements such as suburbanization; and some resulted from the emergence of new voices and styles (e.g., Abstract Expressionism, Rock and Roll, the Beats, bebop and other jazz forms) and more strenuous demands for freedom and equality by long-oppressed groups. While the course will survey the decade and the postwar era in general, it will also go into some depth by focusing on particular expressions of the major issues of the period.
Repeatability: This course may not be repeated for additional credits.

AMST 2065. Global America. 3 Credit Hours.
This distance-learning course is designed to help students examine the United States' role in the modern, industrial, and then, post-industrial world. At the same time, we will look at how the larger world shaped the United States and individual citizens. We will do this through a topics based approach. Each week, moving in roughly chronological order, we will explore a discreet and revealing interaction between the United States - whether this side of the equation is represented by the government, corporate leaders, or culture brokers - and another part of the world - and this side might be other nations, groups of people, or intellectual concepts. Not only will students encounter a broad range of contacts on a wide front, but they will also be asked to write and think about each of these topics and moments from a broad and wide range of different vantage points.
Repeatability: This course may not be repeated for additional credits.

AMST 2071. Immigrant Experiences in America. 3 Credit Hours.
A study of major issues concerning immigrant experience in the U.S., such as legislation regarding immigration, anti-immigrant social and political movements, immigrant efforts to assimilate (or to resist assimilation, or to accommodate to one degree or another). Students will be provided with basic history of the subject. They will also read accounts of life in the U.S. by immigrants and fiction about immigrant experiences. Most of the course will stress 20th century immigration.
Repeatability: This course may not be repeated for additional credits.

AMST 2072. Puerto Ricans in Philadelphia. 3 Credit Hours.
Puerto Ricans constitute the second largest Hispanic group in the country. This course examines the specific community of Puerto Ricans in Philadelphia and its relationship with other racial and ethnic groups and the social, political, and economic situation of Puerto Ricans in the city.
Repeatability: This course may not be repeated for additional credits.
AMST 2096. Asian Diaspora. 3 Credit Hours.
Spurred by pressures of colonialism, economic change, nationalism, political repression, and war as well as individual needs and adventurism, Asians have migrated from their homelands to new regions of the world. This course focuses on Asians in U.S. society through comparison with their reception into other societies. In considering Asian diasporas, familiar terms such as Asia, American, Community, and Nation are called into question by the multiplicity of experiences and identities of those who have ventured out from Eastern regions of the globe.

Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

AMST 2097. Asian Women in Transition. 3 Credit Hours.
This course introduces and compares the experiences of women in Asia and Asian women in migration to the United States in the modern period, including rural and urban women, and ordinary and elite women in the late 19th and 20th centuries. Topics include women in households, women and work, and women's activism.

Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

AMST 2098. Reading Culture. 3 Credit Hours.
As an introduction to the methods and scope of American Studies, Reading Culture will present an in-depth, interdisciplinary look at a discreet period in the American past, for example, the Civil War era or the Great Depression. While delving deeply in this time period, the class will explore how culture in its many forms and manifestations shaped how people lived their daily lives and created meaning. Particular emphasis will be placed on looking at the relationship, and even the disconnect, between different kinds of culture - knowledge production and education, visual culture, including art, photography, and film, music, landscapes, and built environments. In order to do that, we will learn how to read, broadly construe, and understand how different cultural forms convey messages and how distinct ways of seeing and hearing relate to other cultural forms. Through discussion, research, and writing, class members will investigate these varied dimensions of culture. They will learn to understand them in their broader social, aesthetic, ethical, and political contexts. In addition, this class, as an introduction, will prepare students to take more advanced courses in American Studies. This is also a writing-intensive class, so students will be engaged in extensive and varied writing (and rewriting) assignments and projects that will help them to hone these crucial skills.

Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

AMST 2107. Asian American Experiences. 3 Credit Hours.
An introduction to the varied historical and contemporary experiences of Chinese, Japanese, Filipino, Korean, South, and Southeast Asian immigrants and their descendants in the United States. Explores economic, social, political, and cultural developments, beginning with the arrival of the Chinese in the 1830s and ending with the experiences of Asian-American immigrants and their communities today. NOTE: This course can be used to satisfy the university Core Studies in Race (RS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: RS
Repeatability: This course may not be repeated for additional credits.

AMST 2108. Growing Up in America. 3 Credit Hours.
This course will examine the changing perception and experience of growing up in the United States from colonial times to the present, assuming that childhood and adolescence are social constructions that change over time. The course will explore the emergence of childhood and adolescence as distinct stages in the life cycle, the evolving role of the family in the process of growing up, and the increasing importance of social institutions other than the family in the lives of the young. Particular attention will be paid to the difference between growing up rich or poor, black or white, male or female, and rural or urban. Finally, it will consider the reciprocal relationship between popular culture and the lives of young Americans.

Repeatability: This course may not be repeated for additional credits.

AMST 2120. Topics in American Culture. 3 Credit Hours.
A special topics course, used for materials and approaches to American Studies that are either experimental in nature or not yet a regular part of the curriculum. NOTE: Course content varies and students can obtain a description of the current version at the American Studies office.

Repeatability: This course may be repeated for additional credit.

AMST 2217. The Vietnam War. 3 Credit Hours.
An attempt to probe one of the most significant and controversial episodes of American history. Beginning with the history of Vietnam since the 19th century, including the preceding Indochina Wars, this course will explore the impact of the Vietnam War of the '60s and '70s on the domestic and international scenes, together with its multiple legacies to later American culture. Will make use of television and film from the period.

Repeatability: This course may not be repeated for additional credits.

AMST 2742. Work in America. 1 Credit Hour.
Work - labor - stands at the very center of the American story. The nation was settled by people looking for work. That was true in the past and it is true today. This class, then, examines work and the meaning of work from Jamestown to the advent of McWorld. How has work changed over time? How have perceptions of laborers shifted over the last 300 hundred years? Students will explore labor-management relations, the organization of work, the experience of ordinary workers, and the lives of different groups of workers - millhands, immigrant farm laborers, clerical workers, and fast food employees. In the end, this course will use primary and secondary sources to provide students with a broad historical and cultural understanding of the nature of work and the American experience. NOTE: Offered at Temple University Japan only.

Repeatability: This course may not be repeated for additional credits.
AMST 2818. American Icons. 3 Credit Hours.
The Statue of Liberty. Lincoln. Barbie. Route 66. Disneyland. Elvis. Ali. These are all American Icons. This course will explore iconic images of America as a way to understand the central myths, promises, and ideas behind the nation – ideas about freedom, individuality, democracy, mobility, second chances, masculinity and femininity, race and class. Each unit will focus on an individual icon, its origins, what it represented, and how this representation has changed over time and place. The course will invite a critical analysis of these icons and their economic and cultural impact in a global context.

Repeatability: This course may not be repeated for additional credits.

AMST 2900. Honors Topics in American Culture. 3 Credit Hours.
A special topics course, used for materials and approaches to American Studies that are either experimental in nature or not yet a regular part of the curriculum. NOTE: Course content varies and students can obtain a description of the current version at the American Studies office.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

AMST 2901. Honors Quest for the American Dream. 3 Credit Hours.
This class examines the quest for the American dream among the many populations of America by looking at its consequences for the Native American, for the African American, and for the immigrant Chinese, Italians, and Puerto Ricans. Members of all these ethnic groups will be interviewed to try to understand their perspectives.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

AMST 2941. Honors Technology and American Culture. 3 Credit Hours.
This course explores the way American values have shaped technology and how technology has shaped American life, placing contemporary problems in a historical perspective. Materials are drawn from social history, literature, visual arts, film, advertising, and polemical prose. May also include working with collections at the Franklin Institute. NOTE: This course can be used to satisfy the university Core Science & Technology Second Level (SB) requirement.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR

Course Attributes: HO, SB

Repeatability: This course may not be repeated for additional credits.

AMST 2951. Honors American Places: Home, City, Region. 3 Credit Hours.
This course explores the importance of place in determining the character of American culture. A variety of materials, visual and textual, are used to examine the way our lives are shaped by the home, the design of the city, and the suburban and regional areas beyond the city. The extent to which places hold their identities in the face of mass culture and megapolis is also explored.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

AMST 2964. Honors America in the 1950s. 3 Credit Hours.
This course explores the effects of McCarthyism and the Cold War on American intellectual and cultural life in the 1950s. It will also examine dissents from the consensus that gave rise to the rebellions and counterculture of the 1960s. Special attention will be paid to McCarthyism and the origins of the civil rights movement. Renewed stirrings of discontent amongst women will be considered, as well as the start of a new left and counterculture represented by the Beat Generation.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

AMST 3011. Photography in America. 3 Credit Hours.
An overview of the history of photography in America from its beginning in the 1840s to the present, emphasizing its relation to society and the arts. The course will cover both documentary and aesthetic movements, including such figures as Brady, Muybridge, Riis, Hine, Evans, Steiglitz, Steichen, Strand, Robert Frank, Diane Arbus, Duane Michals, Cindy Sherman, etc. The cultural meaning of the Civil War, of westward expansion, of the Great Depression, of the Civil Rights movement, will be studied in relation to photography. Slides and readings on photography and American culture and on how the camera affects our seeing and thinking.

Repeatability: This course may not be repeated for additional credits.

AMST 3012. Film and American Society. 3 Credit Hours.
This course explores the way visual media (film, video, television) have in various ways recorded or documented the social and historical "reality" of American life. A number of issues will be explored: What is the place of documentary within American society, as information and as entertainment? And why are we so attracted to it? How close to "reality" can visual media come? How does documentary compare with non-documentary film in its effort to represent American culture and history?

Repeatability: This course may not be repeated for additional credits.
AMST 3013. The Documentary Mode. 3 Credit Hours.
The Documentary Mode has been, since the 19th century, one of the richest forms of expression and representation in American culture. Drawing upon the life experiences of real people, it has attempted to record the disparities of class, race, and gender, as well as the social structures of American society. This course will examine the range of documentary forms in American culture, including visual and print media (photography, film, reportage, etc.), from the 19th century to the present.
Repeatability: This course may not be repeated for additional credits.

AMST 3014. Retro America. 3 Credit Hours.
Why are Americans so fascinated by reproductions of the past? The rise of living history museums, the popularity of Civil War reenactments, and the ever-growing market for retro consumables all point to a population bent on reliving a mythic past. Retro America will attempt to contextualize and examine this phenomenon through a series of questions including: How do individuals go about “claiming” the past and why? Who or what informs these notions of the past? What does “historical simulation” reveal about the relationship between humans and objects? Although Retro America will cater to a wide variety of interests, it will have special appeal for students interested in History, Material Culture, and/or Cultural Studies.
Repeatability: This course may not be repeated for additional credits.

AMST 3021. Historic Preservation in Philadelphia. 3 Credit Hours.
This course uses Philadelphia as a case study to show how history can be read from the fabric of a city and why and how we go about preserving these buildings and structures. We will trace Philadelphia history from the counting houses and markets of the Colonial period through the factories of the 19th century, up to the automobile-oriented architecture of today. Students will become familiar with the battles to save our built history with the use of tax credits, easements, and the historic registers. NOTE: The class may include several walking tours of Philadelphia.
Repeatability: This course may not be repeated for additional credits.

AMST 3022. Architecture, Urban Design, and American Culture. 3 Credit Hours.
An exploration of ways U.S. cities have been physically shaped over the past 100 years, paying special attention to the leading movements and theories concerning the growth and design of urban space. Readings are from topics such as: Olmsted and the park movement; the city beautiful movement; the modern city and the skyscraper; Lewis Mumford and the garden city movement; the organic city of Jane Jacobs; the postmodern city of Robert Venturi; the dystopian city. In addition to studying the literature of cities, the class explores Philadelphia as a case study, with students developing techniques of observation and analysis, in an effort to understand the city of Philadelphia within the broader framework of thinking about American cities.
Repeatability: This course may not be repeated for additional credits.

AMST 3031. Political Protest and Culture in the '60s. 3 Credit Hours.
Many see the 1960s as a time America fell apart - drugs, sex, anti-Americanism, and the loss of the work ethic. Yet the '60s produced the Civil Rights Movement, the anti-Vietnam War Movement, a revolution in music, Vatican II, and the Counterculture. Martin Luther King, the Kennedys, Marilyn Monroe, and the astronauts - fame and untimely death. What was it like when America still had hope? How did it change us as a society and not change us? Why are so many still so angry about all that or miss it?
Repeatability: This course may not be repeated for additional credits.

AMST 3032. Literature and Political Change. 3 Credit Hours.
A study of significant works of fiction, poetry and non-fiction that voice concerns of the alienated and the dispossessed with emphasis on the struggle against conformity and for social and economic justice from the Great Depression to the election of Ronald Reagan. Some research required. NOTE: Equivalent to English 2114 (0152).
Repeatability: This course may not be repeated for additional credits.

AMST 3031. Political Protest and Culture in the '60s. 3 Credit Hours.
This course will examine the relationship between our legal system and American society. Does the law shape social mores or is it merely a reflection of them? What role should the court play in protecting individual rights? We will study the evolution of American jurisprudence in the area of abortion, affirmative action, freedom of expression, separation of church and state, and examine emerging areas of legal debate including the right to same sex marriage, the legalization of prostitution and the constitutionality of Megan’s law.
Repeatability: This course may not be repeated for additional credits.

AMST 3041. Contemporary Trends in the American Workplace. 3 Credit Hours.
This course will focus on the development of new work arrangements, the attitudes of employees toward their jobs or careers, work expectations and rewards, and issues having to do with the meanings of work in the lives of individuals. "Contemporary trends" is intended to provide students with a clear perspective on what they can expect in their years at work.
Repeatability: This course may not be repeated for additional credits.

AMST 3051. American Frontiers. 3 Credit Hours.
Reexamined from the perspective of the late 20th century, the American frontier becomes contested terrain between diverse groups of settlers and natives. With a geographic focus on America west of the Mississippi, this course looks at elements that were used to construct the myth of the frontier and the many elements that were left out. It incorporates Euro-American women, and persons of Latin American heritage, Asians, African Americans, and especially Native Americans into the story of the frontier of the 19th century and the west of the 20th.
Repeatability: This course may not be repeated for additional credits.
AMST 3061. Media and American Popular Culture. 3 Credit Hours.
This course will explore the role of media in the development of American popular culture, with particular emphasis on the cultural transformations brought about by mass media after 1880. Historical analysis will demonstrate the profound shift in media roles within the past century; from media expressions of popular culture before 1889, to media as generators of popular culture after that point. A by-product of this analysis will be the formulation of a critical definition of mass media in terms of a specific relationship between the media and the audience.
Repeatability: This course may not be repeated for additional credits.

AMST 3071. African American Experiences. 3 Credit Hours.
A survey of historical, social, political, and cultural developments in African American experience in the U.S. Topics include: enslavement, the Civil War and Reconstruction, Harlem Renaissance, Garveyism, the great migration, depression and labor unions, the New Deal and the WPA, African-American involvement in the nation's wars, Civil Rights, Black Power, black arts movement, and Black Panthers. NOTE: This course can be used to satisfy the university Core Studies in Race (RS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: RS
Repeatability: This course may not be repeated for additional credits.

AMST 3073. Class Roots Am Culture. 3 Credit Hours.
Repeatability: This course may not be repeated for additional credits.

AMST 3074. Introduction to Asian American Literature. 3 Credit Hours.
Asian American literature will be considered from the perspective of the social, political, and economic experiences of Asian Americans. Prose, poetry, fiction, and plays will be read from an interdisciplinary perspective, through examinations of writers such as Sui Sin Far, Carlos Bulosan, Toshio Mori, Mary Paik Lee, Frank Chin, Bharati Mukherjee, Maxine Hung Kingston, Amy Tan, and Sara Suleri.
Repeatability: This course may not be repeated for additional credits.

AMST 3075. Literature of American Slavery. 3 Credit Hours.
What kinds of arguments did people use to attack - and support - slavery, and what difference did those literatures make? This course examines the intersection of persuasive writing and the institution of slavery from 1680 to the Civil War, with a special focus on the antebellum period, when the problem of slavery came to occupy a central role in American politics and American literature. NOTE: This course can be used to satisfy the university Core Studies in Race (RS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: RS
Repeatability: This course may not be repeated for additional credits.

AMST 3082. Independent Study. 1 to 4 Credit Hour.
The student devises a program for independent study with his advisor and an instructor. Designed for those students whose research interests are not met in any established course. NOTE: Special authorization required for all students. Interested students should first consult with the Director of American Studies.
Repeatability: This course may be repeated for additional credit.

AMST 3089. Field Work in American Studies. 1 to 4 Credit Hour.
The Field Study internship offers students the opportunity to relate academic interests to a variety of cultural and civic institutions in the Philadelphia area. Individual readings and a final report or research paper provide a perspective on American culture. NOTE: Each three credits earned normally requires ten hours of work per week (during the summer sessions the number of hours is doubled) under faculty and institutional supervision. Interested students should first consult with the Director of American Studies.
Repeatability: This course may be repeated for additional credit.

AMST 3096. The American Woman: Visions and Revisions. 3 Credit Hours.
An examination of images and roles of women in American culture. Using fiction, poetry, and autobiography, we develop an understanding of stereotypes and myths and we relate these images to the real-life experiences of American women. The readings include all classes and many ethnic groups, and focus primarily on the 20th century.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

AMST 3101. Latino Identity in the U.S.. 3 Credit Hours.
Latino Identity in the U.S. is a general survey of the cultural-historical experiences of Latinos in the United States from pre-colonization to the present with concentration on the time period of the civil rights movement to the present. The course will explore the impact of Latinos in U.S. cultural-history and artistic expressions, across all disciplines; specifically on how this impact has reflected itself in the development of Latino identity formation and how Latinos fit within race/ethnic/gender cultural politics in the United States.
Repeatability: This course may not be repeated for additional credits.

AMST 3102. Topics in American Culture. 3 Credit Hours.
A special topics course, used for presenting material and approaches to American Studies that are either experimental in nature or not yet a regular part of the curriculum. NOTE: Course content varies and students can obtain a description of the current version at the American Studies office.
Repeatability: This course may be repeated for additional credit.
AMST 3901. Honors Ideal America: Reform, Revolution, and Utopia. 3 Credit Hours.
Examination of some problems raised by key groups at various times, traditions and ideologies, and the successes or failures of each kind of response. Readings, films, lectures, and discussions. Includes the Shakers, Brook Farm, the Oneida Group, progressive reformers, vegetarianism and temperance, the I.W.W. (Wobblies), American Communism, agrarianism, and selected radical movements from the contemporary period.

**Cohort Restrictions:** Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR

**Course Attributes:** HO

**Repeatability:** This course may not be repeated for additional credits.

AMST 3931. Honors Political Protest and Culture in the 60’s. 3 Credit Hours.
Many see the 1960s as a time America fell apart - drugs, sex, anti-Americanism, and the loss of the work ethic. Yet the 60s produced the Civil Rights Movement, the anti-Vietnam War Movement, a revolution in music, Vatican II, and the Counterculture. Martin Luther King, the Kennedys, Marilyn Monroe, and the astronauts - fame and untimely death. What was it like when America still had hope? How did it change us as a society? And not change us? Why are so many still so angry about all that or miss it?

**Cohort Restrictions:** Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR

**Course Attributes:** HO

**Repeatability:** This course may not be repeated for additional credits.

AMST 3951. Honors American Frontiers. 3 Credit Hours.
Reexamined from the perspective of the late 20th century, the American frontier becomes contested terrain between diverse groups of settlers and natives. With a geographic focus on America west of the Mississippi, this course looks at elements that were used to construct the myth of the frontier and the many elements that were left out. It incorporates Euro-American women, and persons of Latin American heritage, Asians, African Americans, and especially Native Americans into the story of the frontier of the 19th century and the west of the 20th century.

**Cohort Restrictions:** Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR

**Course Attributes:** HO

**Repeatability:** This course may not be repeated for additional credits.

AMST 3972. Honors The American Woman: Visions and Revisions. 3 Credit Hours.
An examination of images and roles of women in American culture. Using fiction, poetry, and autobiography, we develop an understanding of stereotypes and myths and we relate these images to the real-life experiences of American women. The readings include all classes and many ethnic groups, and focus primarily on the twentieth century.

**Cohort Restrictions:** Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR

**Course Attributes:** HO

**Repeatability:** This course may not be repeated for additional credits.

AMST 4097. Senior Seminar in American Studies. 3 Credit Hours.
The capstone class required of all American Studies majors. Open to others with permission of the Director of American Studies. Students write a major paper. Should be taken in the Fall of the senior year. NOTE: This is a Capstone writing course. Special authorization required for all students. Interested students should first consult with the Director of American Studies.

**Course Attributes:** WI

**Repeatability:** This course may not be repeated for additional credits.

AMST 4098. Senior Independent Study. 1 to 4 Credit Hour.
Students who, because of special circumstances, are unable to take 4097 (formerly W393) in the Fall of senior year may fulfill the Capstone requirement through an independent study. The senior essay will be written on a topic or theme related to the student's program of study. NOTE: American Studies majors only. Special authorization required for all students. Interested students should first consult with the Director of American Studies.

**Course Attributes:** WI

**Repeatability:** This course may not be repeated for additional credits.

**Anthropology (ANTH)**

Courses

ANTH 0814. Human Ecology. 3 Credit Hours.
Human hunters may have contributed to animal extinctions as early as 10,000 years ago; civilizations in the ancient Near East developed complex irrigation networks that led to some of the area's permanent deserts. Since pre-history, humans had an impact on the environment, but changes in technology have magnified the scale of human influence. Today, attempts at sustainable land use are often at odds with struggles for indigenous population rights, with population migration and increases in population size, or with desires to preserve areas for national parks or tourism, let alone attempts to exploit natural resources. Study the ecological principles underlying the relationship of humans with the environment and the explosion of conflicts surrounding modern environmental use. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed GUS 0814.

**Course Attributes:** GB

**Repeatability:** This course may not be repeated for additional credits.
ANTH 0815. Language in Society. 3 Credit Hours.
How did language come about? How many languages are there in the world? How do people co-exist in countries where there are two or more languages? How do babies develop language? Should all immigrants take a language test when applying for citizenship? Should English become an official language of the United States? In this course we will address these and many other questions, taking linguistic facts as a point of departure and considering their implications for our society. Through discussions and hands-on projects, students will learn how to collect, analyze, and interpret language data and how to make informed decisions about language and education policies as voters and community members. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: ANTH 0915, Asian Studies 0815, Chinese 0815, CSCE 0815, EDUC 0815/0915, English 0815, Italian 0815, PSY 0815, Russian 0815, or Spanish 0815.

Course Attributes: GB
Repeatability: This course may not be repeated for additional credits.

ANTH 0817. Youth Cultures. 3 Credit Hours.
Do you listen to hip hop, spend all your time in Second Life, dress up like a cartoon character and go to anime fairs, or go skateboarding every day with your friends? Then you're part of the phenomenon called youth culture. Often related to gender, race, class and socio-economic circumstances, youth cultures enable young people to try on identities as they work their way to a clearer sense of self. Empowered by new technology tools and with the luxury of infinite virtual space, young people today can explore identities in ways not available to previous generations. Students in this class will investigate several youth cultures, looking closely at what it means to belong. They will also come to appreciate how the media and marketing construct youth identities and define youth cultures around the world. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed ASST 0817, EDUC 0817/0917 or SOC 0817.

Course Attributes: GB
Repeatability: This course may not be repeated for additional credits.

ANTH 0825. Quantitative Methods in the Social Sciences. 4 Credit Hours.
Psychological, political, social, and economic arguments and knowledge frequently depend on the use of numerical data. A psychologist might hypothesize that I.Q. is attributable to environmental or genetic factors; a politician might claim that hand gun control legislation will reduce crime; a sociologist might assert that social mobility is more limited in the United States than in other countries, and an economist might declare that globalization lowers the incomes of U.S. workers. How can we evaluate these arguments? Using examples from psychology, sociology, political science, and economics, students will examine how social science methods and statistics help us understand the social world. The goal is to become critical consumers of quantitative material that appears in scholarship, the media, and everyday life. NOTE: This course fulfills the Quantitative Literacy (GQ) requirement for students under GenEd and a Quantitative Reasoning (QA or QB) requirement for students under Core. Students cannot receive credit for this course if they have successfully completed POLS 0825, PSY 0825, or SOC 0825/0925.

Course Attributes: GQ
Repeatability: This course may not be repeated for additional credits.

Pre-requisites:
- MATH 0701 | Minimum Grade of C- | May not be taken concurrently
- OR MC3 Y | May not be taken concurrently
- OR MC4 Y | May not be taken concurrently
- OR MC5 Y | May not be taken concurrently
- OR MC6 Y | May not be taken concurrently

ANTH 0829. The History & Significance of Race in America. 3 Credit Hours.
Why were relations between Native Americans and whites violent almost from the beginning of European settlement? How could slavery thrive in a society founded on the principle that “all men are created equal”? How comparable were the experiences of Irish, Jewish, and Italian immigrants, and why did people in the early 20th century think of them as separate “races”? What were the causes and consequences of Japanese Americans’ internment in military camps during World War II? Are today’s Mexican immigrants unique, or do they have something in common with earlier immigrants? Using a variety of written sources and outstanding documentaries, this course examines the racial diversity of America and its enduring consequences. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Duplicate Credit Warning: Students may take only one of the following courses for credit; all other instances will be deducted from their credit totals: African American Studies 0829, Anthropology 0829, Geography and Urban Studies 0829, History 0829, Political Science 0829, Sociology 0829, 0929, 1376, 1396, R059, or X059.

Course Attributes: GD
Repeatability: This course may not be repeated for additional credits.

ANTH 0831. Immigration and the American Dream. 3 Credit Hours.
As a Temple student, you go to school and live in a city full of immigrants. Perhaps your own relatives were immigrants to the United States. But have you ever listened to their stories? With an historical and sociological framework as a basis, we will take an in-depth and more personal look at the immigrant experience as expressed through the immigrants’ own voices in literature and film. Topics explored include: assimilation, cultural identity and Americanization, exploitation and the American Dream, ethnic communities, gender, discrimination and stereotyping. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: CRIT 0831, History 0831, Italian 0831/0931, Russian 0831, SOC 0831, or SPAN 0831/0931.

Course Attributes: GD
Repeatability: This course may not be repeated for additional credits.
ANTH 0833. Race & Poverty in the Americas. 3 Credit Hours.
The transatlantic slave trade was one of the most brutal and momentous experiences in human history. Attitudes toward Latino, Caribbean, African, and Asian immigrants in the United States today can only be fully understood in the contexts of slavery and the “structural racism,” “symbolic violence” (not to mention outright physical violence), and social inequalities that slavery has spawned throughout the region. Although focusing primarily on the United States, we will also study the present entanglements of poverty and race in Brazil, Haiti, and other selected nations of “The New World,” placing the U.S. (and Philadelphia in particular) experience in this historical context. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they have successfully completed LAS 0833/0933, REL 0833/0933, or SOC 0833.
Course Attributes: GD
Repeatability: This course may not be repeated for additional credits.

ANTH 0834. Representing Race. 3 Credit Hours.
From classical Greeks and Romans, who saw themselves under siege by the “barbarian hordes,” to contemporary America and its war on “Islamic extremism,” from “The Birth of a Nation” to “Alien Nation,” Western societies have repeatedly represented some group of people as threats to civilization. This course will examine a wide range of representations of non-Western people and cultures in film, literature, scientific and legal writings, popular culture and artistic expression. What is behind this impulse to divide the world into “us” and “them”? How is it bound up with our understanding of race and racial difference? And what happens when the “barbarian hordes” talk back? NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they have successfully completed AAS 0834, Anthropology 0934, Asian Studies 0834, English 0834/0934, or History 0834.
Course Attributes: GD
Repeatability: This course may not be repeated for additional credits.

ANTH 0848. American Revolutions. 3 Credit Hours.
From the first encounters with Native Americans to the present, a series of pivotal moments have had an enduring influence on American society, culture, and politics. In each class, three modules will focus on three pivotal moments, such as King Philip’s War, Nat Turner’s Rebellion, the Scopes trial, the Civil Rights movement, the women’s movement, the emergence of Elvis Presley, the sexual revolution, the rise of environmentalism, the Reagan Revolution, and 9-11. In each module, students will first place the main subject of the module in context, and then seek to understand how it changed American society. The last week of each module will be devoted to a consideration of how the subject of that module has become part of American collective memory. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: AMST 0848, GUS 0848, History 0848, or SOC 0848.
Course Attributes: GU
Repeatability: This course may not be repeated for additional credits.

ANTH 0856. Evolution of Culture. 3 Credit Hours.
The roots of many contemporary cultures around the globe reach deep into human history. This course examines the evolution of these cultures through the use of paleoanthropological and archaeological data ranging from 2.5 million years ago through the beginnings of written history. Topics include the initial emergence and development of culture, the growth and expansion of human populations, the origins and dispersals of food production (particularly agriculture) and the rise and collapse of early civilizations. In addition we will examine the persistence of hunter-gatherers and other small-scale societies into the 19th and 20th centuries using ethnological data as well as the lessons to be learned from the successes and failures of early civilizations for predicting the future of the modern world. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core.
Course Attributes: GG
Repeatability: This course may not be repeated for additional credits.

ANTH 0867. World Regions and Cultures: Diversity and Interconnections. 3 Credit Hours.
What is globalization? Are we now all citizens of a global capitalist economic and truly international political order? Or do we still live mostly under the economic constraints and governmental policies of the particular nation states of which we are citizens? Is globalization the same thing as economic and cultural imperialism in the form of multinational corporate and “development” projects or other projects that assume “Westernization,” or “Americanization” agendas? Or do different nation states experience and negotiate global capitalism in profoundly different ways rooted in their distinctive historical and political-economic experiences? We live in a fascinating era marked simultaneously by the reach (and the risks) of global capitalism and by the distinctive yet interrelated histories of a tremendous variety of modern nation-states. This course provides you with a strong repertoire of concepts to help you understand our complex contemporary world, and will also expose you to the key foundational concepts and methodologies of contemporary sociocultural anthropology. We will systematically explore the ways in which anthropologists have come to theorize both global capitalism and the nation state through ethnographic case studies in three to four contemporary nation states. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Duplicate Credit Warning: Students may take only one of the following courses for credit; all other instances will be deducted from their credit totals: Anthropology 0867, 1061, C061, Geography and Urban Studies 0867, or Sociology 0867.
Course Attributes: GG
Repeatability: This course may not be repeated for additional credits.
ANTH 0915. Honors Language in Society. 3 Credit Hours.
How did language come about? How many languages are there in the world? How do people co-exist in countries where there are two or more languages? How do babies develop language? Should all immigrants take a language test when applying for citizenship? Should English become an official language of the United States? In this course we will address these and many other questions, taking linguistic facts as a point of departure and considering their implications for our society. Through discussions and hands-on projects, students will learn how to collect, analyze, and interpret language data and how to make informed decisions about language and education policies as voters and community members. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: Anthropology 0815, Asian Studies 0815, Chinese 0815, CSCD 0815, EDUC 0815/0915, English 0815, Italian 0815, PSY 0815, Russian 0815, or Spanish 0815.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GB, HO
Repeatability: This course may not be repeated for additional credits.

ANTH 0934. Honors Representing Race. 3 Credit Hours.
From classical Greeks and Romans, who saw themselves under siege by the "barbarian hordes," to contemporary America and its war on "Islamic extremism," from "The Birth of a Nation" to "Alien Nation," Western societies have repeatedly represented some group of people as threats to civilization. This course will examine a wide range of representations of non-Western people and cultures in film, literature, scientific and legal writings, popular culture and artistic expression. What is behind this impulse to divide the world into "us" and "them"? How is it bound up with our understanding of race and racial difference? And what happens when the "barbarian hordes" talk back? NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they have successfully completed AAS 0834, Anthropology 0834, Asian Studies 0834, English 0834/0934, or History 0834.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GD, HO
Repeatability: This course may not be repeated for additional credits.

ANTH 1009. Discovering Anthropology. 1 Credit Hour.
This course is designed to allow students to explore Anthropology as a possible major and/or career path. It introduces the field of Anthropology in general and, subsequently, the sub-fields of the discipline (Sociocultural Anthropology, Linguistics, Biological Anthropology, Archaeology), and the specialized tracks that exist within the department (Human Biology and Visual Anthropology) in addition to the general anthropology major. Career paths and opportunities will be discussed and students will develop hypothetical course plans for a B.A. in Anthropology and subsequent career plans in conjunction with the faculty member/advisor in charge of the course. Students will sample departmental functions, may sit in on a class of a selected course, participate in a field trip, or attend a relevant lecture or public presentation at area museums or professional gatherings.
Repeatability: This course may not be repeated for additional credits.

ANTH 1055. Introduction to Physical Anthropology. 4 Credit Hours.
An anthropological perspective of scientific knowledge about humans as physical systems, will be used to assess a variety of issues in human biology related to vital current or future student interests and concerns. The purpose is to alert you to these important issues and to provide you with a sufficient background in the basics of human biology and methods of scientific inquiry that will enable you to understand the causes for their occurrence and to be able to apply this knowledge for your own benefit. NOTE: (1) This course cannot be taken to satisfy any of the requirements for majors in the Human Biology Track. (2) This course can be used to satisfy the university Core Science & Technology Second Level (SB) requirement.
Course Attributes: SB
Repeatability: This course may not be repeated for additional credits.

ANTH 1061. Cultures of the World. 3 Credit Hours.
An introductory survey of various cultures from different regions of the world. Ethnographic case studies will be compared to show diversity and continuity in human lifestyles. A major emphasis will be placed on the impact of transglobal economic, political, and sociocultural change in the 20th century. NOTE: This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. In addition to meeting the university Core International Studies requirement, this course meets the Non-Western/Third World IS requirement for Communication Sciences majors. Please note the recent update to the Core IS requirement at www.temple.edu/vpus/resources/coreupdates.html#coreisupdate.
Course Attributes: IS
Repeatability: This course may not be repeated for additional credits.

ANTH 1062. Introduction to Anthropology. 3 Credit Hours.
This introductory Anthropology course is designed to introduce students to important scholarly and practical concepts in the study of race and racism historically and across cultures. It builds upon the important contributions of four-field anthropological practice to our understanding of the ways societies have constructed racial categories and meanings and deployed racialized hierarchies. Students will be asked to read a variety of basic materials in linguistics, biological anthropology, ethnology, and archaeology. This will be supplemented with student efforts to analyze popular representations of race to acquire a familiarity with the important debates in contemporary social science and politics. NOTE: This course can be used to satisfy the university Core Studies in Race and Individual & Society (RN) requirements. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: RN
Repeatability: This course may not be repeated for additional credits.
ANTH 1064. American Culture. 3 Credit Hours.
This course will introduce students to an anthropological perspective on the changing character and complexity of American culture. We will examine the key symbols and core values of American society and how these are differentially understood and encountered in everyday life by diverse peoples in the United States. Topics include the experience of race, ethnicity, and gender in various local settings and how these categories intersect with economic, political, and historic forces. The course will examine the role of patriotism, migration, and social class in shaping the life worlds of Americans. We will ask, how are ideas about race made and remade? Why is it often so difficult to speak of social class? What influences does "American culture" have and how is it shaped by material and symbolic practices beyond the borders of the United States? NOTE: This course can be used to satisfy the university Core American Culture (AC) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: AC
Repeatability: This course may not be repeated for additional credits.

ANTH 1065. Origins of Cultural Diversity. 3 Credit Hours.
Many non-U.S. cultures have long, distinguished histories which can be traced ultimately to a common origin. This course examines the evolution of these cultures through the use of archaeological and paleoanthropological data, which ranges from four million years ago to the time of recorded history. Topics include the emergence of culture, the spread of human populations throughout the world, the origins of agriculture, and the rise of cities, states, and civilizations. NOTE: This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. In addition to meeting the university Core International Studies requirement, this course meets the Non-Western/Third World IS requirement for Communication Sciences majors. Please note the recent update to the Core IS requirement at www.temple.edu/vpus/resources/coreupdates.htm#coreisupdate.

Course Attributes: IS
Repeatability: This course may not be repeated for additional credits.

ANTH 1074. Anthropology through Film. 3 Credit Hours.
An introductory survey course employing the medium of ethnographic film to address the diverse issues that anthropologists engage with. Through watching and analyzing films on issues as varied as Azande witchcraft, Trobriand cricket, and Balinese water-temples, students will gain understanding not only of the issues that anthropologists study, but also of anthropological film and filmmaking. The course is organized as a film presentation followed by discussion of the film based upon critical understanding of the film combined with the reading material for that aspect of the course.

Repeatability: This course may not be repeated for additional credits.

ANTH 1079. Anthropology of Food. 3 Credit Hours.
This class will examine the interrelationship of biological, cultural, and historical influences on what we eat and how we eat it. Topics will link biological, ecological, social and symbolic cultural perspectives and examine the dietary implications of foraging, crop domestication, state formation and industrial capitalism. We will look at the sociocultural practices relating to the uses of food in marking social differences, maintaining social relationships, and dealing with cultural constructions of health, illness, and the body. Throughout the class we will examine the impact of globalization on the transformation of food meanings, practices and availability.

Repeatability: This course may not be repeated for additional credits.

ANTH 1261. Cultures of the World. 1 Credit Hour.
A companion course to Anthropology 1061 (C061) for first-term freshmen. This course provides guidance with the assignments of the core course. Emphasis is on reading, listening, speaking, and writing within the context of the core course. Assistance is also given in the continued development of English-language skills, especially academic reading and the acquisition of a general academic vocabulary. NOTE: Offered at Temple University Japan only.

Repeatability: This course may not be repeated for additional credits.

ANTH 1262. Introduction to Anthropology. 1 Credit Hour.
A companion course to Anthropology 1062 (R060) for first-term freshmen. This course provides guidance with the assignments of the core course. Emphasis is on reading, listening, speaking, and writing within the context of the core course. Assistance is also given in the continued development of English-language skills, especially academic reading and the acquisition of a general academic vocabulary. NOTE: Offered at Temple University Japan only.

Repeatability: This course may not be repeated for additional credits.

ANTH 1961. Honors Cultures of the World. 3 Credit Hours.
An introductory survey of various cultures from different regions of the world. Ethnographic case studies will be compared to show diversity and continuity in human life styles. A major emphasis will be placed on the impact of transglobal economic, political, and sociocultural change in the 20th century. NOTE: This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. In addition to meeting the university Core International Studies requirement, this course meets the Non-Western/Third World IS requirement for Communication Sciences majors. Please note the recent update to the Core IS requirement at www.temple.edu/vpus/resources/coreupdates.htm#coreisupdate.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO, IS
Repeatability: This course may not be repeated for additional credits.
ANTH 2087. Practicum in Curation and Collections Management. 1 Credit Hour.
This is an applied course emphasizing acquisition of practical skills in curation and collections management. Students enrolled will participate in a variety of projects (i.e. cataloging archaeological collections, developing digital collections, artifact photography and documentation, developing new exhibits) related to the long-term care and preservation of ethnographic and archaeological collections housed in the Anthropology Laboratory. Because the specific skillsets learned will vary by project and semester, students may enroll in the course more than once.
Repeatability: This course may not be repeated for additional credits.

ANTH 2098. The Legacy of Mesoamerica. 3 Credit Hours.
The course briefly reviews the nature of Prehispanic Mexico and Central America by examining its earliest manifestations in the Pre-Classic Period through the Late Post-Classic Period, right before European contact. Cultures examined will include the Maya, Nahua, Tarascan, and Mixtec among others. We will then study the Spanish Conquest of the region and how the indigenous peoples adapted to Spanish rule during the Colonial period. Following independence from Spain, indigenous peoples of Mesoamerica dealt with a new sort of adaptation. Specifically, that of integration into the new nation-states of Mexico and Guatemala will be examined. Modern Mesoamerica will also be discussed, particularly in terms of how the indigenous peoples have adapted to a new "globalized" world.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

ANTH 2104. Fundamentals of Archaeology. 3 Credit Hours.
An introduction to the theories and methods used in archaeological anthropology and the ways in which questions about life in the past are framed and investigated. Topics include the nature of archaeological evidence, the importance of context, excavation techniques, analysis of material remains, and reconstruction of ancient cultural patterns.
Repeatability: This course may not be repeated for additional credits.

ANTH 2109. South American Archaeology. 3 Credit Hours.
A survey of prehistoric cultures of South America. Concentrates on (1) the initial entry and spread of human populations into South America and the West Indies, (2) origins of tropical and highland agriculture, (3) the rise of urbanism, civilization, and the state in the Andes, and (4) the impact of prehistoric cultures on the environment.
Repeatability: This course may not be repeated for additional credits.

ANTH 2171. First Century Pompeii & the Mediterranean World: Archaeological & Anthropological Perspectives. 3 Credit Hours.
This course places Pompeii in its Mediterranean Old World Setting and then creates a discourse with its rich material evidence. Pompeii's intimate presentation of ancient Roman urban life, its rich array of material culture, its iconic place in world archaeology, and its spectacularly preserved archaeological record is discussed from the anthropological perspectives of gender, race, status, and social change. Students are confronted with its religious, economic, and social life as revealed by its holistic context. Finally Pompeii's continual influence on our own society is explored and discussed.
Repeatability: This course may not be repeated for additional credits.

ANTH 2172. Archaeology of North America. 3 Credit Hours.
This course surveys the cultural development of native peoples from the time of the initial colonization of North America to the historic period and the arrival of European explorers and settlers. Coverage is organized by cultural/geographic regions, or areas, and chronological periods. Common and contrasting themes in cultural development are stressed. The course develops an appreciation of: the debates and data surrounding the initial colonization of North America; the cultural diversity and complexity evident in Native American cultures across space and through time; the interaction of Native cultures with different and changing environments, and the impact that each had on the other; the range of environmental, social, and cultural issues capable of being addressed with archaeological data.
Repeatability: This course may not be repeated for additional credits.

ANTH 2173. Ancient Mesoamerica. 3 Credit Hours.
Ancient Mesoamerica is a general survey of the pre-Columbian cultures of Mexico and Middle America before the Spanish Conquest of the Aztec Empire in A.D. 1521. In this course we will examine the long history of Mesoamerica beginning with the first peopling of the Americas at least 15,000 years ago and ending with the Spanish Conquest and the creation of "Latin America."
Repeatability: This course may not be repeated for additional credits.

ANTH 2207. Popular Culture in Modern Italy. 3 Credit Hours.
The course explores popular culture in Italy, starting from the Italian historical awareness of popular culture that emerged in the 19th century foundation of the nation up to the present day. The course focuses especially on popular culture in the 20th century using a variety of approaches, from lectures to readings, from the screening of video material to the study of audio recordings. By the end of the course, students will have attained a significant understanding of the variety of popular culture in modern Italy and will have mastered an analytical framework for understanding these phenomena. The course carries up to contemporary times with an exploration of the impact global trends have had on popular culture, making particular reference to contemporary popular music.
Repeatability: This course may not be repeated for additional credits.

ANTH 2238. Visual Anthropology of Modern Japan. 3 Credit Hours.
An anthropological approach to systems of visual communication that are central to understanding Japanese society and culture. Visual sign systems of everyday life such as writing, food, and clothes plus visual aspects of popular culture such as comic books and ads. Ethnographic films, feature films, and network RV programs plus field trips to Japanese cultural sites in Philadelphia.
Repeatability: This course may not be repeated for additional credits.
This course examines the major aspects of social life in the Middle East from an anthropological perspective. Selected topics to be investigated include:

ANTH 2364. People and Culture of the Middle East. 3 Credit Hours.

Repeatability: This course may not be repeated for additional credits.

Shaped by conquest and colonial transnational desires, first of sugar and then of tourism, the Caribbean has been wrought since its very inception by the displacement of people, goods and ideas from Africa, Asia, Europe, and Latin America, presenting a challenge for the anthropological study of socio-cultural change through time and space. In this introductory course on the Caribbean we will critically examine "creolization" processes at social, religious, political, economic, and artistic levels as they have been driven by various groups, from pirates, privateers, maroons, exiles, to tourists, in the context of colonialism, nation building, and globalization. Examining specific sites such as music, display events, folklore, and religion we will ponder about, for instance, the effects of European revolutions on the creation of elites in the Caribbean, and the impact of slave cultures and peasantry on the formation of creole religions. How has the image of the sensuous/threatening mulatta evolved since the plantation? On what kind of histories and emotions do "zombies" feed upon? Why did Reggae and Merenge succeed on the global stage? How does the display of national icons in Trinidadian carnival reflect on their socio-political conflicts? How is the colonial past re-packaged for global consumption?

Repeatability: This course may not be repeated for additional credits.

Starting in 1492, Native American isolation from Europe and Africa ended in the region of the Americas that became Latin America. Despite five hundred years of colonial and nation-state domination, indigenous peoples in Latin America continue to assert their basic human right to resist cultural hegemony. Not only have indigenous populations survived, they are also growing. Today they constitute a majority in Bolivia, Ecuador, Guatemala, and Peru and a substantial plurality in Brazil, Mexico, and Colombia. The focus here is on this remarkable struggle for physical and cultural survival. Attention will be given to the lived experiences of people struggling for human dignity on the lowest strata of regional class structures. Issues of land rights, environmental, health, political, and economic self-determination will be examined.

Repeatability: This course may not be repeated for additional credits.

This course explores both biocultural and sociocultural approaches within the rapidly expanding intersubdisciplinary anthropological field of critical medical anthropology (CMA). Topics addressed include evolutionary approaches to understanding health and disease (including diet and nutrition), as well as sociocultural CMA approaches to such topics as ethnomedicine, medicine and social control, international health development, medical pluralism, science and technology studies, and the anthropology of the body.

Repeatability: This course may not be repeated for additional credits.

This course may serve as a starting point for undergraduate majors in Visual Anthropology. We will question the idea that American culture is best characterized as a variety of many immigrant cultures; specific institutions have produced a shared conception of the American Dream and how fault lines based on race, ethnicity, gender, and generation have come to be "made in America." Emphasis will be given to the contrast between the ways in which American popular culture is represented through media and the way in which ethnographic studies present insights into the ways in which Americans live. Special emphasis will be given to the ways in which fault lines between groups have been socially and culturally constructed and transcended over time and the role that overarching institutions like schools, public policies and media representations play in producing both the diversity and homogeneity of American culture. NOTE: Course is appropriate for students in American Studies, Media Studies, Sociology and Education.

Repeatability: This course may not be repeated for additional credits.

This course examines the major aspects of social life in the Middle East from an anthropological perspective. Selected topics to be investigated include: kinship, social stratification, urbanization, colonialism, nationalism, migration, the state, violence, gender, sexuality, religious practice, popular culture, and neoliberalism. Emphasis will be placed on understanding the connections between cultural practices and political, economic, and social power.

Repeatability: This course may not be repeated for additional credits.
ANTH 2366. Urban America: An Anthropological Perspective. 3 Credit Hours.
This course offers both an introduction to the dominant questions in urban Anthropology and provides an opportunity to do fieldwork in the city, particularly to collaborate with a community-based program or agency and to explore how anthropologists do urban work. The purpose of this course is to connect students' field experiences with ideas and readings from the academic perspective of anthropology. In consultation with their sponsoring agencies, students will agree on what their volunteer responsibilities on-site will be. At the end of the semester, students will write a final paper for the course in which they incorporate material from the academic readings, their own field notes and any other relevant sources (agency reports, news articles, etc.).
Repeatability: This course may not be repeated for additional credits.

ANTH 2367. Peoples of South Asia. 3 Credit Hours.
An introduction to the peoples and cultures of the Indian subcontinent. The course will focus on the indigenous religions of India: Hinduism, Jainism, and Buddhism as well as Islam, Christianity, and Zoroastrianism as brought to western India by migrants.
Repeatability: This course may not be repeated for additional credits.

ANTH 2368. Peoples of the Pacific. 3 Credit Hours.
This is an upper level undergraduate course designed to engage students in studying the indigenous cultures of Australia, Melanesia, Polynesia, and Micronesia. There will be two primary emphases: first, the major issues in cultural anthropology that have been formed and informed by ethnographic data from Pacific societies; and second, the processes of change experienced by Pacific peoples in the last few decades. Specific topics include: (1) How the complexity of kin-based social organization among Australian aborigines influenced anthropological understanding of relationships among individuals and the formation of communities; (2) How and why the traditional sacred art of aboriginal Australia became a valued commodity in the global art market; (3) How the complex ceremonial exchange networks of Melanesia influenced theory in anthropology; (4) The dimensions and range of Melanesian ideas and behavior concerned with gender and sexuality; (5) How class stratification and political hierarchy developed in traditional Polynesian states such as Tahiti, Tonga, and Hawai'i; and (6) How colonialism and post-colonialism has been experienced across the Pacific. The course will be conducted as a seminar with some lectures by the instructor but with proportionately more discussions based on a core of shared readings and students' shared and individual explorations of Pacific cultures.
Repeatability: This course may not be repeated for additional credits.

ANTH 2373. Japanese Culture. 3 Credit Hours.
Introduction to traditional and contemporary Japanese culture. Topics covered include: early literature, aesthetic principles as expressed in art and architecture, religion, gender roles, Japan's shifting relationships with the outside world, rural communities and urban centers in the 20th century, and the construction of the self in modern Japan.
Repeatability: This course may not be repeated for additional credits.

ANTH 2374. The Anthropology of Modern China. 3 Credit Hours.
This course offers an introduction to the culture and society of the contemporary People's Republic of China. The first half of the course provides a historically and ethnographically contextualized examination of the dramatic transformations undergone by Chinese society over the last century, juxtaposing the pre-1949 Republican period against the tumultuous sociocultural and political economic changes in China in the decades immediately following the 1949 Chinese Communist Revolution, and, in particular, examining the impact of Maoist period and post-Mao period political-economic and sociocultural movements on the everyday lives of Chinese people in both rural and urban contexts. During the second half of the course, we will focus on recent ethnographic writings published by China anthropologists which, taken together, encompass such key issues as the contours of China's distinctive narrative of socialist modernity, the profound significance of the rural/urban divide in the post-1949 PRC; shifting PRC constructions of gender and sexuality and the impact of Maoist and post-Mao transformations on women's status, the statuses and representations of the more than 55 minority peoples who reside in China alongside Han Chinese and the emergence of ethnic tourism, the politics of rural health care, the nature of the relationship between Traditional Chinese Medicine and biomedicine, and the politics of HIV/AIDS in the PRC. We will also utilize a number of excellent ethnographic films throughout the course.
Repeatability: This course may not be repeated for additional credits.

ANTH 2396. Fundamentals of Cultural Anthropology. 3 Credit Hours.
An introduction to the basic concepts, methods, and theories of cultural anthropology. Through a variety of case studies from different parts of the world, the course will focus on the connections between culture, power, and representation. Emphasis will be placed on analyzing the process of ethnographic fieldwork and producing ethnographic texts.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

ANTH 2408. Fundamentals of the Anthropology of Visual Communication. 3 Credit Hours.
A survey of theoretical approaches to an anthropological understanding of visual/pictorial communication. Among the topics explored: theories of culture and communication, models of both social and visual communication, perception, cross-cultural aesthetics, non-verbal communication as well as photography, film, and mass media. Emphasis will be placed on the value of constructing ethnographies of visual/pictorial communication. This course has been designed for anthropology majors specializing in the studies of visual communication, but it is also useful for Sociology, FMA, and Mass Communication majors. Course consists of required readings, screenings, and active class participation. No exams. Students keep a journal and write several short papers.
Repeatability: This course may not be repeated for additional credits.
ANTH 2409. Introduction to the Production of Anthropological Media. 3 Credit Hours.
Formerly known as Introduction to Visual Production. Students who have completed Introduction to Visual Production will not receive additional credit for taking Introduction to the Production of Anthropological Media.<p>As the decreasing cost and increasing accessibility to visual technologies, such as DSLR cameras and video cameras, makes their inclusion in research projects a given rather than a rarity, the importance of training in their use increases proportionately. Through a series of lectures and practical exercises, students will gain skills in the uses and techniques of several important visual technologies, such as photography, videography (shooting footage), and video editing. Further, this course will contextualize these techniques within qualitative research (e.g. documentary filmmaking) more generally and anthropological and ethnographic research (e.g. participant-observation) more specifically. As the ethical and disciplinary demands of anthropology necessitate specific aesthetic and technical implementations by the visual anthropologist, the latter aspect is a crucial part of the course and will be of significant benefit to students wishing to conduct ethnographic research integrating visual methods and technologies.
Repeatability: This course may not be repeated for additional credits.

ANTH 2432. Indigenous Media. 3 Credit Hours.
This course critically reviews the relationships between ethnographic film and indigenous forms of self-representation in diverse media. Visual texts from several societies will be compared with each other and with examples of visual representation in contemporary Western societies. In the course we will examine pictorial forms by viewing and analyzing films and video programs made by indigenous individuals and associations. Examples will come from North and South America, Australia, and New Zealand. Through these examples issues of authorship and authority, the politics of representation and autonomy, and the values and limits of indigenous self-representation will be analyzed.
Repeatability: This course may not be repeated for additional credits.

ANTH 2434. Anthropology of Feature Films. 3 Credit Hours.
Formerly known as Anthropology in Feature Films. Students who have completed Anthropology in Feature Films will not receive additional credit for taking Anthropology of Feature Films.<p>Students will critically review a series of feature films that include topics, themes, and subject matter often treated within anthropology. It is clear that American feature films usually thought of as "Hollywood films" can be very influential in establishing or reinforcing social and cultural stereotypes of "states of knowledge" about peoples living in various parts of the world. The potential for influence and false senses of familiarity is enormous. In today's globalized community that is influenced by feature films from all regions of the world, this course attempts to incorporate many expressions of the feature film genre to form a composite whole. Japanese, Indian, Indonesian and other national cinemas will be shared, as will the emergent films made by the Naliput peoples of the 4th world. Peoples who are frequently known as natives, aborigine, local, indigenous, primitive, underdeveloped and tribal, are now makers of feature films and bring new dynamism to the genre to foster new perspectives of culture and communication.
Repeatability: This course may not be repeated for additional credits.

ANTH 2501. Language, Power, & Identity. 3 Credit Hours.
This course focuses on recent research by leading scholars in linguistic anthropology, examining the crucial role of language in issues of power, representation, and identity. The primary goal is to cultivate critical thinking about the complex relationships among language, society, and culture.
Repeatability: This course may not be repeated for additional credits.

ANTH 2507. Fundamentals of Linguistic Anthropology. 3 Credit Hours.
An introduction to linguistic anthropology, one of the four subdisciplines of American anthropology. This course takes an ethno-graphically informed approach to the relationships among language, culture, and society. It also examines the diversity of the world's 6,000+ languages as well as the enormously varied ways in which groups of people around the world use language and other communicative resources in their everyday lives.
Repeatability: This course may not be repeated for additional credits.

ANTH 2525. Maya Language and Culture. 3 Credit Hours.
This course will introduce students to the language and cultures of the Maya area of Mesoamerica. Students will acquire basic conversational elements of one of the Maya languages, study Maya culture, including the indigenous literature of the area where applicable, and generally gain a deeper understanding of this diverse part of Latin America.
Repeatability: This course may not be repeated for additional credits.

ANTH 2705. Fundamentals of Biological Anthropology. 4 Credit Hours.
An introduction to evolutionary theory and its applications to understanding the biology of past and present human populations. Includes basic principles of inheritance and molecular genetics, the genetics of human groups, and genetic models used to explain human biological variability and change. Our place in nature is illustrated by comparison with our non-human primate relatives and a consideration of evolutionary changes in human lineage illustrated by the fossil record. Evolutionary aspects of human development and an evolutionary perspective on epidemiology are also covered. NOTE: Students should complete this course before enrolling in any other upper-level biological anthropology course.
Repeatability: This course may not be repeated for additional credits.

ANTH 2763. Human Population Genetics. 3 Credit Hours.
This course is designed to acquaint the undergraduate major in Anthropology (especially those in the Human Biology specialization) with the fundamental concepts of population genetics with particular relevance to human genetics. Although the course, as indicated, has a particular emphasis on genetics, the influence of environmental effects will be especially appreciated in this course, as the impact of culture is so dramatic, even with respect to human genetic evolution.
Repeatability: This course may not be repeated for additional credits.
ANTH 2764. Primate Behavior. 3 Credit Hours.
This course provides an overview of the social behavior of our closest living relatives, and presents principles and current thinking in the field of behavioral ecology. We review the great taxonomic diversity of living primates, their geographic distribution, general ecology, and conservation status. The course introduces the theoretical approaches used to interpret non-human primate life-ways and social behavior and considers the application of evolutionary theory to interpreting human behavior.
Repeatability: This course may not be repeated for additional credits.

ANTH 2765. Human Osteology. 4 Credit Hours.
This course, presented in lecture/lab format, is designed to train advanced undergraduates to identify all of the components of the human skeleton. Students will learn the uses of the human skeleton in physical anthropology and archeology and, for those going on to clinical health programs, the course will provide a detailed understanding of the morphology and variation in the human skeleton that will be highly valuable in the gross and dental anatomy courses taught in clinical post-graduate programs. Also included are discussions of bone growth, kinesiology, individual reconstruction, forensic anthropology, and the use of regression analysis and discriminate functions. Some comparative (between-species) skeletal anatomy is also included.
Repeatability: This course may not be repeated for additional credits.

ANTH 2907. Honors Fundamentals of Linguistic Anthropology. 3 Credit Hours.
Linguistic anthropology, one of the four subfields of anthropology, is the interdisciplinary study of the relationships among language, culture, and society. Linguistic anthropology shares many of its basic units of analysis, and some of its working concepts, with linguistics, especially the subfield of sociolinguistics. However, unlike most linguistic approaches, which are mainly concerned with language structure, linguistic anthropology is rooted in ethnography and is primarily concerned with how the everyday use of language structures, and is structured by, socio-cultural forces. In Fundamentals of Linguistic Anthropology, we will pose, and seek to answer, a variety of questions about language and its relationships to culture and society. Possible questions include: Why do children all over the world acquire their first languages at about the same rate and age? How do children learn to use language in culturally specific, culturally appropriate ways? Why do groups of people who apparently share "the same language" speak and use it very differently? Does the language that one speaks affect the ways in which one thinks and experiences the world? How and why does a particular language variety come to be regarded as the "standard" variety, while others are regarded as "non-standard"? How and why does language use relate to important social variables, such as ethnicity, class, gender, age, education, and religion? What is the relationship between language and power? Why and how does cross-cultural miscommunication occur and what are its consequences?
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.

ANTH 3170. Methods in Archaeology. 3 Credit Hours.
A series of practical, topical courses that deal with aspects of archaeological fieldwork and laboratory analysis. The topic or focus of the course varies by semester and includes: field methods; pottery analysis; lithic analysis; sediments, soils and stratigraphy. Because the topic changes by semester, students may take Anthropology 3170 more than once.
Repeatability: This course may be repeated for additional credit.

ANTH 3171. Comparative Early Civilizations. 3 Credit Hours.
This comparative analysis of the rise of early civilizations uses archaeological and historical information to examine the development of ancient societies. It focuses on problems of the Neolithic revolution, the autochthonous transformation of kin-based communities into stratified societies and the subsequent formation and development of early class-based societies/states.
Repeatability: This course may not be repeated for additional credits.

ANTH 3172. Seminar in Northeastern Prehistory. 3 Credit Hours.
The archaeology and prehistory of the native peoples of the Middle Atlantic Region are examined in detail, and in the broader context of cultural developments in the Northeast and Eastern Woodlands of the United States. Although the seminar employs cultural historical periods as a way to present information, cultural diversity across time and space are emphasized. Basic descriptive data dealing with prehistoric cultures are presented, as well as the variety of interpretations of native lifeways upon which they are based. Included in the course is information derived from cultural resource management studies, the results of which are infrequently published.
Repeatability: This course may not be repeated for additional credits.

ANTH 3175. Heritage Management in Archaeology. 3 Credit Hours.
The United States and other governments of the world have legal mandates to manage cultural resources on behalf of the public. This course focuses on the archaeological component of cultural resources management in the United States and its linkage with environmental and developmental planning. Participants are given a working knowledge of how the system works, and how to work within it as a professional through a series of readings, classroom discussions, and hands-on exercises. Topic coverage includes: relevant legislation; the phased approach to archaeological and historical research; state and federal review procedures; proposal writing; interacting with clients, native peoples, and the public; professional ethics and standards. The nature of heritage management in other countries is considered for comparative purposes and as a way of illuminating the historical, socio-economic, and legal factors that have shaped the practice in the United States. NOTE: This course helps to satisfy topical requirements in the Anthropology major and the Environmental Studies major.
Repeatability: This course may not be repeated for additional credits.
ANTH 3177. Approaches to Historical Sites in Archaeology. 3 Credit Hours.
Students examine the central questions, values, and goals of historical archaeology, gaining a working knowledge of its basic concepts and methods. A material culture approach is used as archaeological objects are presented in sites where they express a series of concepts related to our understanding of status, wealth, self identity, consumerism, and symbolism. A holistic framework is used to present material evidence together with documentary, oral, and other data. A variety of sites will be examined in order to introduce many important subfields of historical archaeology such as battlefield archaeology, urban archaeology, industrial archaeology, and underwater archaeology. The course will also demonstrate how such evidence illuminates the modern world and its relevance to our own time and place.
Repeatability: This course may not be repeated for additional credits.

ANTH 3180. Topics in Archaeology. 3 Credit Hours.
A variable topic course that highlights the specialized interests and research of faculty and current trends in archaeological analysis, interpretation, and theory. Some examples of anticipated topics include: Northeastern Native American Prehistory, Origins of Food Production, Battlefield Archaeology, and the Archaeology of Philadelphia.
Repeatability: This course may be repeated for additional credit.

ANTH 3189. Field Session in Archaeology. 3 Credit Hours.
Techniques and concepts of field archaeology. Students will be expected to spend the greatest part of the session in the field during the excavation of prehistoric and historic sites. During summer sessions this course is taught in conjunction with Methods in Archaeology (Anthropology 3170).
Repeatability: This course may be repeated for additional credit.

ANTH 3301. History of Anthropological Theory. 3 Credit Hours.
This course historicizes, contextualizes, and explores the major theoretical schools in anthropology from the mid-19th century up through the present, including social evolutionism, historical particularism, structural-functionalism, cultural materialism, structuralism, symbolic anthropology, political-economy approaches, postcolonial critiques, feminist critiques, the crisis in ethnographic representation, and poststructuralist approaches.
Repeatability: This course may not be repeated for additional credits.

ANTH 3321. Folklore and Culture. 3 Credit Hours.
Far from being hidden or "dying," folklore thrives in public and private spheres both in everyday life and in extraordinary situations. It is invoked in nationalist and post-colonialist practices and, lately, also in global cultural productions. This course will explore the cultural attributes and functionings of folklore in its own terms and as a part of anthropology in various spaces, times, and groups. We will begin with a brief theoretical discussion on the connection between folklore, nationalism, and ethnic and regional identity, as well as popular and mass culture. Placing special emphasis on the emergent, unofficial aspects of vernacular culture, we will then examine how different groups communicate and construct their identity through folk narratives, proverbs, and jokes; folk art; spontaneous memorials; displays of the body, yards; the exchange of food; and the performance of music and dance during festivals, parades, and processions. In light of the currency of "tradition" and "heritage" in the public sphere - in school curricula, state sponsored programs, advertisement and museums - we will also look critically at the production of culture in the context of multiculturalism and identity politics, and the often ambiguous relation established between dominant or elite cultures and unofficial, vernacular cultures. Class discussions will be conducted in a seminar style and complemented with audio-visual materials. Short research exercises will provide students with first hand experiences with the cultural-anthropologist's craft of documenting and analyzing current folklore materials.
Repeatability: This course may not be repeated for additional credits.

ANTH 3322. Anthropology of the Global Economy. 3 Credit Hours.
Formerly known as Economic Anthropology. Students who have completed Economic Anthropology will not receive additional credit for taking Anthropology of the Global Economy. Anthropology of the Global Economy is the study of how economic systems articulate with culture on a variety of scales. This class examines basic paradigms of study in economic anthropology, theories of money and value, and ethnographies of exchange. We will look at how the commodification, production and/or sale of goods in formal, informal and black markets affect people in very different ways. We think through the role of the state, of religion, power struggles and advertising in shaping these markets. Format includes readings, lectures, film screenings, and discussions.
Repeatability: This course may not be repeated for additional credits.

ANTH 3324. Anthropology and Art. 3 Credit Hours.
This course examines the anthropology of art and "artworlds." While its emphasis is on non-western art, it maintains a comparative stance between unfamiliar and familiar visual traditions. Thus, by raising questions about western arts and their cultural contexts. Specific topics and cultures vary according to the interests and expertise of the instructor. Topics include comparative aesthetics, authenticity and "primitiveness," the commodification of art, tourist art, gender in the production and consumption of art, the influence of non-Western art objects and performances on European and North American cultures, conceptual systems and modes of viewing, the circumstance of encounter with objects, the modes of production and how objects are shared and valued, both in the culture in which they are initially made and in the culture they may be in now. Cultural contexts may include people and art from Aboriginal Australia, Africa, India, Indonesia, Japan, and Native America.
Repeatability: This course may not be repeated for additional credits.

ANTH 3325. Political Anthropology. 3 Credit Hours.
This course will examine anthropological approaches to political structure, political organization, and political action. We will begin by familiarizing ourselves with some of the basic attributes and cultural commitments of Enlightenment projects as well as liberal political theory. Topics may include anthropological analyses of colonialism, nationalism, state formation, development, corruption, social movements, and human rights. We will consider the culture of politics and the politics of culture in disparate contexts around the world. Throughout the course we will remain attentive to how anthropologists historically have studied politics, and how anthropological notions of politics have changed through time.
Repeatability: This course may not be repeated for additional credits.
ANTH 3326. Religion in Non-Western Cultures. 3 Credit Hours.
This course examines Creole religions in the Americas and the Caribbean, focusing on the often-misunderstood practices of Cuban Santería, Haitian Voodoo, Brazilian Candomblé, and U.S Orisha-Voodoo. By exploring their colonial, national, and transnational trajectories, differences in Portuguese, Spanish, and French colonial rule will become evident as we look at the historical, political, and religious conditions shaping processes of syncretism and mimesis. The unique multi-channeled, performative aspects of these creole religions will be explored in great detail and illustrated through video and music recordings of spiritual events in which divination, drumming, myth, dance, trance and healing come to life. Confronting practitioners' insider experiences with outsiders' exoticizing perceptions - stemming from either frightening Hollywoodian representations or romanticizing state and tourist productions - we will critically address the problematic, highly contested place that these heterodox religions and their practitioners occupy in contemporary societies.
Repeatability: This course may not be repeated for additional credits.

ANTH 3327. Globalization and Localization. 3 Credit Hours.
This course addresses issues of theory and method by means of an examination of cultural globalization processes and current debates about their effects on local cultures - one of the key tropes shared by both anthropological and nationalist projects. One of the main aims of this course is to question the unidirectionality implied in most global theories, and assess via combined macro and micro lenses not only the impact of global processes on particular local histories, but also how the sets of voices that are marginalized by global discourses re-enter them, speaking in them and to them. In other words, we will explore the relation between structured choices and agency. From this vantage point we will examine selected issues on nationalism, postcolonialism, modernity, transnationalism, and diaspora, as well as consumption, technology, tradition, heritage, ethnicity, and tourism. The first part of this course will examine the relation between theory and method in anthropological research on cultural globalization, especially the challenges for fieldwork in complex societies. The second part will test their applicability and validity through a close reading of ethnographic works and the screening of videos that examine various dilemmas arising from processes of cultural contact in complex societies. In addition to exploring globalization and localization issues in anthropology, this course should enable students to think through and apply different methodologies in writing their research projects for the course.
Repeatability: This course may not be repeated for additional credits.

ANTH 3328. Comparative Social Organization. 3 Credit Hours.
An introduction to the various social categories and groups found in human societies including: variation in marriage and the family, the role of kinship in establishing spatial and temporal links among human beings, age groups, castes, and class.
Repeatability: This course may not be repeated for additional credits.

ANTH 3331. Anthropology and Culture Change. 3 Credit Hours.
For the last three centuries, intellectual and popular discourses have advanced conflicting ideas about culture change as either a welcome sign of progress or a detrimental process of irremediable loss. Considering this tension as constitutive of the topic at hand, the first part of the course will critically examine various theoretical explanations for culture change, its causes and results, as well as the social currency of "culture" and "change" in various social projects; for example in social, religious, and artistic movements. This examination will also include the testing the conceptual vigor of terms such as acculturation, syncretism, creolization, and transculturation, some of which have been recently revamped by some social theorists to depict the flux, indeterminacy, and heterogeneity of the world under globalization, while ignoring their past use within discriminatory social tactics. Contemporary ethnographic case studies will offer an opportunity to examine these issues, particularly the ways in which flows of, as well as restrictions upon, capital, people, commodities, media, and ideologies are affecting the lives of diverse social groups in different parts of the world, some of which eagerly embrace change while others strategically resist it.
Repeatability: This course may not be repeated for additional credits.

ANTH 3333. The Anthropology of Tourism. 3 Credit Hours.
The anthropology of Tourism is an anthropology of peoples on the move, an encounter with the alien, the unfamiliar, the forgotten and the other. These journeys are anchored in an educational ethos and serve to make identity and opinion. Tourism today includes the pursuit of imagined and historic pasts, of transformational places of alterity, of the sensual and the experiential where knowing and partaking are constitutional and integral to learning about one's place in the world, one's community place as a unit of one among many, and where notions of a shared humanity often come face to face with an alien and sometimes forbidding other. Students will study the anthropological understanding of place, of travel, of history, of performance, of cuisine, of pilgrimage, of adventure, of ecology, of philanthropy, of alternate medicine, all expressions of the present day offerings of Tourism. They will engage with anthropological films that have examined the phenomenon of tourism in different parts of the world, in a discourse that recognizes the porosity of boundaries and the inherent hybridity of cultures.
Repeatability: This course may not be repeated for additional credits.

ANTH 3335. Anthropology and Social Policy. 3 Credit Hours.
This course explores the critical anthropology of social policy, an emerging new field. First, we will compare this kind of anthropology to closely related "applied anthropology" and "activist anthropology." The critical approach examines the disjunctures between the cultural constructions of policy targets created by experts (and the public) and the actual lived experiences of the targets themselves. Along with other critiques of the bureaucratic structures of national and international "helping" institutions and their assumptions of technocratic professionalism, we will explore the hidden aspects of power and control which lurk within the massive structures of policymaking and implementation in the past six decades.
Repeatability: This course may not be repeated for additional credits.

ANTH 3336. Sex Roles in Cross-Cultural Perspective. 3 Credit Hours.
A cross-cultural survey of the ways in which gender is used to define roles and statuses, with particular attention to the changing nature of sex roles in many contemporary cultures.
Repeatability: This course may not be repeated for additional credits.
ANTH 3337. Violence, War, and Revolution. 3 Credit Hours.
This course examines anthropological approaches to war, violence and peace. We will start by studying ethnographic approaches to violence, conflict and conflict resolution and related topics in traditional indigenous cultures, as well as recent critiques of the consequences of anthropological representations of indigenous peoples as fierce or gentle. We then turn to examine warfare and other kinds of collective violence in the contemporary world. Among the topics we will be examining will be state terror, terrorism, genocide, “small wars,” military culture in the United States, and peacemaking.
Repeatability: This course may not be repeated for additional credits.

ANTH 3355. Anthropology of Sexuality and Gender. 3 Credit Hours.
Formerly known as Gender Theory. Gender is arguably universally the primary category of social difference into which we (as humans) are socialized. This course takes an historically and ethnographically situated approach to understanding how sociocultural anthropologists have theorized gender, with a particular focus on feminist anthropology approaches to culture, power, and history. Throughout the course we will additionally explore the intersection of gender with such other statuses of social difference as sexuality, class, race, ethnicity, generation, education, and rural versus urban residence in a variety of global contexts.
Repeatability: This course may not be repeated for additional credits.

ANTH 3366. Violence: An Anthropological Approach. 3 Credit Hours.
In this seminar we will establish a set of key concepts with which to better understand the phenomenon of violence historically and in modern times. We begin with experiences of violence recorded by men and women in the past, focusing first on slavery and then on war and terrorism. In subsequent weeks we consider how words, pictures, and physical harm make violence, how violence silences people, and how it creates unsafe spaces. We will be concerned, too, with why and how violence is structured and expressed at home, in courts, in prisons, and in “business.”
Repeatability: This course may not be repeated for additional credits.

ANTH 3389. Fieldwork in Ethnography. 3 Credit Hours.
This class encourages students to explore the world around them from an ethnographer's perspective; that is, to observe, hear and listen to people and the settings around them with attention to history and the social, political, economic, and ideological structures that provide the context for actors' agency. We will conduct short fieldwork exercises, write fieldnotes and an analytic paper, and conduct an oral history interview. We will also consider what ethical issues fieldworkers encounter as they pursue their research, read classic and more recent examples of ethnographic writing, and engage in debate about different forms of anthropological methods and writing.
Repeatability: This course may not be repeated for additional credits.

ANTH 3433. Ethnographic Film. 3 Credit Hours.
Formerly known as Anthropological Film. Students who have completed Anthropological Film will not receive additional credit for taking Ethnographic Film. A review of major film styles useful for anthropological film and video in conjunction with an analysis of the role of film/video in anthropology. Topics will include relationships of anthropological and ethnographic films, the significance of historical and ideological contexts, comparisons to indigenous video and feature films, and problems in the communication of anthropological theory and insight through the film/video medium. A broad range of ethnographic films will be screened to illustrate a progression of work and variety in relationships of theory, subject matter, cultural context, production techniques and style, and expected audiences.
Repeatability: This course may not be repeated for additional credits.

ANTH 3436. Anthropology of New Media. 3 Credit Hours.
This course will expose students to the anthropological theory of New Media as well as traditional and newly emerging socio-cultural methodology. Building on long-standing anthropological analyses of media as a vehicle for cultural expression and a means for articulating and defining human culture, this course will train students both to analyze and produce New Media forms. Students will be required to combine the central methodologies of socio-cultural anthropology, such as interviewing and participant observation, with New Media participatory and interactive technologies for producing and analyzing data.
Repeatability: This course may not be repeated for additional credits.

ANTH 3438. Anthropology of Mass Media. 3 Credit Hours.
Mass media is a comparatively new topic of study for anthropology, which a century ago focused on supposedly pre-literate, pre-modern, traditional societies. Now, of course, anthropologists study people in cities as well as villages, in the U.S. and Europe as well as on remote islands, and even supposedly "exotic" groups have access to media, as rainforest residents wield video cameras and Africa is the world's fastest-growing cell phone market. Today the social life of media (books, magazines, TV, films, videocassettes, radio, e-mail, the Internet, telephones, billboards, etc.) is a vibrant and growing topic of interest within anthropology. Some of the questions anthropologists ask: What roles do media play in the circulation, transmission, and contestation of culture? How do media (and new media technologies) affect people's lives, and how do people transform and adapt media to fit their needs? What is the relation of the media to economic and political systems? What can we learn by paying attention to the specific details of how media are produced, used, and talked about? This course provides an introduction to theoretical and methodological tools used by anthropologists in studying media; a forum for critical analysis of media processes in the U.S. and around the world; and opportunities to do ethnographic research of media processes.
Repeatability: This course may not be repeated for additional credits.
ANTH 3439. Anthropology of Photography. 3 Credit Hours.
A critical examination of an anthropological approach to photography. Special attention will be given to a socio-cultural history of photography in the U.S. Examples from documentary, fine art, and commercial photographic genres will be shown, discussed, and compared to ethnographic studies. Field methods, models of analysis, and ethical issues will also be included. Required readings, active class participation. No exams. Students keep a journal and write several short essays. NOTE: Knowledge of camera technology and darkroom procedures is helpful but not required.
Repeatability: This course may not be repeated for additional credits.

ANTH 3444. Advanced Production of Anthropological Media. 3 Credit Hours.
Formerly known as Anthropological Problems in Visual Production. Students who have completed Anthropological Problems in Visual Production will not receive additional credit for taking Advanced Production of Anthropological Media. The introduction of visual recording techniques to a sample of problems in the anthropology of visual communication. Discussions will include ways anthropologists construct problems, develop observational strategies, select appropriate image-making technology, work in field conditions, among others. Strategies of representation connected to the integration of cultural and film theories will be explored in conjunction with a wide range of film examples. Students will be introduced to the department's production facilities and do short exercises in image making, viewing, and interpretation. NOTE: A lab fee may be necessary depending on the extent of each semester's assignments.
Repeatability: This course may not be repeated for additional credits.

ANTH 3509. Language Socialization and Cultural Reproduction. 3 Credit Hours.
This course examines how children and other novices, through interaction with older or otherwise more "expert" persons, acquire the culturally specific forms of knowledge, skills, orientations, and practices that enable them to become competent members of their communities. Topics explored include cross-cultural variation in ways of teaching and learning; socialization of children and of older novices (such as adult immigrants and job trainees) into new identities, roles, and statuses; and socialization processes as sites of cultural reproduction, innovation, and change. Ethnographic case studies from around the world are discussed and compared. Throughout the semester, using the resources of the Linguistic Anthropology Teaching Laboratory, students collect and analyze ethnographic audio-video data from various local settings (schools, churches, community organizations, workplaces, etc.) in which language socialization can be observed.
Repeatability: This course may not be repeated for additional credits.

ANTH 3510. Theory and Method in Linguistic Anthropology. 3 Credit Hours.
A variably themed seminar devoted to key issues in linguistic anthropology. The course's theme varies according to the instructor's research specializations and the curricular needs of students in the department. Contact Instructor for details. NOTE: This course satisfies the Methods requirement for the major in Anthropology.
Repeatability: This course may be repeated for additional credit.

ANTH 3536. Urban Dialects. 3 Credit Hours.
The primary focus of this course is on language variation as revealed in the diversity of regional and social dialects of American English. We will consider why dialects exist and vary; how dialects are manifested; and their social, economic, political, and educational consequences. We will examine the intersections between dialects and major social variables such as class, ethnicity, race, gender, occupation, education, and religion in order to understand how dialectal varieties map onto these variables. Another distinction of interest is between standard and non-standard dialects; we will investigate why such a distinction exists, the social functions of each dialect type, and why negatively stigmatized dialect types persist. This course provides training in the theory and methods of dialect study as well as mastery of key concepts associated with dialectal variation, the mapping of dialect boundaries, and the implications of dialectal diversity for social cohesion and educational achievement. Dialectal diversity within a specific urban environment, the city of Philadelphia, will provide the geographical template for in-depth study.
Repeatability: This course may not be repeated for additional credits.

ANTH 3589. Language as Social Action. 3 Credit Hours.
A variably themed seminar dealing with collection, analysis, and presentation of ethnographic data, emphasizing observation and audio-video recording of communicative practices, both verbal and non-verbal. Each seminar participant develops an independent research project involving fieldwork in local settings.
Repeatability: This course may be repeated for additional credit.

ANTH 3742. Human Paleontology. 3 Credit Hours.
Designed to familiarize students with both theoretical and methodological frameworks for interpreting the human fossil record with a review of the synthetic theory of evolution, socio-biological concepts, and procedures in taxonomy and phylogenetic reconstruction. Attention given to the origin of the human lineage and what the fossils of that lineage tell us about the evolution of anatomical systems that are peculiar to humans.
Repeatability: This course may not be repeated for additional credits.

ANTH 3743. Human Biology of Modern Populations. 3 Credit Hours.
An investigation of how advances in genomics have shaped the way physical anthropologists approach the study of living human populations. Students are introduced to basic concepts in the regulation of genetic expression and developmental genetics. Concepts from these two fields are discussed within the framework of evolutionary developmental biology, and we explore the implications of this new synthesis for the evolution of modern humans and modern human variation. Variation caused by changes in developmental timing is explored in terms of genetics (using selection and life history models) and non-genetic (epigenetic, phenotypic plasticity) response pathways to environmental conditions.
Repeatability: This course may not be repeated for additional credits.
ANTH 3744. Human Evolutionary Genetics. 3 Credit Hours.
Explores the hereditary variation in our species and its special relationship to disease incidences and susceptibilities. Emphasis on contrast between adaptations of traditional societies to infectious disease loads and contemporary societies with degenerative disease loads, and the genetic susceptibilities concerned.
Repeatability: This course may not be repeated for additional credits.

ANTH 3746. Human Reproduction: Evolutionary Perspectives. 3 Credit Hours.
This course surveys classic and contemporary literature on human life history evolution, reproductive physiology, and reproductive ecology. It begins by covering some basic information in life history theory and comparative reproductive biology. Secondly, it surveys key issues in the field organized by the stages and events of the life cycle using the following approach: what is the underlying physiology, how do humans compare to the non-human primates and what explanations have been proposed to account for our differences, what factors modulate the expression of life history characteristics among human populations? Duplicate Credit Warning: Students cannot receive credit for this course if they have successfully completed ANTH 4797.
Repeatability: This course may not be repeated for additional credits.

ANTH 3747. Human Growth and Development. 3 Credit Hours.
Understanding growth and development is essential to many aspects of the study of biological anthropology. In this course we will explore the biological processes that lead to the development of the bony skeleton, teeth, and various aspects of body composition. These measures of human growth and development are used in biological anthropology to understand human biological diversity, as well as to appreciate the influence of the genetics, the environment, and human behavior. Students will learn standard methods of assessment of growth and development used with studies of living and past human populations. After learning the basic principles of growth and development and how to measure them, we will explore specific anthropological applications.
Repeatability: This course may not be repeated for additional credits.

ANTH 3764. Primate Functional Morphology. 3 Credit Hours.
This course offers a survey of the living and fossil primates. It will look at the classification, behavior, and adaptations of living species from the level of the entire order down to the genus level. This comparative perspective will then be used to study the phylogeny of the order from its origins 60 million years ago to the present.
Repeatability: This course may not be repeated for additional credits.

ANTH 3770. Methods in Physical Anthropology. 4 Credit Hours.
Advanced undergraduate students will have the opportunity to develop individual research projects in biological anthropology, utilizing materials in the department collections and from department expeditions. Students will be introduced to problems in research design, sampling theory, research paper writing, and commonly used statistical techniques in biological anthropology, and will apply them in their project analyses.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
ANTH 2705|Minimum Grade of C-|May not be taken concurrently.

ANTH 3771. Quantitative Methods in Anthropology. 3 Credit Hours.
The primary goal of this course is to provide students with a solid grounding in basic statistical techniques/methods as applied to anthropological data. Such data is highly variable in form due, in part, to the diversity of research questions being asked and to the methods of collection. The ultimate goal of this course is to bring together various datasets and methods so that students might better assess the results/interpretations presented in the anthropological literature. New quantitative concepts will be presented each week along with examples/applications of the concepts and practice problems. The problems associated with the texts and other data sets will be solved using SPSS, statistical software which resides on all publically available university machines.
Repeatability: This course may not be repeated for additional credits.

ANTH 3772. Evolutionary Medicine. 3 Credit Hours.
This course explores the new field of evolutionary medicine which seeks adaptive explanations for why humans as a species are susceptible to certain diseases that are rare among other mammals. The course also asks why certain human populations are susceptible to disease and illness whereas others are not. In contrast, when physicians and biomedical researchers ask "why" a patient is sick they usually seek an explanation in the effect of a pathogen, the role of anatomical anomaly, a genetic mutation, exposure to an environmental toxin, the cause of physiological disregulation, or other proximate mechanisms including behavioral and cultural causes. Knowledge of how our biological adaptations and patterns of human biological variation contribute to disease susceptibility is beginning to inform therapeutic approaches in biomedicine and sometimes provokes extraordinary controversy and claims of racism or biological determinism. This course will conclude with a series of discussions and debates about the legitimacy of such critiques after students in the course have learned about evolutionary explanations for disease susceptibility.
Repeatability: This course may not be repeated for additional credits.
ANTH 3774. Environmental Physiology and Health. 3 Credit Hours.
There are two interrelated goals to this course. The first is to understand the nature of human physiological responses to environmental extremes. Here, in addition to understanding basic physiological responses to nutritional stress, climactic temperature and high altitude hypoxia, we will examine genetic and environmental causes of population differences. We also will critically evaluate adaptive hypotheses used to explain differences between human populations. The second goal is to write a scientific paper in a format acceptable for publication. To accomplish this, students will learn how to formulate and justify a hypothesis related to human physiological variation, develop an appropriate analytical strategy, test the hypothesis using a population-based data set, and interpret the results.

Repeatability: This course may not be repeated for additional credits
Pre-requisites: ANTH 2705|Minimum Grade of C-|May not be taken concurrently.

ANTH 3796. Evolutionary Biology. 3 Credit Hours.
This course will critically evaluate the ways evolutionary theory has been used to explain human and primate evolution and modern human biological diversity. Included will be lectures on, and discussion of, the history of evolutionary thinking, the sources of variation in human populations, evolutionary processes, behavioral ecology, the levels of selection and problems in phylogenetic reconstruction. Anthropologically relevant models will be used throughout the course.

Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites: ANTH 2705|Minimum Grade of C-|May not be taken concurrently.

ANTH 3910. Honors: Special Topics. 3 Credit Hours.
A variable topic Honors course. The topic of the course may vary by section number. Be sure to check with the instructor who is offering the given course and section to find out the specific course description in a given semester.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.

ANTH 4082. Independent Study. 1 Credit Hour.
Directed reading and research on a specific anthropological topic. NOTE: Does not count toward major requirements in Anthropology.

Repeatability: This course may be repeated for additional credit.

ANTH 4083. Independent Study. 3 Credit Hours.
Directed reading and research on a specific anthropological topic. NOTE: Does not count toward major requirements in Anthropology.

Repeatability: This course may be repeated for additional credit.

ANTH 4117. Seminar in Environmental Archaeology. 3 Credit Hours.
This course introduces the student to the techniques and disciplines used in conjunction with archaeology to understand the environmental context and paleo-ecology of prehistoric cultures, as well as the nature of the archaeological record itself. Included in this survey are geology, soil and sediment analysis, geomorphology, palynology, ethnobotany and general floral analysis, phytolith analysis, zooarchaeology, and the analysis of blood and other residues found on artifacts. The range of contributions possible from interdisciplinary research will be explored in addition to how to design such research, how to communicate with specialists in other fields, and how to use existing sources of data to solve archaeological problems.

Repeatability: This course may not be repeated for additional credits.

ANTH 4185. Internship in Anthropology. 3 Credit Hours.
This course provides hands-on, professional level work experiences for Anthropology majors focusing on the study of archaeology. It is designed for students who have already completed basic course work in archaeology, including the department's field school [Anthropology 3189 (0320) & 3170 (0321)]. Students will be placed with one of a number of firms in the region involved in cultural resource management studies where they will be employed in a variety of laboratory and field activities. The intensity and focus of the experience will be tailored to the particular needs or interests of the student, but minimally will involve 8 hours of effort per week.

Repeatability: This course may be repeated for additional credits.

ANTH 4196. Theory and Practice of Contemporary Archaeology. 3 Credit Hours.
This writing intensive course is the capstone seminar for anthropology majors with a focus on archaeology. This course is designed to provide students with an overview of the theoretical approaches that are currently employed in archaeological research and the methods utilized in putting these theories into practice. Students will be expected to design a research project that will include a field work component to collect data and a laboratory component to analyze the data. The research proposal will be written in sections (e.g. formulation of a research question; literature review; methods to be employed in carrying out the research; anticipated results and their significance); each section will be discussed in class, revised and resubmitted before moving on to the next section. The final proposal will be presented in class for feedback before the final written version is submitted at the end of the course.

Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.
ANTH 4397. Advanced Seminar in Medical Anthropology. 3 Credit Hours.
This course is designed for advanced undergraduate students interested in understanding special topics in the field of contemporary sociocultural medical anthropology. Previous topics taught include the following: the anthropology of the body, science and technology studies, the anthropology of Chinese medicines, and the anthropology of nutrition. Be sure to check with the instructor who is offering the course to find out the specific course description for any given semester. Note also that this course meets the capstone requirement of the human biology track major within the Anthropology Department (though note that you do not have to be a human biology track major to take the course), and that it serves as a writing intensive course.
NOTE: Be sure to read course description above carefully. This is a variable topics course in advanced medical anthropology that meets the capstone requirement for the human biology track major and is a writing intensive course. Be sure to contact course instructor for the specific topic any given semester.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

ANTH 4398. Research in Socio-Cultural Anthropology. 3 Credit Hours.
This course meets the capstone requirement for the general anthropology undergraduate major and is a writing-intensive course. It serves as the culminating experience of undergraduate training in the general anthropology major. As a capstone course, this class builds on and applies the theoretical, historical, and methodological approaches to which general anthropology majors have been exposed in previous course work. Over the course of the semester, students will explore the ethics of ethnographic field methods, as well as develop and engage an original research project. Course texts address the unique questions raised by distinct fieldwork settings, such as institutional contexts, multi-sited research, the study of elite populations, and marginalized sub-cultures. The book length ethnographies we will read are paired with theoretical texts from which ethnographers draw to develop their arguments. Students will be encouraged to consider how theory can provoke or prevent insight during ethnographic fieldwork. Students will expand their capacity to write well in the specific genres practiced and highly valued by socio-cultural anthropologists. A portion of class time will be devoted to peer writing review, instruction and analysis of ethnographic field notes, and interviewing techniques. Students will interpret their original ethnographic evidence and be asked to hone an argument, moving from practice to theory. Topics, conceptual approaches, and regional specialization will vary. Please contact the instructor for additional information.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

ANTH 4496. Research in Visual Anthropology. 3 Credit Hours.
As the required capstone course for the Visual Anthropology track in the major, students will review, integrate and operationalize what they have learned in previous coursework. By undertaking an original brief study in visual anthropology, students will participate in all phases of work including selecting a problem, formulating and writing a proposal, doing background library research, undertaking a period of fieldwork, data analysis, writing up findings and results, and making a final oral presentation. Students will be responsible for writing assignments at each stage of the process and a final report. Students may work individually or in pairs. Camera work is optional but encouraged.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites: (ANTH 2408|Minimum Grade of C-|May not be taken concurrently) AND (ANTH 3432|Minimum Grade of C-|May not be taken concurrently) OR ANTH 3433|Minimum Grade of C-|May not be taken concurrently) OR ANTH 3434|Minimum Grade of C-|May not be taken concurrently) OR ANTH 3435|Minimum Grade of C-|May not be taken concurrently) OR ANTH 3439|Minimum Grade of C-|May not be taken concurrently).

ANTH 4596. Capstone in Linguistic Anthropology. 3 Credit Hours.
Formerly known as Socio-Cultural Ecologies of Language. Students who have completed Socio-Cultural Ecologies of Language will not receive additional credit for taking Capstone in Linguistic Anthropology. This is one of the courses that meet the capstone requirement for the general anthropology undergraduate major. This is also a writing-intensive course, and it is designed for advanced undergraduate anthropology students interested in the mutually-constitutive intersections between language, culture, and social interaction. This course focuses on contemporary linguistic anthropology, as an autonomous sub-discipline, with its own research agenda and methods. The course readings feature a variety of book-length, linguistic anthropology ethnographies, as well as more general theoretical pieces that will be useful for considering different approaches. Through specific case studies drawn from a variety of ethnographic settings, this course explores how language structures and communicative practices are powerful semiotic resources for individual social actors and communities. Also, using the resources of the Linguistic Anthropology Laboratory, students will analyze data and examine how the socio-cultural organization of language use is not a mere reflection of pre-existing social structures and cultural practices, but is in fact constitutive of the latter.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

ANTH 4796. Biocultural Adaptations in Human Populations. 3 Credit Hours.
An evaluation of adaptation, selection, and ecological concepts as the bases for models integrating human biology and culture, and for explaining change.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.
ANTH 4798. Seminar in Human and Primate Evolution. 3 Credit Hours.
An in-depth review of the synthetic theory of evolution and special topics in evolutionary theory. Emphasis will be placed on human evolution, human bio-cultural adaptation, and evolutionary biology.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

ANTH 4897. Research in Biological Anthropology. 3 Credit Hours.
This is a writing-intensive capstone course in biological anthropology. It is designed to provide students with an opportunity to formulate a data-specific and testable research hypothesis concerning the cause of variation within human populations, or across primate species. Students will have access to a large number of faculty-generated data sets; and can therefore select a research project that fits their interests. Each phase of the research project (the development of hypotheses, the strategy used to test the hypothesis on one of the data sets, the selection of statistics used to analyze data, and the interpretation of results) will coincide with the construction of a section of a scientific paper. After each phase of the paper is written, it will be evaluated, discussed in class, revised, and re-presented. The result will be a final paper based on the research project, in a format that is suitable for presentation at a scientific meeting or publication in a scientific journal.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

ANTH 4982. Honors: Independent Study. 3 Credit Hours.
Directed reading and research on a specific anthropological topic.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.

Applied Behavior Analysis (ABA)

Courses
ABA 3301. Understanding Autism. 3 Credit Hours.
This course provides an overview of Autism Spectrum Disorders (ASD). Students will learn the cases, prevalence, diagnostic criteria, and related characteristics of the disorder, as well as behavioral manifestations. Students will also be introduced to the evidence-based practices developed to help children and adolescents with ASD to reach their full potential.
Repeatability: This course may not be repeated for additional credits.

Arabic (ARBC)

Courses
ARBC 0868. World Society in Literature & Film. 3 Credit Hours.
Learn about a particular national culture by taking a guided tour of its literature and film. You don't need to speak a language other than English to take this exciting course, and you will gain the fresh, subtle understanding that comes from integrating across different forms of human expression. Some of the issues that will be illuminated by looking at culture through the lens of literature and film include family structures and how they are changing, national self-perceptions, pivotal moments in history, economic issues, social change and diversity. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: Arabic 0968, Asian Studies 0868, Chinese 0868/0968, English 0868/0968, French 0868/0968, German 0868/0968, Hebrew 0868, Italian 0868/0968, Japanese 0868/0968, Jewish Studies 0868, Korean 0868, LAS 0868/0968, Political Science 0868/0968, Russian 0868/0968, or Spanish 0868/0968.
Course Attributes: GG
Repeatability: This course may not be repeated for additional credits.

ARBC 0871. Arts in Cultural Context. 4 Credit Hours.
View the arts as an expression of cultural identity as it occurs across the globe. Each semester, we will focus on a particular world region or country, including but not limited to Russia, Japan, and Latin America. The exploration of cultural identity begins with an overview of the region or country's historical and religious influences and then studies the culture's arts, including the visual arts (painting, sculpture), musical traditions, literature (folktales, national mythology), the vernacular arts (crafts, storytelling), film and theater. You will take field trips or have experiences that will allow you to encounter the region's arts firsthand, and to develop a blended understanding of a people's cultural identity and the larger world. NOTE: This course fulfills the Arts (GA) requirement for students under GenEd and Arts (AR) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: Asian Studies 0871, Hebrew 0871, Russian 0871.
Course Attributes: GA
Repeatability: This course may not be repeated for additional credits.
ARBC 0968. Honors World Society in Literature & Film. 3 Credit Hours.
Learn about a particular national culture by taking a guided tour of its literature and film. You don't need to speak a language other than English to take this exciting course, and you will gain the fresh, subtle understanding that comes from integrating across different forms of human expression. Some of the issues that will be illuminated by looking at culture through the lens of literature and film include family structures and how they are changing, national self-perceptions, pivotal moments in history, economic issues, social change and diversity. (This is an Honors course.) NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: Arabic 0868, Asian Studies 0868, Chinese 0868/0968, English 0868/0968, French 0868/0968, German 0868/0968, Hebrew 0868, Italian 0868/0968, Japanese 0868/0968, Jewish Studies 0868, Korean 0868, LAS 0868/0968, Political Science 0868/0968, Russian 0868/0968, or Spanish 0868/0968.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GG, HO
Repeatability: This course may not be repeated for additional credits.

ARBC 1001. Arabic Elements I. 4 Credit Hours.
First semester level of Arabic.
Course Attributes: LC
Repeatability: This course may not be repeated for additional credits

ARBC 1002. Arabic Elements II. 4 Credit Hours.
Second semester level of Arabic.
Course Attributes: LC
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ARBC 1001|Minimum Grade of C-|May not be taken concurrently.

ARBC 2000. Special Topics I. 3 Credit Hours.
Arranged each semester. Please consult with the instructor and/or check the course schedule for specific topic.
Repeatability: This course may be repeated for additional credit.

ARBC 2001. Arabic Intermediate I. 3 Credit Hours.
Third semester of Arabic.
Course Attributes: LC
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ARBC 1002|Minimum Grade of C-|May not be taken concurrently.

ARBC 2002. Arabic Intermediate II. 3 Credit Hours.
Fourth semester of Arabic.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ARBC 2001|Minimum Grade of C-|May not be taken concurrently.

ARBC 2010. Special Topics II. 3 Credit Hours.
Arranged each semester. Please consult with the instructor and/or check the course schedule for specific topic.
Repeatability: This course may be repeated for additional credit.

ARBC 202. Modern Arabic Literature in Translation. 3 Credit Hours.
Formerly known as Contemporary Arabic Literature (in Translation)-p-This course will survey some of the most important contemporary narratives of Arabic literature, with emphasis on their socio-political context. The timeline of the course runs from the end of World War II, the creation of Israel in 1948, and the 1952 Free Officers Revolution in Egypt up to the present. Historic events give us a framework for referencing the literary works. At the same time, we will consider novels, short stories, and poems as works of art on their own, inquiring into their narrative framework, aesthetic strategies, and position within the Arabic literary heritage. Critical and background readings will supplement literary texts. Occasionally we will have the opportunity to watch films that supplement the literature. All works will be in English and all films will be subtitled.
Repeatability: This course may not be repeated for additional credits.

ARBC 2021. Contemporary Arab Society in Film (in Translation). 3 Credit Hours.
This course uses film as a medium to explore contemporary social and political issues in the Arab Middle East. It investigates how filmmakers from the region narrate, represent and navigate particular historical events and conditions of the region. The films are coupled with readings that provide background and help to facilitate historical, cultural and, at times, aesthetic understandings of the narratives. The narratives begin roughly in the middle of the 20th century, and are arranged thematically - though a sense of historic consequence is evident. The films cover issues such as: feudalism and "socialist" revolution; Palestine after 1948 and the consequences in the Arab world; pan-Arabism; women, modernity, and the city; authoritarian states; religious extremism; war; immigration; and identity.
Repeatability: This course may not be repeated for additional credits.
ARBC 2900. Honors Special Topics I. 3 Credit Hours.
This is an Honors course. It is arranged each semester. Please consult with the instructor and/or check the course schedule for specific topic.
**Cohort Restrictions:** Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
**Course Attributes:** HO
**Repeatability:** This course may be repeated for additional credit.

ARBC 2910. Honors Special Topics II. 3 Credit Hours.
This is an Honors course. It is arranged each semester. Please consult with the instructor and/or check the course schedule for specific topic.
**Cohort Restrictions:** Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
**Course Attributes:** HO
**Repeatability:** This course may be repeated for additional credit.

ARBC 3000. Special Topics III. 3 Credit Hours.
Arranged each semester. Please consult with the instructor and/or check the course schedule for specific topic.
**Repeatability:** This course may be repeated for additional credit.

ARBC 3001. Arabic Advanced I. 3 Credit Hours.
Fifth semester of Arabic.
**Repeatability:** This course may not be repeated for additional credits
**Pre-requisites:**
ARBC 2002|Minimum Grade of C-|May not be taken concurrently.

ARBC 3002. Arabic Advanced II. 3 Credit Hours.
Sixth semester of Arabic.
**Repeatability:** This course may not be repeated for additional credits
**Pre-requisites:**
ARBC 3001|Minimum Grade of C-|May not be taken concurrently.

ARBC 3010. Special Topics IV. 3 Credit Hours.
Arranged each semester. Please consult with the instructor and/or check the course schedule for specific topic.
**Repeatability:** This course may be repeated for additional credit.

ARBC 4183. Arabic Directed Readings I. 3 Credit Hours.
Arranged each semester. Please consult with the instructor.
**Repeatability:** This course may be repeated for additional credit.
**Pre-requisites:**
ARBC 3002|Minimum Grade of C-|May not be taken concurrently.

ARBC 4283. Arabic Directed Readings II. 3 Credit Hours.
Arranged each semester. Please consult with the instructor.
**Repeatability:** This course may be repeated for additional credit.
**Pre-requisites:**
ARBC 3002|Minimum Grade of C-|May not be taken concurrently.

Architecture (ARCH)

Courses

ARCH 0835. Guerrilla Altruism: A Mini- Manual of Subversive Activism. 3 Credit Hours.
A multi-disciplinary investigation into the unorthodox strategies deployed by contemporary guerrilla artists and activists, reformers and humanitarians, eventually culminating in the design and realization of one or more small-scale humanitarian interventions within Temple's surrounding communities.
**NOTE:** This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core.
**Course Attributes:** GB
**Repeatability:** This course may not be repeated for additional credits.

ARCH 0935. Honors Guerrilla Altruism: A Mini-Manual of Subversive Activism. 3 Credit Hours.
A multi-disciplinary investigation into strategies deployed by contemporary community based architects, artists and activists. The course engages community groups and results in collaborative planning and design strategies, proposals, and projects in Philadelphia and surrounding communities.
**NOTE:** This course fulfills the Human Behavior (GB) requirement for students under GenEd.
**Cohort Restrictions:** Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
**Course Attributes:** GB, HO
**Repeatability:** This course may not be repeated for additional credits.
ARCH 0975. Honors Architecture & the American Cultural Landscape: Physical Dimensions of Cultural Settings. 3 Credit Hours.
This course examines the cultural richness of Architecture and the layered American landscapes – urban and rural – in order to gain an understanding of their physical and historical contexts over time. Through investigation of select settings at various scales and regions, students will learn to examine architecture in relation to the natural, infrastructural, and socio-political determinants of our physical environment in order to better account for the appearance, repercussions, and potential of the American cultural landscape.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GU, HO
Repeatability: This course may not be repeated for additional credits.

ARCH 1001. Introduction to Design and the Environment. 3 Credit Hours.
An introduction to the complex and contingent relationship between architects and the environments in which they intervene. Using contemporary and historical materials, students will begin to understand how architects establish and position design processes in response to their social, technological, and material situations. Coursework includes both position papers in response to particular reading topics as well as diagrammatic interrogations of the city around us. NOTE: (1) Open to non-majors. (2) A required course for all students interested in majoring in architecture and an elective university Core course in the Arts category. (3) This course can be used to satisfy the university Core Arts (AR) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university Gen Ed requirements. See your advisor for further information.
Course Attributes: AR
Repeatability: This course may not be repeated for additional credits.

ARCH 1011. Visual Literacy for Architects 1. 3 Credit Hours.
This course focuses on the development of visual literacy, graphic techniques, and 3D formal exploration. Through projects supported by research, graphically-based exercises, and formal investigations, students will be exposed to the process of representation in architecture. Units dealing with line, patterning, surface articulation, form, and assembly will be explored through 2D and 3D analog constructions. Thematic concepts linked to each unit will be presented through the work and representation of architects and artists. NOTE: Course previously titled "Design Representation I."
Field of Study Restrictions: Must be enrolled in one of the following Majors: Architecture, Architecture Undeclared, Facilities Management, Architectural Preservation
Repeatability: This course may not be repeated for additional credits.

ARCH 1012. Visual Literacy for Architects 2. 3 Credit Hours.
This course continues to focus on the development of visual literacy, graphical techniques, and 3D formal exploration. Through projects supported by research, graphically-based exercises, and formal investigations, students will be exposed to the process of representation in architecture. Methods of deconstruction and filtering, narrative assemblies, motion systems, propositional imagery, and visual assembly will be explored through 2D and 3D analog and digital constructions. Thematic concepts linked to each unit will be presented through the work and representation of architects and artists. NOTE: Course previously titled "Design Representation II."
Field of Study Restrictions: Must be enrolled in one of the following Majors: Architecture, Architecture Undeclared, Facilities Management, Architectural Preservation
Repeatability: This course may not be repeated for additional credits.

ARCH 1013. Architectural Representation for Non-Majors. 3 Credit Hours.
Introduction to architectural representation and design. This is a studio based course for non-majors. Students are introduced to 2D and 3D architectural design graphic techniques, and engage in drawing and model making in a studio setting. Note: This course may not count as an Architecture elective course for the BS in Architecture, BS in Facilities Management or BS in Architectural Preservation.
Repeatability: This course may not be repeated for additional credits.

ARCH 1017. Photography and Visual Literacy. 3 Credit Hours.
Photography is explored as a visual language, complete with vocabulary, syntax, and modes of expression. This course introduces the principles of visual design that are particularly important for creating articulate and aesthetically engaging photographs. Using their own digital cameras, students develop sufficient technical competence to be able to make photographs that investigate the fundamental issues of visual design, in the context of environmental studies. NOTE: This course can be used to satisfy the university Core Arts (AR) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: AR
Repeatability: This course may not be repeated for additional credits.

ARCH 1031. Design Fundamentals I. 4 Credit Hours.
Exploration of the fundamental principles of design, with an emphasis on the body in the natural landscape; introduction to landscape research and site analysis; consideration of design logics drawn from nature - natural systems, processes and patterns; introduction to the desk critique and design review as teaching methods.
Repeatability: This course may not be repeated for additional credits.

ARCH 1032. Design Fundamentals II. 4 Credit Hours.
Geometry, measurement and fabrication processes as the basis of design; consideration of material processes of form making and methods of assembly - stacking, folding, bending, folding etc.; development of rigorous design thinking through making; integration of material, craft, tectonic and visual practice; further development of the desk critique and design review as teaching methods.
Repeatability: This course may not be repeated for additional credits.
ARCH 1196. History of Form of Cities. 3 Credit Hours.
Study of the physical design of cities with particular emphasis on the emergence of settlement patterns and their relationship to landforms and social intentions. NOTE: This course can be used to satisfy a university Core Arts (AR) and Writing Intensive (WI) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: AR
Repeatability: This course may not be repeated for additional credits.

ARCH 1996. Honors History of Form of Cities. 3 Credit Hours.
Study of the physical design of cities with particular emphasis on the emergence of settlement patterns and their relationship to landforms and social intentions. NOTE: This course can be used to satisfy a university Core Arts (AR) and Writing Intensive (WI) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: AR, HO
Repeatability: This course may not be repeated for additional credits.

ARCH 2121. Foundation Architectural Design 1. 4 Credit Hours.
The development of design logics drawn from natural systems, processes and measurement; introduction to landscape research and site analysis; development of the desk crit as a teaching method; craft based modes of drawing, model making, and visualization; emphasis on graphic and spatial relationships, active plotting and site analysis. Scale: the body in the natural landscape.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Architecture, Architecture Undeclared, Facilities Management, Architectural Preservation
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(ARCH 1011|Minimum Grade of C-|May not be taken concurrently
OR AR11 Y|May not be taken concurrently)
AND (ARCH 1012|Minimum Grade of C-|May not be taken concurrently
OR AR12 Y|May not be taken concurrently).

ARCH 2122. Foundation Architectural Design 2. 4 Credit Hours.
Developing rigorous design thinking through making and the integration of material, craft, tectonic and visual practice. Further development of the design crit plus methods of communicating design objectives. Scale: artifact, body and spatial envelope.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Architecture, Architecture Undeclared, Facilities Management, Architectural Preservation
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(ARCH 1011|Minimum Grade of C-|May not be taken concurrently
OR AR11 Y|May not be taken concurrently)
AND (ARCH 1012|Minimum Grade of C-|May not be taken concurrently
OR AR12 Y|May not be taken concurrently)
AND (ARCH 2121|Minimum Grade of C-|May not be taken concurrently
OR AR21 Y|May not be taken concurrently).

ARCH 2123. Facility Management Foundation I. 3 Credit Hours.
Studio with a focus on interior architecture, space occupation, and qualities of space. Analysis and practical application of use of space, adjacencies, to provide a general understanding of place making, methods of construction, tectonics and detailing as design concerns; introduction to precedent study as research technique.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Architecture, Architecture Undeclared, Facilities Management, Architectural Preservation
Co-requisites: ARCH 2153
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(ARCH 1011|Minimum Grade of C-|May not be taken concurrently
OR AR11 Y|May not be taken concurrently)
AND (ARCH 1012|Minimum Grade of C-|May not be taken concurrently
OR AR12 Y|May not be taken concurrently).

ARCH 2124. Facility Management Foundation II. 3 Credit Hours.
Study of the principles and methods of facility management. Use of precedent study in understanding the value of the built environment. Further development of research techniques in facility management.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Architecture, Architecture Undeclared, Facilities Management, Architectural Preservation
Co-requisites: ARCH 2153
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(ARCH 1011|Minimum Grade of C-|May not be taken concurrently
OR AR11 Y|May not be taken concurrently)
AND (ARCH 1012|Minimum Grade of C-|May not be taken concurrently
OR AR12 Y|May not be taken concurrently).

ARCH 2221. Foundation Architectural Design 3. 4 Credit Hours.
The development of design logics drawn from natural systems, processes and measurement; introduction to landscape research and site analysis; development of the desk crit as a teaching method; craft based modes of drawing, model making, and visualization; emphasis on graphic and spatial relationships, active plotting and site analysis. Scale: the body in the natural landscape.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Architecture, Architecture Undeclared, Facilities Management, Architectural Preservation
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(ARCH 1011|Minimum Grade of C-|May not be taken concurrently
OR AR11 Y|May not be taken concurrently)
AND (ARCH 1012|Minimum Grade of C-|May not be taken concurrently
OR AR12 Y|May not be taken concurrently)
AND (ARCH 2121|Minimum Grade of C-|May not be taken concurrently
OR AR21 Y|May not be taken concurrently).

ARCH 2222. Foundation Architectural Design 4. 4 Credit Hours.
Developing rigorous design thinking through making and the integration of material, craft, tectonic and visual practice. Further development of the design crit plus methods of communicating design objectives. Scale: artifact, body and spatial envelope.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Architecture, Architecture Undeclared, Facilities Management, Architectural Preservation
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(ARCH 1011|Minimum Grade of C-|May not be taken concurrently
OR AR11 Y|May not be taken concurrently)
AND (ARCH 1012|Minimum Grade of C-|May not be taken concurrently
OR AR12 Y|May not be taken concurrently)
AND (ARCH 2122|Minimum Grade of C-|May not be taken concurrently
OR AR22 Y|May not be taken concurrently).

ARCH 2223. Facility Management Foundation III. 3 Credit Hours.
Study of the principles and methods of facility management. Use of precedent study in understanding the value of the built environment. Further development of research techniques in facility management.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Architecture, Architecture Undeclared, Facilities Management, Architectural Preservation
Co-requisites: ARCH 2153
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(ARCH 1011|Minimum Grade of C-|May not be taken concurrently
OR AR11 Y|May not be taken concurrently)
AND (ARCH 1012|Minimum Grade of C-|May not be taken concurrently
OR AR12 Y|May not be taken concurrently).

ARCH 2224. Facility Management Foundation IV. 3 Credit Hours.
Study of the principles and methods of facility management. Use of precedent study in understanding the value of the built environment. Further development of research techniques in facility management.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Architecture, Architecture Undeclared, Facilities Management, Architectural Preservation
Co-requisites: ARCH 2153
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(ARCH 1011|Minimum Grade of C-|May not be taken concurrently
OR AR11 Y|May not be taken concurrently)
AND (ARCH 1012|Minimum Grade of C-|May not be taken concurrently
OR AR12 Y|May not be taken concurrently).
ARCH 2124. Facility Management Foundation II. 3 Credit Hours.
Studio with environmental sustainability focus for facility management - energy and resource use, hydrology, sustainable materials, infrastructure and building methods, recycling, environmental performance and quality; emphasis on systems and details (very large and very small); development of techniques for environmental analysis (observation, data analysis, etc.); development of ecological and environmentally responsive design proposals; program development; introduction to design collaboration.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Architecture, Architecture Undeclared, Facilities Management, Architectural Preservation

Co-requisites: ARCH 2154
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ARCH 2121|Minimum Grade of C-|May not be taken concurrently
OR AR21 Y|May not be taken concurrently
OR ARCH 2123|Minimum Grade of C-|May not be taken concurrently
OR AR23 Y|May not be taken concurrently.

ARCH 2141. Architectural History: Ancient through Renaissance. 3 Credit Hours.
Traces the history of Western architecture from the ancient world to the high renaissance and mannerism of the late 16th century. The evolution of architectural thought, various formal languages (styles) and theoretical concepts are studied through the examination of selected buildings within their specific political, social, economic, and cultural milieu. Emphasis on the analysis of the ancient temple and the Christian church. NOTE: This course can be used to satisfy the university Core Arts (AR) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: AR
Repeatability: This course may not be repeated for additional credits.

ARCH 2142. Architectural History: Renaissance through 20th Century. 3 Credit Hours.
Traces the history of Western architecture from the 17th century through the 20th century. The evolution of architectural thought, various languages (styles) and theoretical concepts studied through the examination of selected buildings within their specific political, social, economic, and cultural milieu. Analysis of the significant buildings of the baroque and rococo, the neo-classic and the romantic, modernist, and post-modernism periods. NOTE: This course can be used to satisfy the university Core Arts (AR) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: AR
Repeatability: This course may not be repeated for additional credits.

ARCH 2151. Architecture, Technology, and the Environment. 3 Credit Hours.
Introduction to behavioral, environmental and technological factors in relation to the building design process. Basic exploration of functional, sustainable and material aspects of architecture.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Architecture, Architecture Undeclared, Facilities Management, Architectural Preservation

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(ARCH 1001|Minimum Grade of C-|May not be taken concurrently
OR AR01 Y|May not be taken concurrently)
AND (ARCH 1011|Minimum Grade of C-|May not be taken concurrently
OR AR11 Y|May not be taken concurrently).

ARCH 2153. Facility Management Case Study Research I. 1 Credit Hour.
Case study research course focused on available products and applications of architectural interiors. This is a one-credit lab component for ARCH 2123: Facility Management Foundation I.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Architecture, Architecture Undeclared, Facilities Management, Architectural Preservation

Co-requisites: ARCH 2123
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(ARCH 1011|Minimum Grade of C-|May not be taken concurrently
OR AR11 Y|May not be taken concurrently)
AND (ARCH 1012|Minimum Grade of C-|May not be taken concurrently
OR AR12 Y|May not be taken concurrently).
ARCH 2154. Facility Management Case Study Research II. 1 Credit Hour.
Case study research course focused on available products, applications, and issues pertaining to sustainable architecture. This is a one-credit lab component for ARCH 2124: Facility Management Foundation II.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Architecture, Architecture Undeclared, Facilities Management, Architectural Preservation
Co-requisites: ARCH 2124
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ARCH 2121|Minimum Grade of C-|May not be taken concurrently
OR AR21 Y|May not be taken concurrently
OR ARCH 2123|Minimum Grade of C-|May not be taken concurrently
OR AR23 Y|May not be taken concurrently.

ARCH 2941. Honors Architectural History: Ancient through Renaissance. 3 Credit Hours.
Traces the history of Western architecture from the ancient world to the high renaissance and mannerism of the late 16th century. The evolution of architectural thought, various formal languages (styles) and theoretical concepts are studied through the examination of selected buildings within their specific political, social, economic, and cultural milieu. Emphasis on the analysis of the ancient temple and the Christian church. NOTE: This course can be used to satisfy the university Core Arts (AR) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: AR, HO
Repeatability: This course may not be repeated for additional credits.

ARCH 2942. Honors Architectural History: Renaissance through the 20th Century. 3 Credit Hours.
Traces the history of Western architecture from the 17th century through the 20th century. The evolution of architectural thought, various languages (styles) and theoretical concepts studied through the examination of selected buildings within their specific political, social, economic, and cultural milieu. Analysis of the significant buildings of the baroque and rococo, the neo-classic and the romantic, modernist, and post-modernism periods. NOTE: This course can be used to satisfy the university Core Arts (AR) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: AR, HO
Repeatability: This course may not be repeated for additional credits.

ARCH 3010. Seminar: Special Topics in Communications. 3 Credit Hours.
Special seminar in dealing with communications in the field of architecture. Topic varies with year and instructor. Consult Architecture Program office. NOTE: May be taken more than once for credit, when each topic is unique.
Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
Repeatability: This course may be repeated for additional credit.

ARCH 3012. Computer Aided Facility Management. 3 Credit Hours.
Consideration of current trends and practices in computer aided facility management (CAFM), computerized maintenance management systems (CMMS) and integrated computer-aided design (CAD) applications and databases.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Facilities Management
Repeatability: This course may not be repeated for additional credits.

ARCH 3013. Project Planning & Programming. 3 Credit Hours.
A course covering the general processes related to the planning, programming, design, construction and occupancy of facilities, including long range, strategic and tactical planning, the relationship between facility planning and business planning, organization of sites, buildings and interiors. Also covered are specific tools and techniques for these functions, including design and construction documentation and contracts, facility inventories, space planning and relocation management, construction and installation specifications, value engineering, post-occupancy evaluation, contract management and cost estimating techniques.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Architecture, Architecture Undeclared, Facilities Management, Architectural Preservation
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(ARCH 1011|Minimum Grade of C-|May not be taken concurrently
OR AR11 Y|May not be taken concurrently)
AND (ARCH 1012|Minimum Grade of C-|May not be taken concurrently
OR AR12 Y|May not be taken concurrently)
AND (ARCH 2121|Minimum Grade of C-|May not be taken concurrently
OR AR21 Y|May not be taken concurrently)
OR (ARCH 2123|Minimum Grade of C-|May not be taken concurrently
AND ARCH 2153|Minimum Grade of C-|May not be taken concurrently)).
ARCH 3020. Special Topics Studio. 6 Credit Hours.
Special design studio. Topics vary with year and instructor. Consult Architecture office for more information.
Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
Repeatability: This course may be repeated for additional credit.

ARCH 3030. Special Topics in Design. 3 to 6 Credit Hours.
Special studio dealing with issues of architectural design. Topics vary with year and instructor. Consult Architecture office for more information. May be taken more than once for credit when each topic is unique. NOTE: Architecture majors only.
Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
Repeatability: This course may be repeated for additional credit.

ARCH 3040. Seminar: Special Topics in History and Theory. 3 Credit Hours.
Special seminar dealing with history and theory of architecture. Topics vary with year and instructor. Consult Architecture Program office for more information. NOTE: Course may be taken more than once when each topic is unique.
Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
Repeatability: This course may be repeated for additional credit.

ARCH 3050. Seminar: Special Topics in Technology. 3 Credit Hours.
Special seminar dealing with technology in the field of architecture. Topics vary with year and instructor. Consult Architecture Program office for more information. NOTE: Course may be taken more than once when each topic is unique.
Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
Repeatability: This course may be repeated for additional credit.

ARCH 3070. Seminar: Special Topics in Site and Context. 3 Credit Hours.
Special seminar dealing with issues of site and context in the field of Architecture. Topics vary with year and instructor. Consult Architecture program office for more information. NOTE: May be taken more than once for credit when each topic is unique.
Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
Repeatability: This course may be repeated for additional credit.

ARCH 3080. Seminar: Special Topics in Behavior & Culture. 3 Credit Hours.
Special seminar dealing with issues of behavior and culture in the field of architecture. Topics vary with year and instructor. Consult architecture department office for more information.
Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
Repeatability: This course may be repeated for additional credit.

ARCH 3096. Vernacular Architecture. 3 Credit Hours.
Study of vernacular architecture as an embodiment of site, culture, indigenous materials and craft.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Architecture, Facilities Management, Architectural Preservation
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

ARCH 3097. Introduction to Facility Management. 3 Credit Hours.
Overview of the profession of facility management, including the organizational, managerial, ethical and legal principles behind facility management services. The course includes the history of facility management and related professions, concepts, roles and responsibilities of the profession, basic facility management functions and techniques, organizational issues (including corporate culture, relationships between facility units and other organizational divisions, facility management and industry structure, etc.) and codes and other regulatory issues. The course is writing intensive.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Facilities Management
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Science
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

ARCH 3111. Introduction to Architectural Preservation. 3 Credit Hours.
This course introduces students to the scope of architectural conservation, preservation and adaptive reuse, their histories, philosophies and theoretical bases. It introduces techniques for the preservation of buildings, including those for observation, recording and intervention.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Architectural Preservation
Repeatability: This course may not be repeated for additional credits.

ARCH 3146. Engaging Places: Observations. 2 Credit Hours.
This course introduces students to the study of buildings and public places in Philadelphia using a set series of investigative and observation methods.
Repeatability: This course may not be repeated for additional credits.
ARCH 3152. Materials and Methods. 4 Credit Hours.
Introduction to construction materials, fundamentals of building construction, methods of assembling building systems in an integrated manner, and costing. Introduces specific regulatory issues dealing with zoning regulations, building codes, and barrier-free access requirements within the context of contemporary building techniques. Methods of construction in wood, masonry, concrete, and steel are described in detail and issues of enclosure, roofing, insulation, and finishes are presented. The course carries technical drawing requirements.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Architecture, Architecture Undeclared, Facilities Management, Architectural Preservation
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(ARCH 2151|Minimum Grade of C-|May not be taken concurrently
OR AR51 Y|May not be taken concurrently)
AND (MATH 1031|Minimum Grade of C-|May not be taken concurrently)
AND (PHYS 1021|Minimum Grade of C-|May not be taken concurrently).

ARCH 3174. Site Investigations. 3 Credit Hours.
The course focuses on the discourse on urban form, the environment and design process that has emerged since the middle of the 20th century. It will examine theories and projects that address the integration of architecture, landscape and urbanism, so that students will be better prepared to address complex issues surrounding building sustainable environments. The subject is explored through readings, lectures, and case studies. NOTE: This course is offered to Bachelor of Architecture majors only.
Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(ARCH 2121|Minimum Grade of C-|May not be taken concurrently
OR AR21 Y|May not be taken concurrently)
AND (ARCH 2122|Minimum Grade of C-|May not be taken concurrently
OR AR22 Y|May not be taken concurrently).

ARCH 3196. Architecture History Non-Western. 3 Credit Hours.
An examination of non-western architecture from its ancient and primitive beginnings to its contemporary expressions, focusing on Africa, the Middle East, the Far East and Southeast Asia, India, and Pre-Colombian America. Special emphasis is placed on the understanding of non-western religions Islam, Hinduism, and Buddhism, and also on Judaism, and on the shaping of appropriate worship places.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ARCH 2141|Minimum Grade of C-|May not be taken concurrently
OR AR41 Y|May not be taken concurrently.

ARCH 3212. Introduction to CAD. 3 Credit Hours.
This lecture and hands-on lab course will introduce students to the implementation of CADD and other integrated software within the field of Architecture.
Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
Repeatability: This course may not be repeated for additional credits.

ARCH 3231. Architectural Design III. 6 Credit Hours.
Sustainable urban design studio, at a neighborhood scale; development of a variety of techniques to analyze, map, represent and generate urban environments - geographical, economic, social, cultural, formal; development of urban program; collaboration within a group and with aligned fields - real estate, planning, civic, neighborhood etc.; introduction of peer critique and self evaluation.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Architecture, Bach of Sci in Architecture
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(ARCH 2122|Minimum Grade of C-|May not be taken concurrently
OR AR22 Y|May not be taken concurrently).

ARCH 3232. Architectural Design IV. 6 Credit Hours.
Elective studio: Students will select from a range of the studio topics, with offerings depending on faculty expertise. Topics will be drawn from the following: Innovation, materials and fabrication studio; Interdisciplinary studio; Big and complex building studio; Community design studio; Global urban systems studio. Not all topics will be offered every year.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Architecture, Bach of Sci in Architecture
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ARCH 3231|Minimum Grade of C-|May not be taken concurrently.
ARCH 3233. Architecture Design Studio in Tokyo (Undergraduate). 6 Credit Hours.
Complex design investigation incorporating analysis of urban systems, observational research, data collection and analysis and the study of architectural
precedent. This course aims to develop understandings of a foreign architectural and urban culture and how to engage it and promotes cosmopolitan
values. Scale: variable.
Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
Repeatability: This course may not be repeated for additional credits.

ARCH 3234. Architectural Design Studio in Rome. 6 Credit Hours.
Architectural design studio at the Rome Campus with noted architectural faculty from Italy. Special application required. Consult Architecture Department
office for more information. Course may be used to satisfy one of the upper level studios [Architecture 3231 (0231), 3232 (0232), or 4332 (0332)] but
may only be taken once.
Repeatability: This course may not be repeated for additional credits.

ARCH 3241. Seminar Analysis of Urban Structure in Rome. 3 Credit Hours.
Research on urban systems and forms that have marked the development of Italian and Roman architecture from the 15th to the 18th century and that
are now a reference point in every Western city: the piazza, the Roman palazzo, the theater, the garden. The course is intended to be a theoretical and
analytical complement to the Rome Campus design course.
Repeatability: This course may not be repeated for additional credits.

ARCH 3242. Urban Seminar in Tokyo (Undergraduate). 3 Credit Hours.
This course provides students an overview of architecture and urbanization in historic and contemporary Japan. Economic, socio-political and
technological forces that have shaped the built environment and architecture are discussed and the work of contemporary Japanese architects are
studied and analyzed. The course is a theoretical and analytical complement to the Architecture Design Studio.
Repeatability: This course may not be repeated for additional credits.

ARCH 3251. Structural Analysis for Architects. 3 Credit Hours.
This course covers loadings determination and evaluation, resolution and equilibrium of force systems, truss analysis, centroids, moments of inertia,
shear and bending moment diagrams, basic beam, column, and system design.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Architecture, Architecture Undeclared, Facilities Management,
Architectural Preservation
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(MATH 1031|Minimum Grade of C-|May not be taken concurrently
AND PHYS 1021|Minimum Grade of C-|May not be taken concurrently).

ARCH 3255. The Art of Detailing. 3 Credit Hours.
Exploration of architectural details and their application and evolution in architectural works through a historical perspective. Students research, analyze,
describe, and document their findings into a bound volume.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(ARCH 2122|Minimum Grade of C-|May not be taken concurrently
OR AR22 Y|May not be taken concurrently)
AND (ARCH 2151|Minimum Grade of C-|May not be taken concurrently
OR AR51 Y|May not be taken concurrently).

ARCH 3273. Housing and Community Design. 3 Credit Hours.
This course explores the context of housing and the design of communities in the Modern era and uses examples both local and world-wide as case
studies.
Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
Repeatability: This course may not be repeated for additional credits.

ARCH 3296. Movements in Modern Architecture. 3 Credit Hours.
History and theories of the architecture and urbanism of the modern period, from the beginning of the 19th century until the 1960’s. Key ideas, texts and
iconic buildings from the USA, Europe and other sites of the modernist diaspora are discussed. NOTE: This is a writing-intensive course.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(ARCH 2141|Minimum Grade of C-|May not be taken concurrently
OR AR41 Y|May not be taken concurrently)
AND (ARCH 2142|Minimum Grade of C-|May not be taken concurrently
OR AR42 Y|May not be taken concurrently).
ARCH 3354. Sustainability and Architecture. 3 Credit Hours.
The study of the ecological, environmental, socio-cultural, and behavioral principles of sustainable architecture, including climatic considerations, total energy systems, resource management, energy-efficient technologies, ecological design strategies, as well as issues of social equity and environmental justice.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Architecture, Architecture Undeclared, Facilities Management, Architectural Preservation

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(ARCH 2151|Minimum Grade of C-|May not be taken concurrently)
OR AR51 Y|May not be taken concurrently)
AND (MATH 1031|Minimum Grade of C-|May not be taken concurrently)
AND (PHYS 1021|Minimum Grade of C-|May not be taken concurrently).

ARCH 3362. Architecture Workshop. 3 Credit Hours.
Preparation for and classroom experience with an interdisciplinary team that introduces an awareness of the principles of architecture and the built environment to young children in city schools. Teams are composed of an architecture student, a practicing architect, and a school teacher; in collaboration with the Foundation for Architecture, the School District of Philadelphia, and the Graduate School of Fine Arts of the University of Pennsylvania, as well as volunteers from architectural firms.

Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits

Repeatability: This course may not be repeated for additional credits.

ARCH 3391. Independent Research. 3 to 7 Credit Hours.
A project assigned with the approval of the Program Director and conducted under the supervision of a faculty sponsor.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Architecture, Facilities Management, Architectural Preservation

Repeatability: This course may be repeated for additional credit.

ARCH 3970. Honors Special Topics in Architecture, Site and Context. 3 Credit Hours.
Special topics seminar dealing with issues of site and context in the field of Architecture. Topics vary with year and instructor. Consult Architecture program office and honors course catalog for more information. NOTE: May be taken more than once for credit when each topic is unique.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

ARCH 4011. Research Methods for Facility Management. 3 Credit Hours.
Research and analytical methods for facility management, including literature searches, data collection, analysis and application, basic descriptive and inferential statistics, benchmarking, audits, post-occupancy evaluation and diagnostic, performance and needs assessment. The course is project based and will engage in working relationships with companies in the Philadelphia region.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Facilities Management

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(ARCH 3013|Minimum Grade of C-|May not be taken concurrently)
AND (ARCH 3097|Minimum Grade of C-|May not be taken concurrently).

ARCH 4096. Professional Practice. 3 Credit Hours.
Administrative and business aspects of the architectural profession, professional relations between architect, engineer, owner, and contractor. Legal aspects of modern practice. Marketing architectural services, project organization, and production.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Architecture, Facilities Management, Architectural Preservation

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.
ARCH 4099. Capstone Research Seminar for Facility Management. 4 Credit Hours.
The capstone course for all B.S. Facility Management majors that focuses on a self defined individual research topic within the field of facility management based on case study analysis requiring investigative research, problem definition, alternative considerations and solution building. It has a seminar format with discussion and commentary expected from all participants. The course results in the development and presentation of a senior level thesis.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Facilities Management
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(ACCT 2101|Minimum Grade of C-|May not be taken concurrently
OR ACCT 2901|Minimum Grade of C-|May not be taken concurrently)
AND (ARCH 3012|Minimum Grade of C-|May not be taken concurrently)
AND (ARCH 3013|Minimum Grade of C-|May not be taken concurrently)
AND (ARCH 3097|Minimum Grade of C-|May not be taken concurrently)
AND (ARCH 3152|Minimum Grade of C-|May not be taken concurrently)
OR AR31 Y|May not be taken concurrently)
AND (ARCH 4011|Minimum Grade of C-|May not be taken concurrently)
AND (RE 3501|Minimum Grade of C-|May not be taken concurrently).

ARCH 4141. Global Preservation Practice. 3 Credit Hours.
This course introduces the agencies, global, national and regional, operating in the fields of architectural conservation, preservation and adaptive reuse. Through global, national and regional case studies, it develops a knowledge base of contemporary practice.
Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ARCH 3111|Minimum Grade of C-|May not be taken concurrently.

ARCH 4145. Research Methods for Architectural Preservation. 3 Credit Hours.
The first half of this course introduces students to sources and methods of investigation particular to historic preservation and develops techniques employed in the physical, verbal, and quantitative documentation of structures, buildings, and sites. Students become acquainted with archival resources, methods of graphical recording and annotation, and preparation of narrative and quantitative records. The second half of this course provides an overview of the physical processes that affect the stability of buildings, structures, and sites and the range of available remedial actions.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Architectural Preservation
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ARCH 3111|Minimum Grade of C-|May not be taken concurrently.

ARCH 4182. Independent Study in History and Theory. 1 to 7 Credit Hour.
Individual study of advanced nature exploring aspects of architectural history and theory, under the guidance of a faculty advisor.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Architecture, Architecture Undeclared, Facilities Management, Architectural Preservation
Repeatability: This course may be repeated for additional credit.

ARCH 4199. Capstone Research Seminar for Architectural Preservation. 4 Credit Hours.
The is the capstone course for all B.S. Architectural Preservation majors that focuses on a self defined individual research topic within the field of architectural preservation or adaptive re-use. Students are required to demonstrate competence through a reality-based case study. The course has a seminar format with discussion and commentary expected from all participants. It results in the development and presentation of a senior level thesis.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Architectural Preservation
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(ARCH 3111|Minimum Grade of C-|May not be taken concurrently
AND ARCH 4141|Minimum Grade of C-|May not be taken concurrently
AND ARCH 4145|Minimum Grade of C-|May not be taken concurrently
AND CHEM 1011|Minimum Grade of C-|May not be taken concurrently).

ARCH 4211. Computer Graphics. 3 Credit Hours.
This course involves lectures and hands-on lab experience in advanced use and applications of computers. The course focuses on graphic programs that allow animation, mapping, visualization, and special rendering techniques. NOTE: Special authorization required for non-majors.
Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
Repeatability: This course may not be repeated for additional credits.

ARCH 4282. Independent Study in Technology. 2 to 7 Credit Hours.
Individual study of advanced nature exploring aspects of architectural history and theory, under the guidance of a faculty advisor.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Architecture, Architecture Undeclared, Facilities Management, Architectural Preservation
Repeatability: This course may be repeated for additional credit.
ARCH 4296. Design, Behavior and Culture. 3 Credit Hours.
This course aims to develop students' understanding of how users perceive environments and adapt to them, to investigate the potential role of environmental psychology factors in architectural design; and to develop a working methodology for thinking about the environment based on behavioral and social science principles. The course is writing intensive.
Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ARCH 2141|Minimum Grade of C-|May not be taken concurrently
OR AR41 Y|May not be taken concurrently.

ARCH 4331. Architectural Design V. 6 Credit Hours.
Comprehensive design studio: the integration of structural and environmental systems, programming, tectonics and detailing into architectural design and expression in holistic and environmentally sustainable ways; comprehensive representation of design; development of time management skills, peer critique and self evaluation; interaction with consultants.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Architecture, Bach of Sci in Architecture
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ARCH 3231|Minimum Grade of C-|May not be taken concurrently.

ARCH 4332. Architectural Design VI. 6 Credit Hours.
Elective studio: students will select from a range of the studio topics, with offerings depending on faculty expertise. Topics will be drawn from the following: Innovation, materials and fabrication studio; Interdisciplinary studio; Big and complex building studio; Community design studio; Global urban systems studio. Not all topics will be offered every year.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Architecture, Bach of Sci in Architecture
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(ARCH 3231|Minimum Grade of C-|May not be taken concurrently)
AND (ARCH 3232|Minimum Grade of C-|May not be taken concurrently)
AND (ARCH 4331|Minimum Grade of C-|May not be taken concurrently)
OR ARCH 3233|Minimum Grade of C-|May not be taken concurrently
OR ARCH 3234|Minimum Grade of C-|May not be taken concurrently).

ARCH 4351. Environmental Control Systems for Buildings. 3 Credit Hours.
Heating, ventilating, air conditioning, electric power, lighting, acoustics, vertical transportation, plumbing, and fire protection for buildings.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(ARCH 3152|Minimum Grade of C-|May not be taken concurrently
AND PHYS 1021|Minimum Grade of C-|May not be taken concurrently).

ARCH 4382. Independent Study: Site and Context. 3 to 7 Credit Hours.
Individual study of advanced nature exploring aspects of site, context, or urbanism in architecture, under the guidance of a faculty advisor.
Field of Study Requirements: Must be enrolled in one of the following Majors: Architecture, Architecture Undeclared, Facilities Management, Architectural Preservation
Repeatability: This course may be repeated for additional credit.

ARCH 4431. Advanced Architectural Design. 6 Credit Hours.
Research-driven upper-level elective design studio to develop capacity for research (archival, social, urban etc.) as basis of design; development of initiative, collaboration and peer critique; development of written and graphic skills. Focus will be defined by the faculty teaching the studio and vary from year to year.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Architecture
Repeatability: This course may not be repeated for additional credits.

ARCH 4482. Independent Study: Behavior & Culture. 3 to 7 Credit Hours.
Individual study of advanced nature exploring aspects of behavior and culture in architecture, under the guidance of a faculty advisor.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Architecture, Architecture Undeclared, Facilities Management, Architectural Preservation
Repeatability: This course may be repeated for additional credit.
ARCH 4596. Seminar in Architectural Theory. 3 Credit Hours.
Theories of architecture and urbanism during the modern and contemporary periods; participation in critical theoretical discussions and the development of a research paper in response to critical feedback. The course serves to lay the ground for the theoretical development of thesis ideas.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Architecture, Architecture Undeclared, Facilities Management, Architectural Preservation
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ARCH 3243|Minimum Grade of C-|May not be taken concurrently
OR ARCH 3296|Minimum Grade of C-|May not be taken concurrently.

Art (ARTU)

Courses
ARTU 1101. Introduction to Visual Language, Painting. 3 Credit Hours.
A foundation course in painting focusing on painting techniques, conceptual development, and the use of elements of design for creative expression.
NOTE: This course can be used to satisfy the university Core Arts (AR) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: AR
Repeatability: This course may not be repeated for additional credits.

ARTU 1201. Introduction to Visual Language, 3-D Design. 3 Credit Hours.
A foundation course in 3-D design focusing on the principles, elements, and technical processes for visual understanding and creative expression.
NOTE: This course can be used to satisfy the university Core Arts (AR) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: AR
Repeatability: This course may not be repeated for additional credits.

ARTU 1401. Introduction to Visual Language, Drawing. 3 Credit Hours.
A foundation course in drawing focusing on drawing techniques, conceptual development, and the use of elements of design for creative expression.
NOTE: This course can be used to satisfy the university Core Arts (AR) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: AR
Repeatability: This course may not be repeated for additional credits.

ARTU 1501. Introduction to Visual Language, Design. 3 Credit Hours.
A foundation course in design focusing on the principles, elements, and technical processes for visual understanding and creative expression. NOTE: This course can be used to satisfy the university Core Arts (AR) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: AR
Repeatability: This course may not be repeated for additional credits.

ARTU 2001. Philadelphia Sketchbook. 3 Credit Hours.
This non-majors drawing course combines studio instruction in basic drawing skills as well as on-site drawing in Philadelphia’s many historical sites and museums. Emphasis will be on improving observational skills and drawing techniques. Students will be encouraged to develop their own unique vision. This course has no prerequisites. Daily outings will be required to various significant Philadelphia sites.
Level Registration Restrictions: May not be enrolled in one of the following: Graduate
Repeatability: This course may not be repeated for additional credits.

ARTU 2102. Intermediate Painting. 3 Credit Hours.
A second semester level course in oil painting that builds on the ideas introduced in 1101 (C079) with emphasis on conceptual and technical growth.
NOTE: This course is required for Art and Art Education majors. Prior to Fall 2008, this course was titled "Painting II."
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ARTU 1101|Minimum Grade of C-|May not be taken concurrently.

ARTU 2111. Aqueous Media. 3 Credit Hours.
An introduction to color design theory and practice.
Repeatability: This course may not be repeated for additional credits.

ARTU 2121. Introduction to Landscape Painting. 3 Credit Hours.
This course introduces students to the rich traditions of painting outdoors. Focus will be on water-based medium. NOTE: Summer only. Ambler Campus only.
Repeatability: This course may not be repeated for additional credits.
ARTU 2122. Advanced Landscape Painting. 3 Credit Hours.
For students with some painting and drawing background, the course emphasizes painting outdoors on the Ambler Campus. NOTE: Summer only. Ambler campus only.
**Repeatability:** This course may not be repeated for additional credits
**Pre-requisites:**
ARTU 2121|Minimum Grade of C-|May not be taken concurrently.

ARTU 2202. Intermediate 3-D. 3 Credit Hours.
Three-dimensional design theory and practice through construction techniques in wood and other materials. Emphasis on conceptual growth. NOTE: Main Campus only. Prior to Fall 2008, this course was titled "3-D Structures."
**Repeatability:** This course may not be repeated for additional credits
**Pre-requisites:**
ARTU 1201|Minimum Grade of C-|May not be taken concurrently.

ARTU 2301. Relief Printmaking. 3 Credit Hours.
An introduction to basic relief printmaking, black/white and color, in wood, linoleum, metal, and various other materials. NOTE: Main Campus only.
**Repeatability:** This course may not be repeated for additional credits

ARTU 2302. Intermediate Printmaking: Relief. 3 Credit Hours.
Intermediate level studies in relief processes including photographic and digital printmaking, with emphasis on conceptual growth and individual instruction. NOTE: Main Campus only. Prior to Fall 2008, this course was titled "Relief Printmaking II."
**Repeatability:** This course may not be repeated for additional credits
**Pre-requisites:**
ARTU 2301|Minimum Grade of C-|May not be taken concurrently.

ARTU 2311. Lithography. 3 Credit Hours.
An introduction to drawing, painting, photographic, and digital printmaking techniques, processes, and image development, black/white and color on limestone. NOTE: Main Campus only.
**Repeatability:** This course may not be repeated for additional credits
**Pre-requisites:**
ARTU 1401|Minimum Grade of C-|May not be taken concurrently
OR ARTU 1496|Minimum Grade of C-|May not be taken concurrently
OR ARTU 1996|Minimum Grade of C-|May not be taken concurrently.

ARTU 2312. Intermediate Printmaking: Lithography. 3 Credit Hours.
Intermediate level studies in lithographic, photographic, and digital printmaking techniques. Reversals, transfers, master image plans, registration procedures and color printing will be demonstrated. Emphasis is on conceptual growth and individual instruction. NOTE: Main Campus only. Prior to Fall 2008, this course was titled "Lithography II."
**Repeatability:** This course may not be repeated for additional credits
**Pre-requisites:**
ARTU 2311|Minimum Grade of C-|May not be taken concurrently.

ARTU 2331. Intaglio Printmaking. 3 Credit Hours.
This course introduces a broad range of intaglio plate making and printing processes including etching, drypoint, collagraphs, and photogravure. Additional topics include the care and use of tools and materials, print portfolio presentation, and a historical survey of printmaking.
**Repeatability:** This course may not be repeated for additional credits

ARTU 2402. Intermediate Drawing. 3 Credit Hours.
Figurative painting in pastel coupled with basic drawing approaches and techniques. A second level drawing course emphasizing more advanced drawing strategies and the use of chalk pastels. The model is used, although not exclusively. NOTE: Prior to Fall 2008, this course was titled "Drawing II."
**Repeatability:** This course may not be repeated for additional credits
**Pre-requisites:**
ARTU 1401|Minimum Grade of C-|May not be taken concurrently.

ARTU 2601. Computer Imaging. 3 Credit Hours.
This course introduces students to the computer as an artist's tool. Emphasis is on developing personal imagery and exploring the ways that the computer can serve as a vehicle for artistic expression. Students should have some previous studio art experience before taking this class. NOTE: Prior to Fall 2008, this course was titled "Introduction to Computer Imaging."
**Repeatability:** This course may not be repeated for additional credits

ARTU 2602. Intermediate Computer Imaging. 3 Credit Hours.
This course serves to deepen students' engagement with the computer as a tool for fine arts. Students explore image making in relation to contemporary practices and work with alternative methods of using the computer as a medium.
**Repeatability:** This course may not be repeated for additional credits
**Pre-requisites:**
ARTU 2601|Minimum Grade of C-|May not be taken concurrently.
ARTU 2605. Internet Imaging. 3 Credit Hours.
This class explores the web as a tool for artistic expression. Students learn web design within the context of an exploration of the uses of the internet as an art medium. NOTE: Prior to Fall 2008, this course was titled “Introduction to Internet Imaging.”
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ARTU 2601|Minimum Grade of C-|May not be taken concurrently
OR ARTU 2811|Minimum Grade of C-|May not be taken concurrently.

ARTU 2801. Art Photography: Darkroom. 3 Credit Hours.
The student is expected to master the basic photographic skills quickly through the use of lecture/demonstration, critiques and independent lab and field work. The course then concentrates on the use of photography as a fine art medium. NOTE: Prior to Fall 2008, this course was titled “Basic Darkroom Photography B/W I.”
Repeatability: This course may not be repeated for additional credits.

ARTU 2802. Intermediate Art Photography: Darkroom. 3 Credit Hours.
An intermediate level class on the use of photography as a fine art medium with emphasis on archival printing on fiber-based paper, sepia and selenium toning, and the development of a personal aesthetic supported by the use of sophisticated shooting and printing techniques. NOTE: Prior to Fall 2008, this course was titled “Basic Darkroom Photography B/W II.”
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ARTU 2801|Minimum Grade of C-|May not be taken concurrently.

ARTU 2811. Art Photography: Digital. 3 Credit Hours.
The basic principles of digital photography, including shooting with a digital camera, manipulating images within the computer, and printing to inkjet printers are taught. The course focuses on black & white photo, including duotones. Emphasis is placed on technical expertise, creative development, and an understanding of the potential of imaging software. NOTE: Prior to Fall 2008, this course was titled “Introduction to Digital Photography.”
Repeatability: This course may not be repeated for additional credits.

ARTU 2812. Intermediate Art Photography: Digital. 3 Credit Hours.
An intermediate level class in digital photography including the introduction of color photography and its relevant aesthetics, and the use of the web as a presentation medium. Emphasis is on conceptual growth and personal vision. NOTE: Prior to Fall 2008, this course was titled "Intermediate Digital Photography.”
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ARTU 2811|Minimum Grade of C-|May not be taken concurrently.

ARTU 2831. Art Photography / Digital On-Line. 3 Credit Hours.
This course teaches students the use of low-tech devices such as cell phones and point-and-shoot cameras for photography, video and sound recording. The results are posted to art-specific online visual communities similar to Facebook and YouTube. Responses from fellow students are evaluated in class critiques. This course raises the aesthetic bar above what is usually seen online. It teaches students how to see the world through a camera, organize the visual spaces found in their local community, and fill these photographs with meaningful content that can communicate the personal vision they develop during the semester to a broader audience.
Repeatability: This course may not be repeated for additional credits.

ARTU 2835. Art Photo / Moving Image. 3 Credit Hours.
This course allows artists to use the medium of video to investigate their world. The technical end involves shooting digital video, transferring to computer, computer editing, post processing, sound editing and processing, and burning finished pieces to DVD. Students are also introduced to alternative ways of creating moving images using digital based animation software to investigate art of motion graphics. The aesthetics are from the art world rather than the commercial, documentary, or Hollywood styles. Knowledge of computers for visual application is expected. NOTE: This course is offered in Tokyo only.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ARTU 2601|Minimum Grade of C-|May not be taken concurrently
OR ARTU 2811|Minimum Grade of C-|May not be taken concurrently.

ARTU 3103. Advanced Painting. 3 Credit Hours.
Painting as an art form with emphasis upon disciplined draftsmanship and imaginative composition. NOTE: Prior to Fall 2008, this course was titled “Painting Workshop.”
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ARTU 2102|Minimum Grade of C-|May not be taken concurrently.
ARTU 3203. Advanced 3-D. 3 Credit Hours.
Workshop course for students wishing to focus on advanced 3-D with emphasis on individual instruction. NOTE: Prior to Fall 2008, this course was titled "Advanced 3-D I."
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ARTU 2202|Minimum Grade of C-|May not be taken concurrently.

ARTU 3303. Advanced Printmaking. 3 Credit Hours.
Exploration of advanced printmaking problems. NOTE: Prior to Fall 2008, this course was titled "Advanced Printmaking I."
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(ARTU 2301|Minimum Grade of C-|May not be taken concurrently)
AND (ARTU 2302|Minimum Grade of C-|May not be taken concurrently)
OR ARTU 2311|Minimum Grade of C-|May not be taken concurrently)
AND (ARTU 2312|Minimum Grade of C-|May not be taken concurrently)
OR ARTU 3321|Minimum Grade of C-|May not be taken concurrently).

ARTU 3321. Intermediate Printmaking: Digital. 3 Credit Hours.
This course integrates a variety of digital applications and the traditional printmaking processes of relief, intaglio and lithography. Emphasis is on creative growth and individual instruction. Printmaking experience is required and computer imaging experience is recommended. NOTE: Prior to Fall 2008, this course was titled "Digital Printmaking."
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(ARTU 2601|Minimum Grade of C-|May not be taken concurrently)
AND (ARTU 2301|Minimum Grade of C-|May not be taken concurrently)
OR ARTU 2311|Minimum Grade of C-|May not be taken concurrently)
AND (ARTU 2312|Minimum Grade of C-|May not be taken concurrently)

ARTU 3403. Advanced Drawing. 3 Credit Hours.
Drawing as an art form with emphasis upon disciplined draftsmanship and imaginative composition. NOTE: Prior to Fall 2008, this course was titled "Intermediate Drawing I."
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ARTU 2402|Minimum Grade of C-|May not be taken concurrently.

ARTU 3601. Multimedia Studio. 3 Credit Hours.
An advanced course in which students explore the computer as a tool for artists. Students will be expected to explore their personal imagery and artistic goals through using the computer to make several long-term ambitious projects using computer screen as their primary medium.
Repeatability: This course may not be repeated for additional credits.

ARTU 3602. Digital Mixed Media Studio. 3 Credit Hours.
An advanced course in which students explore the computer as an artistic tool in combination with other materials. Students will be expected to explore their personal imagery and artistic goals through using the computer to make several long-term ambitious projects that exist primarily outside the computer screen.
Repeatability: This course may not be repeated for additional credits.

ARTU 3603. Advanced Computer Imaging. 3 Credit Hours.
An advanced course in which students explore the computer as a tool for artists. Students will be expected to explore their personal imagery and artistic goals through using the computer to make several long-term ambitious projects.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ARTU 2602|Minimum Grade of C-|May not be taken concurrently.

ARTU 3803. Advanced Art Photography: Darkroom. 3 Credit Hours.
This upper-level class involves the collection of aesthetic and technical tools, organized into a photographic vocabulary and the subsequent generation of a body of work that communicates a personal vision that ultimately evokes a meaningful response from an audience. Fiber-based papers, toners, and some unique aesthetic approach are required. NOTE: Prior to Fall 2008, this course was titled "Intermediate Darkroom Photography."
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ARTU 2802|Minimum Grade of C-|May not be taken concurrently.
ARTU 3813. Advanced Art Photography: Digital. 3 Credit Hours.
An upper-level course in digital photography. Emphasis is on conceptual growth through individual instruction. Advanced forms of presentation, including multiple prints, interactive images, and dynamic photographs are considered. NOTE: Prior to Fall 2008, this course was titled “Advanced Digital Photography.”
Repeatability: This course may not be repeated for additional credits
Pre-requisites: ARTU 2812|Minimum Grade of C-|May not be taken concurrently.

ARTU 3825. Intermediate Art Photography: Hybrid. 3 Credit Hours.
This upper-level course introduces a wide range of processes that integrate digital and darkroom techniques and aesthetics to produce work in this new genre of photography. The students must have experience with both darkroom and digital photography. Aesthetic problems are posed that use the formal characteristics of these special media to support image content to best advantage. NOTE: Prior to Fall 2008, this course was titled “Introduction to Hybrid Photography.”
Repeatability: This course may not be repeated for additional credits
Pre-requisites: (ARTU 2801|Minimum Grade of C-|May not be taken concurrently AND ARTU 2811|Minimum Grade of C-|May not be taken concurrently AND ARTU 2812|Minimum Grade of C-|May not be taken concurrently).  

ARTU 3826. Advanced Art Photography: Hybrid. 3 Credit Hours.
This advanced level class extends the opportunity to study and develop the use of photographic media that integrate digital and darkroom processes and aesthetics to produce a meaningful body of work in this new genre of photography. The students must have experience with both darkroom and digital photography. NOTE: Prior to Fall 2008, this course was titled “Intermediate Hybrid Photography.”
Repeatability: This course may not be repeated for additional credits
Pre-requisites: (ARTU 2811|Minimum Grade of C-|May not be taken concurrently AND ARTU 2812|Minimum Grade of C-|May not be taken concurrently AND ARTU 3825|Minimum Grade of C-|May not be taken concurrently).  

ARTU 4148. Painting Workshop. 3 Credit Hours.
An advanced level drawing course focusing on the refinement of skills and personal expression. Individual instruction and self motivation are emphasized. NOTE: Prior to Fall 2008, this course was 3104 “Painting Workshop II.”
Repeatability: This course may not be repeated for additional credits.

ARTU 4149. Painting Portfolio. 3 Credit Hours.
An advanced level painting course focusing on making finished quality work to build a portfolio. Individual instruction and motivation are emphasized.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: (ARTU 2102|Minimum Grade of C-|May not be taken concurrently AND ARTU 3103|Minimum Grade of C-|May not be taken concurrently AND ARTU 4148|Minimum Grade of C-|May not be taken concurrently).  

ARTU 4182. Independent Study: Painting. 3 Credit Hours.
This course allows the student to explore an area of study that lies outside regular course offering, working independently although under the supervision of a faculty member. All proposals must be approved by the department chair.
Repeatability: This course may be repeated for additional credit.
Pre-requisites: (ARTU 3103|Minimum Grade of C-|May not be taken concurrently AND ARTU 4149|Minimum Grade of C-|May not be taken concurrently).  

ARTU 4248. 3-D Workshop. 3 Credit Hours.
An advanced level 3D course focusing on the refinement of skills and personal expression. Individual instruction and motivation are emphasized. NOTE: Prior to Fall 2008, this course was 3204 “Advanced 3-D II.”
Repeatability: This course may not be repeated for additional credits.

ARTU 4249. 3-D Portfolio. 3 Credit Hours.
An advanced level 3D course focusing on making finished quality work to build a portfolio. Individual instruction and motivation are emphasized.
Repeatability: This course may be repeated for additional credit.

ARTU 4282. Independent Study: 3-D. 3 Credit Hours.
This course allows the student to explore an area of study that lies outside regular course offering, working independently although under the supervision of a faculty member. All proposals must be approved by the department chair.
Repeatability: This course may be repeated for additional credit.
ARTU 4348. Printmaking Workshop. 3 Credit Hours.
Advanced study of aesthetics and techniques of contemporary printmaking provide an in-depth appreciation of etching, lithography, relief printing and intaglio type processes. Students may concentrate in one print medium. Individual and group work is required. NOTE: Prior to Fall 2008, this course was titled "Printmaking Portfolio I."

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
ARTU 3303|Minimum Grade of C-|May not be taken concurrently.

ARTU 4349. Printmaking Portfolio. 3 Credit Hours.
Advanced study in advanced printmaking with emphasis on individual instruction. The preparation of a professional portfolio of editions and/or series is required. Various aspects of a studio career will be covered including: resumes, artists’ statements, photographing work, and presentations. NOTE: Prior to Fall 2008, this course was titled "Printmaking Portfolio II."

Repeatability: This course may not be repeated for additional credits.

ARTU 4382. Independent Study: Printmaking. 3 Credit Hours.
This course allows the student to explore an area of printmaking outside regular course offering, working independently although under the supervision of a faculty member. The department chair must approve a written proposal. NOTE: Prior to Fall 2008, this course was 3304 "Advanced Printmaking II."

Repeatability: This course may be repeated for additional credit.

Pre-requisites:
(ARTU 2102|Minimum Grade of C-|May not be taken concurrently)
AND ARTU 2111|Minimum Grade of C-|May not be taken concurrently
AND ARTU 2402|Minimum Grade of C-|May not be taken concurrently).

ARTU 4448. Drawing Workshop. 3 Credit Hours.
An advanced level drawing course focusing on the refinement of skills and personal expression. Individual instruction and motivation are emphasized. NOTE: Prior to Fall 2008, this course was 4405 "Drawing Workshop I."

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
ARTU 3403|Minimum Grade of C-|May not be taken concurrently.

ARTU 4449. Drawing Portfolio. 3 Credit Hours.
An advanced level drawing course focusing on making finished quality work to build a portfolio. Individual instruction and motivation are emphasized. NOTE: Prior to Fall 2008, this course was 4406 "Drawing Workshop II."

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(ARTU 3403|Minimum Grade of C-|May not be taken concurrently)
AND (ARTU 4448|Minimum Grade of C-|May not be taken concurrently).

ARTU 4482. Independent Study: Drawing. 3 Credit Hours.
This course allows the student to explore an area of drawing that lies outside regular course offering, working independently although under the supervision of a faculty member. A written proposal must be approved by the department chair.

Repeatability: This course may be repeated for additional credit.

Pre-requisites:
(ARTU 3403|Minimum Grade of C-|May not be taken concurrently)
AND (ARTU 4448|Minimum Grade of C-|May not be taken concurrently)
AND (ARTU 4449|Minimum Grade of C-|May not be taken concurrently).

ARTU 4448. Computer Imaging Workshop. 3 Credit Hours.
Advanced study of aesthetics and techniques of computer imaging with emphasis on individual instruction.

Repeatability: This course may not be repeated for additional credits.

ARTU 4449. Computer Imaging Portfolio. 3 Credit Hours.
Advanced study of aesthetics and techniques of computer imaging with emphasis on individual instruction. The preparation of a professional portfolio is required.

Repeatability: This course may not be repeated for additional credits.

ARTU 4482. Independent Study: Computer Imaging. 3 Credit Hours.
This course allows the student to explore an area of study in computer imaging outside the regular course offering, working independently although under the supervision of a faculty member. A written proposal must be approved by the department chair.

Repeatability: This course may be repeated for additional credit.

Pre-requisites:
(ARTU 2602|Minimum Grade of C-|May not be taken concurrently)
AND (ARTU 2605|Minimum Grade of C-|May not be taken concurrently)
AND (ARTU 3603|Minimum Grade of C-|May not be taken concurrently).
ARTU 4785. Field Internship. 3 Credit Hours.
This course offers experiential learning and hands-on training in student's field of choice. NOTE: For Art and Art Education Majors only with Special Authorization.

Repeatability: This course may be repeated for additional credit.

ARTU 4796. Art Seminar. 3 Credit Hours.
The goal of this writing intensive upper-level studio course is to help the advanced student find his/her own voice through independent studio projects and writing assignments. The class will meet as a group and the instructor will also meet individually with students. NOTE: Additional prerequisites for studio concentration: Art 2101 (0118), 2402 (0140), 2111 (0159) and two printmaking courses. For digital concentration: one printmaking or photo, three digital electives, and two studio electives or two non-digital electives. For visual studies concentration: one printmaking, photo, or computer imaging course plus four classes from the concentration group.

Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

ARTU 4848. Art Photography Workshop. 3 Credit Hours.
A top-level course for the study of advanced photographic techniques and aesthetics. The student is expected to design a course of study (proposal required) that is particular to his or her own interests and that involves aspects of photography not available in the other course offerings. Work can be realized in either the darkroom or digital studio and must include unique techniques, aesthetics, and presentation. NOTE: Prior to Fall 2008, this course was titled "Advanced Photo Study I."

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(ARTU 3803|Minimum Grade of C-|May not be taken concurrently)
AND (ARTU 3813|Minimum Grade of C-|May not be taken concurrently)
AND (ARTU 3825|Minimum Grade of C-|May not be taken concurrently).

ARTU 4849. Art Photography Portfolio. 3 Credit Hours.
A top-level course for the study of advanced photographic techniques and aesthetics with an emphasis on the creation of all artwork and documentation needed to build a portfolio. The student is expected to define an aesthetic philosophy that is particular to his or her own interests (proposal required). Work can be realized in either the darkroom or digital studio and must include unique techniques, aesthetics, and presentation. NOTE: Prior to Fall 2008, this course was titled "Advanced Photo Study II."

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(ARTU 3803|Minimum Grade of C-|May not be taken concurrently)
AND (ARTU 3825|Minimum Grade of C-|May not be taken concurrently)
AND (ARTU 3826|Minimum Grade of C-|May not be taken concurrently).

ARTU 4882. Independent Study: Art Photography. 3 Credit Hours.
This course allows the student to explore an area of photographic study outside our regular course offerings, working independently although under the supervision of a faculty member. A written proposal must be approved by the department chair. NOTE: Prior to Fall 2008, this course was 3804 "Advanced Darkroom Photography."

Repeatability: This course may be repeated for additional credit.

Art Education (ARTE)

Courses

ARTE 2001. Science and Art of Teaching. 4 Credit Hours.
Various theories as a framework for considering the science and art of teaching with emphasis on classroom-based research. Accompanied by a practicum in which students observe teacher behavior in a visual arts-based learning environment. NOTE: Students must obtain a B- or better for admission into the certification program. 20 hours field observation required. Child Abuse, Criminal History Clearances, FBI fingerprints and TB test must be obtained prior to the first day of class. Meeting with the Art Education advisor is mandatory.

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(ARTH 1155|Minimum Grade of C|May not be taken concurrently)
OR ARTH 1955|Minimum Grade of C|May not be taken concurrently
AND (ARTH 1156|Minimum Grade of C|May not be taken concurrently)
OR ARTH 1956|Minimum Grade of C|May not be taken concurrently).

ARTE 3003. Arts & Learning in the Elementary School. 3 Credit Hours.
This course forms a foundation for using the arts as active processes for learning, for those who will be teaching at the K-8 level, through a series of hands-on workshops in media including theater, dance, music and visual arts. The course offers experiential and theoretical tools for understanding processes of creativity in the arts and education. Parallel with the in-class arts workshops, students will gain skills in designing curricula which integrate arts and academic content areas.

Repeatability: This course may not be repeated for additional credits.
ARTE 3010. Special Topics. 3 Credit Hours.
Special Topics in Art Education addresses and explores pertinent contemporary issues and artmaking practices. Art students and art teachers in the schools and communities will create work as artists and translate their practices into relevant curriculum for their classrooms.
Repeatability: This course may be repeated for additional credit.

ARTE 3011. Introductory Seminar in Community Arts. 3 Credit Hours.
Community Arts brings artists together with people of a community of location, spirit, or tradition, to create art that is based in the life of that community. This course introduces students to the history and theory of Community Arts and current projects in Philadelphia and nationally, through field trips, guest speakers, readings and research. Students will engage in arts projects to orient to and re-discover their own communities of origin in relation to Community Arts and examine issues of race, class, and aesthetics. The course prepares students to become involved in the field internships that are being offered through Tyler/Temple's Arts in Community Program and is a prerequisite for other Arts in Community courses. NOTE: Course previously called "Interdisciplinary Seminar in Community Arts."
Repeatability: This course may not be repeated for additional credits.

ARTE 3089. Research and Project Planning Seminar in Community Arts. 3 Credit Hours.
In this course, students will apply methods of community data collection to research on a specific community, including personal and oral history interviews, background cultural research, detailed observation of community visual environments and performative conventions, and relationship building. Site visits to community sites and meetings with community leaders provide context for this research. These processes are then directed toward sequential project planning, including a research paper and individual and group creative responses in various media. Utilizing a collective research methodology, students then collaborate to identify emerging themes and key issues toward the conceptual design of a community arts project.
Repeatability: This course may be repeated for additional credit.

Pre-requisites:
ARTE 3011|Minimum Grade of C-|May not be taken concurrently
OR ARTE 3911|Minimum Grade of C-|May not be taken concurrently
OR VS 1058|Minimum Grade of C-|May not be taken concurrently.

ARTE 3096. Art in Elementary and Secondary School. 4 Credit Hours.
Course focuses on an examination of methods, materials, and current research as it relates to teaching art at elementary and secondary levels. NOTE: One day per week internship in a school art classroom is required of each student. Students must obtain B- or better. Application materials must be submitted during pre-registration the semester prior to taking the course. Child Abuse, Criminal History, FBI fingerprints and TB test must be up-to-date. Meeting with the Art Education advisor is recommended.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits

Pre-requisites:
ARTE 2001|Minimum Grade of C|May not be taken concurrently.

ARTE 3202. Artist Educators in Schools and Community Settings. 3 Credit Hours.
This course presents students from all arts fields with career options as teaching artists. Teaching artists are professional, practicing artists who collaborate with community and school leaders to create arts-based experiences in a variety of settings including: arts organizations, social service programs, health facilities, public libraries, senior centers, prisons, museums, and schools. Students will research existing resources for teaching artists, learn advocacy strategies, grant writing skills, and participate in direct field experience. Guest teaching artists and community arts administrators will provide presentations and workshops.
Repeatability: This course may not be repeated for additional credits.

ARTE 3911. Honors Introductory Seminar in Community Arts. 3 Credit Hours.
Community Arts brings artists together with people of a community of location, spirit, or tradition, to create art that is based in the life of that community. The goals of this course are for students to learn about the history and theory of Community Arts, to gain skills in Community Arts studio and research processes, to learn to think critically about the issues of race, class, and aesthetics inherent in Community Arts practice, to gain exposure to established Community Arts projects in Philadelphia through field trips and guest speakers, and to orient to and re-discover one's own community of origin in relation to Community Arts. NOTE: This is an honors course.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.
ARTE 3989. Honors Research and Project Planning in Community Arts. 3 Credit Hours.
In this course, students will apply methods of community data collection to research on a specific community, including personal and oral history interviews, background cultural research, detailed observation of community visual environments and performative conventions, and relationship building. Site visits to community sites and meetings with community leaders provide context for this research. These processes are then directed toward sequential project planning, including a research paper and individual and group creative responses in various media. Utilizing a collective research methodology, students then collaborate to identify emerging themes and key issues toward the conceptual design of a community arts project.
NOTE: This is an honors course.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
ARTE 3911|Minimum Grade of C|May not be taken concurrently.

ARTE 4003. Special Needs K-12 Students in the Art Room. 3 Credit Hours.
Learning about the scope of different disabilities that may present themselves in the art room: the identification of different disabilities including emotional/behavior disorders, mental retardation, learning disabilities, physical disabilities. Effective instructional strategies for special needs students K-12 in the art room, including methods of assessment and accommodations.
Co-requisites: ARTE 4088
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ARTE 3096|Minimum Grade of C|May not be taken concurrently.

ARTE 4012. Community Arts. 3 Credit Hours.
In this course students will create, develop and implement a community-based arts project in media including visual arts and performance within a particular Philadelphia community. Students will gain skills in community arts processes including project design, local research, teaching, and design/performance/installation of arts projects. The course is grounded in community arts theory, growing out of the fields of public art and performance studies.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(ARTE 3089|Minimum Grade of C-|May not be taken concurrently)
OR ARTE 3989|Minimum Grade of C-|May not be taken concurrently)
AND (ARTE 3011|Minimum Grade of C-|May not be taken concurrently)
OR ARTE 3911|Minimum Grade of C-|May not be taken concurrently)
OR VS 1058|Minimum Grade of C-|May not be taken concurrently).

ARTE 4088. Student Teaching. 9 Credit Hours.
Students assume responsibility for direction of classes and lesson planning in both elementary and secondary schools. The practical experience is enriched through seminar discussions focusing on the enterprise of teaching. NOTE: Application Materials must be submitted during pre-registration the semester prior to taking the course. Meeting with the Art Education advisor is recommended.
Co-requisites: ARTE 4003
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
ARTE 3096|Minimum Grade of C|May not be taken concurrently.

ARTE 4089. Evaluation and Documentation in Community Arts. 3 Credit Hours.
In this course students will learn and apply methods for evaluation and ongoing work in the aftermath phase of Community Arts projects, including assessment of artistic process and product and community impact, approaches to continuing community involvement, and transitioning of project ownership to the community. The course offers students a variety of media for documenting and assisting community members to document Community Arts projects in the form of scholarly articles, video and audio documentary, community feedback and personal essays/journals that contribute knowledge to the field of Community Arts.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
ARTE 4012|Minimum Grade of C-|May not be taken concurrently.

Art History (ARTH)
Courses

**ARTH 0803. The Art of Sacred Space. 3 Credit Hours.**
Where do people go to communicate with the divine? Explore with us where and how people of the many different cultures of the Greco-Roman world communicated with their gods. Why are graves and groves considered sacred space? When is a painting or sculpture considered sacred? Whom do the gods allow to enter a sacred building? Can a song be a prayer or a curse? How can dance sway the gods? Why do gods love processions and the smell of burning animals? The journey through sacred space in Greco-Roman antiquity will engage your senses and your intellect, and will reveal a mindset both ancient and new. **NOTE:** This course fulfills the Arts (GA) requirement for students under GenEd and Arts (AR) for students under Core. Students cannot receive credit for this course if they have successfully completed REL 0803 or GRC 0803/0903.

**Course Attributes:** GA
**Repeatability:** This course may not be repeated for additional credits.

**ARTH 0808. Arts of the Western World: The Visual Experience. 4 Credit Hours.**
Weekly class lectures and on-site visits provide a survey of Roman art from the Etruscan through the Baroque periods, and therefore, from the founding of the ancient city in 8th century B.C. to circa 1700. Students study each period's art and architecture and define its place within the general context of Roman civilization. Rome's position as both capital of the ancient empire and of the Western Latin Church has earned her the well-recognized sobriquet, Eternal City. Consequently, students confront how the idea of Rome had bearing upon the formation of its art and architecture within the chronological context. The course as a whole can be considered an introduction to art history in the field, as each week the class visits a historical site or museum in order to reconstruct through living examples the artistic fabric of the city. **NOTE:** (1) Field trips are mandatory for this class. (2) This course fulfills the Arts (GA) requirement for students under GenEd and Arts (AR) for students under Core. (3) Students cannot receive credit for this course if they have successfully completed ARTH 1001 or C051.

**Course Attributes:** GA
**Repeatability:** This course may not be repeated for additional credits.

**ARTH 0813. The History of Art in Rome. 4 Credit Hours.**
Weekly class lectures and on-site visits provide a survey of Roman art from the Etruscan through the Baroque periods, and therefore, from the founding of the ancient city in 8th century B.C. to circa 1700. Students study each period's art and architecture and define its place within the general context of Roman civilization. Rome's position as both capital of the ancient empire and of the Western Latin Church has earned her the well-recognized sobriquet, Eternal City. Consequently, students confront how the idea of Rome had bearing upon the formation of its art and architecture within the chronological context. The course as a whole can be considered an introduction to art history in the field, as each week the class visits a historical site or museum in order to reconstruct through living examples the artistic fabric of the city. **NOTE:** (1) Field trips are mandatory for this class. (2) This course fulfills the Arts (GA) requirement for students under GenEd and Arts (AR) for students under Core. (3) Students cannot receive credit for this course if they have successfully completed ARTH 1001 or C051.

**Course Attributes:** GA
**Repeatability:** This course may not be repeated for additional credits.

**ARTH 1001. The Visual Experience. 3 Credit Hours.**
An introduction to art from the position of the observer, the artist, the scholar, and the critic. Covers techniques of architecture, painting, drawing and sculpture with a short survey of art from its beginnings to present day; museum trips. Emphasis on an analysis of individual works. **NOTE:** (1) Field trips are mandatory for this class. (2) This course can be used to satisfy the university Core Arts (AR) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

**Course Attributes:** AR
**Repeatability:** This course may not be repeated for additional credits.

**ARTH 1003. History of Art in Rome. 4 Credit Hours.**
Weekly class lectures and on-site visits provide a survey of Roman art from the Etruscan through the Baroque periods, and therefore, from the founding of the ancient city in the 8th century B.C. to circa 1700. Students study each period's art and architecture and define its place within the general context of Roman civilization. Rome's position as both capital of the ancient empire and of the Western Latin Church has earned her the well-recognized sobriquet, Eternal City. Consequently, students confront how the idea of Rome had bearing upon the formation of its art and architecture within the chronological context. The course as a whole can be considered an introduction to art history in the field, as each week the class visits a historical site or museum in order to reconstruct through living examples the artistic fabric of the city. **NOTE:** This course is taught in Rome. This course can be used to satisfy the university Core Arts (AR) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

**Course Attributes:** AR
**Repeatability:** This course may not be repeated for additional credits.

**ARTH 1101. Art Heritage Western World I. 4 Credit Hours.**
**Repeatability:** This course may not be repeated for additional credits.

**ARTH 1102. Art Heritage Western World II. 4 Credit Hours.**
**Repeatability:** This course may not be repeated for additional credits.
ARTh 1148. International Cinema. 3 Credit Hours.
A selection of films from modern Europe and Third World cultures which demonstrate both their interaction with postmodern politics, theory and culture, and the development of an international alternative discourse to Hollywood commercial film-making. Films will be selected according to a theme each semester. Past courses: Italian Neo-Realism, Independent Film Makers, and Women in Film. NOTE: This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: IS
Repeatability: This course may be repeated for additional credit.

ARTh 1155. Art Heritage of the Western World I. 3 Credit Hours.
Students in this course examine and analyze the architecture, sculpture, and painting of the Western tradition from the era of Prehistory through the Early Renaissance in Europe. Students analyze the forms, techniques, styles, subjects, and symbolism represented in architecture, sculpture, and painting both historically and in relation to the impact of societal beliefs and values. Students employ contemporary methods in the interpretation of forms, subjects, and artistic differences and parallels. NOTE: (1) Field trips are mandatory for this class. (2) This course can be used to satisfy the university Core Arts (AR) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: AR
Repeatability: This course may not be repeated for additional credits.

ARTh 1156. Art Heritage of the Western World II. 3 Credit Hours.
Students in this course examine and analyze the art of the Western tradition, including architecture, sculpture, painting, and modern media, from the Early Renaissance in Europe to global art of the present day. Students analyze the forms, techniques, styles, subjects, and symbolism represented in art and architecture both historically and in relation to the impact of societal beliefs and values. Students employ contemporary methods in the interpretation of forms, subjects, and artistic differences and parallels. NOTE: (1) Field trips are mandatory for this class. (2) This course can be used to satisfy the university Core Arts (AR) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: AR
Repeatability: This course may not be repeated for additional credits.

ARTh 1801. Arts of Asia. 3 Credit Hours.
Architecture, sculpture, painting and the functional arts of Asia (India, China, Japan and Southeast Asia). A historical examination of the art as a religious expression and as a product of changing social and economic conditions. The material culture of Asia will be examined with an emphasis on differing world views and perspectives with which to "see" art. NOTE: (1) Field trips are mandatory for this class. (2) This course can be used to satisfy the university Core Arts (AR) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: AR
Repeatability: This course may not be repeated for additional credits.

ARTh 1955. Honors Art Heritage of the Western World I. 3 Credit Hours.
Students in this course examine and analyze the architecture, sculpture, and painting of the Western tradition from the era of Prehistory through the Early Renaissance in Europe. Students analyze the forms, techniques, styles, subjects, and symbolism represented in architecture, sculpture, and painting both historically and in relation to the impact of societal beliefs and values. Students employ contemporary methods in the interpretation of forms, subjects, and artistic differences and parallels. NOTE: This course is for Honors students. (1) Field trips are mandatory for this class. (2) This course can be used to satisfy the university Core Arts (AR) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: AR
Repeatability: This course may not be repeated for additional credits.

ARTh 1956. Honors Art Heritage of the Western World II. 3 Credit Hours.
Students in this course examine and analyze the art of the Western tradition, including architecture, sculpture, painting, and modern media, from the Early Renaissance in Europe to global art of the present day. Students analyze the forms, techniques, styles, subjects, and symbolism represented in art and architecture both historically and in relation to the impact of societal beliefs and values. Students employ contemporary methods in the interpretation of forms, subjects, and artistic differences and parallels. NOTE: This course is for Honors students. (1) Field trips are mandatory for this class. (2) This course can be used to satisfy the university Core Arts (AR) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: AR
Repeatability: This course may not be repeated for additional credits.

ARTh 2000. Topics in Art History. 3 Credit Hours.
A selected topic from a specific period in the history of art will be examined. NOTE: Field trips are mandatory for this course.
Repeatability: This course may be repeated for additional credit.
ARTh 2001. European Crafts and Decorative Arts. 4 Credit Hours.
Traces the development of crafts from the beginning to the Industrial Revolution, focusing on the role of the craft-worker in society, the role of the patron, and the styles of different eras. Includes European, Mediterranean, and Islamic crafts. NOTE: Field trips are mandatory for this course.
Repeatability: This course may not be repeated for additional credits.

ARTh 2002. History of Modern Crafts. 4 Credit Hours.
Traces the ideas, personnel, workshops, objects & styles of the Arts & Crafts Movement from William Morris to Henry Mercer (1850s-ca. 1915), in Europe and the United States. Charles & Margaret Mackintosh in Scotland, Eliel Saarinen in Finland, Charles Ashbee and the Guild of Handicraft in England will be studied, among others; Stickley, Roycroft, Frank Lloyd Wright, Tiffany, etc., in the U.S., and other key designers/crafters of clay, metal, fiber, wood, glass. The influence of Japanese art & craft is a key issue for this course; also the development of the various forms of Art Nouveau. NOTE: Field trips are mandatory for this class.
Repeatability: This course may not be repeated for additional credits.

ARTh 2003. History of Modern Crafts & Design, Part 2. 4 Credit Hours.
This class will explore the decorative arts, crafts and design styles and movements that developed from the post WWI period to the present day. The first half of class will focus on the Bauhaus, Wiener Werkstatte, Art Deco and Streamlined Design. The second half of the semester will feature the Contemporary Craft Movement from its birth after WWII to the changing state of Craft today. The goal of the class is to learn about and become well versed in the craft and design style periods of the 20th century, the major changes going on in Europe and America that affected these artistic styles, as well as the designers and artists working in the craft and design worlds. Special attention will be given to how these topics are related to the Philadelphia area. Museum visits, critical reading and critical writing are integral to the class. NOTE: Field trips are mandatory for this class.
Repeatability: This course may not be repeated for additional credits.

ARTh 2004. History of Printmaking. 4 Credit Hours.
This course explores how various printmaking media, such as woodcut, etching, lithography, and silkscreen have changed the way artists put their ideas to paper from the Renaissance to contemporary times. Beginning with European woodcut and engraving in the early 15th century and Japanese woodblock printing dating from the 17th century, students examine how print technologies related to the older methods they replaced. Emphasis will be placed on major printmakers including Dürer, Rembrandt, Piranesi, Goya, Utamaro, Hokusai, Hiroshige, Degas, Toulouse-Lautrec, Kollwitz, Munch, and contemporary artists such as Lorna Simpson, Chuck Close, Kiki Smith, and others. Uses of prints in popular and propagandistic communication will also be explored.
Repeatability: This course may not be repeated for additional credits.

ARTh 2007. World Photography Since 1839. 4 Credit Hours.
A history of photography from 1839 to the present and its relation to cultural contexts as well as to various theories of the functions of images. Topics discussed in considering the nineteenth century will be the relationship between photography and painting, the effect of photography on portraiture, photography in the service of exploration, and photography as practiced by anthropologists; and in considering the twentieth century, photography and abstraction, photography as fine art, photography and the critique of art history, and photography and censorship. NOTE: Field trips are mandatory for this class.
Repeatability: This course may not be repeated for additional credits.

ARTh 2008. History of Photography. 3 Credit Hours.
Students in this course examine and analyze the history of the photographic process and its product from its inception to contemporary innovations. Critical approaches to the evaluation and interpretation of photography are also explored.
Repeatability: This course may not be repeated for additional credits.

ARTh 2010. Topics in Art History. 4 Credit Hours.
A selected topic from a specific period in the history of art will be examined. NOTE: Field trips are mandatory for this class.
Repeatability: This course may be repeated for additional credit.

ARTh 2011. Philadelphia Architecture. 4 Credit Hours.
This course traces the development of Philadelphia architecture from the 17th to the 20th centuries, with special attention given to the major architects who contributed to that development.
Repeatability: This course may not be repeated for additional credits.

ARTh 2013. Art of the Film. 4 Credit Hours.
An introduction to the study of film as a work of art, an analysis of the ways filmic style and structure express meaning on several levels. Specific directors or auteurs, actors, movements, styles and technical or message-laden filmic challenges are treated, as are the relationship of film to the novel, the drama, and to the larger context of modernist and post-modern art credos and movements. Various genres of feature film, such as anti-war, feminist, noir, comedy, action, etc., are considered.
Repeatability: This course may not be repeated for additional credits.

ARTh 2039. Myth and Allegory in European Art, 14c - 18c. 4 Credit Hours.
Students in this course examine and analyze the representation of myth and allegory in visual art across several periods - the Gothic era, the Renaissance, the Baroque and Romantic eras - with particular attention to the significance of form and meaning in relation to textual sources, visual models, and the larger cultural context. Students may consider such topics as: personification and moralizing allegories in the Gothic era; poetic, dynastic, and religious allegories in Renaissance and Baroque art; and Romantic nature-allegories and social criticism. NOTE: Field trips are mandatory for this class.
Repeatability: This course may not be repeated for additional credits.
ARTH 2041. Architectural History: Ancient to Renaissance. 3 Credit Hours.
Traces the history of western architecture from the ancient world to the High Renaissance and Mannerism of the late 16th century.
Repeatability: This course may not be repeated for additional credits.

ARTH 2042. Architectural History: Renaissance to the 20th Century. 3 Credit Hours.
Traces the history of western architecture from the 17th century through the 20th century. The evolution of architectural thought, various formal languages (style) and theoretical concepts studied through the examination of selected buildings within their specific political, social, economic, and cultural milieu.
Repeatability: This course may not be repeated for additional credits.

ARTH 2061. Art of Landscape Painting. 4 Credit Hours.
An examination of landscape painting from the ancient world to the present. Its origins as a more specific genre in the 17th century is explored and particular attention is paid to its efflorescence in French and American 19th century art. How landscape painting develops in the art of the twentieth century is also analyzed, especially in relation to concepts of expressionism, abstraction, the sublime, conceptualism, land art, and more contemporary forms of realism, as well as to ideas about regionalism, nationalism and globalization. NOTE: Field trips are mandatory for this class.
Repeatability: This course may not be repeated for additional credits.

ARTH 2096. Art History Writing Intensive. 4 Credit Hours.
A selected topic from a specific period in the history of art will be examined. NOTE: This is a Writing Intensive Course. Field trips are mandatory for this class.
Course Attributes: WI
Repeatability: This course may be repeated for additional credit.

ARTH 2097. Art History Writing Intensive. 3 Credit Hours.
A selected topic from a specific period in the history of art will be examined. NOTE: This is a Writing Intensive Course. Field trips are mandatory for this class.
Course Attributes: WI
Repeatability: This course may be repeated for additional credit.

ARTH 2098. Art History Writing Intensive. 4 Credit Hours.
A selected topic from a specific period in the history of art will be examined. NOTE: This is a Writing Intensive Course. Field trips are mandatory for this class.
Course Attributes: WI
Repeatability: This course may be repeated for additional credit.

ARTH 2101. Art of Ancient Egypt and the Aegean. 4 Credit Hours.
The Bronze Age art of the Eastern Mediterranean was the predecessor for the Classical world of ancient Greece and Rome. Ancient Egypt, Minoan Crete, and Mycenaeans Greece developed rich artistic styles during the early centuries of civilized life. Their art included some very rich and highly expressive forms of visual communication. Bronze Age society supported splendid palaces and large cities as well as small and humble settlements. The art of this period has some very interesting ways of expressing ideas, and its colorful and often symbolic iconography was very different from much of the art of later times. The course will cover the painting, sculpture, architecture, and crafts of these societies that flourished from about 3000 to 1000 BC. The course will include written papers, a midterm, and a final examination.
Repeatability: This course may not be repeated for additional credits.

ARTH 2102. Greek Mythology and Art. 4 Credit Hours.
Mythology played a major role in the subject matter of ancient Greek art. The stories recorded in myths and legends were illustrated both as interesting tales and as symbols for different aspects of human life and culture. The Greeks had many gods, goddesses, deified heroes, demons, and other supernatural beings whose activities and adventures ranged from the comical to the heroic. Their fascinating world made interesting art. This course explores the world of the ancient Greek myths and how they were used in ancient vase paintings, sculpture, wall paintings, and other media. The course will include written papers, a midterm, and a final examination.
Repeatability: This course may not be repeated for additional credits.

ARTH 2105. Roman Art and Archaeology. 4 Credit Hours.
From a group of thatched huts on the banks of the Tiber River, to a wall built to keep the Picts out of England; from the marble temples to the emperors in modern Turkey to the houses of North Africa; from the theaters in Roman Gaul to the destroyed town of Pompeii, the Romans inhabited the entire Mediterranean basin and formed a diverse urban society. We will explore how the Romans built and decorated their houses, how they buried their dead, how they interacted in public spaces, and how they used art in the service of the sacred. We will begin with the formation of Rome in the 8th century BCE, and finish when Constantine moves the capital of the Empire to the east. In this chronological unfolding of the Roman world, we will explore how the Romans developed different building types for their new urban needs; developed the art of interior painting and mosaic; used sculpture to glorify the individual and explain what it means to be a "Roman." We will pay particular attention to the interplay between the city of Rome and its monuments and the larger cultural world the Romans inhabited, especially where they met other art styles that influenced the development of their own - in Greece, France, Asia Minor, the Middle East and Africa. NOTE: Field trips are mandatory for this class.
Repeatability: This course may not be repeated for additional credits.

ARTH 2110. Topics in Ancient Art. 4 Credit Hours.
A selected topic from the Ancient period in the history of art will be examined. NOTE: Field trips are mandatory for this class.
Repeatability: This course may be repeated for additional credit.
ARTH 2111. Minoan Art. 4 Credit Hours.
A selected topic in the art and archaeology of the Bronze Age Aegean will be studied in detail through student presentations, discussions, readings, and lectures by the instructor. Topics will be broad enough to include both information that is already part of the general conclusions for the field as well as subjects that are still hotly debated. A research paper is required. NOTE: Field trips are mandatory for this class.
Repeatability: This course may not be repeated for additional credits.

ARTH 2117. Archaeological Excavation. 1 to 6 Credit Hours.
Requires permission of the instructor. Credit given for participating in an archaeological excavation.
Repeatability: This course may be repeated for additional credit.

ARTH 2129. Greek and Roman Sculpture. 4 Credit Hours.
When is a naked male a god? Are females a sum of their hairstyles and clothes? We begin our exploration of the sculptor's view of the human body in the 7th century BCE and finish as the rise of a newly legal religion changes the form of sculpture in the early 4th century CE. Along the way we will investigate the portrayal of the body in space, the use of emotion, the changing role of nudity as costume, and the depiction of different ethnic groups and ages, the beginning of portraiture, and the representation of non-humans, as the Greek and Roman sculptors portray the Other, the emperor, the god, and more. NOTE: Field trips are mandatory for this class.
Repeatability: This course may not be repeated for additional credits.

ARTH 2135. Art and Archaeology of Ancient Rome and the Mediterranean. 4 Credit Hours.
Weekly class lectures and on-site visits provide an outline of the origins and development of Italian and Roman art between the 8th century B.C. and the 4th century A.D. Special attention is paid to the cultures that influenced the formation of Roman art: the Greeks in southern Italy and the Etruscans in Tuscany and Latium. The course deals with architecture (and urban design), sculpture, painting, and mosaics. To complete the picture of Roman art, a survey is also given of Roman art in the provinces of the Empire. The course includes a weekend excursion outside of Rome. NOTE: This course is taught in Rome.
Repeatability: This course may not be repeated for additional credits.

ARTH 2196. Greek and Roman Sculpture. 4 Credit Hours.
When is a naked male a god? Are females a sum of their hairstyles and clothes? We begin our exploration of the sculptor's view of the human body in the 7th century BCE and finish as the rise of a newly legal religion changes the form of sculpture in the early 4th century CE. Along the way we will investigate the portrayal of the body in space, the use of emotion, the changing role of nudity as costume, and the depiction of different ethnic groups and ages, the beginning of portraiture, and the representation of non-humans, as the Greek and Roman sculptors portray the Other, the emperor, the god, and more. NOTE: This is a Writing Intensive Course. Field trips are mandatory for this class.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

ARTH 2200. Topics in Medieval Art. 4 Credit Hours.
A selected topic from the Medieval period in the history of art will be examined.
Repeatability: This course may be repeated for additional credit.

ARTH 2215. Late Antique/Byzantine Art. 4 Credit Hours.
The visual culture of the Mediterranean region in Late Antiquity (ca. 200 - 400) is explored, charting the transformation of the Roman world into an eastern Mediterranean empire which we call Byzantium, and continuing up to the conquest of Constantinople (Istanbul) in 1453. Special attention is given to the social and religious functions of images and architecture, and to typical settings in which these visual tools were deployed, for example the imperial state, monasticism, and the church. NOTE: Field trips are mandatory for this class.
Repeatability: This course may not be repeated for additional credits.

ARTH 2216. Early Medieval Visual Culture. 4 Credit Hours.
This course focuses on the visual culture of Western Europe and the Western Mediterranean from about 400 through the year 1000. Intensive areas of focus are the Anglo-Saxon, Carolingian and Ottonian periods, as well as early Medieval Spain, and the use of art and architecture to shape ideas about institutions such as kingship and monasticism. Manuscript illuminations receive special attention. NOTE: Field trips are mandatory for this class. (Prior to fall 2009, the course title was "The Dark Ages.")
Repeatability: This course may not be repeated for additional credits.

ARTH 2217. Gothic Art. 4 Credit Hours.
This course presents the transformative phenomenon of the Gothic, with its emblematic creation, the Gothic cathedral: a fusion of architecture, stained glass, and sculpture. Romanesque precursors are studied, as well as certain themes, such as the art of the Western Crusaders in the Eastern Mediterranean, and the rise of secular art and architecture. NOTE: Field trips are mandatory for this class.
Repeatability: This course may not be repeated for additional credits.

ARTH 2300. Special Topics. 4 Credit Hours.
A selected topic in the history of art will be examined. NOTE: Field trips are mandatory for this class.
Repeatability: This course may be repeated for additional credit.

ARTH 2310. Topics in Renaissance Art. 4 Credit Hours.
A selected topic in Renaissance art will be examined. NOTE: Field trips are mandatory for this class.
Repeatability: This course may be repeated for additional credit.
ARTH 2321. Masters of Renaissance Art. 4 Credit Hours.
This course will explore the construction of artistic identity and style from the mid-fifteenth century to the early-seventeenth century through visual analyses, readings of contemporary sources (biographies/autobiographies, art treatises, and correspondences), and modern scholarship in an attempt to demystify the "Masters" of the Italian Renaissance. NOTE: Field trips are mandatory for this class.
Repeatability: This course may not be repeated for additional credits.

ARTH 2323. Early Renaissance: Italy. 4 Credit Hours.
Central Italian art from Giotto to Leonardo da Vinci; and the Venetian school from Bellini through Titian, Veronese, Tintoretto. NOTE: Field trips are mandatory for this class.
Repeatability: This course may not be repeated for additional credits.

ARTH 2325. Northern Renaissance Art 1350-1550. 4 Credit Hours.
Late Gothic and Renaissance traditions in France, Germany, and the Low Countries, with emphasis on 15th century Netherlandish art and 16th century German painting, sculpture, and graphic arts. Featured artists include Jan Van Eyck, Albrecht Dürer, Matthias Grünewald, Hieronymus Bosch, and Pieter Bruegel the Elder, with an emphasis on new developments relating to Netherlandish "realism," print technology, the Reformation, and an emerging market for art works. NOTE: Field trips are mandatory for this class.
Repeatability: This course may not be repeated for additional credits.

ARTH 2329. Renaissance and Baroque Architecture in Italy. 4 Credit Hours.
Humanism and the revival of antiquity in Florence and Rome form the background for a study of the theory and practice of Alberti, Michelangelo and Palladio. The subsequent evolution of Mannerist and Baroque style in Italy leads to an examination of 17th century architecture and its influence in Europe. NOTE: Field trips are mandatory for this class.
Repeatability: This course may not be repeated for additional credits.

ARTH 2350. Topics in Early Modern Art, 1400-1750. 4 Credit Hours.
A selected topic in Early Modern Art will be examined. NOTE: Field trips are mandatory for this class.
Repeatability: This course may be repeated for additional credit.

ARTH 2400. Topics in Baroque Art. 4 Credit Hours.
A selected topic from the Baroque period in the history of art will be examined. NOTE: Field trips are mandatory for this class.
Repeatability: This course may be repeated for additional credit.

ARTH 2428. High and Late Baroque Art in Rome. 4 Credit Hours.
Weekly class lectures and on-site visits examine 17th century Rome, the center of baroque art and culture in Italy and Europe. Many of the most significant works of painting, sculpture, and architecture from c. 1580-c. 1750 are viewed first hand during weekly on-site visits in Rome. Special attention is given to works by Italian artists such as Annibale Carracci, Caravaggio, Artemisia Gentileschi, Pietro da Cortona, Bernini, and Borromini (among others). The cultural context of Rome and papal patronage are investigated. A two-day field trip to Naples provides students with the opportunity to visit the Capodimonte Museum and to explore baroque churches in the historic center, "Spaccanapoli." NOTE: This course is taught in Rome.
Repeatability: This course may not be repeated for additional credits.

ARTH 2431. Southern Baroque Art: Italy and Spain. 4 Credit Hours.
Art in Italy and Spain in the age of Caravaggio; the Carracci invention of the Academy; the High Baroque of Cortona, Bernini, and Velasquez; the artistic centers of Rome, Naples, Madrid. NOTE: Field trips are mandatory for this class.
Repeatability: This course may not be repeated for additional credits.

ARTH 2432. Northern Baroque Art. 4 Credit Hours.
Art in Holland in the age of Rembrandt, Hals, and Vermeer, the High Baroque as an international style with Rubens and Van Dyck, with artistic relations between Italy, Flanders, France, England and Spain. NOTE: Field trips are mandatory for this class.
Repeatability: This course may not be repeated for additional credits.

ARTH 2450. Topics in Eighteenth Century Art. 4 Credit Hours.
A selected topic in eighteenth-century art will be examined. NOTE: Field trips are mandatory for this class.
Repeatability: This course may be repeated for additional credit.

ARTH 2496. Southern Baroque Art: Italy and Spain. 4 Credit Hours.
Art in Italy and Spain in the age of Caravaggio; the Carracci invention of the Academy; the High Baroque of Cortona, Bernini, and Velasquez; the artistic centers of Rome, Naples, Madrid. NOTE: This is a Writing Intensive Course. Field trips are mandatory for this class.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

ARTH 2497. Northern Baroque Art. 4 Credit Hours.
Art in Holland in the age of Rembrandt, Hals, and Vermeer, the High Baroque as an international style with Rubens and Van Dyck, with artistic relations between Italy, Flanders, France, England and Spain. NOTE: This is a Writing Intensive Course. Field trips are mandatory for this class.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

ARTH 2500. Topics in 19th Century Art. 4 Credit Hours.
A selected topic in the history of art from the 19th century will be examined.
Repeatability: This course may be repeated for additional credit.
ARTh 2535. Romanticism. 4 Credit Hours.
European art of the romantic era, 1750 to 1850. Painting, sculpture, and selected works of architecture in England, France, and Germany, with attention to such giants as Piranesi, Canova, David, Goya, Friedrich, Runge, Ingres, Gericault, Delacroix, Constable and Turner. NOTE: Field trips are mandatory for this class.
Repeatability: This course may not be repeated for additional credits.

ARTh 2543. Impressionism and Post-Impressionism. 4 Credit Hours.
This course will study the art of France, in the second half of the 19th century as the origin of modernism. Methodologies such as feminism, social art history, and psychoanalytic perspectives will be engaged to analyze the artists and their pictorial work in a variety of media. NOTE: Field trips are mandatory for this class.
Repeatability: This course may not be repeated for additional credits.

ARTh 2563. Painting: Late 19th Century. 4 Credit Hours.
Survey of European painting between 1870 and 1900, concentrating on Realism and Symbolism in France, Belgium, England, Germany, Austria and Scandinavia. Artists to be considered in detail are Monet, Cezanne, Batien-Lepage, Gauguin, Rossetti, Burne-Jones, Whistler, Leighton, Knopf, Menzel, Hodler, Munch and Zorn.
Repeatability: This course may not be repeated for additional credits.

ARTh 2600. Topics in 20th Century Art. 4 Credit Hours.
A selected topic in the history of art from the 20th century will be examined.
Repeatability: This course may be repeated for additional credit.

ARTh 2601. History of Modern Graphic Design. 4 Credit Hours.
The mixture of image and type we view today as graphic design has a history rooted in the earliest pictographs on pre-historic cave walls, evolving through such experiences as Roman political campaigns, medieval illuminated manuscripts, Renaissance book design, and the Industrial Revolution before arriving in the twentieth century. Keeping this rich heritage in mind, this course will investigate the development of graphic design from the mid-nineteenth century to the present, as a result of technological advances, political upheaval, commerce, and cultural and artistic exchange. We will discuss issues and works that are relevant to the field of graphic design in order to enrich your practice and develop critical thinking skills that will be useful to you throughout your academic and professional careers in other environments as well.

Repeatability: This course may not be repeated for additional credits.

ARTh 2610. Topics in Modern and Contemporary Art. 4 Credit Hours.
A selected topic in Modern and Contemporary Art will be examined. NOTE: Field trips are mandatory for this class.
Repeatability: This course may be repeated for additional credit.

ARTh 2622. Galleries and Studios of Rome. 4 Credit Hours.
A course designed to give an overview of the artistic developments in Rome during the past 25 years and to offer insight into the diverse trends of contemporary art in the city. Visits are made to galleries, specific exhibitions, and artists' studios. NOTE: This course is taught in Rome.
Repeatability: This course may not be repeated for additional credits.

ARTh 2642. Modern Painting and Sculpture 1900-45. 4 Credit Hours.
This course examines the major artists and movements in art from 1900 to 1945, placing them within a larger social and political context. Movements to be considered include: Fauvism; Cubism; Futurism; German Expressionism; the Russian Avant-Garde; De Stijl; Purism; the Bauhaus; Dada; Surrealism; and American Early Modernism. NOTE: Field trips are mandatory for this class.
Repeatability: This course may not be repeated for additional credits.

ARTh 2644. Modern Art: 1945 to the Present. 4 Credit Hours.
This course examines the major artists and movements in art from 1945 to the present, placing them within a larger social and political context. Developments to be considered include: Abstract Expressionism; Neo-Dada; Nouveaux Realism; Assemblage; Environments; Happenings; Pop; Op; Minimal; Post-Minimal; Performance; Earthworks; Conceptual; Installation; New Image; Neo-Expressionism; Post/Neo-Conceptual; and others. Issues of feminism, multiculturalism, and critical theory are also considered. NOTE: Field trips are mandatory for this class.
Repeatability: This course may not be repeated for additional credits.

ARTh 2651. Symbolism, Dada, and Surrealism. 4 Credit Hours.
This course investigates certain movements within Modernism that explore fantasy, psychology, imagination, humor, irrationality, violence, the grotesque, the unconscious, the abject, and the absurd. Symbolism and some aspects of Expressionism are approached in relation to the key twentieth-century international developments of Metaphysical Art, Dada and Surrealism. Works in various media are considered, including those outside the visual arts (such as poetry and music), paying particular attention to challenges to the definition of art and the social and political implications of these challenges. Artists considered include: Moreau, Redon, Gauguin, Van Gogh, Munch, Rousseau, de Chirico, Duchamp, Picabia, Tzara, Arp, Man Ray, Bréton, Schwitters, Höch, Groez, Ernst, Masson, Miro, Magritte, Matta, Kahlo, Tanguy, Dali, Gorky and others. NOTE: Field trips are mandatory for this class.
Repeatability: This course may not be repeated for additional credits.

ARTh 2655. Picasso and Modern Masters. 4 Credit Hours.
This course investigates the work of four major modern artists - Picasso, Matisse, Duchamp, and Brancusi- and places them in a variety of cultural, social, aesthetic, and historical contexts. Because the works of these artists are strongly represented in the Philadelphia Museum and in other local collections, several trips to examine work first-hand are planned.
Repeatability: This course may not be repeated for additional credits.
ARTH 2660. Topics in International Cinema. 4 Credit Hours.
Students in this course study a selection of films from modern Europe and Third World cultures which demonstrate both their interaction with postmodern politics, theory and culture, and the development of an international alternative discourse to Hollywood commercial film-making. Films will be selected according to a theme each semester. Past themes have included Italian Neo-Realism, Independent Film Makers, and Women in Film.
Repeatability: This course may be repeated for additional credit.

ARTH 2700. Topics in American Art. 4 Credit Hours.
A selected topic in American Art will be examined. NOTE: Field trips are mandatory for this class.
Repeatability: This course may be repeated for additional credit.

ARTH 2701. Main Trends in American 20th Century Painting. 4 Credit Hours.
Ashcan School, Early American Modernism, Regionalism, Abstract Expressionism, Assemblage, Pop-Optical Art, Minimal Art, Photo-Realism, and Neo-Expressionism will be discussed. NOTE: Field trips are mandatory for this class.
Repeatability: This course may not be repeated for additional credits.

ARTH 2704. 19th Century American Art. 4 Credit Hours.
An examination of the painting, sculpture, photography and popular illustration of the 19th century in the United States and its cultural context.
Visual material is considered as it corresponds to a series of historical moments, including the establishment of the academy, the era of Jacksonian Democracy, the rise of tourism, the birth of photography, the opening of the American West, the Civil War, the rise of Industrial Capitalism, and the emergence of the New Woman. Readings will incorporate a range of methodological approaches as well as a selection of primary source material.
NOTE: Field trips are mandatory for this class.
Repeatability: This course may not be repeated for additional credits.

ARTH 2751. American Art. 4 Credit Hours.
This course explores visual art produced in North America since the arrival of Columbus in 1492. Some pre-contact, pre-Columbian art will be included, but the course is designed to concentrate on works produced since the beginning of European colonialism and the ensuing encounter of diverse cultures, which have contributed to the rich diversity of North American art for the past five hundred years. Although course content focuses on art of the United States, works by some Mexican, Canadian, and Native American artists will be considered as well. A broad purpose of the course is to investigate the role of visual art in creating and negotiating various meanings of “America.” Major trends in American art - colonial portraiture, Hudson River landscape painting, Realism, Aestheticism, the Harlem Renaissance, Abstract Expressionism, and Postmodernism, among others - will be examined in the context of American cultural history. The course will introduce students to a multitude of artists and works in a wide variety of media, using an exploratory approach designed to foster visual literacy and historical understanding, not just memorization of minor facts or established stylistic categories. Through a combination of lectures, discussions, readings, exams, and a fieldtrip, the course provides an introductory survey of the arts in North America while encouraging students to look, think, speak, and write critically about what they see. NOTE: Field trips are mandatory for this class.
Repeatability: This course may not be repeated for additional credits.

ARTH 2752. American Architecture. 4 Credit Hours.
An examination of the major movements and architects in the history of American architecture. NOTE: Field trips are mandatory for this class.
Repeatability: This course may not be repeated for additional credits.

ARTH 2753. Art and Environment in American Culture. 4 Credit Hours.
Does our present global environmental crisis demand a new way of thinking about art and its history? What role has art played in constructing an image of our environment as natural resource, scientific specimen, mythic Eden, arena of struggle, and/or fragile ecosystem? Can art and art history help envision a more sustainable world or are they part of the problem? As a way of addressing such questions, this course takes an “ecocritical” perspective on American art from the late 19th century (when the word “ecology” first appeared) to the present. More than any other single nation, the United States bears responsibility for the ecological challenges facing our planet, even as its citizens arguably enjoy unparalleled opportunities for creative freedom. By highlighting the interconnectedness of human beings with their environment in America, as well as the power of art to re-imagine that relationship, the course provokes students to re-think accepted canons and practices in light of other criteria having to do with sustainability, environmental justice, and our ethical responsibility to non-human life. Covering a wide range of artists and media - from the Romantic paintings and writings of Thomas Cole and John James Audubon to more recent work by Edward Burtynsky, Subhankar Banerjee, Mierle Laderman Ukeles, Robert Smithson, Helen and Newton Harrison, Eduardo Kac, Alexis Rockman, Mark Dion and other contemporary artists active in this country - the course gives students a new and richly diverse opportunity to think about American art. NOTE: Field trips are mandatory for this course.
Repeatability: This course may not be repeated for additional credits.

ARTH 2780. Topics in Non-Western Art. 4 Credit Hours.
A selected topic in the Non-Western history of art will be examined. NOTE: Field trips are mandatory for this class.
Repeatability: This course may be repeated for additional credit.

ARTH 2807. East Meets West. 4 Credit Hours.
This course focuses on topics related to the correspondence between the arts of Eastern and Western cultures. Past and future topics include: American chromolithography and Japanese woodblock prints; religious iconography in the East and West; art and technology in modern Eastern and Western art and culture; trade and commerce and the interchange of artistic motifs, philosophies and techniques. NOTE: Field trips are mandatory for this class.
Repeatability: This course may not be repeated for additional credits.
ARTH 2815. Japanese Art. 4 Credit Hours.
This course introduces the history and aesthetics of visual arts in Japan from ancient times to the present through close visual analysis of objects and critical readings. Students study the development of major forms of Japanese visual culture including painting, sculpture, architecture, prints, and ceramics. Special attention will be paid to the cultural, social, and religious context in which works were produced and functioned. NOTE: Field trips are mandatory for this class.
Repeatability: This course may not be repeated for additional credits.

ARTH 2818. Art of India. 4 Credit Hours.
The art and architecture of the Indian sub-continent from 2500 BC to the present. The Hindu, Buddhist, Jain, and Islamic religions have been crucially important for the formation of south Asian culture and art. This class will emphasize how religious ideas have been made visually manifest in the arts. Art's role in the formation of modern India will also be examined. NOTE: Field trips are mandatory for this class.
Repeatability: This course may not be repeated for additional credits.

ARTH 2819. Southeast Asian Art. 4 Credit Hours.
The art and civilization of Sri Lanka, Burma, Thailand, Cambodia, Vietnam, and Indonesia, focusing on the key aspects that have shaped cultures from the 5th century AD to modern times. NOTE: Field trips are mandatory for this class.
Repeatability: This course may not be repeated for additional credits.

ARTH 2866. Arts of Asia. 4 Credit Hours.
Architecture, sculpture, painting and the functional art of Asia (India, China, Japan and Southeast Asia). A historical examination of the art as a religious expression and as a product of changing social and economic conditions. NOTE: Field trips are mandatory for this class.
Repeatability: This course may not be repeated for additional credits.

ARTH 2871. Chinese Art. 4 Credit Hours.
This course is an introductory survey of the arts of China from the Neolithic period to the 20th century. Looking primarily at works in situ and in Asian collections, we will investigate how art objects and monuments reflect the religious beliefs, political agendas and aesthetic preferences of the artists and patrons who created them. We will also pay particular attention to the roles that media and technology play in the appearance of and status attached to the finished products. Another major theme will be the development of indigenous and imported religions, and their impact on iconography. Finally, time permitting, we will touch on related contemporary subjects, such as forgeries and the illegal trade in looted art. NOTE: Field trips are mandatory for this class.
Repeatability: This course may not be repeated for additional credits.

ARTH 2887. Writing for Art History: Art History Writing Intensive Seminar. 4 Credit Hours.
This course is designed to provide students with opportunities to become familiar with different kinds of art historical writing, with the ultimate aim of pulling together these skills for a final project of researching and writing a virtual exhibition catalog. Students will build on smaller assignments that involve formal description and analysis of visual images, research and contextual interpretation of images, critical reading of secondary sources, and the writing of extended catalog essays. The course will be thematically based according to the instructor's area of expertise and will include two mandatory group field trips to local and regional museums. Examples of possible topics offered in the future are: Renaissance Portraiture; The Development of Landscape in Western Art; Abstraction; Sacred Images from Antiquity to the Baroque Period.
Course Attributes: WI

ARTH 2904. Honors Counterfeiting, Looting and the Ethics of Collecting Ancient Art. 3 Credit Hours.
Did you know that the Getty Museum paid over 9 million dollars for a statue that many now consider a fake? That some curators believe that 40% of the art on the market today is fake or so restored that we can consider the pieces fake? We will begin looking at some prominent fakes that took in scholars (the Metropolitan's "Etruscan" Warriors), talk about when something becomes a fake, and problematic pieces that are still on display. Fakes are made because there is so much money in the art market, and we will see how this market developed. In doing so we will see how Napoleon's policies ultimately lead to the looting on a massive scale in Nazi Germany; discuss the modern development of international law on looting and the protection of antiquities; and argue about what is the United States' responsibility in Iraq now. Finally, we will look at various means of how governments try to protect their antiquities (paying attention to the real-life soap operas like the Lydian Hoard); what is the role of museums in protecting antiquities (looking at the major news story on the indictment of the curator of the Getty, and the return of the stolen Euphronios vase by the Metropolitan Museum); what dealers do; and how an ethical collector can pursue his/her hobby responsibly. NOTE: This course is for Honors students. Field trips are mandatory for this class.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.

ARTH 2990. Honors Special Topics. 3 Credit Hours.
Selected topic from a specific period. NOTE: This course is for Honors students. This course can be used to satisfy the university Core Arts (AR) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: AR, HO
Repeatability: This course may be repeated for additional credit.
ARTH 3082. Independent Study. 1 to 3 Credit Hour.
Intensive study in a specific area under individual guidance. Students must get permission from their department before attempting independent study.
Repeatability: This course may be repeated for additional credit.

ARTH 3097. Art History Capstone. 4 Credit Hours.
Undergraduate Capstone seminar in methodology, historiography, and or criticism of art and art history. Specific topics will vary by semester. This course is required of all art history majors for graduation and should be taken in their junior or senior year. NOTE: This is a Writing Intensive Course. This course fulfills the capstone requirement for Tyler Art History majors who entered the university in fall 2008 or later. Field trips are mandatory for this class.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

ARTH 3182. Independent Study. 1 to 3 Credit Hour.
Intensive study in a specific area under individual guidance. Students must get permission from their department before attempting independent study.
Repeatability: This course may be repeated for additional credit.

ARTH 3301. Michelangelo. 4 Credit Hours.
Profoundly impressive both for his technique and expressive content - emotional, dramatic, heroic, but always human - Michelangelo Buonarroti (1475-1564) continues to be a vital element in the history of art, as he was during the Renaissance. Weekly class lectures and onsite visits examine his drawing, painting, sculpture and architecture in the context of the art and patronage of his own time, starting with a study of Classical Roman Antiquity. In depth, direct viewing of his works such as the Pietà, Sistine Chapel, and Moses are matched by lectures and readings in class, and a trip to Florence offers further access to his oeuvre. We seek to determine why, in the age of virtual reality, viewing him in the original is enduringly powerful and necessary for an understanding of the artist and his impact.
Repeatability: This course may not be repeated for additional credits.

ARTH 3302. Images of Women. 3 Credit Hours.
A study of women as subjects of art, as patrons, as creators. The course is organized around the roles of women as represented over the course of western art.
Repeatability: This course may not be repeated for additional credits.

ARTH 3324. High Renaissance Art in Italy. 4 Credit Hours.
Painting and sculpture in Italy from Leonardo da Vinci to 1600. The High Renaissance style of Raphael, the art of Michelangelo, Mannerism, and the Counter-Reformation, through Caravaggio. NOTE: Field trips are mandatory for this class.
Repeatability: This course may not be repeated for additional credits.

ARTH 4082. Independent Study. 1 to 4 Credit Hour.
Intensive study in a specific area under individual guidance. Students must get permission from their department before attempting independent study.
Repeatability: This course may be repeated for additional credit.

ARTH 4182. Independent Study. 4 Credit Hours.
Intensive study in a specific area under individual guidance. Students must get permission from their department before attempting independent study.
Repeatability: This course may be repeated for additional credit.

ARTH 4285. Internship. 1 to 6 Credit Hour.
Students working on relevant projects at area museums or galleries may receive Temple credit toward an art history major or minor. Variable credit depending on the number of hours worked per week, up to six credits maximum. Students will maintain a regular record of activities. Prior arrangements must be made with a host museum or gallery. Requires the permission of the Undergraduate Advisor of the Art History Department.
Repeatability: This course may be repeated for additional credit.

Asian Studies (ASST)

Courses

ASST 0811. Asian Behavior & Thought. 3 Credit Hours.
We incessantly engage ourselves in doing things. We are beings-at-doing. We define ourselves by the kind of actions we perform. How we act or conduct ourselves is shaped by the kind of self we construct for ourselves. And that self is shaped by the society into which we happen to be born. Self-identity, which is socially and culturally constructed by our experiences and interactions with others, carries a personal as well as an interpersonal meaning. Learn the four Asian paradigmatic cases of self-identity and examine your self in light of them. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: CRIT 0811, PHIL 0811, REL 0811/0911, Chinese 0811, or Japanese 0811.
Course Attributes: GB
Repeatability: This course may not be repeated for additional credits.
ASST 0815. Language in Society. 3 Credit Hours.

How did language come about? How many languages are there in the world? How do people co-exist in countries where there are two or more languages? How do babies develop language? Should all immigrants take a language test when applying for citizenship? Should English become an official language of the United States? In this course we will address these and many other questions, taking linguistic facts as a point of departure and considering their implications for our society. Through discussions and hands-on projects, students will learn how to collect, analyze, and interpret language data and how to make informed decisions about language and education policies as voters and community members. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: ANTH 0815/0915, Chinese 0815, CSCD 0815, EDUC 0815/0915, English 0815, Italian 0815, PSY 0815, Russian 0815, or Spanish 0815.

Course Attributes: GB

Repeatability: This course may not be repeated for additional credits.

ASST 0817. Youth Cultures. 3 Credit Hours.

Do you listen to hip hop, spend all your time in Second Life, dress up like a cartoon character and go to anime fairs, or go skateboarding every day with your friends? Then you're part of the phenomenon called youth culture. Often related to gender, race, class and socio-economic circumstances, youth cultures enable young people to try on identities as they work their way to a clearer sense of self. Empowered by new technology tools and with the luxury of infinite virtual space, young people today can explore identities in ways not available to previous generations. Students in this class will investigate several youth cultures, looking closely at what it means to belong. They will also come to appreciate how the media and marketing construct youth identities and define youth cultures around the world. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed ANTH 0817, EDUC 0817/0917 or SOC 0817.

Course Attributes: GB

Repeatability: This course may not be repeated for additional credits.

ASST 0834. Representing Race. 3 Credit Hours.

From classical Greeks and Romans, who saw themselves under siege by the "barbarian hordes," to contemporary America and its war on "Islamic extremism," from "The Birth of a Nation" to "Alien Nation," Western societies have repeatedly represented some group of people as threats to civilization. This course will examine a wide range of representations of non-Western people and cultures in film, literature, scientific and legal writings, popular culture and artistic expression. What is behind this impulse to divide the world into "us" and "them"? How is it bound up with our understanding of race and racial difference? And what happens when the "barbarian hordes" talk back? NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed AAS 0834, Anthropology 0834/0934, English 0834/0934, or History 0834.

Course Attributes: GD

Repeatability: This course may not be repeated for additional credits.

ASST 0836. Development & Globalization. 3 Credit Hours.

Use historical and case study methods to study the differences between rich and poor nations and the varied strategies available for development in a globalizing world. Examine the challenges facing developing countries in historical and contemporary context and analyze the main social, cultural, and political factors that interact with the dynamic forces of the world economy. These include imperialism/colonialism, state formation, labor migration, demographic trends, gender issues in development, religious movements and nationalism, the challenges to national sovereignty, waves of democratization, culture and mass media, struggles for human rights, environmental sustainability, the advantages and disadvantages of globalization, and movements of resistance. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed History 0862, POLS 0862/0962, or SOC 0862/0962.

Course Attributes: GG

Repeatability: This course may not be repeated for additional credits.

ASST 0863. Religion in the World. 3 Credit Hours.

Learn about the major religious traditions found worldwide today: Hinduism, Buddhism, Judaism, Christianity, Islam, and several indigenous traditions. Examine the beliefs, practices, and values of these groups in order to understand the worldviews and ways of life of the people who practice them. Our interdisciplinary analysis and interpretation of specific examples of religious experience will help shed light on the overall meaning of religion and human existence. We will carefully consider examples while also focusing on particular thematic issues, like cosmology and ritual. Develop appreciation for the religious vibrancy and diversity that exist in human cultures while you actively engage in the learning process through class presentation, class participation, paper-writing, and a self-selected field trip. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Duplicate Credit Warning: Students may take only one of the following courses for credit; all other instances will be deducted from their credit totals: Religion 0863, 0963, 1101, C053, Asian Studies 0863, Critical Languages 0863, or Philosophy 0863.

Course Attributes: GG

Repeatability: This course may not be repeated for additional credits.
ASST 0868. World Society in Literature & Film. 3 Credit Hours.
Learn about a particular national culture - Russian, Indian, French, Japanese, Italian, for example, each focused upon in separate sections of this course - by taking a guided tour of its literature and film. You don't need to speak Russian, Hindu, French or Japanese to take one of these exciting courses, and you will gain the fresh, subtle understanding that comes from integrating across different forms of human expression. Some of the issues that will be illuminated by looking at culture through the lens of literature and film: Family structures and how they are changing, national self-perceptions, pivotal moments in history, economic issues, social change and diversity. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: Arabic 0868/0968, Chinese 0868/0968, English 0868/0968, French 0868/0968, German 0868/0968, Hebrew 0868, Italian 0868/0968, Japanese 0868/0968, Jewish Studies 0868, Korean 0868, LAS 0868/0968, Political Science 0868/0968, Russian 0868/0968, or Spanish 0868/0968.
Course Attributes: GG
Repeatability: This course may not be repeated for additional credits.

ASST 0871. Arts in Cultural Context. 4 Credit Hours.
View the arts as an expression of cultural identity as it occurs across the globe. Each semester, we will focus on a particular world region or country, including but not limited to Russia, Japan, and Latin America. The exploration of cultural identity begins with an overview of the region or country's historical and religious influences and then studies the culture's arts, including the visual arts (painting, sculpture), musical traditions, literature (folktales, national mythology), the vernacular arts (crafts, storytelling), film and theater. You will take field trips or have experiences that will allow you to encounter the region's arts firsthand, and to develop a blended understanding of a people's cultural identity and the larger world. Note: This course fulfills the Arts (GA) requirement for students under GenEd and Arts (AR) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: Arabic 0871, Hebrew 0871 or Russian 0871.
Course Attributes: GA
Repeatability: This course may not be repeated for additional credits.

ASST 1051. Premodern Asia. 3 Credit Hours.
This course covers state, society, and culture, including religion and literature in South, Southeast, and East Asia. The diffusion of Indian and Chinese civilizations to the Khmer Empire and Vietnam in Southeast Asia and to Japan, and in Korea will be overarching themes. Themes of continuity and change over time will be explored. Comparison of state, society and culture in major Asian regions will highlight cultural adaptation and introduce the diversity of Asian cultures and institutions.
Repeatability: This course may not be repeated for additional credits.

ASST 1052. Modern Asia. 3 Credit Hours.
This course covers the incursions of Western imperialism, nationalism and independence movements, and postcolonial developments in South, Southeast, and East Asia. It will explore continuity and change in state, society, and culture in the major countries and regions. As in Asian Studies 1051 Premodern Asia, comparisons will shed light on similarities and differences in patterns of cultural adaptation and the diversity of Asian cultures and institutions.
Repeatability: This course may not be repeated for additional credits.

ASST 1101. Introduction to World Religions. 3 Credit Hours.
Introduction to major world religions (Hinduism, Buddhism, Taoism, Confucianism, Judaism, Christianity, Islam) as a way of coming to know and appreciate the world views of other cultures. Attention to beliefs, values, and practices of these religions as ways of dealing with the issues basic to human life. NOTE: This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: IS
Repeatability: This course may not be repeated for additional credits.

ASST 1102. Introduction to Asian Religions. 3 Credit Hours.
Introduction to the major Asian religious, philosophical, and cultural traditions (Hinduism, Buddhism, Confucianism, Taoism, Shinto) with emphasis on the cultural roots of each religious tradition, the analysis of its principal teachings and practices, and the major cultural expressions in religious art, ritual, poetry, music, and scriptures. NOTE: This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. In addition to meeting the university Core International Studies requirement, this course meets the Non-Western/Third World IS requirement for Communication Sciences majors. Please note the recent update to the Core IS requirement at www.temple.edu/vpus/resources/coreupdates.htm#coreisupdate.
Course Attributes: IS
Repeatability: This course may not be repeated for additional credits.
ASST 1801. Chinese and Japanese Literature in Cultural Context. 3 Credit Hours.
A literary and cultural exploration of the worlds of classical and modern China and Japan. No knowledge of Chinese or Japanese language expected. NOTE: (1) AS Foundation Course. (2) This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. In addition to meeting the university Core International Studies requirement, this course meets the Non-Western/Third World IS requirement for Communication Sciences majors. Please note the recent update to the Core IS requirement at www.temple.edu/vpus/resources/coreupdates.htm#coreisupdate.
Course Attributes: IS
Repeatability: This course may not be repeated for additional credits.

ASST 1802. Arts of Asia. 3 Credit Hours.
Architecture, sculpture, painting, and the functional arts of Asia (India, China, Japan, and Southeast Asia). A historical examination of the art as a religious expression and as a product of changing social and economic conditions. The material culture of Asia will be examined with an emphasis on differing world views and perspectives with which to ‘see’ art. NOTE: (1) Course fee (about $20) and field trips required. (2) This course can be used to satisfy the university Core Arts (AR) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: AR
Repeatability: This course may not be repeated for additional credits.

ASST 1901. Honors Chinese and Japanese Literature in Cultural Context. 3 Credit Hours.
A literary and cultural exploration of the worlds of classical and modern China and Japan. NOTE: AS Foundation Course. No knowledge of Chinese or Japanese language expected. Requires instructor's permission.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.

ASST 1902. Honors Introduction to Asian Religions. 3 Credit Hours.
Introduction to the major Asian religious, philosophical, and cultural traditions (Hinduism, Buddhism, Confucianism, Taoism, Shinto) with emphasis on the cultural roots of each religious tradition, the analysis of its principal teachings and practices, and the major cultural expressions in religious art, ritual, poetry, music, and scriptures. NOTE: Requires instructor's permission.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.

ASST 2000. Special Topics in Asian Studies I. 2 to 4 Credit Hours.
Provides a cross listing for regular and writing intensive courses in other departments when they have substantial Asian Studies content. Also used for directed readings and new courses. NOTE: Cross listing arranged by Asian Studies Director.
Repeatability: This course may be repeated for additional credit.

ASST 2001. Practical Asian Society and Culture. 3 Credit Hours.
Emphasizes practical Asian Studies knowledge and skills. This course provides a foundation for living and working in four countries: China, Japan, Korea, and India. It includes basic aspects of the culture of daily life and work, such as meeting people, communication patterns, entertaining, holidays, and taboos. The course also builds fundamental skills for independent research on Asian society and culture and develops basic presentation skills for use in the workplace and the Asian Studies capstone course. Student teams select and research one aspect of a society or culture, using print and online sources. NOTE: Required for Asian Business & Society Certificate.
Repeatability: This course may not be repeated for additional credits.

ASST 2011. Survey of Japanese Literature Before 1868. 3 Credit Hours.
Novels, poetry, travel diaries, plays, and other genres from Japan's Heian through Edo periods. NOTE: No knowledge of Japanese language expected.
Repeatability: This course may not be repeated for additional credits.

ASST 2012. Modern and Contemporary Japanese Literature in Translation. 3 Credit Hours.
Major writers and works of late 19th, 20th, and 21st century Japanese literature. NOTE: No knowledge of Japanese language expected. Prior to fall 2009, the course title was "Survey of Japanese Modern Literature."
Repeatability: This course may not be repeated for additional credits.

ASST 2013. Modern and Contemporary Chinese Literature in Translation. 3 Credit Hours.
This course focuses on 20th- and 21st-century literature from China. Among the major themes of the course are socio-political and cultural upheaval and transformation, fiction and nation, and gender, race and class relations. Students will read representative short stories, novels, poetry, and essays. Selected documentaries and feature films will supplement the literary texts. The course will help familiarize students with major writers and with the cultural and historical contexts in which they produced their works.
Repeatability: This course may not be repeated for additional credits.
ASST 2015. Tokyo in Literature and Film. 3 Credit Hours.
Like all great cities, Tokyo simultaneously fascinates and frightens us. The course explores this fascination and fear through the work of leading writers and directors who have responded to and shaped the city in their work. Readings will include essays, short stories, and novels by authors such as Yasunari Kawabata, Fumiko Hayashi, Banana Yoshimoto, and Haruki Murakami. Films by directors such as Yasujiro Ozu, Satoshi Kon, and Shosuke Murakami will be reviewed and discussed.
Repeatability: This course may not be repeated for additional credits.

ASST 2016. Mystery and Crime Fiction in Japan. 3 Credit Hours.
This course examines mystery and crime fiction in Japan through the work of writers such as Edogawa Rampo, Matsumoto Seicho, and Kirino Natsuo. Through critical analysis of novels and short stories, we'll seek insights into the anxieties and tensions of life in modern and contemporary Japan.
We'll explore a range of socio-cultural issues in areas such as family life, education, careers, and gender relations. All readings and discussions are in English.
Repeatability: This course may not be repeated for additional credits.

ASST 2021. Japanese Literature in Film. 3 Credit Hours.
Cinematic adaptations of Japanese novels and short stories, with the focus on principal figures of film and literature such as Kurosawa and Akutagawa.
NOTE: No knowledge of Japanese language expected.
Repeatability: This course may not be repeated for additional credits.

ASST 2022. Contemporary Chinese Urban Film and Fiction in Translation. 3 Credit Hours.
This course looks at a selection of Chinese cinematic and literary texts by contemporary filmmakers and writers from China, Taiwan, and Hong Kong. Through the study of film and fiction, we will examine how urban spaces and subjects have been delineated and imagined within the context of recent social and economic transformation and globalization. In particular, we will examine the different ways in which cinematic images and narrative structures celebrate the metropolis and convey the anxieties associated with it. We will explore a wide range of urban subjects as represented in film and fiction, and the ways in which they are shaped by and at the same time are shaping society and culture in China, Taiwan, and Hong Kong today.
Repeatability: This course may not be repeated for additional credits.

ASST 2030. Special Topics I. 3 Credit Hours.
Arranged each semester, please consult with the instructor or the Asian Studies web site (http://www.temple.edu/asian_studies/) for a detailed description.
Repeatability: This course may be repeated for additional credit.

ASST 2040. Special Topics II. 4 Credit Hours.
Arranged each semester, please consult with the instructor or the Asian Studies web site (http://www.temple.edu/asian_studies/) for a detailed description.
Repeatability: This course may be repeated for additional credit.

ASST 2074. Geography of East and South Asia. 3 Credit Hours.
Introduction to the natural environments and diverse contemporary societies that comprise East, Southeast, and South Asia. Emphasis on such topics as poverty, economic development, and social conditions in India, Thailand, and the Philippines, as well as China, Japan, and Korea. NOTE: (1) AS Foundation Course. (2) This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. In addition to meeting the university Core International Studies requirement, this course meets the Non-Western/Third World IS requirement for Communication Sciences majors. Please note the recent update to the Core IS requirement at www.temple.edu/vpus/resources/coreupdates.htm#coreisupdate.
Course Attributes: IS
Repeatability: This course may not be repeated for additional credits.

ASST 2096. Writing Seminar I. 2 to 4 Credit Hours.
Provides a cross listing for regular and writing intensive courses in other departments when they have substantial Asian Studies content. Also used for directed readings and new courses. NOTE: Cross listing arranged by Asian Studies Director.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

ASST 2097. Asian Diaspora. 3 Credit Hours.
Spurred by pressures of colonialism, economic change, nationalism, political repression and war as well as individual needs and adventurism, Asians have migrated from their homelands to new regions of the world within Asia as well as in Africa, the Caribbean, and Latin America, North America, and Europe. In considering the diaspora, familiar terms such as Asian, American, Community, and Nation are called into question by the multiplicity of experiences and identities of those who have ventured out from Eastern regions of the globe. This course examines the social experiences and cultural productions of Chinese, Japanese, and Filipinos who have journeyed to far flung lands and the terms that can be employed to analyze their experiences and cultures.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.
ASST 2098. Japanese Popular Culture and its Literature. 3 Credit Hours.
Contemporary culture and literature of Japan. NOTE: No knowledge of Japanese language expected.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

ASST 2101. Religions of India. 3 Credit Hours.
An introduction to the foundations, nature, and principles of classical Hinduism. An introduction to the fundamentals of Buddhism and Jainism.
Repeatability: This course may not be repeated for additional credits.

ASST 2102. Introduction to Buddhism. 3 Credit Hours.
Introduction to the historical development of Buddhism in relation to other East Asian religions. Topics include the Four Noble Truths of Basic Buddhism, the Hinayana Mahayana controversy over Buddhist Dharma and practice, as well as the development of Buddhist thought throughout Asia.
Repeatability: This course may not be repeated for additional credits.

ASST 2107. Asian American Experiences. 3 Credit Hours.
This introductory survey analyzes commonalities and differences in the historical and contemporary experiences of Asian American ethnic groups, Chinese, Japanese, Filipinos, Koreans, and South and Southeast Asians. It explores important ideas about the position of Asians in U.S. society, including racialization, assimilation, cultural pluralism, model minority thesis, split labor market, and internal colonialism. It begins with the arrival of the Chinese in the 1830s and ends with contemporary issues. Lectures and videos; emphasis on active student participation in learning through discussion and response papers. NOTE: This course can be used to satisfy the university Core Studies in Race (RS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: RS
Repeatability: This course may not be repeated for additional credits.

ASST 2201. Chinese Religions. 3 Credit Hours.
Critical study of the development of Chinese religions from the time of Confucius to Mao, including the problem of ideological continuity in contemporary China (Maoist Marxism versus Confucianism).
Repeatability: This course may not be repeated for additional credits.

ASST 2217. The Vietnam War. 3 Credit Hours.
An attempt to probe in-depth one of the most significant and controversial episodes of recent American history. The history of Vietnam since the 19th century with equal emphasis on the First and Second Indochina Wars. The impact of the war on the domestic and international scenes and its multiple legacies. Television and film from the period and guest speakers.
Repeatability: This course may not be repeated for additional credits.

ASST 2238. Visual Anthropology of Modern Japan. 3 Credit Hours.
This course offers an anthropological approach to systems of visual communication that are central to understanding Japanese society and culture. Themes and perspectives from visual anthropology will be applied to visual sign systems of everyday life (writing, clothes, food, etc.), to the prevalence and influences of popular culture emphasizing mass mediated forms of manga (comic books), advertisements, etc. The course will also include ethnographic films about Japanese culture as well as a review of how Japanese culture is communicated to mass audiences through classic and contemporary feature films as well as network television. We will try to unpack some of the stereotypic reductions common to superficial knowledge of Japan and Japanese culture.
Repeatability: This course may not be repeated for additional credits.

ASST 2301. Introduction to Zen Buddhism. 3 Credit Hours.
This course surveys the historical development of Zen Buddhism as it unfolds in India, China, and Japan, and focuses on the examination of the nature of satori experience. Analyzes its existential meaning from perspectives of therapy, Zen practice, and philosophy.
Repeatability: This course may not be repeated for additional credits.

ASST 2351. Japan in a Changing World. 3 Credit Hours.
An examination and analysis of the key elements that contribute to Japan's behavior in the global arena. The development of Japan's interaction with foreign powers, the psychological underpinnings of its diplomacy, and the creation of Tokyo's world view will be discussed.
Repeatability: This course may not be repeated for additional credits.

ASST 2367. South Asia: Peoples, Culture, Experiences. 3 Credit Hours.
An introduction to the peoples and cultures of the Indian subcontinent. The course will focus on the indigenous religions of India: Hinduism, Jainism, and Buddhism as well as Islam, Christianity, and Zoroastrianism as brought to western India by migrants.
Repeatability: This course may not be repeated for additional credits.

ASST 2373. Japanese Culture. 3 Credit Hours.
Introduction to traditional and contemporary Japanese culture. Topics covered include: early literature, aesthetic principles as expressed in art and architecture, religion, gender roles, Japan's shifting relationships with the outside world, rural communities and urban centers in the 20th century, and the construction of the self in modern Japan.
Repeatability: This course may not be repeated for additional credits.
ASST 2374. The Anthropology of Modern China. 3 Credit Hours.
This course provides an introduction to the culture and society of the contemporary People's Republic of China (P.R.C.). The first half of the course explores the dramatic changes in both rural and urban sectors of Chinese society since the turn of the century, with a particular focus on post-1949 Maoist and post-Mao socialist transformations. The second half of the course examines such topics as gender and the status of women, ethnic minorities, religion and healing, the self and society, the Party and the state, and P.R.C. narratives of modernity. Throughout, the P.R.C. will be examined as a society that embodies a distinctively Chinese synthesis of tradition and modernity.
Repeatability: This course may not be repeated for additional credits.

ASST 2501. Introduction to East Asia: China. 3 Credit Hours.
Within the context of larger processes of socioeconomic and cultural change, this course examines the development of characteristic institutions and thought in traditional China and revolutionary transformation in the modern era. This approach is designed to provide the student with a basic understanding of state, society, and culture in China, the major themes of Chinese history, and more generally, broad processes of social change.
NOTE: AS Foundation Course. Usually offered in alternate years or summer on Main Campus.
Repeatability: This course may not be repeated for additional credits.

ASST 2502. Introduction to East Asia: Japan. 3 Credit Hours.
A survey of Japanese history to the 20th century. Major themes include religious, political, and social change. Major topics are: the early centralized state, the rise of aristocratic culture, the emergence of the warrior class, and the modern transformation into an urban, industrial empire. Course materials include primary documents in translation and videos. NOTE: AS Foundation Course. Usually offered in alternate years on Main Campus.
Repeatability: This course may not be repeated for additional credits.

ASST 2503. Introduction to Southeast Asia: Insular. 3 Credit Hours.
Covers the histories of the Philippines, Indonesia, Malaysia, and Singapore from the 16th century until modern times. The course will introduce students to the island worlds of Southeast Asia, its peoples, their histories, societies, and economies. To familiarize students with non-Western worlds, lectures will be illustrated with videotapes, slides, and transparencies. Excerpts of articles and indigenous documents will also be used for discussion.
Repeatability: This course may not be repeated for additional credits.

ASST 2504. Introduction to Southeast Asia: Mainland. 3 Credit Hours.
Covers the histories of Myanmar (Burma), Thailand, Laos, Cambodia, and Vietnam, from the 16th century until modern times. It is a course designed to introduce students to the analysis of such forces as religion, statecraft, and trade, and the manner in which they have shaped the mainland countries of Southeast Asia. Reference will be made to contemporary events taking place in the region, and students will be encouraged to follow these developments through the media and integrate their knowledge in class discussions. Course work will include readings, discussions, films, examinations, and book reviews.
Repeatability: This course may not be repeated for additional credits.

ASST 2511. Introduction to Asian Business. 3 Credit Hours.
An overview of Asian business practices and their economic, political, and social contexts, with emphasis on Japan, China, Korea, and India. Asian Studies and other non-business majors/minors are welcome. NOTE: Required for Asian Business and Society Certificate.
Repeatability: This course may not be repeated for additional credits.

ASST 2606. Introduction to Islam. 3 Credit Hours.
Analysis of the tawhid, essence of Islam, of its basic categories for religious life, law, theology, literature, philosophy, art, and science. Survey of the major phenomena of Islamic civilization in their relation to tawhid.
Repeatability: This course may not be repeated for additional credits.

ASST 2696. Introduction to Islam. 3 Credit Hours.
Analysis of the tawhid, essence of Islam, of its basic categories for religious life, law, theology, literature, philosophy, art, and science. Survey of the major phenomena of Islamic civilization in their relation to tawhid.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

ASST 2807. East Meets West. 4 Credit Hours.
A study of the impact of East-West cultural exchanges throughout Japanese art history, concentrating on four main areas: early Buddhist imagery and the influence of Hellenistic and Indian sculpture and paintings; Namban art (art of the southern barbarians) and the effect of the Western approach on the treatment of space in two-dimensional Japanese art; Japonisme and the impact of wood-block prints on European and American artists (Degas, Lautrec, Whistler, Mary Cassatt, etc.); Japanese architecture as an inspiration for modern architects (Bruno Taut, Le Corbusier, F. L. Wright) and cross-cultural Western influences on Japanese architects (Tange, Isozaki, Edward Suzuki, etc.).
Repeatability: This course may not be repeated for additional credits.

ASST 2815. Japanese Art. 4 Credit Hours.
A look at Japanese history through art, with the primary focus on design and pattern. The course will examine all the major art forms from the earliest times to the present.
Repeatability: This course may not be repeated for additional credits.
ASST 2818. Art of India. 4 Credit Hours.
The art and architecture of the Indian sub-continent from 2500 B.C. to the present. The Hindu, Buddhist, Jain, and Islamic religions have been crucially important for the formation of South Asian culture and art. This class will emphasize how religious ideas have been made visually manifest in the arts. The role of art in the formation of modern India will also be examined. NOTE: Field trips required.
Repeatability: This course may not be repeated for additional credits.

ASST 2903. Honors Ethnic and Social Minorities in Japan. 3 Credit Hours.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.

ASST 2921. Honors Japanese Literature in Film. 3 Credit Hours.
Cinematic adaptations of Japanese novels and short stories, with the focus on principal figures of film and literature such as Kurosawa and Akutagawa. NOTE: No knowledge of Japanese language expected.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.

ASST 3000. Special Topics in Asian Studies II. 2 to 4 Credit Hours.
Provides a cross listing for regular and writing intensive courses in other departments when they have substantial Asian Studies content. Also used for directed readings and new courses. NOTE: Cross listing arranged by Asian Studies Director.
Repeatability: This course may be repeated for additional credit.

ASST 3001. Earth Ethics. 3 Credit Hours.
This course examines the relationship of human and environmental science to ethical principles. By analyzing case studies that deal with resource sustainability, environmental protection, divergent views of technology and respect for all forms of life, students will assess individual life-styles and alternative visions of the good life on planet earth.
Repeatability: This course may not be repeated for additional credits.

ASST 3011. Monks, Masters, and Magicians: Religion in Premodern Chinese Literature. 3 Credit Hours.
This course offers an introduction into the rich heritage of Chinese literature before 1911 with a focus on religious culture. We will follow Buddhist nuns and monks, Daoist masters and Confucian scholars on their adventures through 2000 years of Chinese history. Thematically, the class will focus on texts that show how Chinese religious traditions (Confucianism, Daoism, and Buddhism) were depicted in secular literature, but will also include narrative religious texts. From 3rd century miracle tales, to the classical novels of the Ming and Qing dynasty, we will look at Chinese religion through the lens of literature. Next to the readings themselves, we will cover more general aspects such as the relationship of literature to historical facts and notions of genre and motif as they apply to China.
Repeatability: This course may not be repeated for additional credits.

ASST 3030. Special Topics III. 3 Credit Hours.
Arranged each semester, please consult with the instructor or the Asian Studies web site (http://www.temple.edu/asian_studies/) for a detailed description.
Repeatability: This course may be repeated for additional credit.

ASST 3031. Women in Chinese Literature. 3 Credit Hours.
This course focuses on women writers and women as characters in premodern, modern, and contemporary Chinese literature. Texts will include poetry, novels, short stories, and drama. Gender, representation, and women’s roles in the history of Chinese literature are among the topics that will be covered. Knowledge of Chinese is not required. The class will be conducted in English, and all readings will be in English translation.
Repeatability: This course may not be repeated for additional credits.

ASST 3040. Special Topics IV. 4 Credit Hours.
Arranged each semester, please consult with the instructor or the Asian Studies web site (http://www.temple.edu/asian_studies/) for a detailed description.
Repeatability: This course may be repeated for additional credit.

ASST 3052. Environmental Problems in Asia. 3 Credit Hours.
Japan is used as an introduction and model for examining environmental issues in several east and southeast Asian countries. Emphasis is on deforestation, river basin development, urban planning, ecotourism, and role of non-governmental organizations.
Repeatability: This course may not be repeated for additional credits.

ASST 3076. Metropolitan Tokyo. 3 Credit Hours.
The growth and development of Tokyo, past and present. The course includes a profile of the city’s many neighborhoods, economic activities, architecture, and challenges for urban planners.
Repeatability: This course may not be repeated for additional credits.

ASST 3082. Independent Study. 1 to 4 Credit Hour.
Directed reading and/or research on an Asian Studies topic. Required: A faculty supervisor, good study skills, and the ability to work independently.
Repeatability: This course may be repeated for additional credit.
ASST 3096. Writing Seminar II. 2 to 4 Credit Hours.
Provides a cross listing for regular and writing intensive courses in other departments when they have substantial Asian Studies content. Also used for directed readings and new courses. NOTE: Cross listing arranged by Asian Studies Director.

Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

ASST 3101. Yoga and Tantric Mysticism. 3 Credit Hours.
Explores Yoga as well as Tantric Mysticism in India and South Asia.

Repeatability: This course may not be repeated for additional credits.

ASST 3201. I-Ching, Tao, and Ch'an/Zen. 3 Credit Hours.
This course covers selected topics in the history of Taoist ideas and religious practice, which have broadly influenced China for two and a half millennia. Discussion topics include: symbols and divination; the philosophy of Lao-tzu and Chuang-tzu; the interaction between Taoism and Ch'an/Zen Buddhism; the Taoist/Ch'an influence on the Chinese literary tradition and ideals of beauty; the Taoist view on ch'i energy, meditation, sexuality, and the good life; and Taoism/Zen in America today.

Repeatability: This course may not be repeated for additional credits.

ASST 3247. Ideology and Social Change in Japan. 3 Credit Hours.
A sociological look at the conditions that have contributed to Japan's emergence as a world-class economic force. How do culture, social organization, life style, ideology, and global political change to affect Japan's rapid rise to power? Is Japan a closed society? What significance do factors such as racism, religion, education, family, the military, class, and population changes hold for understanding what happened in Japan and in Japan's relations with outsiders, particularly the U.S.? How does this analysis affect the future of American sociology?

Repeatability: This course may not be repeated for additional credits.

ASST 3251. China: State and Society. 3 Credit Hours.
Contemporary Chinese government and politics, together with a survey of the political history of China in the 20th century. Emphasis is on the evolution of the political system and political culture through successive periods of reform and repression. Note: Prior to fall 2010, the course title was "China: Politics and Revolution."

Repeatability: This course may not be repeated for additional credits.

ASST 3252. East Asia and the United States. 3 Credit Hours.
The development of the Pacific Rim strategy in Japan over the past century and its spread into other regions of Asia, including South Korea, Taiwan, Hong Kong, Singapore, and even mainland China. The strengths, problems, and implications for the United States of this pattern of development are examined.

Repeatability: This course may not be repeated for additional credits.

ASST 3301. Japanese Religions. 3 Credit Hours.

Repeatability: This course may not be repeated for additional credits.

ASST 3302. Japanese Buddhism. 3 Credit Hours.
Introduction to classical thinkers of Japanese Buddhism: Kukai, Dogen, Shinran, Nichiran, Hakuin. Schools covered are: Shingon, Pure Land, Soto Zen, Rinzai Zen, Nichiren.

Repeatability: This course may not be repeated for additional credits.

ASST 3521. Chinese Revolution. 3 Credit Hours.
The history of China from the Opium Wars to 1919. Topics to be discussed include the decline of the traditional order, the impact of imperialism, the rise of nationalism, the revolution of Sun Yat-sen, and socio-cultural ferment.

Repeatability: This course may not be repeated for additional credits.

ASST 3522. Contemporary China. 3 Credit Hours.
The rise of nationalism, social-cultural changes, and revolutions since the late 19th century. Developments after 1949 in detail.

Repeatability: This course may not be repeated for additional credits.

ASST 3531. Modern India. 3 Credit Hours.
Major political issues are colonialism, nationalism, non-violent political struggle, independence and adjustment, regionalism and tension, leadership in a third world movement, relations with the U.S.A. Social issues include coping with inequality, population explosion, hunger, regional violence, and new popular organizations. Major personalities: Mahatma Gandhi, Jawaharal Nehru, Sardar Patel, Indira Gandhi, Jayaprakash Narayan, Sri Aurobindo.

Repeatability: This course may not be repeated for additional credits.

ASST 3541. Japan Today. 3 Credit Hours.
Examines significant social, economic, and cultural trends in Japan from 1945 to the 1990s-the Occupation; the 'economic miracle,' state and society; the world of work; family, women and gender; international relations; impact of affluence; post-bubble Japan; and varying approaches to the study of postwar Japanese history and society. NOTE: Usually offered alternate years on Main Campus.

Repeatability: This course may not be repeated for additional credits.
ASST 3542. Women and Society in Japan. 3 Credit Hours.
This course analyzes the changing position of women in Japanese society from ancient times to the present. Through discussions, lectures, and audiovisual materials, students learn about goddesses, female diviners, empresses, the classical female writers, women in warrior culture, women in industrializing Japan, and Japanese women's movements.
Repeatability: This course may not be repeated for additional credits.

ASST 3551. History of Vietnam. 3 Credit Hours.
Emphasizing cultural, social, and economic factors, the course traces Vietnamese history from its mythological origins to the 21st century. Topics include indigenous social formations, the period of Chinese domination, the rise of independent Vietnamese dynasties, the French colonial era, the Vietnamese Revolution, and the three Indochina Wars, including the Vietnam Conflict in the 20th century. It will close with consideration of life under the current Socialist Republic of Vietnam.
Repeatability: This course may not be repeated for additional credits.

First known as the Democratic Republic of Vietnam, today's Socialist Republic of Vietnam was created in the wave of nationalism which swept through Southeast Asia at the end of the War in the Pacific in 1945. This course examines the internal and external forces which shaped the new state, paying close attention to the role of the communist party. We will use books based on recent archival research, mainly in Vietnam and France, to attempt to move beyond the ideological history and prejudices of the Cold War. Vietnam provides a fascinating case study of a country which was both strongly influenced by the Cold War, but which at the same time itself had a strong influence on the course of international history. This course is cross-listed with History 3556.
Repeatability: This course may not be repeated for additional credits.

ASST 3636. Asian Women in Transition. 3 Credit Hours.
This course introduces and compares the experiences of women in Asia and Asian women in migration to the United States in the modern period, including rural and urban women, and ordinary and elite women in the late 19th and 20th centuries. Topics include women in households, women and work, and women's activism.
Repeatability: This course may not be repeated for additional credits.

ASST 3696. Asian Women in Transition. 3 Credit Hours.
This course introduces and compares the experiences of women in Asia and Asian women in migration to the United States in the modern period, including rural and urban women, and ordinary and elite women in the late 19th and 20th centuries. Topics include women in households, women and work, and women's activism.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

ASST 3880. Topics in Comparative History. 3 Credit Hours.
SECTION 001 (MAIN CAMPUS): Asian Biographies: Traditional and Otherwise. In the Confucian and Islamic traditions the writing of the lives of virtuous men has been central to the establishment of state legitimacy and the transmission of cultural values. In the past women were only rarely been included in the pantheon of heroes. This course considers the traditions and uses of biography and autobiography in Asia, a crucial issue in historiography, by examining traditional approaches to biography and autobiography, and by tracing the evolution of these traditions, as adapted to the needs of modern civil society and state. SECTION 101 (AMBLER): Comparative Revolutions in South and Southeast Asia: Nationalism, Communism, and Tradition. This course examines 20th century transformations of Afghanistan, Indonesia and Vietnam, with an emphasis on the sources of ideas for revolutionary change. We will contrast the role of Western concepts, including those spread to colonial countries via the Communist International in Moscow, with the importance of indigenous beliefs and Asian religions in the revolutions in these three countries. We'll also consider the role of colonial and imperial powers in encouraging obscurantist (often referred to as traditional) doctrines.
Repeatability: This course may be repeated for additional credit.

ASST 3900. Honors Topics in Asian Studies II. 3 Credit Hours.
Provides a cross listing for honors courses in other departments when they have substantial Asian Studies content. Also used for directed readings and new courses.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.

ASST 3904. Honors Earth Ethics. 3 Credit Hours.
What is, or should be, our relation to the natural world? Especially since we are presently living in a modern urban environment, have we perhaps outgrown nature? Is it something we have mastered? Is it primarily a luxury of sorts that we can go to for periodic enjoyment or relaxation? On the other hand, why do we seem to be in a burgeoning environmental crisis? Is it just greed? Too many people? Insufficient technology? How did we get to where we are? Or more immediately--and perhaps deeply--what fundamental beliefs, attitudes, and values shape our everyday actions, how we perceive and use (or misuse) the earth? What creative alternatives can we find, and how can we apply them? In addressing these kinds of questions we will explore both Western and Asian ways of conceiving and interacting with the natural world, past and present. Our approach will also be interdisciplinary, including materials from art, film and literature, as well a range of academic disciplines. NOTE: This is an University Honors course.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.
ASST 3928. Honors Metropolitan Tokyo. 3 Credit Hours.
This is an honors version of Metropolitan Tokyo. The course looks at the growth and development of Tokyo, Japan, past and present. It includes a profile of the city's many neighborhoods, economic activities, architecture, and challenges for urban planners. NOTE: Usually offered at Temple Japan.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.

ASST 3942. Honors Women and Society in Japan. 3 Credit Hours.
This Honors course analyzes the changing position of women in Japanese society from ancient times to the present. Through discussions, lectures, and audiovisual materials, students learn about goddesses, female diviners, empresses, the classical female writers, women in warrior culture, women in industrializing Japan, and Japanese women's movements. NOTE: This is an Honors course.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.

ASST 3947. Honors Ideology and Social Change in Japan. 3 Credit Hours.
A sociological look at the conditions that have contributed to Japan's emergence as a world-class economic force. How did culture, social organization, lifestyle, ideology, and global political change fit together and react to affect Japan's rapid rise to power? Is Japan a closed society? What significance do factors such as racism, religion, education, family, the military, class, and population changes hold for understanding what happened in Japan and in Japan's relations with outsiders, particularly the United States? How does this analysis affect the future of American sociology? NOTE: This is an Honors course.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.

ASST 4096. Seminar in Asian Studies. 3 Credit Hours.
In this capstone writing course you will do independent research on Asia. You'll deepen your skills in choosing bibliographic tools, in finding and evaluating authoritative sources, including primary materials translated from Asian languages, and organizing and properly formatting a research paper. In consultation with the instructor, you'll choose a topic to meet your interests and professional needs. Required for majors; good to take in junior year. NOTE: Required for the Asian Studies major.

Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

ASST 4268. Indian Philosophy: An Introduction. 3 Credit Hours.
Beginnings of Indian philosophical thinking in the hymns of Rig Veda and The Upanishads and the major schools of Indian philosophy as they took shape during the next thousand years. The latter include Samkhya, the Buddhist schools, the Vaiseskika, the Nyaya, and the major schools of Vedanta. Issues in metaphysics, epistemology, and logic emphasized.

Repeatability: This course may not be repeated for additional credits.

ASST 4624. Modern Japan: Empire, War, Society. 3 Credit Hours.
Was early modern Japan (1600-1867) static or dynamic? Do the roots of Japan's modern achievements (1868-1945) lie in her early modern culture? What happened to Japan after the 1868 Meiji Restoration, and why? Was modernity a blessing or a curse? We'll find answers to questions like these as we survey Japanese society, culture, and events and trends at home and abroad from the Tokugawa shogunate to the Pacific War. Assignments focus on writing a comparative review.

Repeatability: This course may not be repeated for additional credits.

ASST 4626. Indian Philosophy: An Introduction. 3 Credit Hours.
Beginnings of Indian philosophical thinking in the hymns of Rig Veda and The Upanishads and the major schools of Indian philosophy as they took shape during the next thousand years. The latter include Samkhya, the Buddhist schools, the Vaiseskika, the Nyaya, and the major schools of Vedanta. Issues in metaphysics, epistemology, and logic emphasized.

Repeatability: This course may not be repeated for additional credits.

ASST 4696. Modern Japan: Empire, War, Society. 3 Credit Hours.
Was early modern Japan (1600-1867) static or dynamic? Do the roots of Japan's modern achievements (1868-1945) lie in her early modern culture? What happened to Japan after the 1868 Meiji Restoration, and why? Was modernity a blessing or a curse? We'll find answers to questions like these as we survey Japanese society, culture, and events and trends at home and abroad from the Tokugawa shogunate to the Pacific War. Assignments focus on writing a comparative review.

Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

ASST 4901. Honors Comparative Philosophy of Religions. 3 Credit Hours.
An introduction to the comparative philosophy of Asian and Western religions. After asking what is meant by the comparative philosophy of religion, the focus will be on a comparative philosophical study of basic concepts and issues in Western and Asian religious traditions. For example, we will look at the concepts of divine or ultimate reality, arguments for the existence of an ultimate reality, the relation of faith and reason, critiques of religion, the problem of evil, the concepts of personal destiny and immortality, the relation of religion to morality, religious and mystical experience, the nature of religious language, the problem of conflicting truth claims, and religious pluralism. NOTE: This is an Honors course.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.

Bioengineering (BIOE)
Courses

BIOE 0856. Ethical Issues in Biomedical Science, Engineering and Technology. 3 Credit Hours.
At some point in our lives, each of us will be confronted with difficult biomedical and biotechnological questions that present an ethical dilemma. This course is designed to enable you to critically address important issues in ethics that arise from advances in these fields. We will consider potential advantages of using modern technologies to improve human health, in contrast to the risks associated with their application. Some of the questions we will pose include: Is it acceptable to use technology to restore our bodies to a pre-injury state? If so, what about using technology to enhance our bodies to improve our performance? What are the implications of the use of reproductive technology that results in one child having three biological parents? Can a physician text a picture of an X-ray to another colleague? These questions, and many others, will be explored in detail through class and small group discussions, coupled with analysis of current news events and scientific publications. Evidence-based approaches will be used to investigate issues related to a variety of subjects including use/overuse of imaging modalities, organ transplant, regenerative tissue engineering and medicine, human enhancements, genetic engineering, personalized medicine, reproductive control (e.g. IVF, surrogate pregnancy), cloning, stem cell use, medical privacy in the era of the electronic medical record, texting, and Instagram, and animal testing for cosmetics, drugs, or medical devices.
Course Attributes: GS
Repeatability: This course may not be repeated for additional credits.

BIOE 1301. Principles of Macromolecular Science. 3 Credit Hours.
In this course students will gain an understanding of the fundamentals of polymer physical chemistry. We will cover polymer structure and conformation, bulk and solution thermodynamics and phase behavior, polymer networks, and viscoelasticity. We will also apply engineering principles to the analysis of biomacromolecules, such as proteins, polysaccharides and oligonucleotides. Upon the completion of the course, students should be able to understand the influence of monomer structure, temperature, solution conditions, degree of polymerization and 3D conformation on the function of biopolymers.
Department restrictions: Must be enrolled in one of the following Departments: Engineering:Bio Engineering
Field of Study Restrictions: Must be enrolled in one of the following Majors: Bioengineering
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CHEM 2201|Minimum Grade of C-|May not be taken concurrently.

BIOE 2001. Frontiers in Bioengineering. 2 Credit Hours.
This survey course will provide a first introduction to the wide scope of biomedical engineering, with emphasis on the application of engineering principles to solving problems in biology and medicine. Specific topics will include biomechanics; bioimaging; bioinstrumentation and biomedical devices; artificial organs; computational biology and bioinformatics; biomaterials and drug delivery; cellular, tissue and regenerative engineering; and nanobiotechnology. At the end of this introductory course the students will be familiar with some of the major molecular, cellular, physiological and engineering principles that allow for problem solving in the vast area of biomedical engineering. Thus the students will be prepared to study in depth some of the specialized topics of bioengineering.
Repeatability: This course may not be repeated for additional credits.

BIOE 2101. Engineering Principles of Physiological Systems. 3 Credit Hours.
This course will introduce biomedical engineering students to quantitative modeling of physiological systems. It will cover fundamental topics in physiology ranging from cell membrane models and chemical messengers to neuronal signaling and control of body movement. In addition, specific physiological systems are discussed in detail, including the cardiovascular, pulmonary, and visual systems. Furthermore, pharmacokinetic models provide quantitative assessment of the dynamics of drug distribution and compartmental interactions. Hands-on laboratories combining actual experiments with computer simulations will reinforce the contents of classroom teaching.
Department restrictions: Must be enrolled in one of the following Departments: Engineering:Bio Engineering
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Bioengineering
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
BIOL 1111|Minimum Grade of C-|May be taken concurrently
OR BIOL 2112|Minimum Grade of C-|May be taken concurrently
OR BIOL 1012|Minimum Grade of C-|May be taken concurrently
OR BIOL 1911|Minimum Grade of C-|May be taken concurrently
OR BIOL 2912|Minimum Grade of C-|May be taken concurrently.
BIOE 2301. Quantitative Pathophysiology. 3 Credit Hours.
This course will introduce students to fundamental principles of human pathophysiology. Students will gain a systems level understanding of disease processes necessary for the rational design of novel therapeutic and diagnostic technologies. The course will integrate basic biological science and fundamental engineering principles in the evaluation of clinical disease manifestations. Topics that will be covered include: fundamental concepts of cellular homeostasis; cellular responses (adaptation, injury, cell death) induced by stress, injurious stimuli, and disease, and systemic models of major diseases within the US (cardiac, neoplastic, cerebrovascular, traumatic, neurodegenerative, diabetic, and pulmonary).
Department restrictions: Must be enrolled in one of the following Departments: Engineering:Bio Engineering Field of Study Restrictions: Must be enrolled in one of the following Majors: Bioengineering Repeatability: This course may not be repeated for additional credits
Pre-requisites:
BIOL 1111|Minimum Grade of C-|May not be taken concurrently
OR BIOL 2112|Minimum Grade of C-|May not be taken concurrently
OR BIOL 1012|Minimum Grade of C-|May not be taken concurrently
OR BIOL 1911|Minimum Grade of C-|May not be taken concurrently
OR BIOL 2912|Minimum Grade of C-|May not be taken concurrently.

BIOE 2302. Cellular and Molecular Biology for Bioengineers. 3 Credit Hours.
This course will enhance the basic knowledge of the students in quantitative cell and molecular biology from the vantage point of a bioengineer, focusing on molecular mechanisms and cellular functions, specifically in cell-cell and cell-matrix communications. Textbook learning will be supplemented with results from recent research and technological innovations in biology. After completing this course, bioengineering students will be able to apply their aptitude in the quantitative, physical and engineering sciences to modern biology. Students will also learn the principles how to establish and test biological models.
Department restrictions: Must be enrolled in one of the following Departments: Engineering:Bio Engineering Field of Study Restrictions: Must be enrolled in one of the following Majors: Bioengineering Repeatability: This course may not be repeated for additional credits
Pre-requisites:
BIOL 2101|Minimum Grade of C-|May not be taken concurrently.

BIOE 2312. Mechanics for Bioengineering I. 4 Credit Hours.
This course will provide students with an understanding of the application of statics and dynamics to biomechanical problem analyses. Topics will introduce basic concepts of mechanics and kinetic analyses with application to physiologic loading and motion in the body.
Department restrictions: Must be enrolled in one of the following Departments: Engineering:Bio Engineering Field of Study Restrictions: Must be enrolled in one of the following Majors: Bioengineering Repeatability: This course may not be repeated for additional credits
Pre-requisites:
( PHYS 1062|Minimum Grade of C-|May be taken concurrently)
AND ( MATH 1042|Minimum Grade of C-|May not be taken concurrently)
OR MATH 1942|Minimum Grade of C-|May not be taken concurrently.

BIOE 3001. Research Design and Methods in Bioengineering. 2 Credit Hours.
In this course the upper division students will learn how to integrate fundamental principles of biology, chemistry, engineering, mathematics (including statistics) and physics to develop practical solutions for a variety of biomedical problems from cells to organisms. Students will use both engineering (methodology) and scientific (hypothesis) approaches to problem-solving thereby learning to distinguish between the two approaches. This course will teach the students the fundamental principles underlying modern measurements and control instrumentation utilized in science and engineering. Taking a quantitative and hands-on approach to measurement theory and practice, this course will present and analyze example instruments currently used in academic and industrial research. In addition, the students will consider and discuss bioethical issues involving biological and living systems. Specific bioethics topics that will be covered include stem cells, patents, conflict of interest, patient rights, animal rights, organ donation, and data manipulations but are not limited to them.
Department restrictions: Must be enrolled in one of the following Departments: Engineering:Bio Engineering Field of Study Restrictions: Must be enrolled in one of the following Majors: Bioengineering Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(MATH 1041|Minimum Grade of C-|May not be taken concurrently
OR MATH 1941|Minimum Grade of C-|May not be taken concurrently
OR MATH 1038|Minimum Grade of C-|May not be taken concurrently
AND ( BIOL 1111|Minimum Grade of C-|May not be taken concurrently
OR BIOL 2112|Minimum Grade of C-|May not be taken concurrently
OR BIOL 1012|Minimum Grade of C-|May not be taken concurrently
OR BIOL 1911|Minimum Grade of C-|May not be taken concurrently
OR BIOL 2912|Minimum Grade of C-|May not be taken concurrently
OR CHEM 1031|Minimum Grade of C-|May not be taken concurrently
OR CHEM 1035|Minimum Grade of C-|May not be taken concurrently
OR CHEM 1985|Minimum Grade of C-|May not be taken concurrently).
BIOE 3101. BioE Lab #1 - Bioelectrical Engineering. 3 Credit Hours.
This laboratory class will introduce students to the empirical study of bioelectrical phenomena in physiological systems. This includes the origin of biopotentials, the use of biopotential electrodes in their measurements and subsequent amplification, signal processing and analysis of their physiological relevance. Applications of physical principles and basic electric engineering techniques are emphasized.

Department restrictions: Must be enrolled in one of the following Departments: Engineering:Bio Engineering
Field of Study Restrictions: Must be enrolled in one of the following Majors: Bioengineering
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(BIOE 2001|Minimum Grade of C-|May be taken concurrently)
AND (PHYS 1062|Minimum Grade of C-|May not be taken concurrently)
AND (MATH 1042|Minimum Grade of C-|May not be taken concurrently).

BIOE 3102. BioE Lab #2 - Biomaterials. 3 Credit Hours.
This laboratory class will teach students experimental methods used to prepare and characterize biomaterials used in biomedical engineering. Students will learn basic techniques for the fabrication and characterization tools used for polymeric biomaterials, and investigate structure-property relationships as it applies to thermal, mechanical, surface and morphological properties of polymeric biomaterials.

Department restrictions: Must be enrolled in one of the following Departments: Engineering:Bio Engineering
Field of Study Restrictions: Must be enrolled in one of the following Majors: Bioengineering
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
BIOE 3101|Minimum Grade of C-|May not be taken concurrently.

BIOE 3201. Biomedical Instrumentation. 2 Credit Hours.
This course will introduce the upper division students to the fundamentals of medical instrumentation. Specifically, it will teach the physiological/ physicochemical, biomechanical, computational and electronic principles governing the operation of select medical instrumentation. Focusing on classical and modern instrumentation used in specific clinical departments, such as cardiology, pulmonary medicine and critical care, radiology, and anesthesiology, the course will also introduce the students to the operation, safety aspects, and calibration of electronic, optical and acoustical instruments, as well as those involving ionizing radiation.

Department restrictions: Must be enrolled in one of the following Departments: Engineering:Bio Engineering
Field of Study Restrictions: Must be enrolled in one of the following Majors: Bioengineering
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(PHYS 1062|Minimum Grade of C-|May not be taken concurrently)
AND (MATH 1042|Minimum Grade of C-|May not be taken concurrently)
OR MATH 1942|Minimum Grade of C-|May not be taken concurrently)
AND (BIOE 3101|Minimum Grade of C-|May be taken concurrently).

BIOE 3301. Biomedical Signals and Systems. 3 Credit Hours.
This course will expose students to digital signal processing with emphasis on problems in biomedical research and clinical medicine. It covers principles and algorithms for processing signals and systems in both continuous and discrete time domains with examples from biomedical signal processing and control. Theory and practice of Continuous-time linear systems: convolution, steady-state responses, Fourier and Laplace transforms, transfer functions, poles and zeros, stability, sampling, feedback. Discrete-time linear systems: Z transform, filters, Fourier transform, signal processing. This class will make extensive use of Matlab projects.

Department restrictions: Must be enrolled in one of the following Departments: Engineering:Bio Engineering
Field of Study Restrictions: Must be enrolled in one of the following Majors: Bioengineering
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 2101|Minimum Grade of C-|May not be taken concurrently
OR ENGR 2011|Minimum Grade of C-|May not be taken concurrently
OR MEE 2011|Minimum Grade of C-|May not be taken concurrently.

BIOE 3302. Drug Delivery. 3 Credit Hours.
This course will cover the engineering principles utilized in the design of drug delivery systems. Topics will include: drug delivery mechanisms (oral, parenteral, passive, targeted, etc.); therapeutic modalities and mechanisms of action; engineering principles of controlled release and quantitative understanding of drug transport (diffusion, convection); effects of electrostatics, macromolecular conformation, and molecular dynamics on interfacial interactions; thermodynamic principles of self-assembly; chemical and physical characteristics of delivery molecules and assemblies (polymer based, lipid based); significance of biodistributions and pharmacokinetic models; toxicity issues and immune responses.

Department restrictions: Must be enrolled in one of the following Departments: Engineering:Bio Engineering
Field of Study Restrictions: Must be enrolled in one of the following Majors: Bioengineering
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(CHEM 2201|Minimum Grade of C-|May not be taken concurrently)
AND (MATH 3041|Minimum Grade of C-|May be taken concurrently).
BIOE 3303. Biomedical Engineering. 3 Credit Hours.
This course will provide students with a quantitative understanding of momentum transport (viscous flow) and mass transport (convection and diffusion) in living systems. The application of engineering methods to model and quantify aspects of bioengineering systems will be covered. Emphasis will be placed on the analysis of fluid flow phenomena in the cardiovascular and respiratory system as well as other human organ systems.
Department restrictions: Must be enrolled in one of the following Departments: Engineering: Bio Engineering
Field of Study Restrictions: Must be enrolled in one of the following Majors: Bioengineering
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(ENGR 3571|Minimum Grade of C-|May not be taken concurrently)
AND (CHEM 1031|Minimum Grade of C-|May not be taken concurrently)
OR CHEM 1035|Minimum Grade of C-|May not be taken concurrently
OR CHEM 1951|Minimum Grade of C-|May not be taken concurrently
AND (MATH 3041|Minimum Grade of C-|May be taken concurrently).

BIOE 3312. Mechanics for Bioengineering II. 4 Credit Hours.
This course will provide students with an understanding of the application of mechanics of solids and dynamics to engineering problem analyses. Topics will introduce basic concepts of dynamics and mechanics with application to physiologic loading and motion in the body.
Department restrictions: Must be enrolled in one of the following Departments: Engineering: Bio Engineering
Field of Study Restrictions: Must be enrolled in one of the following Majors: Bioengineering
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
BIOE 2312|Minimum Grade of C-|May not be taken concurrently.

BIOE 3311. Interactions of Biomaterials with Living Tissues. 3 Credit Hours.
This course will cover topics that illustrate how biomaterials interact with living tissues, focusing on cell culture, immunology, cell-biomaterial interfaces, and cell signaling. The students will learn the fundamentals maintaining living cells in culture and how these cells react to the presence of biomaterials using lecture and laboratory format.
Department restrictions: Must be enrolled in one of the following Departments: Engineering: Bio Engineering
Field of Study Restrictions: Must be enrolled in one of the following Majors: Bioengineering
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(BIOE 2101|Minimum Grade of C-|May not be taken concurrently)
AND (CHEM 1031|Minimum Grade of C-|May not be taken concurrently)
OR CHEM 1035|Minimum Grade of C-|May not be taken concurrently
OR CHEM 1951|Minimum Grade of C-|May not be taken concurrently).

BIOE 3719. Introduction to Bioengineering. 3 Credit Hours.
Course topics include biomaterials and implant materials, research proposal preparation, tyrosine-derived synthetic polymer devices for tissue engineering spine biomechanics, cellular material biomechanics, orthopedic biomechanics, hydroxyapatite/polymer composites, applications of injury biomechanics, biomechanics of the lower extremities, principles of polymers used in dental and biomaterials, interfaces in biomaterials. Students will be required to prepare a proposal for a design-oriented term project (i.e. rationale, concept and design, but no actual construction).
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
College Restrictions: Must be enrolled in one of the following Colleges: Engineering
Repeatability: This course may not be repeated for additional credits.

BIOE 3725. Cell Biology for Engineers. 3 Credit Hours.
Cell Biology for Engineers is a basic course that introduces biological concepts in modern cellular and molecular biology to engineering students. Topics will include the chemical composition of cells, bioenergetics and metabolism, structure and function of the plasma membrane, transport across membranes, the cytoplasmic membrane system, the extracellular matrix, interactions between cells and their environment, the cytoskeleton and cell motility, sensory systems, and cell signaling. In addition, an introduction to basic anatomy and physiology of vertebrates will include the skeletal system, muscle system, cardiovascular system, and nervous system.
College Restrictions: Must be enrolled in one of the following Colleges: Engineering
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CHEM 1031|Minimum Grade of C-|May not be taken concurrently
OR CHEM 1035|Minimum Grade of C-|May not be taken concurrently
OR CHEM 1951|Minimum Grade of C-|May not be taken concurrently.
BIOE 4101. BioE Lab #3 - Biomechanics. 3 Credit Hours.
In this course students will apply principles of engineering mechanics in the design and utilization of biomechanical instrumentation. Principles of transduction, mechanics, sampling theory, strain, temperature, and flow measurement as applied to biomechanical systems will be covered. A background in data acquisition, electrical safety, operational amplifier and bridge circuits, and measurements is provided. Students will investigate the biomechanics of the musculoskeletal and cardiovascular systems in normal and pathological states.

Department restrictions: Must be enrolled in one of the following Departments: Engineering; Bio Engineering

Field of Study Restrictions: Must be enrolled in one of the following Majors: Bioengineering

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
BIOE 3102|Minimum Grade of C-|May not be taken concurrently.

BIOE 4278. Cardiac Devices. 3 Credit Hours.
Intended for electrical engineering, biology, and bioengineering students. No course prerequisites. This course will cover cardiac anatomy and physiology, the heart's electrical system in health and disease, cardiac ECG rhythm interpretation, design and function of ECG monitoring devices, pacemakers and external and implanted defibrillators, and arrhythmia detection algorithms. The course will include observation of pacemaker implants, and troubleshooting in a pacemaker follow-up clinic. The course will prepare students to take the Heart Rhythm Society Allied Professional Pacemaker Certification examination. It is intended to put students in a competitive advantage for getting jobs in the expanding pacemaker and other medical electronics device industries.

Repeatability: This course may not be repeated for additional credits.

BIOE 4301. Bioengineering Seminar. 1 Credit Hour.
This seminar is intended for bioengineering students who are interested in acquiring hands-on presentation skills and, in addition, keeping up-to-date with the bioengineering research fields. The aim of the class is to allow upper division students to present a summarized view of a specific bioengineering or biomedical engineering topic. Specific topics that will be suggested to be covered (by the students) are biomaterials, tissue/regenerative engineering, bioimaging, biosensing, bionanotechnology (or nanobiotechnology), neuroengineering, bioinformatics (computational), biomechanics, (but are not limited to them). Guest lecturers from academia and industry will be invited to talk on several occasions.

Department restrictions: Must be enrolled in one of the following Departments: Engineering; Bio Engineering

Field of Study Restrictions: Must be enrolled in one of the following Majors: Bioengineering

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
BIOE 2001|Minimum Grade of C-|May not be taken concurrently.

BIOE 4311. The Entrepreneurial Bioengineer. 2 Credit Hours.
Recognizing the increasingly entrepreneurial landscape of Bioengineering, this course will introduce the students to the fundamentals of entrepreneurship and is designed to provide students with a working knowledge of the modern entrepreneurial and business planning and the regulatory process with the special focus on translational development of bioengineering products from the bench to the bedside.

Department restrictions: Must be enrolled in one of the following Departments: Engineering; Bio Engineering

Field of Study Restrictions: Must be enrolled in one of the following Majors: Bioengineering

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
BIOE 2001|Minimum Grade of C-|May not be taken concurrently.

BIOE 4333. Applied Biospectroscopy. 3 Credit Hours.
This course introduces the basics of light propagation in tissue and other turbid media, vibrational spectroscopy, absorption and fluorescence, and emerging spectroscopic applications. Emphasis is on applications for assessment of biomolecules, engineered tissues and clinically-relevant analyses including musculoskeletal disease and cancer diagnosis. Multivariate analyses for complex spectral data sets will also be introduced.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(MATH 2101)|Minimum Grade of C-|May not be taken concurrently
OR ENGR 2011|Minimum Grade of C-|May not be taken concurrently
OR MEE 2011|Minimum Grade of C-|May not be taken concurrently
AND (MATH 3041)|Minimum Grade of C-|May not be taken concurrently
AND (PHYS 1061)|Minimum Grade of C-|May not be taken concurrently
AND (CHEM 1031)|Minimum Grade of C-|May not be taken concurrently
AND (CHEM 1035)|Minimum Grade of C-|May not be taken concurrently
OR CHEM 1951|Minimum Grade of C-|May not be taken concurrently
AND (Biol 1111)|Minimum Grade of C-|May not be taken concurrently
OR BIOL 2112|Minimum Grade of C-|May not be taken concurrently
OR BIOL 1012|Minimum Grade of C-|May not be taken concurrently
OR BIOL 1911|Minimum Grade of C-|May not be taken concurrently
OR BIOL 2912|Minimum Grade of C-|May not be taken concurrently.
BIOE 4411. Capstone Elective: Biomaterials. 3 Credit Hours.
This course will focus on materials and design parameters used to develop human implant devices, bulk and surface characterization methods for biomaterials, biocompatibility, failure mechanisms of current biomaterials, and regulatory requirements for design and testing of human implant devices. Special attention will be given to biomaterials used in tissue regeneration, orthopedics, and controlled drug delivery.
Department restrictions: Must be enrolled in one of the following Departments: Engineering:Bio Engineering
Field of Study Restrictions: Must be enrolled in one of the following Majors: Bioengineering
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(BIOE 2101|Minimum Grade of C-|May not be taken concurrently)
AND (BIOE 3302|Minimum Grade of C-|May not be taken concurrently).

BIOE 4421. Capstone Elective: Bionanotechnology. 3 Credit Hours.
This course is intended for upper division students interested in acquiring knowledge involving nanometer-sized objects frequently utilized within the biomedical sciences and engineering areas. The aim of the class is to introduce fundamental concepts critical in the design, preparation, analysis, and usage of bionanotechnology (or nanobiotechnology) and its multiple bottom-up and top-down approaches. Multiple nanomaterials categories, such as nanoparticles, nanotubes, biomacromolecules, synthetic polymers, and self-assembled structures, will be covered in detail along with their applications.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(CHEM 2201|Minimum Grade of C-|May not be taken concurrently)
AND (BIOE 1301|Minimum Grade of C-|May not be taken concurrently).

BIOE 4431. Capstone Elective: Neuroengineering. 3 Credit Hours.
This course will teach students how signals are generated and propagated in neurons and neuronal circuits, and how this knowledge can be utilized to engineer devices to assist people with neurologic disease or injury. The functions of neurons as discrete elements and as parts of neuronal assemblies will be examined; generator and action potentials; conduction in nerve fibers and across synaptic junctions; analysis of sensory and neuromuscular systems; EEG and EKG waveforms. At the completion of the course, students will have gained a fundamental understanding of neural interface/prosthetics design parameters from basic neural physiology to models of neural mechanisms. We will also review advanced neural interfaces currently being developed and or produced commercially by the field.
Department restrictions: Must be enrolled in one of the following Departments: Engineering:Bio Engineering
Field of Study Restrictions: Must be enrolled in one of the following Majors: Bioengineering
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(BIOE 2101|Minimum Grade of C-|May not be taken concurrently)
AND (MATH 3041|Minimum Grade of C-|May be taken concurrently).

BIOE 4441. Capstone Elective: Biomechanics. 3 Credit Hours.
This course will provide students with an understanding of the mechanics of cells, tissue, and organ systems as well as methods for their analysis. Topics will include motion-actuating, force generating, and load-supporting mechanisms in the musculoskeletal system, as explained from basic engineering principles. We will also cover experimental and analytical approaches to designing load bearing implants and prosthetic devices.
Department restrictions: Must be enrolled in one of the following Departments: Engineering:Bio Engineering
Field of Study Restrictions: Must be enrolled in one of the following Majors: Bioengineering
College Restrictions: Must be enrolled in one of the following Colleges: Engineering
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(BIOE 2101|Minimum Grade of C-|May not be taken concurrently)
OR BIOE 3725|Minimum Grade of C-|May not be taken concurrently)
AND (BIOE 3312|Minimum Grade of C-|May not be taken concurrently)
OR (ENGR 2332|Minimum Grade of C-|May not be taken concurrently)
AND ENGR 2333|Minimum Grade of C-|May not be taken concurrently).
BIOE 4451. Capstone Elective: Biomedical Imaging. 3 Credit Hours.
In this course students learn how light, X-rays, radiopharmaceuticals, ultrasound, magnetic fields, and other energy probes are generated and how they interact with tissues and detectors to produce useful image contrast. Practical issues such as beam generation, dose limitations, patient motion, spatial resolution and dynamic range limitations, and cost-effectiveness will be addressed. Emphasis will be placed on diagnostic radiological imaging physics, including the planar X-ray, digital subtraction angiography mammography, computed tomography, nuclear medicine, ultrasound, and magnetic resonance imaging modalities.

Department restrictions: Must be enrolled in one of the following Departments: Engineering:Bio Engineering
Field of Study Restrictions: Must be enrolled in one of the following Majors: Bioengineering
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
( PHYS 1062|Minimum Grade of C-|May not be taken concurrently)
AND ( CHEM 1031|Minimum Grade of C-|May not be taken concurrently)
OR ( CHEM 1035|Minimum Grade of C-|May not be taken concurrently)
OR ( CHEM 1951|Minimum Grade of C-|May not be taken concurrently)
AND ( BIOL 1111|Minimum Grade of C-|May not be taken concurrently)
OR ( BIOL 1012|Minimum Grade of C-|May not be taken concurrently)
OR ( BIOL 2112|Minimum Grade of C-|May not be taken concurrently)
OR ( BIOL 1911|Minimum Grade of C-|May not be taken concurrently)
OR ( BIOL 2912|Minimum Grade of C-|May not be taken concurrently)
AND ( MATH 3041|Minimum Grade of C-|May not be taken concurrently).

BIOE 4461. Capstone Elective: Principles of Tissue and Regenerative Engineering. 3 Credit Hours.
This course will introduce fundamental concepts of tissue engineering and regenerative medicine, focusing on biomaterials used for scaffolds, mechanisms of cell-biomaterial interactions, biocompatibility and foreign body response, cellular engineering, and tissue biomechanics. Principles of cell/developmental and stem cell biology will be introduced, which will enable the students to apply a multidisciplinary approach to engineering select tissues and organs, such as the musculoskeletal system, cardiovascular tissues, the nervous system, and to design artificial organs. These topics will also be discussed in the context of scale-up, manufacturing, ethical and regulatory concerns.

Department restrictions: Must be enrolled in one of the following Departments: Engineering:Bio Engineering
Field of Study Restrictions: Must be enrolled in one of the following Majors: Bioengineering
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
( BIOE 2101|Minimum Grade of C-|May not be taken concurrently)
AND ( CHEM 4401|Minimum Grade of C-|May be taken concurrently).

BIOE 4500. Special Topics in Bioengineering. 3 Credit Hours.
An emerging or advanced area of bioengineering research will be covered. Topics vary by semester.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Bioengineering
Repeatability: This course may be repeated for additional credit.

BIOE 4501. Regenerative Engineering. 3 Credit Hours.
This course is a continuation of fundamental concepts introduced in Principles of Tissue and Regenerative Engineering focusing on developmental biology used in tissue engineering and regenerative medicine. Principles of cell development/biology, cell-cell interactions, signal transduction, and stem cell biology will be discussed with applications to regenerative medicine. These topics will also be discussed in the context of scale-up, manufacturing, ethical and regulatory concerns.

Department restrictions: Must be enrolled in one of the following Departments: Engineering:Bio Engineering
Field of Study Restrictions: Must be enrolled in one of the following Majors: Bioengineering
Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
BIOE 4461|Minimum Grade of C-|May not be taken concurrently.
BIOE 4555. Capstone Elective - Biophotonics: Seeing is Believing. 3 Credit Hours.

Only a small portion of the world around us is visible to the human eye. So, is there a way to visualize chaos, force, fractals, viral infection or cancer metastasis? Once we see biology happen, is the result a pretty image or a valuable measurement? Can the light be used to modify biological processes? In this course students will learn how photons are used to visualize and manipulate biomaterials at multiple scales. The first part of the course will provide a review of electromagnetism, light and optics. We will cover typical hardware used for imaging in biology, such as light sources, objectives and detectors used to generate images. Next, chemistry of imaging probes will be covered, including photochemistry and interaction of light and matter. The rest of the course will give a comprehensive overview of methodologies for multiscale imaging in life sciences, ranging from electron to atomic-molecular-cell-multicellular tissue-whole body scales, in vivo and in vitro. This will include among others Spectroscopy, Microscopy (Electron, Atomic, Fluorescent), Flow Cytometry, Optical Traps, Bioluminescence, X-Ray, MRI. Final classes will include special demonstrations in the imaging labs in the Temple Main Campus.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Bioengineering

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
( PHYS 1062 | Minimum Grade of C- | May not be taken concurrently
OR PHYS 2022 | Minimum Grade of C- | May not be taken concurrently)
AND (CHEM 2202 | Minimum Grade of C- | May not be taken concurrently)
AND (BIOL 2112 | Minimum Grade of C- | May not be taken concurrently
OR BIOE 3102 | Minimum Grade of C- | May be taken concurrently).

BIOE 4741. Biomaterials for Engineers. 3 Credit Hours.

This course introduces engineering students to materials as they interact with biological systems, primarily in medicine. Topics will include a review of properties of materials, the classes of materials, tissues that come into contact with materials, the degradation of materials in the biological environment, the application of materials for specific uses, tissue engineering, and biomaterials standards and regulations.

Field of Study Restrictions: May not be enrolled in one of the following Majors: Bioengineering

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
CHEM 1031 | Minimum Grade of C- | May not be taken concurrently
OR CHEM 1035 | Minimum Grade of C- | May not be taken concurrently
OR CHEM 1951 | Minimum Grade of C- | May not be taken concurrently.

Biology (BIOL)

Courses

BIOL 0848. DNA: Friend or Foe. 3 Credit Hours.

This course is typically offered in Fall. Through the study of basic biological concepts, think critically about modern biotechnology. Consider questions like: What are the ethical and legal implications involving the gathering and analysis of DNA samples for forensic analysis and DNA fingerprinting? Are there potential discriminatory implications that might result from the human genome project? What are embryonic stem cells, and why has this topic become an important social and political issue? Will advances in medicine allow humans to live considerably longer, and how will a longer human life span affect life on earth? We will learn through lectures, lecture demonstrations, problem solving in small groups and classroom discussion, and make vivid use of technology, including short videos from internet sources such as YouTube, electronic quizzes, imaging and video microscopy. NOTE: This course fulfills a Science & Technology (GS) requirement for students under GenEd and the Science & Technology Second Level (SB) requirement for students under Core. Students cannot receive credit for this course if they have successfully completed Biology 0948.

Course Attributes: GS

Repeatability: This course may not be repeated for additional credits.

BIOL 0948. Honors DNA: Friend or Foe. 3 Credit Hours.

This course is not offered every year. Through the study of basic biological concepts, think critically about modern biotechnology. Consider questions like: What are the ethical and legal implications involving the gathering and analysis of DNA samples for forensic analysis and DNA fingerprinting? Are there potential discriminatory implications that might result from the human genome project? What are embryonic stem cells, and why has this topic become an important social and political issue? Will advances in medicine allow humans to live considerably longer, and how will a longer human life span affect life on earth? We will learn through lectures, lecture demonstrations, problem solving in small groups and classroom discussion, and make vivid use of technology, including short videos from internet sources such as YouTube, electronic quizzes, imaging and video microscopy. (This is an Honors course.) NOTE: This course fulfills a Science & Technology (GS) requirement for students under GenEd and the Science & Technology Second Level (SB) requirement for students under Core. Students cannot receive credit for this course if they have successfully completed Biology 0848.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR

Course Attributes: GS, HO

Repeatability: This course may not be repeated for additional credits.
BIOL 1001. Human Biology. 4 Credit Hours.
This course is typically offered in Fall, Spring, and Summer I.<p>An introduction to the principles of biology using the human as a model organism. The course covers biomolecules; the heredity, development, structure and function of the human body; and the relationship of humans to their environment.
NOTE: (1) Laboratory requires dissection. Not available for Biology major credit; no credit if Biology 1011 (C083) is previously taken. (2) This course can be used to satisfy the university Core Science & Technology First Level (SA) requirement.
Course Attributes: SA
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 0701 to 0702| Required Courses:1|Minimum Grade of C-|May not be taken concurrently
OR MATH 0800 to 4999| Required Courses:1|Minimum Grade of C-|May be taken concurrently
OR MC3 Y|May not be taken concurrently
OR MC4 Y|May not be taken concurrently
OR MC5 Y|May not be taken concurrently
OR MC6 Y|May not be taken concurrently
OR STAT 1001|Minimum Grade of C-|May not be taken concurrently
OR STT2 Y|May not be taken concurrently
OR STAT 1102|Minimum Grade of C-|May not be taken concurrently
OR STAT 1902|Minimum Grade of C-|May not be taken concurrently.

BIOL 1009. Biological Reasoning. 3 Credit Hours.
This course is typically offered in Fall.<p>This course is a transition semester of biology to be taken before Introductory Biology 1111 for students who have not had advanced biology in high school or who wish to increase their reasoning skills before taking the Introductory Biology sequence. The course will focus on the analysis of biological data as well as understanding how these data support or contradict foundational concepts including biological evolution, structure and function, information exchange, energy transformation and flow and systems. The course format will involve group exercises designed to increase diagrammatic and quantitative reasoning in biology using examples from introductory textbooks. Understanding and developing concept maps will provide students with an effective approach for studying biology. The course will prepare students for the content and pace required to be successful in the Introductory Biology sequence.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CHEM 1031|Minimum Grade of C|May be taken concurrently
OR CHEM 1041|Minimum Grade of C|May be taken concurrently
OR CHEM 1951|Minimum Grade of C|May be taken concurrently
OR CHM1 Y|May not be taken concurrently.

BIOL 1011. General Biology I. 4 Credit Hours.
This course is typically offered in Fall and Summer I.<p>General introductory biology for non-biology majors. Topics include cell physiology (introduction), origins of life, taxonomy, principles of evolution, animal evolution, and a survey of physiology. NOTE: (1) Laboratory required. (2) This course can be used to satisfy the university Core Science & Technology First Level (SA) requirement. To determine if this course in combination with another course can satisfy the GenEd Science & Technology requirement, see your advisor.
Course Attributes: SA
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 0701 to 0702| Required Courses:1|Minimum Grade of C-|May not be taken concurrently
OR MATH 0800 to 4999| Required Courses:1|Minimum Grade of C-|May be taken concurrently
OR MC3 Y|May not be taken concurrently
OR MC4 Y|May not be taken concurrently
OR MC5 Y|May not be taken concurrently
OR MC6 Y|May not be taken concurrently
OR STAT 1001|Minimum Grade of C-|May not be taken concurrently
OR STT2 Y|May not be taken concurrently
OR STAT 1102|Minimum Grade of C-|May not be taken concurrently
OR STAT 1902|Minimum Grade of C-|May not be taken concurrently.
BIOL 1012. General Biology II. 4 Credit Hours.<p>This course is typically offered in Spring and Summer II.<p>General introductory biology for non-biology majors. Topics include biological molecules, biochemistry, molecular biology, and genetics. NOTE: (1) Laboratory required. (2) This course can be used to satisfy the university Core Science & Technology Second Level (SB) requirement. To determine if this course in combination with another course can satisfy the GenEd Science & Technology requirement, see your advisor.</p>Course Attributes: SB
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 0701 to 0702| Minimum Grade of C-| May not be taken concurrently
OR MATH 0800 to 4999| Required Courses: 1| Minimum Grade of C-| May be taken concurrently
OR MC3 Y| May not be taken concurrently
OR MC4 Y| May not be taken concurrently
OR MC5 Y| May not be taken concurrently
OR MC6 Y| May not be taken concurrently
OR STAT 1001| Minimum Grade of C-| May not be taken concurrently
OR STT2 Y| May not be taken concurrently
OR STAT 1102| Minimum Grade of C-| May not be taken concurrently
OR STAT 1902| Minimum Grade of C-| May not be taken concurrently.

BIOL 1111. Introduction to Biology I. 0 or 4 Credit Hours.<p>This course, with Biology 2112, makes up the introductory series for Biology majors. Both courses must be completed with a grade of C or better before students will be allowed to take the second level of required courses in the Biology curriculum, Biology 2296 and 3096. Biology 1111 is designed to be taken in the spring of the students’ freshman year. This semester covers evolutionary principles, an introduction to ecology, and anatomy and physiology of plants and animals with an emphasis on vertebrate systems. Concepts and facts discussed in lecture will be closely integrated with laboratory observation and experimentation. NOTE: This is part of the introductory series for Biology majors. There are weekly laboratories that emphasize hands-on experience with living material. Students must pass this course with a C or better to take upper level Biology courses.<p>Two sections are required for this course. This course requires registration for a 0.0 credit Recitation section in addition to the 4.0 credit Lecture & Laboratory section. The Recitation sections corresponding to a course are listed under the same course number as the Lecture & Laboratory sections, but have unique section numbers.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CHEM 1031| Minimum Grade of C| May not be taken concurrently
OR CHEM 1041| Minimum Grade of C| May not be taken concurrently
OR CHEM 1951| Minimum Grade of C| May not be taken concurrently
OR CHM1 Y| May not be taken concurrently
AND (CHEM 1032| Minimum Grade of C-| May be taken concurrently
OR CHEM 1042| Minimum Grade of C-| May be taken concurrently
OR CHEM 1952| Minimum Grade of C-| May be taken concurrently.

BIOL 1911. Honors Introduction to Biology I. 4 Credit Hours.<p>This course, with Biology 2912 (H102) or 2112 (0102), makes up the introductory series for Biology majors. The series must be completed with a grade of C or better before students will be allowed to take the second level of required courses in the Biology curriculum, Biology 2296 (2203, 0203) and 3096 (W204). Biology 1911 (H101) is designed to be taken in the spring of the students’ freshman year. This semester covers evolutionary principles, an introduction to ecology, and anatomy and physiology of plants and animals with an emphasis on vertebrate systems. Concepts and facts discussed in lecture will be closely integrated with laboratory observation and experimentation. NOTE: (1) This course can substitute for Biology 1111 as part of the introductory series for Biology majors. (2) This course can be used to satisfy the university Core Science & Technology First Level (SA) requirement. To determine if this course in combination with another course can satisfy the GenEd Science & Technology requirement, see your advisor.</p>Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO, SA
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CHEM 1031| Minimum Grade of C| May not be taken concurrently
OR CHEM 1041| Minimum Grade of C| May not be taken concurrently
OR CHEM 1951| Minimum Grade of C| May not be taken concurrently
OR CHM1 Y| May not be taken concurrently
AND (CHEM 1032| Minimum Grade of C-| May be taken concurrently
OR CHEM 1042| Minimum Grade of C-| May be taken concurrently
OR CHEM 1952| Minimum Grade of C-| May be taken concurrently).
BIOL 2001. Clinical Microbiology. 4 Credit Hours.
This course is typically offered in Fall.<p>This course is an introduction to the microorganisms that cause infectious diseases around the world. The nonspecific and specific host defense mechanisms are discussed. Methods for diagnosis, including culturing and immunological procedures, are covered. Other topics include disinfection, sterilization, standard precautions, antimicrobials, disease prevention and control. Laboratory related learning experiences, involving the testing of scientific principles related to lecture/discussion content, are integrated to support concepts introduced during lectures. NOTE: Not available for Biology major credit.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(CHEM 1021|Minimum Grade of C-|May not be taken concurrently
OR CHEM 1031|Minimum Grade of C-|May not be taken concurrently
OR CHEM 1041|Minimum Grade of C-|May not be taken concurrently
OR CHEM 1951|Minimum Grade of C-|May not be taken concurrently)
AND (BIOL 1012|Minimum Grade of C-|May not be taken concurrently
OR BIOL 2112|Minimum Grade of C-|May not be taken concurrently
OR BIOL 2912|Minimum Grade of C-|May not be taken concurrently)
AND (KINS 1224|Minimum Grade of C-|May not be taken concurrently).

BIOL 2003. Introductory Laboratory for Transfer Students. 1 Credit Hour.
This course is typically offered in Fall and Spring.<p>For transfer students only. Instruction to satisfy the laboratory component of either Biology 1111 or Biology 2112 for students that transfer courses from other institutions that are similar in topic to those offered by the Biology Department, but lack a laboratory. This course allows such students to register solely for the laboratory component of the relevant course. This course does not serve as a Biology elective.
Repeatability: This course may not be repeated for additional credits.

BIOL 2005. Laboratory for Transfer Students. 1 Credit Hour.
This course is typically offered in Fall and Spring.<p>For transfer students only. Instruction to satisfy the laboratory component of either Biology 2296 or Biology 3096 for students that transfer courses from other institutions that are similar in topic to those offered by the Biology Department, but lack a laboratory. This course allows such students to register solely for the laboratory component of the relevant course. This course does not serve as a Biology elective.
Repeatability: This course may not be repeated for additional credits.

BIOL 2082. Independent Research I. 2 to 4 Credit Hours.
This course is typically offered in Fall, Spring, Summer I and Summer II.<p>Research under the direction of a faculty member in the Department of Biology or under joint supervision of an approved outside preceptor and a member of the Biology department. The Temple Biology faculty member oversees their work and acts as a liaison between an outside institution and the Biology Honors Committee. All students must obtain the approval of the Biology Undergraduate Committee. Students must have completed Biology 1111 OR Biology 2112. NOTE: Not available for major credit. This course is not repeatable.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
BIOL 1111|Minimum Grade of C|May not be taken concurrently
OR BIOL 1911|Minimum Grade of C|May not be taken concurrently
OR BIO3 Y|May not be taken concurrently
OR BIOL 2112|Minimum Grade of C|May not be taken concurrently
OR BIOL 2912|Minimum Grade of C|May not be taken concurrently
OR BIO4 Y|May not be taken concurrently.
BIOL 2112. Introduction to Biology II. 4 Credit Hours.
This course is typically offered in Fall and Spring.<br>This course, with Biology 1111 (0101), makes up the introductory series for Biology majors. Both courses must be completed with a grade of C or better before students will be allowed to take the second level of required courses in the Biology curriculum, Biology 2296 (2203, 0203) and 3096 (W204), without the instructors’ permission. Biology 2112 (0102) is designed to be taken in the fall of the sophomore year. This course provides an introduction to the fundamental concepts of biochemistry, cell biology, molecular biology and genetics. Topics covered include the structure of important biological macromolecules, enzyme kinetics, metabolic pathways, photosynthesis, cell changes during mitosis and meiosis, DNA replication, transcription, translation and genetic analysis. NOTE: This is part of the introductory series for Biology majors. There are weekly laboratories that emphasize hands-on experience with living material. Students must pass this course with a C or better to take upper level Biology courses.
**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
(CHEM 1031|Minimum Grade of C|May not be taken concurrently
OR CHEM 1041|Minimum Grade of C|May not be taken concurrently
OR CHEM 1951|Minimum Grade of C|May not be taken concurrently
OR CHM1 Y|May not be taken concurrently)
AND (CHEM 1032|Minimum Grade of C|May not be taken concurrently
OR CHEM 1042|Minimum Grade of C|May not be taken concurrently
OR CHEM 1952|Minimum Grade of C|May not be taken concurrently
OR CHM2 Y|May not be taken concurrently)
AND (CHEM 2201|Minimum Grade of C|May be taken concurrently
OR CHEM 2211|Minimum Grade of C|May be taken concurrently
OR CHEM 2921|Minimum Grade of C|May be taken concurrently)
AND (MATH 1022|Minimum Grade of C|May not be taken concurrently
OR MATH 2922|Minimum Grade of C|May not be taken concurrently)

BIOL 2227. Principles of Ecology. 3 Credit Hours.
This course is typically offered in Spring.<br>This course provides an overview of ecology from the level of the individual organism to populations, communities and ecosystems. It examines the physical, chemical, and biological components of ecological interactions, and includes a comparative treatment of terrestrial and aquatic ecosystems.

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
(BIOL 1111|Minimum Grade of C|May not be taken concurrently
OR BIOL 1911|Minimum Grade of C|May not be taken concurrently
OR BIO3 Y|May not be taken concurrently)

BIOL 2233. Mammalian Anatomy. 4 Credit Hours.
This course is typically offered in Fall.<br>A study of the development and gross anatomy of the human. In the laboratory, the dissection of the cat, together with pertinent illustrations from humans and other animals, provides a comparative survey of the anatomical structure of mammals.

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
(BIOL 1111|Minimum Grade of C|May not be taken concurrently
OR BIOL 1911|Minimum Grade of C|May not be taken concurrently
OR BIO3 Y|May not be taken concurrently)

BIOL 2235. General Histology. 4 Credit Hours.
This course is typically offered in Spring.<br>A study of the fundamental techniques used in preparing tissues for microscopic examinations, followed by a detailed study of the various types of normal tissues and organs in mammals with emphasis on correlations between structure and function.

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
(BIOL 1111|Minimum Grade of C|May not be taken concurrently
OR BIOL 1911|Minimum Grade of C|May not be taken concurrently
OR BIO3 Y|May not be taken concurrently)
BIOL 2241. Invertebrate Biology. 4 Credit Hours.
This course is typically offered in Spring.<p>An introduction to the biology of the invertebrate phyla including insects. Demonstrations of the patterns of invertebrate evolution by consideration of morphology, behavior, development, physiology, and ecology of representative organisms.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
BIOL 1111|Minimum Grade of C|May not be taken concurrently
OR BIOL 1911|Minimum Grade of C|May not be taken concurrently
OR BIO3 Y|May not be taken concurrently.

BIOL 2296. Genetics. 4 Credit Hours.
This course is typically offered in Spring.<p>Examines the basic principles and problems of classical, biochemical, and molecular genetics. NOTE: Required for majors in Biology. There are weekly laboratories that emphasize hands-on experience with living material.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(BIOL 1111|Minimum Grade of C|May not be taken concurrently
OR BIOL 1911|Minimum Grade of C|May not be taken concurrently
OR BIO3 Y|May not be taken concurrently)
AND (BIOL 2112|Minimum Grade of C|May not be taken concurrently
OR BIOL 2912|Minimum Grade of C|May not be taken concurrently
OR BIO4 Y|May not be taken concurrently)
AND (CHEM 2201|Minimum Grade of C|May not be taken concurrently
OR CHEM 2921|Minimum Grade of C|May not be taken concurrently)
AND (CHEM 2202|Minimum Grade of C|May be taken concurrently
OR CHEM 2922|Minimum Grade of C|May be taken concurrently)
AND (MATH 1022|Minimum Grade of C|May be taken concurrently
OR MC6 Y|May not be taken concurrently
OR MA04 Y|May not be taken concurrently).

BIOL 2912. Honors Introduction to Biology II. 4 Credit Hours.
This course is typically offered in Fall.<p>This course, with Biology 1911 (H101) or Biology 1111 (0101), makes up the introductory series for Biology majors. Both courses in the series must be completed with a grade of C or better before students will be allowed to take the second level of required courses in the Biology curriculum, Biology 2296 (2203, 0203) and 3096 (W204). Biology 2912 (H102) is designed to be taken in the fall of the sophomore year. This course provides an introduction to the fundamental concepts of biochemistry, cell biology, molecular biology and genetics. Topics covered include the structure of important biological macromolecules, enzyme kinetics, metabolic pathways, photosynthesis, cell changes during mitosis and meiosis, DNA replication, transcription, translation and genetic analysis. NOTE: (1) This course can substitute for Biology 2112 as part of the introductory series for Biology majors. There are weekly laboratories. (2) This course can be used to satisfy the university Core Science & Technology Second Level (SB) requirement. To determine if this course in combination with another course can satisfy the GenEd Science & Technology requirement, see your advisor.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO, SB
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(CHEM 1031|Minimum Grade of C|May not be taken concurrently
OR CHEM 1041|Minimum Grade of C|May not be taken concurrently
OR CHEM 1951|Minimum Grade of C|May not be taken concurrently
OR CHM1 Y|May not be taken concurrently)
AND (CHEM 1032|Minimum Grade of C|May not be taken concurrently
OR CHEM 1042|Minimum Grade of C|May not be taken concurrently
OR CHEM 1952|Minimum Grade of C|May not be taken concurrently
OR CHM2 Y|May not be taken concurrently)
AND (CHEM 2201|Minimum Grade of C|May be taken concurrently
OR CHEM 2211|Minimum Grade of C|May be taken concurrently
OR CHEM 2921|Minimum Grade of C|May be taken concurrently
OR CHEM 2202|Minimum Grade of C|May be taken concurrently
OR CHEM 2922|Minimum Grade of C|May be taken concurrently
AND (MATH 1022|Minimum Grade of C|May be taken concurrently
OR MATH 1038 to 4999| Required Courses:1|Minimum Grade of C|May be taken concurrently
OR MC6 Y|May not be taken concurrently
OR MA04 Y|May not be taken concurrently).
BIOL 3082. Independent Research II. 1 to 4 Credit Hour.
This course is typically offered in Fall, Spring, Summer I and Summer II. Research under the direction of a faculty member in the Department of Biology or under joint supervision of an approved outside preceptor and a member of the Biology department. The Temple Biology faculty member oversees their work and acts as a liaison between an outside institution and the Biology Honors Committee. All students must obtain the approval of the Biology Undergraduate Committee. Students must have completed Biology 1111 and Biology 2112; as well as be enrolled in or have completed one of Biology 2227, 2296 or 3096. NOTE: Not available for major credit. This course is repeatable.

Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(BIOL 1111) Minimum Grade of C May not be taken concurrently
OR BIOL 1911 Minimum Grade of C May not be taken concurrently
OR BIO3 Y May not be taken concurrently
AND (BIOL 2112) Minimum Grade of C May not be taken concurrently
OR BIOL 2912 Minimum Grade of C May not be taken concurrently
OR BIO4 Y May not be taken concurrently
AND (BIOL 2227) Minimum Grade of C May be taken concurrently
OR BIOL 2296 Minimum Grade of C May be taken concurrently
OR BIOL 3096 Minimum Grade of C May be taken concurrently

BIOL 3083. Directed Readings. 3 Credit Hours.
This course is typically offered in Fall, Spring, Summer I and Summer II. Prerequisites: Junior standing and a GPA of 3.2 or better with recommendation of a faculty sponsor and approval of the Biology Honors Committee. This course is repeatable. A tutorial opportunity for a student to work with a faculty member to investigate areas of study not covered by courses in the department. Available as an elective for Biology major credit by petition to the Biology Honors Committee prior to registration. The student must make a written agreement with a Biology faculty member detailing the course of study to be followed and the mechanism of evaluation. NOTE: Agreement must be submitted to the Biology Undergraduate Advisor and the Biology Honors Committee for approval. This course can be taken a maximum of two times; only one of these can count toward Biology elective requirements as well as GPA requirements.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may be repeated for additional credit.

BIOL 3091. Research Methods. 3 Credit Hours.
This course is typically offered in Spring. Research Methods is required for all of the TUteach with Teaching majors. It is one of several content courses specially designed to meet the needs of future teachers. Sections meet two hours per week for non-traditional, interactive lectures and two hours per week for lab. The course is cross-listed in Biology, Chemistry, Earth and Environmental Science, and Physics. The goals of the course are (1) to provide students with the tools that scientists use to solve scientific problems; (2) to give students the opportunity to use these tools in a laboratory setting; (3) to make students aware of how scientists communicate with each other through peer-reviewed scientific literature; and (4) to enable students to understand how scientists develop new knowledge and insights, the most important of which are eventually presented in textbooks and taught in conventional science classes. Students design and carry out four independent inquiries, which they write up and present in the manner that is common in the scientific community. The inquiries incorporate mathematics and the various science disciplines, thus the team of instructors teaching this course have expertise in different disciplines and are available to supervise all students as they work on their inquiries in the lab. The combination of Research Methods and the TUteach course "Perspectives on Science and Mathematics" (Philosophy 2196) provides prospective science and mathematics teachers with an in-depth understanding of how the scientific enterprise works. NOTE: Biology 3091 is only available for major credit in the Biology with Teaching BS program.

College Restrictions: Must be enrolled in one of the following Colleges: Science & Technology
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
SCTC 1289 Minimum Grade of C May not be taken concurrently.
BIOL 3096. Cell Structure and Function. 4 Credit Hours.
This course is typically offered in Fall. The chemistry and biological functions of important small molecules and macromolecules of the cell. Concept: the functions of cells are rooted in structures, and the structures themselves derive their characteristics from their chemical components. NOTE: Required for majors in Biology. There are weekly laboratories that emphasize hands-on experience with living material.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(BIOL 1111|Minimum Grade of C|May not be taken concurrently
OR BIOL 1911|Minimum Grade of C|May not be taken concurrently
OR BIO3 Y|May not be taken concurrently)
AND (BIOL 2112|Minimum Grade of C|May not be taken concurrently
OR BIOL 2912|Minimum Grade of C|May not be taken concurrently
OR BIO4 Y|May not be taken concurrently)
AND (CHEM 2202|Minimum Grade of C-|May not be taken concurrently
OR CHEM 2212|Minimum Grade of C-|May not be taken concurrently
OR CHEM 2922|Minimum Grade of C-|May not be taken concurrently
AND (PHYS 1021|Minimum Grade of C-|May be taken concurrently
OR PHYS 1061|Minimum Grade of C-|May be taken concurrently
OR PHYS 2021|Minimum Grade of C-|May be taken concurrently
OR PHYS 2921|Minimum Grade of C-|May be taken concurrently).

BIOL 3101. Evolution. 3 Credit Hours.
This course is typically offered in Fall. Topics covered include Darwinism and neo-Darwinian theory, including adaptation, natural selection, sexual selection, speciation, and techniques used to understand evolution of living and extinct organisms.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(BIOL 1111|Minimum Grade of C|May not be taken concurrently
OR BIOL 1911|Minimum Grade of C|May not be taken concurrently
OR BIO3 Y|May not be taken concurrently)
AND (BIOL 2112|Minimum Grade of C|May not be taken concurrently
OR BIOL 2912|Minimum Grade of C|May not be taken concurrently
OR BIO4 Y|May not be taken concurrently)

BIOL 3111. Genomics in Medicine. 3 Credit Hours.
This course is typically offered in Fall. The completion of the Human Genome Project in 2003 began a revolution in the treatment of human disease. More than 10 years later, the promise of personalized genome-guided medical treatment is becoming reality. This course will explore how genomic information has enhanced our understanding of human genetic variation and disease susceptibility. Students will develop familiarity with main areas in genomic medicine through lectures from intra- and extramural experts, and they will be involved in classroom discussions.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
BIOL 2112|Minimum Grade of C-|May not be taken concurrently
OR BIOL 2912|Minimum Grade of C-|May not be taken concurrently
OR BIO4 Y|May not be taken concurrently.

BIOL 3112. Fundamentals of Genomic Evolutionary Medicine. 3 Credit Hours.
This course is typically offered in Spring. Modern evolutionary theory offers a conceptual framework for understanding human health and disease. In this course we will examine human disease in evolutionary contexts with a focus on modern techniques and genome-scale datasets. We ask: What can evolution teach us about human populations? How can we understand disease from molecular evolutionary perspectives? What are the relative roles of negative and positive selection in disease? How do we apply evolutionary principles in diagnosing diseases and developing better treatments? Students will conduct case studies of a variety of diseases and phenotypes in a group setting.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
BIOL 2112|Minimum Grade of C|May not be taken concurrently
OR BIOL 2912|Minimum Grade of C|May not be taken concurrently
OR BIO4 Y|May not be taken concurrently.
BIOL 3114. Evolutionary Ecology. 3 Credit Hours.
This course is typically offered in Fall.<p>The field of evolutionary ecology deals broadly with understanding how organisms adapt to their abiotic and biotic environments. What is the adaptive significance and evolutionary potential of phenotypic variation in natural populations? How do ecological interactions and genetic constraints shape the course of evolution? The class will cover fundamental ecological and evolutionary theories and approaches used to address questions in evolutionary ecology, including molecular tools, modeling, manipulative field studies, and laboratory- or field-based common garden studies. Topics covered include adaptation and constraint, phenotypic plasticity, life history evolution, ecological speciation, and evolutionary conservation biology. Lectures, assignments, and discussions will explore theoretical and recent empirical advances in the field.
**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
BIOL 2227|Minimum Grade of C-|May not be taken concurrently.

BIOL 3181. Cooperative Research in Biochemistry. 3 Credit Hours.
This course is typically offered in Fall, Spring, Summer I and Summer II.<p>Independent research carried out in an off-campus laboratory. A Biochemistry faculty member and the research director of the off-campus laboratory will jointly supervise research. Written permission must be obtained in advance from the supervising faculty member and one of the co-administrators. Student must present a seminar on campus describing the scientific aims of the project, the experimental design, and the conclusions drawn from the experiments. NOTE: Restricted to Biochemistry majors enrolled in the Cooperative Program.

**Field of Study Restrictions:** Must be enrolled in one of the following Fields of study: Biochemistry

**Repeatability:** This course may be repeated for additional credit.

BIOL 3183. Junior Independent Research. 3 Credit Hours.
This course is typically offered in Fall, Spring, Summer I and Summer II.<p>Discussion of research problems and methods as part of laboratory research. Designed to acquaint students with concepts of modern biology and to prepare them for independent research. NOTE: Students should obtain a faculty sponsor before applying for admission. Not available for Biology elective credit.

**Repeatability:** This course may be repeated for additional credit.

BIOL 3201. Human Genetics. 3 Credit Hours.
This course is typically offered in Fall.<p>The class provides an extensive overview of various Human genetics topics, including classical Mendelian genetics, molecular genetics and population genetics. We will delve into questions such as: what does human genome look like? What are the individual differences and how do they translate into phenotypic traits that affect our lives? How do we inherit and transmit this information? How do researchers study our genetic material and how do they find genes responsible for various diseases? What are the dynamic forces that shape genetic composition of human populations and why is it important to understand it? What have we learned about the past of human populations? Finally, is the ability to decipher the genome is the ultimate tool to tell the future and are there any ramifications we should be cautious of? The class will integrate lectures and in-class discussion of scientific literature. This course will build upon the basic genetic knowledge acquired in Biology 2296 (Genetics).

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
BIOL 2296|Minimum Grade of C|May not be taken concurrently.

BIOL 3211. Human Evolution. 3 Credit Hours.
Since we last shared a common ancestor with chimpanzees, over 6 million years ago, the human species experienced a series of unusual adaptations so that today humans dominate planet earth and are masters of arts and letters, science and technology. Humans are both highly intelligent and highly social, so that when we work together extraordinary and unpredictable things can happen. This course will cover the evolutionary history of humans, with an emphasis on the genetic aspects of the process.

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
BIOL 2296|Minimum Grade of C|May not be taken concurrently
OR BIO6 Y|May not be taken concurrently.

BIOL 3225. Evolutionary Genetics. 3 Credit Hours.
This course is typically offered in Spring.<p>This class covers fundamental principles of population and comparative genetics with special attention given to recent advances in genomics. The scope of the class ranges from understanding variation at the population level to addressing species-level questions. Topics covered include classical population genetics, quantitative genetics, comparative genomics, phylogenomics and speciation. Lectures, assignments and discussions will explore theoretical and recent empirical advances.

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
(BIOL 2296)Minimum Grade of C|May not be taken concurrently
OR BIO6 Y|May not be taken concurrently
AND (MATH 1042)Minimum Grade of C|May not be taken concurrently
OR MATH 1942|Minimum Grade of C|May not be taken concurrently
OR MATH 1951|Minimum Grade of C|May not be taken concurrently
OR MATH 2043 to 3080| Required Courses:1|Minimum Grade of C|May be taken concurrently
OR MA07 Y|May not be taken concurrently).
BIOL 3232. Behavioral Genetics. 3 Credit Hours.
This course is typically offered in Fall. This course is an introduction to the interdisciplinary field - behavioral genetics - that combines behavioral sciences and genetics and unifies the long-standing debate on what underlies complex human behavior: "nurture" or "nature." This course will discuss the genetic approaches used to dissect out the genetic determinant of complex human traits. For example, students will learn about genes that influence learning and memory, intelligence (IQ), cognitive disorders, personality disorders, psychopathology, antisocial behavior, substance abuse, and sexual orientation. In addition, the interplay of environment and genetic factors that create individual differences in behavior will be explored. Because this field represents the intersection between what is known and what might be known in the future about complex and potentially controversial behaviors and characteristics, students will be encouraged to discuss contemporary ethical issues regarding human behavior in the realm of the scientific evidence presented.

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
BIOL 2296|Minimum Grade of C|May not be taken concurrently.

BIOL 3241. Genomics and Evolutionary Biology of Parasites and Other Dependent Species. 3 Credit Hours.
This course is typically offered in Spring. All known multicellular organisms harbor diverse assemblages of dependent species, many of which are considered parasites or pathogens. Yet, in spite of a growing awareness of the importance of dependent species in biodiversity and medicine, many studies are limited to assessing the consequences to their hosts. The goal of this seminar is to discuss some of the biological processes leading to the diversity of dependent species and their functional/evolutionary relationships with their hosts. This general objective will be fulfilled by discussing research articles on the genomics and evolution of dependent species, many of them considered parasites or pathogens. Students are also expected to gain proficiency in writing scientific review papers.

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(BIOL 2112|Minimum Grade of C|May not be taken concurrently)
OR BIOL 2912|Minimum Grade of C|May not be taken concurrently
OR BIO4 Y|May not be taken concurrently
AND (BIOL 2227|Minimum Grade of C|May not be taken concurrently).

BIOL 3243. Parasitology. 4 Credit Hours.
This course is not offered every year. This course will introduce students to the basic concepts of parasitology, including types of animal associations, adaptations to parasitic mode of life, and evolution of parasitism. Parasite life cycles (infection, transmission, pathology, symptoms, diagnosis, treatment) and control of medically and economically important parasites are the main emphasis of this course. Includes a laboratory.

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(BIOL 3096|Minimum Grade of C-|May not be taken concurrently)
AND (BIOL 2296|Minimum Grade of C|May be taken concurrently).

BIOL 3244. Experimental Marine Biology. 4 Credit Hours.
This course is typically offered in summer. Experimental Marine Biology is an upper level Biology course focused on the types of experiments that are used to further the science of Marine Biology. The course will be structured around three themes: Oceanography, Physiology, and Ecology. The Oceanography section will examine the marine environment in terms of the physics of current flow and the chemical properties of seawater. The Physiology section will examine how different organisms respond to these abiotic factors. In the Ecology section, we will discuss how organisms interact with each other as individuals and populations, and how communities and ecosystems are structured.

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(BIOL 1111|Minimum Grade of C|May not be taken concurrently)
OR BIOL 1911|Minimum Grade of C|May not be taken concurrently
OR BIO3 Y|May not be taken concurrently
AND (BIOL 2112|Minimum Grade of C|May not be taken concurrently)
OR BIOL 2912|Minimum Grade of C|May not be taken concurrently
OR BIO4 Y|May not be taken concurrently).

BIOL 3245. Marine Ecology. 4 Credit Hours.
This course is occasionally offered in Fall. A survey of the concepts of aquatic ecology in estuarine and marine ecosystems, emphasizing the organization and maintenance of the major aquatic communities in response to the physical, chemical, and biological characteristics of the environment, modes of energy transfer, physiological adaptation, life history characteristics, and functional morphology. Laboratory exercises stress comparative measurement of biological diversity in the marine environment. NOTE: One or more field trips required.

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
BIOL 2227|Minimum Grade of C-|May not be taken concurrently.
BIOL 3254. Animal Behavior. 3 Credit Hours.
This course is typically offered in Spring.<p>This course will examine how animals behave, and investigate the proximate (neurological and developmental) and ultimate (functional and evolutionary) explanations for these behaviors. The ecological and evolutionary processes that shape animal behavior will be examined through the study of classic theories and major principles of animal behavior, including a weighing of the experimental and observational evidence for each idea. Concepts will be illustrated with examples from a wide range of taxonomic groups of animals in diverse ecosystems, and emerging theories in animal behavior will be discussed. We will conclude with applications of animal behavior for conservation.  
Repeatability: This course may not be repeated for additional credits
Pre-requisites: 
BIOL 2227|Minimum Grade of C|May not be taken concurrently
OR BIO5 Y|May not be taken concurrently.

BIOL 3265. Developmental Biology. 3 Credit Hours.
This course is typically offered in Fall.<p>This course provides an introduction to invertebrate and vertebrate development. It combines the description of classical examples of experimental embryology with the current study of the mechanisms of development, differentiation, and growth in animals at the molecular, cellular, and genetic levels. Topics covered include embryonic patterning, cell-cell interactions, growth factors and signal transduction, transcriptional control mechanisms and regulatory network, evolutionary mechanisms as well as the discussion of relevant diseases.  
Repeatability: This course may not be repeated for additional credits
Pre-requisites: 
BIOL 2296|Minimum Grade of C-|May not be taken concurrently.

BIOL 3275. Ecology of Invasive Species. 3 Credit Hours.
This course is typically offered in Fall.<p>Species that are transported by humans from their native range and successfully establish and spread in a new environment are called invasive species. Invasive species can cause significant ecological and economic impacts and are a growing threat to native species and ecosystems across the globe. Recognition of this problem has led to a recent surge in research on invasive species and a better understanding of the ecology of invasions and approaches for improved prevention and control. Yet many challenges still hinder scientific and applied advancements in this emerging field. In this course we will investigate these challenges and the science of invasive species using interactive activities and student-driven projects.  
Repeatability: This course may not be repeated for additional credits
Pre-requisites: 
BIOL 2227|Minimum Grade of C|May not be taken concurrently
OR BIO5 Y|May not be taken concurrently.

BIOL 3281. Cooperative Research in Biochemistry. 3 Credit Hours.
This course is typically offered in Fall, Spring, Summer I and Summer II.<p>Independent research carried out in an off-campus laboratory. A Biochemistry faculty member and the research director of the off-campus laboratory will jointly supervise research. Written permission must be obtained in advance from the supervising faculty member and one of the co-administrators. Student must present a seminar on campus describing the scientific aims of the project, the experimental design, and the conclusions drawn from the experiments. NOTE: Restricted to Biochemistry majors enrolled in the Cooperative Program.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Biochemistry
Repeatability: This course may be repeated for additional credit.

BIOL 3301. Cell Biology. 3 Credit Hours.
This course is not offered every year.<p>Recent developments in cell biology will be discussed. Topics will include the cytoskeleton, cell cycle, and cell motility.  
Repeatability: This course may not be repeated for additional credits
Pre-requisites: 
BIOL 3096|Minimum Grade of C-|May not be taken concurrently.

BIOL 3307. Conservation Biology. 3 Credit Hours.
This course is typically offered in Fall.<p>The Earth harbors an incredible diversity of species and communities, most still poorly understood by science. This biodiversity is essential to the functioning of natural ecosystems and provides a wide array of priceless services to people today and a treasure of benefits for the future. Yet human threats to biodiversity have led us to the brink of the sixth major extinction event in Earth's history. Which populations, species, communities, and ecoregions are most diverse? Which are most threatened, and by which human activities? What is the contribution of biodiversity to human livelihoods? What does the science suggest is needed to conserve biodiversity? How might this best be done given social, economic, and political realities? These questions and more will be examined in this course, focusing on the key principles of conservation biology and the application of those principles to local, national, and international examples.  
Repeatability: This course may not be repeated for additional credits
Pre-requisites: 
BIOL 2227|Minimum Grade of C|May not be taken concurrently.
BIOL 3311. Herpetology. 4 Credit Hours.
This course is typically offered in Spring. Reptiles and amphibians comprise nearly 7,400 species and can be found on every major and minor landmass in the world except Antarctica. This course will provide a broad, evolutionary survey of the major groups of reptiles and amphibians ("herps"). We will cover topics about their basic biology, including anatomy, physiology, ecology, behavior, and conservation. The laboratory will emphasize taxonomic characters and identification of living and preserved specimens, with emphasis on species found in North America. Additionally several field trips (conducted during lab hours and spring break) will reinforce course material through hands-on experience.

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(BIOL 1111)|Minimum Grade of C-May not be taken concurrently
OR BIOL 1911|Minimum Grade of C-May not be taken concurrently
OR BIO3 Y|May not be taken concurrently
AND (BIOL 2112)|Minimum Grade of C-May not be taken concurrently
OR BIOL 2912|Minimum Grade of C-May not be taken concurrently
OR BIO4 Y|May not be taken concurrently.

BIOL 3312. Biostatistics. 3 Credit Hours.
This course is typically offered in Fall. Students will learn the basic tools of statistical analysis for raw data and learn how to apply and interpret the analysis for the type of experiments they will encounter in biology. They will have opportunities to work with raw data using available computer tools such as EXCEL and SPSS.

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(MATH 1042)|Minimum Grade of C- May not be taken concurrently
OR MATH 1942|Minimum Grade of C- May not be taken concurrently
OR MATH 1951|Minimum Grade of C- May not be taken concurrently
OR MATH 2043 to 3080| Required Courses:1|Minimum Grade of C-May be taken concurrently
AND (BIOL 1111)|Minimum Grade of C-May not be taken concurrently
OR BIOL 1911|Minimum Grade of C-May not be taken concurrently
OR BIO3 Y|May not be taken concurrently
AND (BIOL 2112)|Minimum Grade of C-May not be taken concurrently
OR BIOL 2912|Minimum Grade of C-May not be taken concurrently
OR BIO4 Y|May not be taken concurrently.

BIOL 3316. Tropical Marine Biology. 4 Credit Hours.
This course is typically offered in Fall of odd years. A survey of marine biology focusing on coral reefs of the Atlantic Ocean. Course lectures given at Temple University include regular meetings during the fall semester plus some meetings between semesters during December and January. The course work at Temple is supplemented by a required week of lectures, field trips and field projects on Ambergris Caye in Belize (Central America). Lecture topics include coral biology, reef geology and ecology, coral reef biota, food webs and nutrient transfer in coral reefs, reef community organization, the biology of reef fishes, commensal and symbiotic interactions of reef organisms, and other appropriate topics. Group projects and presentations are required. Additional requirements include a current passport and snorkeling equipment. NOTE: Requires fall plus inter-session attendance, including air travel to a foreign country between fall and spring semesters. Room, board, and boat use in Belize are covered by the course fee; air transportation to Belize is not included. The course web site survey or an application available from the instructor must be completed prior to registration.

Repeatability: This course may not be repeated for additional credits.

BIOL 3317. General Microbiology. 4 Credit Hours.
This course is typically offered in Spring. A general survey of bacteria and archaea. Topics include: classification; physiology, growth, and environmental impact; genetics and gene recombination; evolutionary relationships. Laboratory topics include pure culture, identification, growth characteristics, and genetics.

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
BIOL 3096|Minimum Grade of C- May not be taken concurrently.

BIOL 3321. Plant Community Ecology. 3 Credit Hours.
This course is typically offered in Fall. This class focuses on fundamental principles in community ecology as they relate to plant systems. The scope of the class ranges from plant-environment interactions and species interactions, to the relationship among communities at larger spatial scales. Lectures and small group discussions will also highlight theoretical and empirical advances made in ecology through classic and contemporary studies of plant communities.

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
BIOL 2227|Minimum Grade of C-May not be taken concurrently.

BIOL 3322. Plant Genetics. 3 Credit Hours.
This course is typically offered in Fall. Current molecular and genetic analyses of classical problems in the genetics of higher plants.

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
BIOL 2296|Minimum Grade of C-May not be taken concurrently.
BIOL 3324. Molecular Biology. 3 Credit Hours.
This course is typically offered in Fall. A comprehensive introduction to molecular genetics and the biochemistry of DNA, RNA, and proteins. The structure and expression of genes in both prokaryotes and eukaryotes will be discussed with special emphasis on DNA replication, transcription, and translation. Current journal articles covering recent developments in modern molecular biology and genetic engineering will be covered.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(BIOL 2296|Minimum Grade of C-|May not be taken concurrently)
AND (CHEM 2202|Minimum Grade of C-|May not be taken concurrently)
OR CHEM 2212|Minimum Grade of C-|May not be taken concurrently
OR CHEM 2922|Minimum Grade of C-|May not be taken concurrently).

BIOL 3325. Research Techniques in Molecular Biology. 3 Credit Hours.
This course is typically offered in Spring. Instruction in the techniques used in modern molecular biology and molecular genetics. This course takes a problem-oriented approach toward teaching the methods of DNA and RNA analysis that are used in determining the structure and function of genes. Practical experience in the preparation of DNA, modern cloning methods, restriction enzyme mapping, hybridization analysis, DNA sequencing, and PCR techniques will be provided. Students will carry out a research project during the course. NOTE: Biology 3324 is highly recommended, but not required.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
BIOL 2296|Minimum Grade of C|May not be taken concurrently
OR BIO6 Y|May not be taken concurrently.

BIOL 3327. Immunology. 3 Credit Hours.
The purpose of the Immunology course is to provide a comprehensive overview of the immune system that in its normal function protects each of us from the harmful effects of microbial invaders. The lectures will describe the general properties and development of immunity, the condition of being protected from infection by microorganisms or the effects of foreign molecules. They will provide systemic coverage of immune responses to viruses, bacteria, protozoa and roundworms as well as the practical aspects of vaccine development. Additional lectures will include a description of various types of primary immunodeficiencies, most prevalent autoimmune disease and cancer.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
BIOL 2296|Minimum Grade of C-|May not be taken concurrently
OR BIOL 3096|Minimum Grade of C-|May not be taken concurrently.

BIOL 3328. Virology. 3 Credit Hours.
The role of viruses in human diseases, and their potential as tools for research and clinical interventions. The course will focus on virus-induced diseases in man including polio, rabies, hepatitis, herpes, and influenza; recently discovered viruses such as HIV and HTLV-1 will also be studied. Virus-host interactions and the mechanisms involved in disease progression, therapeutic strategies, and vaccines, strategies for viral entry, evasion of the immune system, transmission, and the subversion of host-cell machinery will be emphasized. Potential uses of viruses as vector for gene therapy of genetic disorders, cancers, and infectious diseases will also be discussed.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(BIOL 2296|Minimum Grade of C-|May not be taken concurrently
AND BIOL 3096|Minimum Grade of C-|May not be taken concurrently).

BIOL 3329. Developmental Genetics. 3 Credit Hours.
The role of genes during the periods of determination and differentiation in eukaryote development. Emphasis on the regulation of gene function and the relationship between gene function and the molecular and developmental interactions that culminate in the adult phenotype.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(BIOL 2296|Minimum Grade of C-|May not be taken concurrently
AND BIOL 3096|Minimum Grade of C-|May not be taken concurrently).

BIOL 3333. Advanced Techniques in Microscopy. 4 Credit Hours.
This course is typically offered in Spring. A survey of modern techniques in microscopy. Students will acquire a thorough grounding in general principles of optics and their application to the microscope. We will cover the theory of many methods current in Biology and Medicine, including: phase, interference contrast, and fluorescence microscopy, confocal microscopy, video microscopy, and digital image processing and analysis. This course includes extensive laboratory experience.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
BIOL 3096|Minimum Grade of C-|May not be taken concurrently.
BIOL 3334. Mammalian Physiology. 4 Credit Hours.
This course is typically offered in Spring.<p>Emphasis on the physiology of normal animals; consideration of disease states as counter-illustrations. Certain comparative aspects of physiology are introduced. Discussions of function extend to the physical and biochemical level. NOTE: Credit is not permitted for both Biology 0234 (under the old numbering system) and Biology 3334 (0334).
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(BIOL 1111|Minimum Grade of C|May not be taken concurrently
OR BIOL 1911|Minimum Grade of C|May not be taken concurrently
OR BIO3 Y|May not be taken concurrently
OR BIOE 3725|Minimum Grade of C|May not be taken concurrently)
AND (BIOL 2112|Minimum Grade of C|May not be taken concurrently
OR BIOL 2912|Minimum Grade of C|May not be taken concurrently
OR BIO4 Y|May not be taken concurrently
OR BIOE 3725|Minimum Grade of C|May not be taken concurrently)
AND (CHEM 1032|Minimum Grade of C|May not be taken concurrently
OR CHEM 1042|Minimum Grade of C|May not be taken concurrently
OR CHEM 1952|Minimum Grade of C|May not be taken concurrently
OR CHM2 Y|May not be taken concurrently)
AND (MATH 1042|Minimum Grade of C|May not be taken concurrently
OR MATH 1942|Minimum Grade of C|May not be taken concurrently
OR MATH 1951|Minimum Grade of C|May not be taken concurrently
OR MATH 2043 to 3080|Required Courses:1|Minimum Grade of C|May be taken concurrently)
AND (PHYS 1062|Minimum Grade of C|May be taken concurrently
OR PHYS 2022|Minimum Grade of C|May be taken concurrently
OR PHYS 2922|Minimum Grade of C|May be taken concurrently).

BIOL 3336. Freshwater Ecology. 4 Credit Hours.
This course is typically offered in Fall of even years.<p>The interrelationships between biological, chemical, and physical factors in freshwater environments. Lectures and laboratories address general ecological principles (population dynamics, community structure, energy flow, and nutrient cycling) as they apply to plants and animals in lakes, ponds, streams and wetlands. NOTE: Students are required to participate in up to two field trips, one of which includes weekend travel.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
BIOL 2227|Minimum Grade of C-|May not be taken concurrently.

BIOL 3337. Comparative Biomechanics. 3 Credit Hours.
This course is typically offered in Fall.<p>An overview of biomechanics with emphasis on locomotion. Students gain a working knowledge of the breadth of biomechanical study ranging across organismal and environmental scales.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(BIOL 1111|Minimum Grade of C|May not be taken concurrently
OR BIOL 1911|Minimum Grade of C|May not be taken concurrently
OR BIO3 Y|May not be taken concurrently
OR BIOL 2112|Minimum Grade of C|May not be taken concurrently
OR BIOL 2912|Minimum Grade of C|May not be taken concurrently
OR BIO4 Y|May not be taken concurrently
OR BIOE 3725|Minimum Grade of C|May not be taken concurrently)
AND (MATH 1042|Minimum Grade of C|May not be taken concurrently
OR MATH 1942|Minimum Grade of C|May not be taken concurrently
OR MATH 1951|Minimum Grade of C|May not be taken concurrently
OR MA07 Y|May not be taken concurrently)
AND (PHYS 2021|Minimum Grade of C|May not be taken concurrently
OR PHYS 1061|Minimum Grade of C|May not be taken concurrently
OR PHYS 2921|Minimum Grade of C|May not be taken concurrently).
BIOL 3352. Systems Neuroscience. 3 Credit Hours.
This course is typically offered in Fall and Spring. Study of the structure and function of the central nervous system (CNS) with a focus on the functional brain at a systems level. Systems level questions include how circuits are formed and used anatomically and physiologically to produce physiological functions, such as reflexes, sensory integration, motor coordination, emotional responses, learning and memory.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(BIOL 1111|Minimum Grade of C|May not be taken concurrently)
OR BIOL 1911|Minimum Grade of C|May not be taken concurrently
OR BIO3 Y|May not be taken concurrently
OR BIOL 3096|Minimum Grade of C-|May not be taken concurrently
AND (BIOL 2112|Minimum Grade of C|May not be taken concurrently)
OR BIOL 2912|Minimum Grade of C|May not be taken concurrently
OR BIO4 Y|May not be taken concurrently
OR BIOL 3096|Minimum Grade of C-|May not be taken concurrently
AND (CHEM 2201|Minimum Grade of C-|May not be taken concurrently)
OR CHEM 2211|Minimum Grade of C-|May not be taken concurrently
OR CHEM 2921|Minimum Grade of C-|May not be taken concurrently
OR BIOL 3096|Minimum Grade of C-|May not be taken concurrently
AND (MATH 1042|Minimum Grade of C-|May not be taken concurrently)
OR MATH 1942|Minimum Grade of C|May not be taken concurrently
OR MATH 1951|Minimum Grade of C|May not be taken concurrently
OR MATH 2043 to 3080|Required Courses:1|Minimum Grade of C-|May be taken concurrently
OR MA07 Y|May not be taken concurrently).

BIOL 3354. Neural Basis of Animal Behavior. 3 Credit Hours.
This course is typically offered in Fall of odd years. An exploration of the relationship of neural activity and connectivity to behavior. Topics include motor control, object recognition, and feedback. Examples from both vertebrate and invertebrate species. Analytic and synthetic approaches.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
BIOL 3352|Minimum Grade of C|May not be taken concurrently.

BIOL 3356. Organization and Development of the Nervous System. 3 Credit Hours.
This course is typically offered in Fall of even years. This course covers developmental and anatomical aspects of the nervous system. The relationship of form to function will be studied in a variety of both invertebrate and vertebrate systems. The course is intended to complement Neurobiology 3352 (0352)/5452 (0452) so that students will have a perspective on neuroscience ranging from the molecular to the systems level.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
BIOL 3096|Minimum Grade of C-|May not be taken concurrently.

BIOL 3358. Cellular and Molecular Neuroscience. 3 Credit Hours.
This course is typically offered in Spring. The course will focus on the molecular and cellular basis of neurological processing. The fundamentals of action potential generation, synaptic and receptor potentials generation and neuron-neuron communication will be discussed. The contemporary understanding of sensory processing will be covered in great detail with a particular focus on molecular sensors of light, sound, odorants, taste and touch and the signal transduction pathways that underlie the five senses.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
BIOL 3096|Minimum Grade of C-|May not be taken concurrently.

BIOL 3361. Synaptic Neuropharmacology: From Poppies to People. 3 Credit Hours.
This course is not offered every year. In this course we will examine how drugs interact with the nervous system. Specifically, we will focus on the cellular and molecular actions of drugs such as opiates, hallucinogens, marijuana, and cocaine on synaptic transmission as a mechanism for understanding the structure and function of the synapse. In addition, we will discuss how toxins and venoms affect synaptic transmission in nature as well as how they have been (and continue to be) used as research tools. Through this approach - of relating natural to experimental - students will be able to appreciate both the simplicity of synaptic design and the complexity of synaptic transmission in the historical context of the study of neuroscience.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
BIOL 3352|Minimum Grade of C-|May not be taken concurrently.
**BIOL 3363. Mammalian Development. 3 Credit Hours.**
This course is not offered every year.<p>This course covers normal and abnormal embryonic and fetal development; sources of totipotent, pluripotent and determined embryonic and fetal stem cells; the production of gynogenotes and androgenotes and the evaluation of these embryos to determine the contribution of maternal and paternal genomes to the developing embryo; epigenetic and X chromosome imprinting; the use of transgenes to correct genetic defects in developing embryos; and the function of specific genes in determining body pattern.

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
BIOL 3265|Minimum Grade of C-|May not be taken concurrently.

**BIOL 3365. The New Neuroimmunology. 3 Credit Hours.**
This course is typically offered in Spring.<p>It is now recognized that there is extensive communication between the immune and nervous systems. This course will examine the mechanisms and effects of this communication. Potential topics include effects of immune molecules on neuronal synaptic structure and function over the lifespan, and the implications for learning and memory; the biological basis of sickness behavior and links to depression and PTSD; possible effects of the microbiome on brain development and function; and links between immune deregulation and neurodegenerative disease.

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
BIOL 3352|Minimum Grade of C|May not be taken concurrently.

**BIOL 3367. Endocrinology. 3 Credit Hours.**
This course is typically offered in Fall.<p>Broad coverage of “chemical messengers,” occurrence, biochemistry, and physiology. Vertebrate endocrinology with minor treatment of invertebrates and plants.

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
BIOL 3096|Minimum Grade of C-|May not be taken concurrently.

**BIOL 3368. Biology of Cancer. 3 Credit Hours.**
This course is typically offered in Spring.<p>This course will survey the categories of tumors and their varying natures. Known mechanisms that lead to tumor cell development, multistep tumorigenesis, metastasis, tumor immunology, and cancer treatments will be examined in depth.

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
(BIOL 2296|Minimum Grade of C-|May not be taken concurrently)
AND (BIOL 3096|Minimum Grade of C-|May not be taken concurrently).

**BIOL 3371. Cell Proliferation. 3 Credit Hours.**
This course is typically offered in Spring.<p>Cell proliferation and its control: model systems, comparisons of proliferating cells with non-proliferating cells, controls of cell division and genomic stability and how that control is modified in proliferative diseases such as cancer, and the relationships between proliferation and differentiation. Readings will be taken from the literature.

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
(BIOL 2296|Minimum Grade of C-|May not be taken concurrently)
AND BIOL 3096|Minimum Grade of C-|May not be taken concurrently.

**BIOL 3373. Cell Signaling and Motility. 3 Credit Hours.**
This course is typically offered in Spring.<p>Cell-cell communication plays a central role during the development of an organism as well as governing its normal physiology and homeostasis. Disruption of cellular signaling events is known to be causative to numerous human pathologies and as such a major emphasis in the biological sciences is to discern and understand both the mechanisms and logic that drives such signaling. This course is an advanced cell biology course with a primary focus on the mechanisms of cellular signaling. We will also focus on how these signaling mechanisms control the processes of cell polarization and migration. The topics to be covered will broadly cover ligands, receptors, signal transduction, cellular cytoskeleton, cell-cell interactions and cell motility. Examples of signaling and motility will be drawn from both developmental and diseases-based examples to illustrate both the mechanisms and roles of these key processes.

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
BIOL 3096|Minimum Grade of C-|May not be taken concurrently.
BIOL 3374. Physical Biochemistry. 3 Credit Hours.
This course is typically offered in Spring.<p>This course is designed to survey current issues in technologies including therapeutics and diagnostics, and to examine consequences of developments in this area. The course is designed in a Problem Based Learning format, where students research critical areas and provide oral and written reports for other members in the class. The course is organized by topics including Concepts in Genetics, Cloning and Ethics, Gene Therapy, Prenatal Diagnosis, Gene Therapy for Cancer, Cell Replacement Therapy, Genomics and Proteomics, Vaccines, Forensics, Plant Biotechnology, and Instrumentation. At the end of the course, each student makes a formal presentation on a specific advance in biotechnology.
Repeatability: This course may be repeated for additional credit.
Pre-requisites: 
(BIOL 2112|Minimum Grade of C|May not be taken concurrently
OR BIOL 2912|Minimum Grade of C|May not be taken concurrently
OR BIO4 Y|May not be taken concurrently)
AND (MATH 1042|Minimum Grade of C|May not be taken concurrently
OR MATH 1942|Minimum Grade of C|May not be taken concurrently
OR MATH 1951|Minimum Grade of C|May not be taken concurrently
OR MATH 2043 to 3080) Required Courses:1|Minimum Grade of C|May be taken concurrently
OR MA07 Y|May not be taken concurrently)
AND (PHYS 1061|Minimum Grade of C|May not be taken concurrently
OR PHYS 2021|Minimum Grade of C|May not be taken concurrently
OR PHYS 2921|Minimum Grade of C|May not be taken concurrently)
AND (CHEM 1034|Minimum Grade of C|May not be taken concurrently
OR CHEM 1954|Minimum Grade of C|May not be taken concurrently
OR CHEM 1954|Minimum Grade of C|May not be taken concurrently).

BIOL 3379. Biotechnology. 3 Credit Hours.
This course is typically offered in Spring.<p>This course is designed to survey current issues in technologies including therapeutics and diagnostics, and to examine consequences of developments in this area. The course is designed in a Problem Based Learning format, where students research critical areas and provide oral and written reports for other members in the class. The course is organized by topics including Concepts in Genetics, Cloning and Ethics, Gene Therapy, Prenatal Diagnosis, Gene Therapy for Cancer, Cell Replacement Therapy, Genomics and Proteomics, Vaccines, Forensics, Plant Biotechnology, and Instrumentation. At the end of the course, each student makes a formal presentation on a specific advance in biotechnology.
Repeatability: This course may be repeated for additional credit.
Pre-requisites: 
(BIOL 2296|Minimum Grade of C|May not be taken concurrently
AND BIOL 3096|Minimum Grade of C|May not be taken concurrently).

BIOL 3380. Contemporary Biology. 3 Credit Hours.
This course is typically offered in Fall and Spring.<p>This course is advanced discussion of selected topics.<p>This course is repeatable for credit.
Repeatability: This course may be repeated for additional credit.

BIOL 3396. Scientific Writing for Biology: The Art of Communicating. 3 Credit Hours.
This course is typically offered in Fall and Spring.<p>This course is designed for upper-level undergraduate students majoring in a natural science. This seminar course teaches students how to communicate scientific information in written and oral (PowerPoint) formats clearly and succinctly. The development and refinement of the primary research article represents the core of the course; however, other genres of scientific writing (and audiences) are explored. In addition, students develop their skills as revisers, editors, and reviewers through in-class exercises that focus on giving (and receiving) constructive criticism. As part of a secondary goal of the course, other professional forms of writing (e.g., cover letters, personal statements, and resumes) as well as careers in scientific writing are discussed.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites: 
BIOL 2296|Minimum Grade of C|May not be taken concurrently
OR BIOL 3096|Minimum Grade of C|May not be taken concurrently.

BIOL 3403. Genomics. 3 Credit Hours.
This course is typically offered in Fall.<p>Genomics is the study of the mechanisms of gene inheritance and gene expression as they are manifested across the entire genome. Students will learn about genome-related technologies, including genome sequencing and mapping. They will also learn about genome structure and how genomes vary across species, as well as the forces driving these evolutionary changes. Students will also learn how to carry out genome-level data analyses.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: 
BIOL 2112|Minimum Grade of C|May not be taken concurrently
OR BIOL 2912|Minimum Grade of C|May not be taken concurrently
OR BIO4 Y|May not be taken concurrently.
BIOL 3681. Cooperative Studies. 2 to 4 Credit Hours.
This course is typically offered in Fall, Spring, Summer I and Summer II. Students obtain a job through the Cooperative Placement Office. Course grade based entirely on a research paper, related in subject matter to the job, and prepared under the supervision of a Biology Department faculty member. NOTE: The student is responsible for finding a departmental supervisor. For students enrolled in a Cooperative Program; not available for Biology elective credit. This course is not repeatable. Repeatability: This course may not be repeated for additional credits.

BIOL 3781. Cooperative Studies. 2 to 4 Credit Hours.
This course is typically offered in Fall, Spring, Summer I and Summer II. Students obtain a job through the Cooperative Placement Office. Course grade based entirely on a research paper, related in subject matter to the job, and prepared under the supervision of a Biology Department faculty member. The student is responsible for finding a departmental supervisor. For students enrolled in a Cooperative Program; not available for Biology elective credit.

Repeatability: This course may be repeated for additional credit.

BIOL 4291. Extradepartmental Research. 1 to 4 Credit Hour.
This course is typically offered in Fall, Spring, Summer I and Summer II. Prerequisite: Senior standing and a GPA of 3.2 or better with recommendation of a faculty sponsor and approval of the Biology Honors Committee. Students must be Biology majors who have completed Biology 1111, 2112, and at least two of the other department core courses (Biology 2227, 2296 and 3096) with enrollment in the third in the Fall or Spring semester when offered. Students must obtain a sponsor on the Biology Department faculty to oversee their work and act as a liaison between the outside institution and the Biology Honors Committee. A student is eligible to apply for "Distinction in Biology" upon: 1) successful completion of 6 s.h. of Biology 4291; 2) submission of a written report on the student's research to the faculty sponsor and the Biology Honors Committee; and 3) a poster presentation on the student's research during the Biology Department's annual poster exhibition. Note: Not available for Biology major credit. This course is repeatable. Students wishing to complete additional credits of Biology 4291 beyond 6 s.h. may do so if they elect the CR/NC option. Repeatability: This course may be repeated for additional credit.

Pre-requisites:
(BIOL 1111|Minimum Grade of C|May not be taken concurrently
OR BIOL 1911|Minimum Grade of C|May not be taken concurrently
OR BIO3 Y|May not be taken concurrently)
AND (BIOL 2112|Minimum Grade of C|May not be taken concurrently
OR BIOL 2912|Minimum Grade of C|May not be taken concurrently
OR BIO4 Y|May not be taken concurrently)
AND (BIOL 2227|Minimum Grade of C-|May not be taken concurrently
OR BIOL 2296|Minimum Grade of C-|May not be taken concurrently
OR BIOL 3096|Minimum Grade of C-|May not be taken concurrently)
AND (BIOL 2227|Minimum Grade of C-|May not be taken concurrently
OR BIOL 2296|Minimum Grade of C-|May not be taken concurrently
OR BIOL 3096|Minimum Grade of C-|May not be taken concurrently)
AND (BIOL 2227|Minimum Grade of C-|May be taken concurrently
OR BIOL 2296|Minimum Grade of C-|May be taken concurrently
OR BIOL 3096|Minimum Grade of C-|May be taken concurrently).

BIOL 4327. Biological Impacts of Global Climate Change. 3 Credit Hours.
This course is typically offered in Fall. This course will use primary research articles to examine the biological impacts of climate change, often mentioned as the greatest challenge facing humanity today. The course will focus on the climate change impacts on coastal and marine ecosystems; water resources and freshwater ecosystems; food and agriculture; forests, grasslands and deserts; biodiversity and protected areas; and population, health and human well-being. In addition to the biology, we will consider the overlapping social, economic, and ethical concerns rising from the climate changes. Class time will be devoted to reflections and reactions to readings and news articles, case studies, student presentations and lectures. Repeatability: This course may not be repeated for additional credits.

Pre-requisites:
(BIOL 1111|Minimum Grade of C|May not be taken concurrently
OR BIOL 1911|Minimum Grade of C|May not be taken concurrently
OR BIO3 Y|May not be taken concurrently)
AND (BIOL 2112|Minimum Grade of C|May not be taken concurrently
OR BIOL 2912|Minimum Grade of C|May not be taken concurrently
OR BIO4 Y|May not be taken concurrently)
AND (BIOL 2227|Minimum Grade of C-|May not be taken concurrently
OR BIOL 2296|Minimum Grade of C-|May not be taken concurrently
OR BIOL 3096|Minimum Grade of C-|May not be taken concurrently)
AND (BIOL 2227|Minimum Grade of C-|May be taken concurrently
OR BIOL 2296|Minimum Grade of C-|May be taken concurrently
OR BIOL 3096|Minimum Grade of C-|May be taken concurrently).
BIOL 4338. Epigenetics. 3 Credit Hours.
This course is not offered every year. The term “epigenetics” describes a heritable effect on chromosome or gene function that is not accompanied by a change in DNA sequence. Recent findings suggest an important role of epigenetics in both normal development and cancer. This course provides an overview of the field and examines selected phenomena in several eukaryotes, mechanisms regulating these effects, and their phenotypic consequences when normal regulation is lost. Topics include gene regulation through chromatin modification (acetylation, methylation), genomic imprinting, mechanisms of silencing (including small interfering RNAs), and the role of epigenetics in human diseases and cancer.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(BIOL 2296|Minimum Grade of C|May not be taken concurrently
OR BIO6 Y|May not be taken concurrently)
AND (BIOL 3096|Minimum Grade of C|May not be taken concurrently
OR BIO7 Y|May not be taken concurrently).

BIOL 4344. Research Techniques in Biochemistry. 4 Credit Hours.
This course is typically offered in Spring. Laboratory instruction in techniques used to investigate biochemical problems. Techniques include spectrophotometry, various types of electrophoresis, separation of macromolecules, two-dimensional protein separation, affinity chromatography, isolation of plasmid DNA, Western Blot, immunoassay, enzyme kinetics, and radioisotope techniques. If time permits, students will be given a small research project.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CHEM 4401|Minimum Grade of C-|May not be taken concurrently
OR BIOL 4375|Minimum Grade of C-|May not be taken concurrently.

BIOL 4364. Biochemistry of Embryogenesis. 3 Credit Hours.
This course is typically offered in Fall. This course will compare and contrast key biochemical mechanisms of embryonic development in a variety of model organisms ranging from humans to plants. We will examine the roles of enzymes, peptides, small RNA molecules and chromatin structure during embryogenesis. Topics will include micro RNAs, modification of DNA structure, and effects of mutation on enzyme activity. These basic principles will then be applied to subjects such as cell communication, stem cells, and cloning. Course material will be drawn from the experimental literature.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
BIOL 2296|Minimum Grade of C|May not be taken concurrently
OR BIO6 Y|May not be taken concurrently.

BIOL 4365. Evolutionary Developmental Biology: Evo-Devo. 3 Credit Hours.
This course is typically offered in Spring. An overview of the relationship between organisms' development and phenotypic changes during evolution. Includes historical, theoretical and mechanistic themes of Evo-Devo, molecular and genetic basis of development and evolution.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(BIOL 2296|Minimum Grade of C-|May be taken concurrently
OR BIOL 3101|Minimum Grade of C-|May not be taken concurrently)
AND (BIOL 3096|Minimum Grade of C-|May not be taken concurrently).

BIOL 4366. Stem Cell Biology. 3 Credit Hours.
The purpose of this course is two-fold. The first is to present the developmental biology of stem cells, with an overview of the various types of stem cells that exist and an emphasis on embryonic stem cells. The overview will include the important functional differences between embryonic, hematopoietic, and adult stem cells as well as the differences in their biomedical potentials. Techniques such as somatic cell nuclear transfer (SCNT) and other methods for the derivation of stem cell lines will be outlined so that differences that may seem subtle at first glance are clarified. The second purpose is to look into the larger debate on human embryonic stem cell research while continually drawing connections to the established fields of bioethics, politics, and philosophy. The course will ground the issues by looking at the history of the debate over the embryo, with careful attention paid to the language used in arguments. An exploration of important social, ethical, political, and economic issues and how they arose with respect to the stem cell debate will round out the remainder of the course.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(BIOL 2296|Minimum Grade of C|May not be taken concurrently
OR BIO6 Y|May not be taken concurrently)
AND (BIOL 3096|Minimum Grade of C|May not be taken concurrently
OR BIO7 Y|May not be taken concurrently).

BIOL 4370. Advanced Special Topics in Biochemistry. 3 Credit Hours.
This course is not offered every year. Advanced lecture course. Subject matter varies from semester to semester. This course is repeatable for credit.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
CHEM 4401|Minimum Grade of C-|May not be taken concurrently
OR BIOL 4375|Minimum Grade of C-|May not be taken concurrently.
BIOL 4375. General Biochemistry I. 3 Credit Hours.
This course is typically offered in Fall. Properties of water (pH and buffers); chemistry of amino acids and proteins including non-covalent interactions; carbohydrates, nucleotides and nucleic acids; lipids and membranes; enzyme mechanisms and kinetics; control of enzyme activity; bioenergetics and oxidative metabolism; and chemistry of photosynthesis.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(BIOL 3096) Minimum Grade of C-|May not be taken concurrently
AND (MATH 1041) Minimum Grade of C|May not be taken concurrently
OR MATH 1038) Minimum Grade of C|May not be taken concurrently
OR MATH 1042) Minimum Grade of C|May be taken concurrently
OR MATH 1951) Minimum Grade of C|May be taken concurrently
OR MATH 2043 to 3080) Required Courses: Minimum Grade of C-|May be taken concurrently
OR MA06 Y|May not be taken concurrently).

BIOL 4376. General Biochemistry II. 3 Credit Hours.
This course is typically offered in Fall. Emphasis on the biochemical reactions in various metabolic pathways. Biosynthesis and degradation of carbohydrates, lipids, proteins and amino acids. Regulation and integration of metabolic pathways. Bioenergetics and oxidative phosphorylation. Signal transduction. Transcription, translation and their control.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CHEM 4401|Minimum Grade of C-|May not be taken concurrently
OR BIOL 4375|Minimum Grade of C-|May not be taken concurrently.

BIOL 4391. Accelerated Research in Biology. 1 to 4 Credit Hour.
This course is typically offered in Fall, Spring, Summer I and Summer II. Prerequisites: Senior standing and a GPA of 3.2 or better with recommendation of a faculty sponsor and approval of the Biology Honors Committee. Research under the supervision of a faculty member in the Biology Department. Students must be Biology majors who have completed Biology 1111, 2112, and at least two of the other department core courses (Biology 2227, 2296 and 3096) with enrollment in the third in the Fall or Spring semester when offered. A student is eligible to apply for "Distinction in Biology" upon: 1) successful completion of 6 s.h. of Biology 4391; 2) submission of a written report on the student's research to the faculty sponsor and the Biology Honors Committee; and 3) a poster presentation on the student's research during the Biology Department's annual poster exhibition. Students completing a minimum of 6 s.h. of Biology 4391 over two semesters may petition the Biology Honors Committee to have the two semesters count for one Biology elective course. This course is repeatable. Students wishing to complete additional credits of Biology 4391 beyond 6 s.h. may do so if they elect the CR/NC option.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(BIOL 1111) Minimum Grade of C|May not be taken concurrently
OR BIOL 1911|Minimum Grade of C|May not be taken concurrently
OR BIO3 Y|May not be taken concurrently)
AND (BIOL 2112)Minimum Grade of C|May not be taken concurrently
OR BIOL 2912|Minimum Grade of C|May not be taken concurrently
OR BIO4 Y|May not be taken concurrently
AND (BIOL 2227)Minimum Grade of C|May not be taken concurrently
OR BIOL 2296|Minimum Grade of C|May not be taken concurrently
OR BIOL 3096|Minimum Grade of C|May not be taken concurrently
AND (BIOL 2227)Minimum Grade of C|May not be taken concurrently
OR BIOL 2296|Minimum Grade of C|May not be taken concurrently
OR BIOL 3096|Minimum Grade of C|May not be taken concurrently
AND (BIOL 2227)Minimum Grade of C|May be taken concurrently
OR BIOL 2296|Minimum Grade of C|May be taken concurrently
OR BIOL 3096|Minimum Grade of C|May be taken concurrently.

BIOL 4483. Accelerated Research in Biochemistry. 3 Credit Hours.
This course is typically offered in Fall, Summer I and Summer II. This course is required for graduation with distinction in the major. Student presentation of research done in this course [and 4491 (0394)] or a comprehensive presentation of a topic selected jointly by student and advisor. Emphasis placed on analysis of experimental techniques, quantitative interpretation of the data, logical analysis of controls, and implication of the results. Admission to this course and the distinction track, as well as recommendation for graduation with distinction, must be approved by the Biochemistry Committee. Not available for Biology major credit.
Repeatability: This course may be repeated for additional credit.
BIOL 4491. Research in Biochemistry. 3 Credit Hours.
This course is typically offered in Fall, Spring, Summer I and Summer II. Research under the supervision of one of the Biochemistry faculty. If repeated, a presentation of the student's research is required during the second semester. Upon successful completion of two semesters of Biology 4491 (0394), the student may petition for them to be counted as one of the Biochemistry electives. Not available for Biology major credit. **Repeatability:** This course may be repeated for additional credit.

BIOL 4591. Research in Neuroscience. 1 to 4 Credit Hour.
This course is typically offered in Fall, Spring, Summer I and Summer II. Prerequisites: Senior standing and a GPA of 3.2 or better with recommendation of a faculty sponsor and approval of the Neuroscience Honors Committee. Research under the supervision of a faculty member in the Neuroscience Department. Students must be Neuroscience majors who have completed Biology 1111, 2112, 2296, and 3096. A written presentation of the student's research is required during the second semester. A student is eligible to apply for "Distinction in Neuroscience" upon: 1) successful completion of 6 s.h. of Biology 4591; 2) submission of a written report on the student's research to the faculty sponsor and the Biology Honors Committee; and 3) a poster presentation on the student's research during the Biology Department's annual poster exhibition. Not available for Biology major credit. This course is repeatable. Students who complete additional credits of Biology 4591 beyond 6 s.h. must take the additional credits as CR/NC only. **Repeatability:** This course may be repeated for additional credit. **Pre-requisites:**
(BIOL 1111|Minimum Grade of C|May not be taken concurrently
OR BIOL 1911|Minimum Grade of C|May not be taken concurrently
OR BIOL 3 Y|May not be taken concurrently)
AND (BIOL 2112|Minimum Grade of C|May not be taken concurrently
OR BIOL 2912|Minimum Grade of C|May not be taken concurrently
OR BIOL 4 Y|May not be taken concurrently)
AND (BIOL 2296|Minimum Grade of C-|May not be taken concurrently)
AND (BIOL 3096|Minimum Grade of C-|May not be taken concurrently).

Botany (BOT)

Courses

BOT 1111. General Botany. 4 Credit Hours.
Sexual, structural, and vegetative characteristics of bacteria, algae, fungi, nonvascular and vascular plants. An emphasis is placed on angiosperm (flowering plant) diversity, anatomy, morphology, phylogeny, and ecology. The course explores the importance of plants and the impact of people on our plant communities. NOTE: This course can be used to satisfy the university Core Science & Technology First Level (SA) requirement. To determine if this course in combination with another course can satisfy the GenEd Science & Technology requirement, see your advisor. **Course Attributes:** SA
**Repeatability:** This course may not be repeated for additional credits.

BOT 1112. Plant Ecology. 3 Credit Hours.
The structure and function of plants are studied in relationship to their fit into the environment. The interaction of plants with each other and with their environment through study of natural and artificial systems, including wetlands, meadows, forests, deserts, disturbed sites, and managed landscapes. **Repeatability:** This course may not be repeated for additional credits.

BOT 2121. Plant Physiology. 4 Credit Hours.
An introduction to the major topics and concepts of plant physiology. Discusses the structure and functions of the different parts of a plant. Focuses on water and nutrition, biochemistry and metabolism, and growth and development of plants. NOTE: This course can be used to satisfy the university Core Science & Technology Second Level (SB) requirement. **Course Attributes:** SB
**Repeatability:** This course may not be repeated for additional credits
**Pre-requisites:**
(BOT 1111|Minimum Grade of D-|May not be taken concurrently
AND CHEM 1021 to 1024|Minimum Grade of D-|May not be taken concurrently)
OR BIOL 1011 to 1012|Minimum Grade of D-|May not be taken concurrently.

BOT 2156. Plant Genetics and Diversity. 3 Credit Hours.
Genetics of plants, including Mendelian and extranuclear genetics, quantitative genetics, and population genetics. The course also considers the basis for, and significance and preservation of plant genetic diversity. The course considers man's impact on plant genetic diversity, including plant extinction, conservation, breeding, and biotechnology. **Repeatability:** This course may not be repeated for additional credits
**Pre-requisites:**
(BOT 1111|Minimum Grade of D-|May not be taken concurrently
AND CHEM 1021 to 1024|Minimum Grade of D-|May not be taken concurrently).
BOT 3122. Applied Plant Physiology. 3 Credit Hours.
Highlights the major environmental factors that affect plant growth and development and explores ecologically sound approaches to solving stress-related problems. Focuses on techniques for designing experiments to examine the impact of environmental stress on the growth and development of a plant, and on techniques for manipulating a microenvironment in the production of horticulture crops.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
BOT 2121|Minimum Grade of D-|May not be taken concurrently.

BOT 3166. Plant Taxonomy. 3 Credit Hours.
Systematic botany, evolutionary relationships of angiosperm families. Identification, classification, and nomenclature based on analysis of plant structure, genetics, physiology, and ecology. Identification of local native flowering plants; preparation of preserved specimens.
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
BOT 1111|Minimum Grade of D-|May not be taken concurrently.

Business Administration (BA)

Courses

BA 1901. Honors Research Methods in Business. 1 Credit Hour.
Students are introduced to a variety of research methods, including online and library research. They also learn the basics of statistical analysis and statistical software. Finally, students receive instruction in writing, with particular attention to how one presents research. This course is restricted to students in the Fox School Research Scholars Program. NOTE: This course is restricted to students in the Fox School Research Scholars Program.
College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.

BA 2101. Professional Development Strategies. 1 Credit Hour.
Prepare students to enter the internship and permanent job marketplace. Emphasis on career planning, interview preparation (including behavioral event interviewing), expected behaviors and legal issues. Presentation and writing skills will be included. NOTE: It is recommended that all FSBM students take this course as soon as they have completed 45 credit hours.
College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatability: This course may not be repeated for additional credits.

BA 2104. Excel for Business Applications. 1 Credit Hour.
The purpose of this online course is to prepare you to use Excel as a tool for solving business problems. You may be familiar with Excel but this course focuses on tools and Excel features that will specifically prepare you for your business courses, job interviews and for your professional life. You will learn how to use Excel efficiently, how to create formulas, use functions, produce and format charts, create reports and Pivot Tables, and use what-if-analysis for managerial decision making.
College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School, Tourism & Hospitality Mngmnt
Repeatability: This course may not be repeated for additional credits.

BA 2196. Business Communications. 3 Credit Hours.
Business Communications is a writing-intensive workplace-oriented course designed to help students develop and refine the oral, written, and analytical skills necessary to communicate effectively in professional settings. Students will learn to effectively edit their own writing, understand how businesses communicate to an audience, and enhance their presentation and persuasive skills. Teaching method is small group discussion and workshop. NOTE: This course counts toward the university requirement that students complete two writing-intensive courses in their major, and it also counts as a lower level Business Core Course. Students who take this course to fill either requirement, need a C- or better for the class to count towards graduation.
College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
HRM 1101|Minimum Grade of C-|May not be taken concurrently
OR HRM 1901|Minimum Grade of C-|May not be taken concurrently.
BA 2996. Honors Business Communications. 3 Credit Hours.
Business Communications is a writing-intensive workplace-oriented course designed to help students develop and refine the oral, written, and analytical skills necessary to communicate effectively in professional settings. Students will learn to effectively edit their own writing, understand how businesses communicate to an audience, and enhance their presentation and persuasive skills. Teaching method is small group discussion and workshop. NOTE: This course counts toward the university requirement that students complete two writing-intensive courses in their major, and it also counts as a lower level Business Core Course. Students who take this course to fill either requirement, need a C- or better for the class to count towards graduation.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mgmt, Fox School
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO, WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
HRM 1101|Minimum Grade of C-|May not be taken concurrently
OR HRM 1901|Minimum Grade of C-|May not be taken concurrently.

BA 3102. Business Society and Ethics. 3 Credit Hours.
This course challenges students to consider the ethical obligations of corporations and their employees to a wide variety of societal stakeholders. Students are exposed to a broad range of ethical dilemmas that can arise in the business world and are offered the tools and taught the skills to respond to such dilemmas. Most significantly, the course encourages students to critically examine a preeminent societal institution of which they are a part, with the possibility that they can ultimately be forces for positive change.

Repeatability: This course may not be repeated for additional credits.

BA 3103. Integrative Business Applications. 3 Credit Hours.
This course integrates various functional business disciplines to help the student develop an understanding of business practices. Students will learn to view organizations as integrated systems based on the knowledge accumulated to date in the BBA Core and provide students with an opportunity to address problems faced by organizations from an integrated perspective. This course will bridge the gap between theoretical class work and business practice. NOTE: Students will use business simulation software to allow them to test alternative ways to operate a business in a competitive environment.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mgmt, Fox School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(FIN 3101)|Minimum Grade of D-|May not be taken concurrently
OR FIN 3901|Minimum Grade of D-|May not be taken concurrently
OR FIN 3502|Minimum Grade of C|May not be taken concurrently
OR AS 2503|Minimum Grade of D-|May not be taken concurrently
AND (MIS 2101)|Minimum Grade of C-|May not be taken concurrently
OR MIS 2901|Minimum Grade of C-|May not be taken concurrently
AND (MSOM 3101)|Minimum Grade of D-|May not be taken concurrently
OR MSOM 3901|Minimum Grade of D-|May not be taken concurrently
AND (RMI 2101)|Minimum Grade of C-|May not be taken concurrently
OR RMI 2901|Minimum Grade of C-|May not be taken concurrently.

BA 3531. Sustainability on the Ground. 3 Credit Hours.
Explores how sustainable business practices influence an organization's success by working individually or in teams on sustainable projects at a local company in the Philadelphia region. Topics covered include: consulting skills, communication, presentation skills, employee engagement, leadership development, project management and more based on the consulting opportunity provided by the company. Part of the final grade comes from the company.

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(HRM 2511)|Minimum Grade of D-|May not be taken concurrently
AND (LGLS 3511)|Minimum Grade of D-|May not be taken concurrently.

BA 3580. Special Topics - Business Administration. 1 to 3 Credit Hour.
Special topics in current developments in the field of business administration.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mgmt, Fox School
Repeatability: This course may be repeated for additional credit.
BA 3581. Co-operative Experience in Business. 3 Credit Hours.
The course is designed for Fox students who have a full time business co-operative which will take place over a semester, and which requires them to stop attending classes during that semester. NOTE: Arrangements are made through the Center for Student Professional Development. This course is for Fox School of Business undergraduate majors only.
College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatability: This course may be repeated for additional credit.

BA 3582. Independent Study. 1 to 3 Credit Hour.
Readings and/or papers in consultation with a faculty member.
College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatability: This course may be repeated for additional credit.

BA 3902. Honors Business Society and Ethics. 3 Credit Hours.
This course challenges students to consider the ethical obligations of corporations and their employees to a wide variety of societal stakeholders. Students are exposed to a broad range of ethical dilemmas that can arise in the business world and are offered the tools and taught the skills to respond to such dilemmas. Most significantly, the course encourages students to critically examine a preeminent societal institution of which they are a part, with the possibility that they can ultimately be forces for positive change. NOTE: Honors section of Business Administration 3102 (0215).
College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.

BA 3903. Honors Integrative Business Applications. 3 Credit Hours.
This course integrates various functional business disciplines to help the student develop an understanding of business practices. Students will learn to view organizations as integrated systems based on the knowledge accumulated to date in the BBA Core and provide students with an opportunity to address problems faced by organizations from an integrated perspective. This course will bridge the gap between theoretical class work and business practice. NOTE: Honors section of Business Administration 3103. Students will use business simulation software to allow them to test alternative ways to operate a business in a competitive environment.
College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(FIN 3101|Minimum Grade of D-|May not be taken concurrently
OR FIN 3901|Minimum Grade of D-|May not be taken concurrently
OR FIN 3502|Minimum Grade of C|May not be taken concurrently
OR AS 2503|Minimum Grade of D-|May not be taken concurrently
AND (MIS 2101|Minimum Grade of C-|May not be taken concurrently
OR MIS 2901|Minimum Grade of C-|May not be taken concurrently
AND (MSOM 3101|Minimum Grade of D-|May not be taken concurrently
OR MSOM 3901|Minimum Grade of D-|May not be taken concurrently
AND (RMI 2101|Minimum Grade of C-|May not be taken concurrently
OR RMI 2901|Minimum Grade of C-|May not be taken concurrently).

BA 4101. Global Business Policies. 3 Credit Hours.
An integrative course that focuses on strategic planning, policy formulation, implementation, and corporate-wide decision making through the use of comprehensive case problems.
College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
BA 3103|Minimum Grade of D-|May not be taken concurrently
OR BA 3903|Minimum Grade of D-|May not be taken concurrently.

BA 4196. Global Business Policies. 3 Credit Hours.
An integrative course that focuses on strategic planning, policy formulation, implementation, and corporate-wide decision making through the use of comprehensive case problems.
College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.
BA 4901. Honors Global Business Policies. 3 Credit Hours.
An integrative course that focuses on strategic planning, policy formulation, implementation, and corporate-wide decision making through the use of comprehensive case problems.
**College Restrictions:** Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
**Cohort Restrictions:** Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
**Course Attributes:** HO
**Repeatability:** This course may not be repeated for additional credits
**Pre-requisites:**
BA 3103|Minimum Grade of D-|May not be taken concurrently
OR BA 3903|Minimum Grade of D-|May not be taken concurrently.

BA 4906. Honors Global Business Policies. 3 Credit Hours.
An integrative course that focuses on strategic planning, policy formulation, implementation, and corporate-wide decision making through the use of comprehensive case problems. NOTE: Honors version of Business Administration 4196 (W361).
**College Restrictions:** Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
**Cohort Restrictions:** Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
**Course Attributes:** HO, WI
**Repeatability:** This course may not be repeated for additional credits.

Business Education (BSED)

**Courses**

BSED 3241. Methods of Teaching Microcomputer Applications. 3 Credit Hours.
Psychology of skill development and development of effective teaching techniques for teaching computer applications. Textbooks are evaluated, lessons presented, and student evaluations prepared. Simulated presentations videotaped.
**College Restrictions:** Must be enrolled in one of the following Colleges: Education
**Repeatability:** This course may not be repeated for additional credits
**Pre-requisites:**
EDUC 2205|Minimum Grade of C-|May be taken concurrently.

Career and Technical Education (CTE)

**Courses**

CTE 3101. Principles of Career and Technical Education. 3 Credit Hours.
For prospective career and technical education teachers and technical trainers. Provides an in-depth analysis of the context in which contemporary career and technical programs operate. Emphasis is placed on the philosophical concepts underlying career and technical education, an examination of issues and problems in present programs and how research on teaching practice drives curricular change. NOTE: General familiarity with internet searching and navigation necessary. Some course assignments will be posted on Blackboard. Students are to inquire with the program for technical equipment requirements.
**College Restrictions:** Must be enrolled in one of the following Colleges: Education
**Repeatability:** This course may not be repeated for additional credits

CTE 3102. Teaching Strategies in Career and Technical Education. 3 Credit Hours.
This course focuses on developing teaching competence. The following will be addressed: models of teaching for achieving instructional outcomes in career and technical areas; using performance standards to prepare and present content lessons; evaluation of instructional outcomes; integration of technology in instruction; serving students with special needs; creating an environment for student learning, differentiated instruction. NOTE: General familiarity with internet searching and navigation necessary. Some course assignments will be posted on Blackboard. Students are to inquire with the program for technical equipment requirements.
**College Restrictions:** Must be enrolled in one of the following Colleges: Education
**Repeatability:** This course may not be repeated for additional credits.

CTE 3103. Curriculum in Career and Technical Education. 3 Credit Hours.
Develop strategies for designing, implementing, and evaluating curriculum in career and technical education. Acquire knowledge, skills, and methods to validate a curriculum. Develop the skill to analyze an occupation in terms of duty and tasks performed; develop the skill to prepare valid performance objectives; determine scope and sequence schedules; aligning content, learning experiences, assessment and performance standards. NOTE: General familiarity with internet searching and navigation necessary. Some course assignments will be posted on Blackboard. Students are to inquire with the program for technical equipment requirements.
**College Restrictions:** Must be enrolled in one of the following Colleges: Education
**Repeatability:** This course may not be repeated for additional credits.
Center for the Performing and Cinematic Arts (CFA)

Courses

CFA 1001. Art Scene: Inspired Connections. 3 Credit Hours.
Have you ever wondered how a piece of music is composed, a screenplay is written for a film, or how a work of art comes to be? This course will explore these very ideas, revealing how creative people make and perform in a variety of the rich arts disciplines that comprise the Center for the Arts, including architecture, art and design, dance, film, music, and theater. Each week of the semester will be devoted to a different area of the arts and will provide insight into the working process of that form of art, the nature of the creative challenges, and the type of training and practice required to be successful. The format of the class will vary to suit the weekly topic and will include interviews with student participation, lectures, discussions, live demonstrations, and performances. During the first meeting of each week a distinguished faculty member for the Center for the Arts will present a brief history and broad introduction to their discipline, followed by a dynamic experience during the second class meeting that brings to life the artistic process and particular details about how that artist brings their ideas and vision to life.
Repeatability: This course may not be repeated for additional credits.

Chemistry (CHEM)
Courses

CHEM 0821. Chemistry of Wine. 3 Credit Hours.
This course is typically offered in Fall. <p>Wine has occupied a central role in human culture. In our exploration of the science of wine we will learn why wine was the beverage of choice through the ages, why a bottle of wine can range from $2 to $2,000, how wine is made, what makes a good/bad wine, how is white different from red, and how we know what is in a bottle of wine. The course begins with a large scale fermentation of red and white wine and will continue with team-based analyses of the two month process of turning grape juice into wine. Many aspects of the production and consumption of wine will be addressed in this course. NOTE: This course fulfills a Science & Technology (GS) requirement for students under GenEd and the Science & Technology Second Level (SB) requirement for students under Core.

Course Attributes: GS
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 0701 to 0702| Required Courses:1|Minimum Grade of C-|May not be taken concurrently
OR MATH 0800 to 4999| Required Courses:1|Minimum Grade of C-|May be taken concurrently
OR MC2 Y|May not be taken concurrently
OR MC3 Y|May not be taken concurrently
OR MC4 Y|May not be taken concurrently
OR MC5 Y|May not be taken concurrently
OR MC6 Y|May not be taken concurrently.

CHEM 0838. Nature Has No Reverse. 3 Credit Hours.
This course is not offered every year. <p>Rapid advances in modern science often tend to conceal the "forest in the trees," but we all need enough familiarity with the "scientific method" to make informed judgments as citizens and voters. This course will take you on a journey through the history of science, with stops at the Second Law of Thermodynamics, the "revolution" of fire, the rational basis of life, energy as the universal currency and changes in the universe around us. We will end with that most disturbing of paradoxes: the certainty of uncertainty. Each week includes both lecture and hands-on demonstration/practicum. NOTE: This course fulfills a Science & Technology (GS) requirement for students under GenEd and the Science & Technology Second Level (SB) requirement for students under Core.

Course Attributes: GS
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 0701 to 0702| Required Courses:1|Minimum Grade of C-|May not be taken concurrently
OR MATH 0800 to 4999| Required Courses:1|Minimum Grade of C-|May be taken concurrently
OR MC2 Y|May not be taken concurrently
OR MC3 Y|May not be taken concurrently
OR MC4 Y|May not be taken concurrently
OR MC5 Y|May not be taken concurrently
OR MC6 Y|May not be taken concurrently.

CHEM 1011. Chemistry: The Study of Matter I. 4 Credit Hours.
This course is typically offered in Fall and Spring. <p>Four hours of lecture and demonstration per week; intended to be the primary course for those who take chemistry only to satisfy their Core requirements. Important chemical phenomena and their explanations. Special emphasis on the use of chemical theories and development of mathematical skills needed for their use. NOTE: (1) Because fundamental science is presented, this sequence is also recommended for students who would like to enter a scientific field but fear their background is not adequate. (2) This course can be used to satisfy the university Core Science & Technology First Level (SA) requirement.

Course Attributes: SA
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 0701 to 0702| Required Courses:1|Minimum Grade of C-|May not be taken concurrently
OR MATH 0800 to 4999| Required Courses:1|Minimum Grade of C-|May be taken concurrently
OR MC3 Y|May not be taken concurrently
OR MC4 Y|May not be taken concurrently
OR MC5 Y|May not be taken concurrently
OR MC6 Y|May not be taken concurrently
OR STAT 1001|Minimum Grade of C-|May be taken concurrently
OR STAT 102 Y|May not be taken concurrently
OR STAT 1102|Minimum Grade of C-|May be taken concurrently
OR STAT 1902|Minimum Grade of C-|May be taken concurrently.
CHEM 1021. Introduction to Chemistry I. 3 Credit Hours.
This course is typically offered in Fall and Summer I. The first semester of a course designed for the non-science major, introducing chemical principles in the context of everyday life. Fundamental concepts of chemistry including atomic theory, the mole concept, acids and bases, and physical properties of substances. NOTE: (1) Appropriate for some Allied Health students; check the requirements of your program. (2) This course can be used to satisfy the university Core Science & Technology First Level (SA) requirement. To determine if this course in combination with another course can satisfy the GenEd Science & Technology requirement, see your advisor.

Course Attributes: SA
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
- MATH 0701 to 0702| Required Courses:1|Minimum Grade of C|May not be taken concurrently
- OR MATH 1021 to 4999| Required Courses:1|Minimum Grade of C-|May be taken concurrently
- OR MC3 Y|May not be taken concurrently
- OR MC4 Y|May not be taken concurrently
- OR MC5 Y|May not be taken concurrently
- OR MC6 Y|May not be taken concurrently
- OR MA01 Y|May not be taken concurrently
- OR STAT 1001|Minimum Grade of C-|May be taken concurrently
- OR STT2 Y|May not be taken concurrently
- OR STAT 1102|Minimum Grade of C-|May be taken concurrently
- OR STAT 1902|Minimum Grade of C-|May be taken concurrently.

CHEM 1022. Introduction to Chemistry II. 3 Credit Hours.
This course is typically offered in Spring and Summer II. An introduction to organic and biochemistry. Emphasis on relationships between carbon compounds and the chemistry of living systems, the interaction of chemical science with current technology, and chemicals in the environment. NOTE: This course can be used to satisfy the university Core Science & Technology Second Level (SB) requirement. To determine if this course in combination with another course can satisfy the GenEd Science & Technology requirement, see your advisor.

Course Attributes: SB
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
- CHEM 1021|Minimum Grade of C-|May not be taken concurrently.

CHEM 1023. Introduction to Chemistry Laboratory I. 1 Credit Hour.
This course is typically offered in Fall and Summer I. Introduction to experimental inorganic chemistry and general chemical techniques. NOTE: This course can be used to satisfy the university Core Science & Technology First Level (SA) requirement. To determine if this course in combination with another course can satisfy the GenEd Science & Technology requirement, see your advisor.

Course Attributes: SA
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
- (MATH 0701 to 0702) Required Courses:1|Minimum Grade of C|May not be taken concurrently
- OR MATH 1021 to 4999| Required Courses:1|Minimum Grade of C-|May be taken concurrently
- OR MC3 Y|May not be taken concurrently
- OR MC4 Y|May not be taken concurrently
- OR MC5 Y|May not be taken concurrently
- OR MC6 Y|May not be taken concurrently
- OR MA01 Y|May not be taken concurrently
- OR STAT 1001|Minimum Grade of C-|May be taken concurrently
- OR STT2 Y|May not be taken concurrently
- OR STAT 1102|Minimum Grade of C-|May be taken concurrently
- OR STAT 1902|Minimum Grade of C-|May be taken concurrently
- AND (CHEM 1021|Minimum Grade of C-|May be taken concurrently).

CHEM 1024. Introduction to Chemistry Laboratory II. 1 Credit Hour.
This course is typically offered in Spring and Summer II. Introduction to experimental organic and biological chemistry. NOTE: This course can be used to satisfy the university Core Science & Technology Second Level (SB) requirement. To determine if this course in combination with another course can satisfy the GenEd Science & Technology requirement, see your advisor.

Course Attributes: SB
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
- (CHEM 1023)Minimum Grade of C-|May not be taken concurrently
- AND (CHEM 1022|Minimum Grade of C-|May be taken concurrently).
CHEM 1027. Applications of Chemistry. 4 Credit Hours.
This course is typically offered in Fall, Spring, and Summer II.<p>This course is a transition semester of chemistry to be taken before Chemistry 1031 (C071) designed for students who have not had enough preparation in chemistry or mathematics to directly take Chemistry 1031 (C071). Mathematical concepts and chemical principles will be integrated into a series of common applications. In this class, students will learn proper handling of laboratory materials and perform experiments that are integrated with, as well as introduce and reinforce, the material from the lecture. This course is intended to prepare students for General Chemistry by emphasizing the mathematical basis of chemistry and laboratory measurements. A quantitative introduction to atomic and molecular structure, states of matter, basic thermodynamics, solutions, gas laws, kinetics, and equilibrium. NOTE: Students must register for 2 sections: one of which is a combination of lecture and lab for 4 credits and the other is a 0 credit recitation.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 1021|Minimum Grade of C|May be taken concurrently
OR MATH 1022 to 4999| Required Courses:1|Minimum Grade of C-|May be taken concurrently
OR MC5 Y|May not be taken concurrently
OR MC6 Y|May not be taken concurrently
OR STAT 1001|Minimum Grade of C|May not be taken concurrently
OR STAT 1102|Minimum Grade of C|May not be taken concurrently
OR STAT 1902|Minimum Grade of C|May not be taken concurrently.

CHEM 1031. General Chemistry I. 3 Credit Hours.
This course is typically offered in Fall, Spring, and Summer I.<p>The first semester of chemistry for science majors, pre-professional students, and others in science related fields. A quantitative introduction to atomic and molecular structure, states of matter, basic thermodynamics, and solutions. NOTE: This course can be used to satisfy the university Core Science & Technology First Level (SA) requirement. To determine if this course in combination with another course can satisfy the GenEd Science & Technology requirement, see your advisor.
Course Attributes: SA
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 1021|Minimum Grade of C|May not be taken concurrently
OR MATH 1022 to 4999| Required Courses:1|Minimum Grade of C-|May be taken concurrently
OR MC5 Y|May not be taken concurrently
OR MC6 Y|May not be taken concurrently
OR MA03 Y|May not be taken concurrently
OR STAT 1001|Minimum Grade of C|May not be taken concurrently
OR STAT 1102|Minimum Grade of C|May not be taken concurrently.

CHEM 1032. General Chemistry II. 3 Credit Hours.
This course is typically offered in Fall, Spring, Summer I and Summer II.<p>The second semester of chemistry for science majors, pre-professional students, and others in science related fields. An introduction to thermodynamics, equilibrium, kinetics, electrochemistry, and descriptive chemistry.
NOTE: This course can be used to satisfy the university Core Science & Technology Second Level (SB) requirement. To determine if this course in combination with another course can satisfy the GenEd Science & Technology requirement, see your advisor.
Course Attributes: SB
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CHEM 1031|Minimum Grade of C-|May not be taken concurrently
OR CHEM 1041|Minimum Grade of C-|May not be taken concurrently
OR CHEM 1951|Minimum Grade of C-|May not be taken concurrently.
CHEM 1033. General Chemistry Laboratory I. 1 Credit Hour.
This course is typically offered in Fall, Spring, and Summer I.
An introduction to experimental chemistry, including the determination of molecular weights, calorimetry, and fundamental analytical techniques. NOTE: This course can be used to satisfy the university Core Science & Technology First Level (SA) requirement. To determine if this course in combination with another course can satisfy the GenEd Science & Technology requirement, see your advisor.
Course Attributes: SA
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(MATH 1021|Minimum Grade of C|May not be taken concurrently
OR MATH 1022 to 4999| Required Courses:1|Minimum Grade of C-|May be taken concurrently
OR MC5 Y|May not be taken concurrently
OR MC6 Y|May not be taken concurrently
OR MA03 Y|May not be taken concurrently
OR STAT 1001|Minimum Grade of C|May not be taken concurrently
OR STAT 1102|Minimum Grade of C|May not be taken concurrently)
AND (CHEM 1031|Minimum Grade of C-|May be taken concurrently
OR CHEM 1035|Minimum Grade of C-|May be taken concurrently
OR CHEM 1041|Minimum Grade of C-|May be taken concurrently
OR CHEM 1951|Minimum Grade of C-|May be taken concurrently).

CHEM 1034. General Chemistry Laboratory II. 1 Credit Hour.
This course is typically offered in Fall, Spring, Summer I and Summer II.
Experiments in equilibrium, kinetics, acid-base and oxidation reduction titrations, electrochemistry, and synthesis of metal complexes. NOTE: This course can be used to satisfy the university Core Science & Technology Second Level (SB) requirement. To determine if this course in combination with another course can satisfy the GenEd Science & Technology requirement, see your advisor.
Course Attributes: SB
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(CHEM 1033|Minimum Grade of C-|May not be taken concurrently
OR CHEM 1043|Minimum Grade of C-|May not be taken concurrently
OR CHEM 1953|Minimum Grade of C-|May not be taken concurrently
AND (CHEM 1032|Minimum Grade of C-|May be taken concurrently
OR CHEM 1042|Minimum Grade of C-|May be taken concurrently
OR CHEM 1952|Minimum Grade of C-|May be taken concurrently).

CHEM 1035. Chemistry for Engineers. 3 Credit Hours.
This course is typically offered in Fall and Spring.
The course is specifically designed to provide Engineering students with a concise, but comprehensive treatment of chemical principles. An objective of the course is to present concepts in an engineering context. This will be accomplished in part by discussing how chemical principles provide a foundation for engineering and technology. Topics to be included will be states of matter, reaction stoichiometry, atomic and molecular structure, chemical equilibria, thermodynamics, and kinetics. The course will consist of three hours of lecture and one hour of recitation per week. CHEM 1033 is normally taken concurrently.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 1022|Minimum Grade of C|May not be taken concurrently
OR MATH 1038 to 4999| Required Courses:1|Minimum Grade of C-|May be taken concurrently
OR MC6 Y|May not be taken concurrently
OR MA04 Y|May not be taken concurrently.
CHEM 1951. Honors General Chemical Science I. 3 Credit Hours.
This course is typically offered in Fall.<p>When taken with Chemistry 1953 (H093), this course meets pre-professional requirements. Similar to Chemistry 1031 (C071) but with added emphasis on topics of current interest to the professional chemist. NOTE: This course can be used to satisfy the university Core Science & Technology First Level (SA) requirement. To determine if this course in combination with another course can satisfy the GenEd Science & Technology requirement, see your advisor.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO, SA
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 1041|Minimum Grade of C|May be taken concurrently
OR MATH 1941|Minimum Grade of C|May be taken concurrently
OR MATH 1038|Minimum Grade of C|May be taken concurrently
OR MATH 1042|Minimum Grade of C|May be taken concurrently
OR MATH 1942|Minimum Grade of C|May be taken concurrently
OR MATH 1951|Minimum Grade of C|May be taken concurrently
OR MATH 2043 to 3080| Required Courses:1|Minimum Grade of D|May be taken concurrently
OR MA06 Y|May not be taken concurrently.

CHEM 1952. Honors General Chemical Science II. 3 Credit Hours.
This course is typically offered in Spring.<p>Similar to Chemistry 1032 (C072), but with added emphasis on topics of current interest to the professional chemist. NOTE: This course can be used to satisfy the university Core Science & Technology Second Level (SB) requirement. To determine if this course in combination with another course can satisfy the GenEd Science & Technology requirement, see your advisor.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO, SB
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(CHEM 1951|Minimum Grade of C|May not be taken concurrently)
AND (MATH 1042|Minimum Grade of C|May be taken concurrently
OR MATH 1942|Minimum Grade of C|May be taken concurrently
OR MATH 1951|Minimum Grade of C|May not be taken concurrently
OR MATH 2043 to 3080| Required Courses:1|Minimum Grade of C|May be taken concurrently
OR MA07 Y|May not be taken concurrently).

CHEM 1953. Honors Chemical Science Laboratory I. 1 Credit Hour.
This course is typically offered in Fall.<p>An introduction to the experimental techniques employed in the determination of the physical and chemical properties of matter. NOTE: This course can be used to satisfy the university Core Science & Technology First Level (SA) requirement. To determine if this course in combination with another course can satisfy the GenEd Science & Technology requirement, see your advisor.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO, SA
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(MATH 1041|Minimum Grade of C|May be taken concurrently
OR MATH 1941|Minimum Grade of C|May be taken concurrently
OR MATH 1038|Minimum Grade of C|May be taken concurrently
OR MATH 1042|Minimum Grade of C|May be taken concurrently
OR MATH 1942|Minimum Grade of C|May be taken concurrently
OR MATH 1951|Minimum Grade of C|May be taken concurrently
OR MATH 2043 to 3080| Required Courses:1|Minimum Grade of D|May be taken concurrently
OR MA06 Y|May not be taken concurrently)
AND (CHEM 1031|Minimum Grade of C|May be taken concurrently
OR CHEM 1041|Minimum Grade of C|May be taken concurrently
OR CHEM 1951|Minimum Grade of C|May be taken concurrently).
CHEM 1954. Honors Chemical Science Laboratory II. 1 Credit Hour.
This course is typically offered in Spring. Introduction to the experimental techniques employed in the determination of the physical and chemical properties of matter. NOTE: This course can be used to satisfy the university Core Science & Technology Second Level (SB) requirement. To determine if this course in combination with another course can satisfy the GenEd Science & Technology requirement, see your advisor.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO, SB
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(CHEM 1951|Minimum Grade of C-|May not be taken concurrently)
AND (CHEM 1953|Minimum Grade of C-|May not be taken concurrently)
AND (CHEM 1952|Minimum Grade of C-|May be taken concurrently).

CHEM 2201. Organic Chemistry I. 3 Credit Hours.
This course is typically offered in Fall, Spring, and Summer I. Structure, synthesis, and reactivity of hydrocarbons and their simple derivatives. Principles of organic spectroscopy and stereochemistry. Introductory study of kinetics and reaction mechanisms.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CHEM 1032|Minimum Grade of C-|May not be taken concurrently
OR CHEM 1042|Minimum Grade of C-|May not be taken concurrently
OR CHEM 1952|Minimum Grade of C-|May not be taken concurrently.

CHEM 2202. Organic Chemistry II. 3 Credit Hours.
This course is typically offered in Fall, Spring, Summer I and Summer II. Detailed examination of the more common functional groups and their reaction chemistry. Emphasis on development of organochemical reasoning powers through planning of multi-step syntheses and solution of structural problems by the combination of chemical and spectroscopic methods. Applications of organic chemistry to biological systems.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CHEM 2201|Minimum Grade of C-|May not be taken concurrently
OR CHEM 2211|Minimum Grade of C-|May not be taken concurrently
OR CHEM 2921|Minimum Grade of C-|May not be taken concurrently.

CHEM 2203. Organic Chemistry Laboratory I. 1 Credit Hour.
This course is typically offered in Fall, Spring, and Summer I. An introduction to microscale laboratory techniques in organic chemistry. Emphasis on learning to manipulate equipment and on efficient separation and purification of organic compounds.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(CHEM 1034|Minimum Grade of C-|May not be taken concurrently
OR CHEM 1044|Minimum Grade of C-|May not be taken concurrently
OR CHEM 1954|Minimum Grade of C-|May not be taken concurrently)
AND (CHEM 2201|Minimum Grade of C-|May be taken concurrently
OR CHEM 2211|Minimum Grade of C-|May be taken concurrently
OR CHEM 2921|Minimum Grade of C-|May be taken concurrently).

CHEM 2204. Organic Chemistry Laboratory II. 1 Credit Hour.
This course is typically offered in Fall, Spring, Summer I and Summer II. A continuation of Chemistry 2203 (0123). Preparation, purification, and analysis, including multi-step sequences, of typical moderately complicated organic compounds.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(CHEM 2203|Minimum Grade of C-|May not be taken concurrently
OR CHEM 2213|Minimum Grade of C-|May not be taken concurrently
OR CHEM 2923|Minimum Grade of C-|May not be taken concurrently)
AND (CHEM 2202|Minimum Grade of C-|May be taken concurrently
OR CHEM 2212|Minimum Grade of C-|May be taken concurrently
OR CHEM 2922|Minimum Grade of C-|May be taken concurrently).

CHEM 2211. Organic Chemistry for Majors I. 3 Credit Hours.
This course is typically offered in Fall. Structure, synthesis, and reactivity of hydrocarbons and their simple derivatives. Principles of organic spectroscopy and stereochemistry. Introductory study of kinetics and reaction mechanisms. Presentation focused on topics of interest to the professional chemist.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CHEM 1032|Minimum Grade of C-|May not be taken concurrently
OR CHEM 1042|Minimum Grade of C-|May not be taken concurrently
OR CHEM 1952|Minimum Grade of C-|May not be taken concurrently.
CHEM 2212. Organic Chemistry for Majors II. 3 Credit Hours.
This course is typically offered in Spring. Detailed examination of the more common functional groups and their reaction chemistry. Emphasis on development of organochemical reasoning powers through planning of multi-step syntheses and solution of structural problems by the combination of chemical and spectroscopic methods. Applications of organic chemistry to the chemical profession.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CHEM 2201|Minimum Grade of C-|May not be taken concurrently
OR CHEM 2211|Minimum Grade of C-|May not be taken concurrently
OR CHEM 2921|Minimum Grade of C-|May not be taken concurrently.

CHEM 2213. Organic Majors Laboratory I. 1 Credit Hour.
This course is typically offered in Fall. Introduction to organic chemical laboratory techniques, including spectroscopy and chromatography. Hands-on approach with individualized demonstration and instruction.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(CHEM 1034|Minimum Grade of C-|May not be taken concurrently
OR CHEM 1044|Minimum Grade of C-|May not be taken concurrently
OR CHEM 1954|Minimum Grade of C-|May not be taken concurrently)
AND (CHEM 2201|Minimum Grade of C-|May be taken concurrently
OR CHEM 2211|Minimum Grade of C-|May be taken concurrently
OR CHEM 2921|Minimum Grade of C-|May be taken concurrently).

CHEM 2214. Organic Majors Laboratory II. 1 Credit Hour.
This course is typically offered in Spring. Advanced organic chemical laboratory techniques, including spectroscopy and chromatography. Hands-on approach with individualized demonstration and instruction.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(CHEM 2203|Minimum Grade of C-|May not be taken concurrently
OR CHEM 2213|Minimum Grade of C-|May not be taken concurrently
OR CHEM 2923|Minimum Grade of C-|May not be taken concurrently)
AND (CHEM 2202|Minimum Grade of C-|May be taken concurrently
OR CHEM 2212|Minimum Grade of C-|May be taken concurrently
OR CHEM 2922|Minimum Grade of C-|May be taken concurrently).

CHEM 2891. Introduction to Undergraduate Research. 1 Credit Hour.
This course is typically offered in Fall and Spring. Individual independent study and research under supervision of a member of the Chemistry faculty. Open to sophomore chemistry and biochemistry majors, others with permission of the department. The student is expected to gain an introduction to research through participating in limited independent research (3-4 hours/week) and participating in group research activities. A group presentation is required, the content of which is to be determined in consultation with the Research Mentor. A final written report will be submitted to the faculty member, who will forward a copy to the Department's Undergraduate Research Coordinator. Students are responsible for arranging their program and submitting reports with lead-time sufficient that registration and grading can be accomplished normally. NOTE: For further information and details, contact the Undergraduate Research Coordinator. This course does not fulfill an advanced Chemistry course for the Chemistry B.A. or B.S. degree. This course is repeatable for credit.
Repeatability: This course may be repeated for additional credit.

CHEM 2921. Organic Chemistry for Honors I. 3 Credit Hours.
This course is typically offered in Fall. Structure, synthesis, and reactivity of hydrocarbons and their simple derivatives. Principles of organic spectroscopy and stereochemistry. Introductory study of kinetics and reaction mechanisms. Presentation focused on topics of interest to the professional chemist. NOTE: This course can be used to satisfy the university Core Science & Technology First Level (SA) requirement.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO, SA
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CHEM 1032|Minimum Grade of C-|May not be taken concurrently
OR CHEM 1042|Minimum Grade of C-|May not be taken concurrently
OR CHEM 1952|Minimum Grade of C-|May not be taken concurrently.
CHEM 2922. Organic Chemistry for Honors II. 3 Credit Hours.
This course is typically offered in Spring. Detailed examination of the more common functional groups and their reaction chemistry. Emphasis on development of organochemical reasoning powers through planning of multi-step syntheses and solution of structural problems by the combination of chemical and spectroscopic methods. Applications of organic chemistry to the chemical profession. NOTE: This course can be used to satisfy the university Core Science & Technology Second Level (SB) requirement.

**Cohort Restrictions:** Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR

**Course Attributes:** HO, SB

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
CHEM 2201|Minimum Grade of C-|May not be taken concurrently
OR CHEM 2211|Minimum Grade of C-|May not be taken concurrently
OR CHEM 2921|Minimum Grade of C-|May not be taken concurrently.

CHEM 2923. Organic Honors Laboratory I. 1 Credit Hour.
This course is typically offered in Fall. Introduction to organic chemical laboratory techniques, including spectroscopy and chromatography. Hands-on approach with individualized demonstration and instruction. NOTE: This course can be used to satisfy the university Core Science & Technology First Level (SA) requirement.

**Cohort Restrictions:** Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR

**Course Attributes:** HO, SA

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
(CHEM 1034|Minimum Grade of C-|May not be taken concurrently
OR CHEM 1044|Minimum Grade of C-|May not be taken concurrently
OR CHEM 1954|Minimum Grade of C-|May not be taken concurrently
AND (CHEM 2201|Minimum Grade of C-|May be taken concurrently
OR CHEM 2211|Minimum Grade of C-|May be taken concurrently
OR CHEM 2921|Minimum Grade of C-|May be taken concurrently).

CHEM 2924. Organic Honors Laboratory II. 1 Credit Hour.
This course is typically offered in Spring. Advanced organic chemical laboratory techniques, including spectroscopy and chromatography. Hands-on approach with individualized demonstration and instruction. NOTE: This course can be used to satisfy the university Core Science & Technology Second Level (SB) requirement.

**Cohort Restrictions:** Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR

**Course Attributes:** HO, SB

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
(CHEM 2203|Minimum Grade of C-|May not be taken concurrently
OR CHEM 2213|Minimum Grade of C-|May not be taken concurrently
OR CHEM 2923|Minimum Grade of C-|May not be taken concurrently
AND (CHEM 2202|Minimum Grade of C-|May be taken concurrently
OR CHEM 2212|Minimum Grade of C-|May be taken concurrently
OR CHEM 2922|Minimum Grade of C-|May be taken concurrently).

CHEM 3001. Inorganic Chemistry. 3 Credit Hours.
This course is typically offered in Fall and Spring. Structure and bonding of inorganic compounds. Introduction to symmetry and group theory. Nomenclature. Descriptive chemistry of the main group elements. Introduction to transition metal chemistry and solid state materials. Mode: Three hours lecture and one hour recitation per week.

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
CHEM 2201|Minimum Grade of C-|May not be taken concurrently
OR CHEM 2211|Minimum Grade of C-|May not be taken concurrently
OR CHEM 2921|Minimum Grade of C-|May not be taken concurrently.
CHEM 3091. Research Methods. 3 Credit Hours.
This course is typically offered in Spring.<p>Research Methods is required for all of the TUteach with Teaching majors. It is one of several content courses specially designed to meet the needs of future teachers. Sections meet two hours per week for non-traditional, interactive lectures and two hours per week for lab. The course is cross-listed in Biology, Chemistry, Earth and Environmental Science, and Physics. The goals of the course are (1) to provide students with the tools that scientists use to solve scientific problems; (2) to give students the opportunity to use these tools in a laboratory setting; (3) to make students aware of how scientists communicate with each other through peer-reviewed scientific literature; and (4) to enable students to understand how scientists develop new knowledge and insights, the most important of which are eventually presented in textbooks and taught in conventional science classes. Students design and carry out four independent inquiries, which they write up and present in the manner that is common in the scientific community. The inquiries incorporate mathematics and the various science disciplines, thus the team of instructors teaching this course have expertise in different disciplines and are available to supervise all students as they work on their inquiries in the lab. The combination of Research Methods and the TUteach course "Perspectives on Science and Mathematics" (Philosophy 2196) provides prospective science and mathematics teachers with an in-depth understanding of how the scientific enterprise works. NOTE: Chemistry 3091 is only available for major credit in the Chemistry with Teaching BS program.

**College Restrictions:** Must be enrolled in one of the following Colleges: Science & Technology

**Repeatability:** This course may be repeated for additional credit.

**Pre-requisites:**
SCTC 1289 Minimum Grade of C-|May not be taken concurrently.

CHEM 3103. Techniques of Chemical Measurement I. 3 Credit Hours.
This course is typically offered in Fall, Spring, and Summer I.<p>Introduction to the theory of instrumental analytical methods, with particular emphasis on equilibria and acid-base techniques. Application of statistics and error analysis to the design and execution of experiments, and writing and presenting scientific reports and papers. NOTE: Enrollment limited to students with declared concentration in chemistry or biochemistry.

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
(CHEM 1032|Minimum Grade of C-|May not be taken concurrently
OR CHEM 1042|Minimum Grade of C-|May not be taken concurrently
OR CHEM 1952|Minimum Grade of C-|May not be taken concurrently)
AND (CHEM 1034|Minimum Grade of C-|May not be taken concurrently
OR CHEM 1044|Minimum Grade of C-|May not be taken concurrently
OR CHEM 1954|Minimum Grade of C-|May not be taken concurrently)
AND (MATH 1042|Minimum Grade of C|May not be taken concurrently
OR MATH 1942|Minimum Grade of C|May not be taken concurrently
OR MATH 1951|Minimum Grade of C|May not be taken concurrently
OR MATH 2043 to 3080| Required Courses:1|Minimum Grade of C-|May be taken concurrently
OR MA07 Y|May not be taken concurrently).

CHEM 3105. Introduction to Chemical Research Techniques. 1 Credit Hour.
This course is typically offered in Fall, Spring, and Summer I.<p>Introduction to the application of instrumental analytical methods, with particular emphasis on equilibria and acid-base techniques. Written scientific reports will require a quantitative analysis of collected data, including statistics and error analyses. NOTE: Enrollment limited to students with declared concentration in chemistry or biochemistry.

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
(CHEM 1032|Minimum Grade of C-|May not be taken concurrently
OR CHEM 1042|Minimum Grade of C-|May not be taken concurrently
OR CHEM 1952|Minimum Grade of C-|May not be taken concurrently)
AND (CHEM 1034|Minimum Grade of C-|May not be taken concurrently
OR CHEM 1044|Minimum Grade of C-|May not be taken concurrently
OR CHEM 1954|Minimum Grade of C-|May not be taken concurrently)
AND (MATH 1042|Minimum Grade of C|May not be taken concurrently
OR MATH 1942|Minimum Grade of C|May not be taken concurrently
OR MATH 1951|Minimum Grade of C|May not be taken concurrently
OR MATH 2043 to 3080| Required Courses:1|Minimum Grade of C-|May be taken concurrently
OR MA07 Y|May not be taken concurrently).

AND (CHEM 3103|Minimum Grade of C-|May be taken concurrently).
CHEM 3301. Physical Chemistry Lecture I. 3 Credit Hours.
This course is typically offered in Fall and Spring. Chemistry 3301 (0231) provides the foundation essential for most higher-level work in chemistry. Topics covered include thermodynamics, phase equilibria, chemical equilibria, kinetic theory of gases, chemical kinetics, and equilibrium electrochemistry.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:

(CHEM 1032|Minimum Grade of C-|May not be taken concurrently
OR CHEM 1042|Minimum Grade of C-|May not be taken concurrently
OR CHEM 1952|Minimum Grade of C-|May not be taken concurrently)
AND (MATH 2043|Minimum Grade of C-|May be taken concurrently
OR MATH 3043 to 3044| Required Courses:1|Minimum Grade of C-|May be taken concurrently
OR MATH 3137 to 3142| Required Courses:1|Minimum Grade of C-|May be taken concurrently
OR MATH 4051 to 4063| Required Courses:1|Minimum Grade of C-|May be taken concurrently)
AND (PHYS 1062|Minimum Grade of C-|May be taken concurrently
OR PHYS 2022|Minimum Grade of C-|May be taken concurrently
OR PHYS 2922|Minimum Grade of C-|May be taken concurrently
OR PHYS 3101 to 3701| Required Courses:1|Minimum Grade of C-|May be taken concurrently
OR PHYS 4101 to 4796| Required Courses:1|Minimum Grade of C-|May be taken concurrently).

CHEM 3302. Physical Chemistry Lecture II. 3 Credit Hours.
This course is typically offered in Fall and Spring. An introduction to quantum mechanics and spectroscopy. NOTE: Although it is recommended that physical chemistry courses be taken in sequence [i.e., 3301 (0231) followed by 3302 (0232)], this course may be taken prior to Chemistry 3301 (0231).

Repeatability: This course may not be repeated for additional credits

Pre-requisites:

(CHEM 1032|Minimum Grade of C-|May not be taken concurrently
OR CHEM 1042|Minimum Grade of C-|May not be taken concurrently
OR CHEM 1952|Minimum Grade of C-|May not be taken concurrently)
AND (MATH 2043|Minimum Grade of C-|May be taken concurrently
OR MATH 3043 to 3044| Required Courses:1|Minimum Grade of C-|May be taken concurrently
OR MATH 3137 to 3142| Required Courses:1|Minimum Grade of C-|May be taken concurrently
OR MATH 4051 to 4063| Required Courses:1|Minimum Grade of C-|May be taken concurrently)
AND (PHYS 1062|Minimum Grade of C-|May be taken concurrently
OR PHYS 2022|Minimum Grade of C-|May be taken concurrently
OR PHYS 2922|Minimum Grade of C-|May be taken concurrently
OR PHYS 3101 to 3701| Required Courses:1|Minimum Grade of C-|May be taken concurrently
OR PHYS 4101 to 4796| Required Courses:1|Minimum Grade of C-|May be taken concurrently).

CHEM 3397. Physical Chemistry Laboratory I. 2 Credit Hours.
This course is typically offered in Fall and Spring. A laboratory-based exploration of the fundamental physical and chemical principles involved in thermodynamics, chemical equilibria, colligative properties, and electrochemistry. The material complements topics covered in CHEM 3301. Special emphasis is placed on physical measurements followed by computer-aided analysis of data and errors. This writing-intensive course gives the student experience in generating technical reports as preparation for a professional career in Chemistry. NOTE: Capstone writing course.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits

Pre-requisites:

(CHEM 3103|Minimum Grade of C-|May not be taken concurrently
AND CHEM 3105|Minimum Grade of C-|May not be taken concurrently
AND CHEM 3301|Minimum Grade of C-|May not be taken concurrently).

CHEM 3398. Physical Chemistry Laboratory II. 2 Credit Hours.
This course is typically offered in Fall and Spring. A laboratory-based exploration of the fundamental physical and chemical principles involved in quantum mechanics, spectroscopy, and chemical kinetics. The material complements topics covered in CHEM 3302. Special emphasis is placed on physical measurements followed by computer-aided analysis of data and errors. This writing-intensive course gives the student experience in generating technical reports as preparation for a professional career in Chemistry. NOTE: Capstone writing course.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits

Pre-requisites:

(CHEM 3103|Minimum Grade of C-|May not be taken concurrently
AND CHEM 3105|Minimum Grade of C-|May not be taken concurrently
AND CHEM 3302|Minimum Grade of C-|May not be taken concurrently).
CHEM 3405. Physical Chemistry of Biomolecules. 3 Credit Hours.
This course is typically offered in Spring.<p>CHEM 3405 is a lecture/recitation based survey course that covers those aspects of physical chemistry of use to biochemists in understanding the physical properties of biologically significant molecules and structures. Topics to be covered include thermodynamics, colligative properties of matter, electrolytes, enzyme kinetics, quantum theory, and spectroscopy. Note: Not for Chemistry majors. 
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(CHEM 1032|Minimum Grade of C-|May not be taken concurrently
OR CHEM 1042|Minimum Grade of C-|May not be taken concurrently
OR CHEM 1952|Minimum Grade of C-|May not be taken concurrently
AND (MATH 2043|Minimum Grade of C-|May be taken concurrently
OR MATH 3043 to 3044| Required Courses:1|Minimum Grade of C-|May be taken concurrently
OR MATH 3137 to 3142| Required Courses:1|Minimum Grade of C-|May be taken concurrently
OR MATH 4051 to 4063| Required Courses:1|Minimum Grade of C-|May be taken concurrently
AND (PHYS 1062|Minimum Grade of C-|May be taken concurrently
OR PHYS 2022|Minimum Grade of C-|May be taken concurrently
OR PHYS 2922|Minimum Grade of C-|May be taken concurrently
OR PHYS 2101 to 2701| Required Courses:1|Minimum Grade of C-|May be taken concurrently
OR PHYS 3101 to 3701| Required Courses:1|Minimum Grade of C-|May be taken concurrently
OR PHYS 4101 to 4796| Required Courses:1|Minimum Grade of C-|May be taken concurrently
AND (CHEM 4401|Minimum Grade of C-|May be taken concurrently).

CHEM 3881. Cooperative Research. 1 to 3 Credit Hour.
This course is typically offered in Fall, Spring, Summer I and Summer II.<p>Individual independent study and research at Temple University outside of the Chemistry Department or an off-campus laboratory facility under joint supervision of a member of the Temple Chemistry faculty and a Research Director at the laboratory facility. Open to junior and senior chemistry and biochemistry majors, others with permission of the department. Credit may be offered for research during full-time off-campus employment. A final written report, endorsed by the off-campus research director, will be submitted to the Temple faculty member, who will forward a copy to the department's Undergraduate Research Program Director on behalf of the Undergraduate Committee. Students are responsible for arranging their programs and submitting reports with lead-time sufficient that registration and grading can be accomplished normally. NOTE: For further information and details, contact the Undergraduate Research Coordinator. Biochemistry Majors will have to take CHEM 3881 twice to have it satisfy the Advanced Science elective in the major.
Repeatability: This course may be repeated for additional credit.

CHEM 3891. Undergraduate Research. 1 to 3 Credit Hour.
This course is typically offered in Fall, Spring, Summer I and Summer II.<p>Individual independent study and research under supervision of a member of the Chemistry faculty. Open to junior and senior chemistry and biochemistry majors, others with permission of the department. A final written report will be submitted to the faculty member, who will forward a copy to the Department's Undergraduate Research Coordinator. Students are responsible for arranging their program and submitting reports with lead-time sufficient that registration and grading can be accomplished normally. NOTE: For further information and details, contact the Undergraduate Research Coordinator. Only 1 of these 2 courses [Chemistry 3891 (0283) and 4891 (0297)] can count as 1 of the 3 advanced laboratory courses required for the degree to be certified by the American Chemical Society and as an advanced science course for the Chemistry B.A. or B.S. degree. It will not fulfill an advanced Chemistry course for the Chemistry B.A. or B.S. degree. This course is repeatable for credit.
Repeatability: This course may be repeated for additional credit.

CHEM 4002. Advanced Inorganic Chemistry. 3 Credit Hours.
This course is not offered every year.<p>Group theory and its applications to chemical systems. Molecular orbital theory and spectroscopy. Descriptive chemistry of transition metal and organometallic compounds. Mode: Three hours lecture and one hour recitation per week.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(CHEM 3001|Minimum Grade of C-|May not be taken concurrently
OR CHEM 4001|Minimum Grade of C-|May not be taken concurrently
AND (CHEM 3301|Minimum Grade of C-|May not be taken concurrently
OR CHEM 3302|Minimum Grade of C-|May not be taken concurrently
OR CHEM 3303|Minimum Grade of C-|May not be taken concurrently
OR CHEM 3304|Minimum Grade of C-|May not be taken concurrently
AND (CHEM 4401|Minimum Grade of C-|May be taken concurrently)

CHEM 4003. Inorganic Synthesis. 4 Credit Hours.
This course is typically offered in Fall and Spring.<p>Introduction to preparative techniques and spectroscopic techniques used in contemporary inorganic chemistry. NOTE: This course can count as one of the three advanced laboratory courses required for the degree to be certified by the American Chemical Society. Mode: One hour lecture and six hours laboratory per week.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(CHEM 3001|Minimum Grade of C-|May not be taken concurrently
OR CHEM 4001|Minimum Grade of C-|May not be taken concurrently
AND (CHEM 3301|Minimum Grade of C-|May not be taken concurrently
OR CHEM 3302|Minimum Grade of C-|May not be taken concurrently
OR CHEM 3303|Minimum Grade of C-|May not be taken concurrently
OR CHEM 3304|Minimum Grade of C-|May not be taken concurrently
AND (CHEM 4401|Minimum Grade of C-|May be taken concurrently).
CHEM 4004. Crystallography and Diffraction. 4 Credit Hours.
This course is typically offered in Spring. Students will learn the theory and practice of crystal structure determination by the method of single-crystal X-ray diffraction. Students will become independently competent in each stage of the crystal structure data collection, solution, and refinement processes, and will understand the theory behind each stage, as well as how to overcome common pitfalls. NOTE: This course can count as one of the three advanced laboratory courses required for the degree to be certified by the American Chemical Society. Mode: Two hours lecture and three hours laboratory per week.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(CHEM 3001|Minimum Grade of C-|May not be taken concurrently
OR CHEM 4001|Minimum Grade of C-|May not be taken concurrently)
AND (CHEM 3301|Minimum Grade of C-|May not be taken concurrently
OR CHEM 3302|Minimum Grade of C-|May not be taken concurrently).

CHEM 4103. Instrumental Design. 4 Credit Hours.
This course is typically offered in Fall. This course covers method development for the analysis of complex organic mixtures. The analytical techniques detailed are High Performance Liquid Chromatography (HPLC), Gas Liquid Chromatography (GLC), and other appropriate chromatographic methodologies. NOTE: This course can count as one of the three advanced laboratory courses required for the degree to be accredited by the American Chemical Society.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(CHEM 3103|Minimum Grade of C-|May not be taken concurrently)
AND (CHEM 3105|Minimum Grade of C-|May not be taken concurrently)
AND (CHEM 4196|Minimum Grade of C-|May be taken concurrently).

CHEM 4107. Drug Analysis. 4 Credit Hours.
This course is not offered every year. Analytical techniques with specific applications to drug substances.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(CHEM 3103|Minimum Grade of C-|May not be taken concurrently)
AND (CHEM 3105|Minimum Grade of C-|May not be taken concurrently)
AND (CHEM 3301|Minimum Grade of C-|May not be taken concurrently)
AND (CHEM 4196|Minimum Grade of C-|May not be taken concurrently).

CHEM 4108. Investigative Chemistry. 4 Credit Hours.
This course is typically offered in Spring. This course will challenge students to perform chemical analyses on a variety of samples that may be considered as evidence. Students will be instructed in methodology and method validation. An understanding of data statistics and representation of data through use of spreadsheets will be emphasized. This course will introduce students to modern chemical instrumentation and techniques as applied to forensic issues.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(CHEM 3103|Minimum Grade of C-|May not be taken concurrently)
AND (CHEM 3105|Minimum Grade of C-|May not be taken concurrently)
AND (CHEM 4196|Minimum Grade of C-|May not be taken concurrently).

CHEM 4196. Techniques of Chemical Measurement II. 5 Credit Hours.
This course is typically offered in Fall and Spring. This course provides an introduction to modern applications of chromatography and spectroscopy. Laboratory assignments involve quantitative and qualitative analyses of inorganic and organic molecules. Instrumentation design, operating principles, and theory will be presented as they apply to uv-vis, nmr, fluorescence, epr, aa, ae, gc, gc-ms, gpc, and hplc. NOTE: Capstone writing course.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(CHEM 3103|Minimum Grade of C-|May not be taken concurrently)
AND (CHEM 3105|Minimum Grade of C-|May not be taken concurrently)
AND (CHEM 3301|Minimum Grade of C-|May not be taken concurrently)
AND (CHEM 3302|Minimum Grade of C-|May be taken concurrently)
AND (CHEM 3302|Minimum Grade of C-|May be taken concurrently).
CHEM 4201. Organic Structure and Mechanisms. 3 Credit Hours.
This course is typically offered in Fall. A problem-oriented course in organic structure, stereochemistry, and reaction mechanisms. Introduction to efficient retrieval of information from the organochemical literature. Simple molecular orbital and HOMO/LUMO theory.
**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
CHEM 2202|Minimum Grade of C-|May not be taken concurrently
OR CHEM 2212|Minimum Grade of C-|May not be taken concurrently
OR CHEM 2922|Minimum Grade of C-|May not be taken concurrently.

CHEM 4202. Organic Synthesis Methodology. 3 Credit Hours.
This course is typically offered in Spring. Modern approaches to efficiently designed multi-step syntheses of important compounds. Retrosynthetic analysis, synths, chirons, and protecting groups. Evaluation and appreciation of landmark achievements in the field.
**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
CHEM 2202|Minimum Grade of C-|May not be taken concurrently
OR CHEM 2212|Minimum Grade of C-|May not be taken concurrently
OR CHEM 2922|Minimum Grade of C-|May not be taken concurrently.

CHEM 4207. Advanced Organic Preparations. 4 Credit Hours.
This course emphasizes the preparation of organic compounds using methods currently used in the modern chemical laboratory. Literature sources and spectroscopic methods are extensively used. The safe use of aggressive reagents, the use of and the design of multistep syntheses are emphasized. The environmental impact of method choice is treated. NOTE: This course can count as one of the three advanced laboratory courses required for the degree to be certified by the American Chemical Society.
**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
(CHEM 2202|Minimum Grade of C-|May not be taken concurrently
OR CHEM 2212|Minimum Grade of C-|May not be taken concurrently
OR CHEM 2922|Minimum Grade of C-|May not be taken concurrently)
AND (CHEM 2204|Minimum Grade of C-|May not be taken concurrently
OR CHEM 2214|Minimum Grade of C-|May not be taken concurrently
OR CHEM 2924|Minimum Grade of C-|May not be taken concurrently).

CHEM 4396. Physical Chemistry Laboratory. 4 Credit Hours.
A laboratory study of the fundamental physical and chemical principles involved in molecular spectroscopy, thermodynamics, and chemical kinetics, with particular emphasis on the techniques of physical measurement and the presentation of coherent laboratory reports. NOTE: Capstone writing course.
**Course Attributes:** WI
**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
(CHEM 3103|Minimum Grade of C-|May not be taken concurrently
AND (CHEM 3105|Minimum Grade of C-|May not be taken concurrently
AND (CHEM 3301|Minimum Grade of C-|May not be taken concurrently
OR CHEM 3302|Minimum Grade of C-|May not be taken concurrently
AND (CHEM 3301|Minimum Grade of C-|May be taken concurrently
OR CHEM 3302|Minimum Grade of C-|May be taken concurrently).

CHEM 4401. Biochemistry I. 3 Credit Hours.
Emphasis on structure/function relationships in proteins and nucleic acids. Kinetics and catalytic mechanisms of enzymes. Replication and genetic manipulation of DNA. NOTE: This course is required for the degree to be certified by the American Chemical Society.
**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
CHEM 2202|Minimum Grade of C-|May not be taken concurrently
OR CHEM 2212|Minimum Grade of C-|May not be taken concurrently
OR CHEM 2922|Minimum Grade of C-|May not be taken concurrently.
CHEM 4405. Biophysical Chemistry. 3 Credit Hours.  
This course is typically offered in Spring. The course covers those aspects of physical chemistry and computer simulation of use to biochemists in understanding the physical properties of biologically significant molecules and structures.  
Repeatability: This course may not be repeated for additional credits  
Pre-requisites:  
(CHEM 1032|Minimum Grade of C-|May not be taken concurrently  
OR CHEM 1042|Minimum Grade of C-|May not be taken concurrently  
OR CHEM 1952|Minimum Grade of C-|May not be taken concurrently  
AND (CHEM 1034|Minimum Grade of C-|May not be taken concurrently  
OR CHEM 1044|Minimum Grade of C-|May not be taken concurrently  
OR CHEM 1954|Minimum Grade of C-|May not be taken concurrently  
AND (MATH 1042|Minimum Grade of C|May not be taken concurrently  
OR MATH 1942|Minimum Grade of C|May not be taken concurrently  
OR MATH 1951|Minimum Grade of C|May not be taken concurrently  
OR MATH 2043 to 3080|Required Courses: 1|Minimum Grade of C-|May be taken concurrently  
OR MA07 Y|May not be taken concurrently  
AND (PHYS 1061|Minimum Grade of C-|May not be taken concurrently  
OR PHYS 2021|Minimum Grade of C-|May not be taken concurrently  
OR PHYS 2921|Minimum Grade of C-|May not be taken concurrently).

CHEM 4503. Introduction to Polymer Chemistry. 4 Credit Hours.  
This course is typically offered in Fall. Polymers are ubiquitous in many new (scaffolds for tissue engineering, hip replacements) and old (textiles, engineering resins, flocculants) applications, and are often used in composites with inorganic materials. In order to better understand the use and novel developments of polymers, this course will provide the fundamentals of synthesis, polymer structure/property relationships, and characterization methods. There is a laboratory component to the course that will cover molecular weight and phase transition methods.  
Repeatability: This course may not be repeated for additional credits  
Pre-requisites:  
(CHEM 2202|Minimum Grade of C-|May not be taken concurrently  
OR CHEM 2212|Minimum Grade of C-|May not be taken concurrently  
OR CHEM 2922|Minimum Grade of C-|May not be taken concurrently  
AND (CHEM 3301|Minimum Grade of C-|May not be taken concurrently).

CHEM 4891. Undergraduate Research. 1 to 3 Credit Hour.  
This course is typically offered in Fall, Spring, Summer I and Summer II. Individual independent study and research under supervision of a member of the Chemistry faculty. Open to senior chemistry and biochemistry majors, others with permission of the department. A final written report will be submitted to the faculty member, who will forward a copy to the Department's Undergraduate Research Coordinator. Students are responsible for arranging their program and submitting reports with lead-time sufficient that registration and grading can be accomplished normally. NOTE: For further information and details, contact the Undergraduate Research Coordinator. Only 1 of these 2 courses [Chemistry 3891 (0293) and 4891 (0297)] can count as 1 of the 3 advanced laboratory courses required for the degree to be certified by the American Chemical Society and as an advanced science course for the Chemistry B.A. or B.S. degree. It will not fulfill an advanced Chemistry course for the Chemistry B.A. or B.S. degree. This course is repeatable for credit.  
Repeatability: This course may be repeated for additional credit.

Chinese (CHI)

Courses

CHI 0811. Asian Behavior & Thought. 3 Credit Hours.  
We incessantly engage ourselves in doing things. We are beings-at-doing. We define ourselves by the kind of actions we perform. How we act or conduct ourselves is shaped by the kind of self we construct for ourselves. And that self is shaped by the society into which we happen to be born. Self-identity, which is socially and culturally constructed by our experiences and interactions with others, carries a personal as well as an interpersonal meaning. Learn the four Asian paradigmatic cases of self-identity and examine your self in light of them. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: ASST 0811, CRIT 0811, PHIL 0811, REL 0811/0911, or Japanese 0811.  
Course Attributes: GB  
Repeatability: This course may not be repeated for additional credits.
CHI 0815. Language in Society. 3 Credit Hours.
How did language come about? How many languages are there in the world? How do people co-exist in countries where there are two or more languages? How do babies develop language? Should all immigrants take a language test when applying for citizenship? Should English become an official language of the United States? In this course we will address these and many other questions, taking linguistic facts as a point of departure and considering their implications for our society. Through discussions and hands-on projects, students will learn how to collect, analyze, and interpret language data and how to make informed decisions about language and education policies as voters and community members. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: ANTH 0815/0915, Asian Studies 0815, CSCD 0815, EDUC 0815/0915, English 0815, Italian 0815, PSY 0815, Russian 0815, or Spanish 0815.
Course Attributes: GB
Repeatability: This course may not be repeated for additional credits.

CHI 0868. World Society in Literature & Film. 3 Credit Hours.
Learn about a particular national culture - Russian, Indian, French, Japanese, Italian, for example, each focused upon in separate sections of this course - by taking a guided tour of its literature and film. You don't need to speak Russian, Hindi, French or Japanese to take one of these exciting courses, and you will gain the fresh, subtle understanding that comes from integrating across different forms of human expression. Some of the issues that will be illuminated by looking at culture through the lens of literature and film: Family structures and how they are changing, national self-perceptions, pivotal moments in history, economic issues, social change and diversity. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: Arabic 0868/0968, Asian Studies 0868, Chinese 0968, English 0868/0968, French 0868/0968, German 0868/0968, Hebrew 0868, Italian 0868/0968, Japanese 0868/0968, Jewish Studies 0868, Korean 0868, LAS 0868/0968, Political Science 0868/0968, Russian 0868/0968, or Spanish 0868/0968.
Course Attributes: GG
Repeatability: This course may not be repeated for additional credits.

CHI 0968. Honors World Society in Literature & Film. 3 Credit Hours.
Learn about a particular national culture - Russian, Indian, French, Japanese, Italian, for example, each focused upon in separate sections of this course - by taking a guided tour of its literature and film. You don't need to speak Russian, Hindi, French or Japanese to take one of these exciting courses, and you will gain the fresh, subtle understanding that comes from integrating across different forms of human expression. Some of the issues that will be illuminated by looking at culture through the lens of literature and film: Family structures and how they are changing, national self-perceptions, pivotal moments in history, economic issues, social change and diversity. (This is an Honors course.) NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: Arabic 0868/0968, Asian Studies 0868, Chinese 0868/0968, English 0868/0968, French 0868/0968, German 0868/0968, Hebrew 0868, Italian 0868/0968, Japanese 0868/0968, Jewish Studies 0868, Korean 0868, LAS 0868/0968, Political Science 0868/0968, Russian 0868/0968, or Spanish 0868/0968.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GG, HO
Repeatability: This course may not be repeated for additional credits.

CHI 1001. Chinese Elements I. 4 Credit Hours.
First semester level of Mandarin Chinese. Assumes no prior knowledge.
Repeatability: This course may not be repeated for additional credits.

CHI 1002. Chinese Elements II. 4 Credit Hours.
Second semester level of Mandarin Chinese.
Course Attributes: LC
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CHI 1001|Minimum Grade of C-|May not be taken concurrently.

Third semester of Mandarin Chinese.
Course Attributes: LC
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CHI 1001|Minimum Grade of C-|May not be taken concurrently.

CHI 2002. Chinese Intermediate II. 3 Credit Hours.
Fourth semester of Mandarin Chinese.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CHI 2001|Minimum Grade of C-|May not be taken concurrently.
CHI 2011. Pre-Modern Chinese Literature. 3 Credit Hours.
This course provides an interdisciplinary introduction to Chinese literature from its inception to the early 18th century. Some of the course's readings are drawn from works well known in the west like the "Book of Songs," "Zhuangzi," the poems of the Tang poets Wang Wei, Li Bai, Du Fu, and Bai Juyi, and the Song poet Su Shi, and short stories by the dramatist and novelist Li Yu. Other readings include works less well known in the west but long considered central to various literary and performance traditions by many Chinese. This course will present its readings with an emphasis on their cultural and historical contexts. Special attention will be paid to the place they have in various Chinese literary traditions and how these traditions have contributed to both Chinese ways of understanding their own cultural heritage and how they have influenced western understandings of that heritage.
Repeatability: This course may not be repeated for additional credits.

CHI 2013. Modern and Contemporary Chinese Literature in Translation. 3 Credit Hours.
This course focuses on 20th- and 21st-century literature from China. Among the major themes of the course are socio-political and cultural upheaval and transformation, fiction and nation, and gender, race and class relations. Students will read representative short stories, novels, poetry, and essays. Selected documentaries and feature films will supplement the literary texts. The course will help familiarize students with major writers and with the cultural and historical contexts in which they produced their works.
Repeatability: This course may not be repeated for additional credits.

CHI 2022. Contemporary Chinese Urban Film and Fiction in Translation. 3 Credit Hours.
This course looks at a selection of Chinese cinematic and literary texts by contemporary filmmakers and writers from China, Taiwan, and Hong Kong. Through the study of film and fiction, we will examine how urban spaces and subjects have been delineated and imagined within the context of recent social and economic transformation and globalization. In particular, we will examine the different ways in which cinematic images and narrative structures celebrate the metropolis and convey the anxieties associated with it. We will explore a wide range of urban subjects as represented in film and fiction, and the ways in which they are shaped by and at the same time are shaping society and culture in China, Taiwan, and Hong Kong today.
Repeatability: This course may not be repeated for additional credits.

CHI 3000. Chinese Special Topics I. 3 Credit Hours.
Arranged each semester. Please consult with the instructor and/or check the course schedule for specific topic.
Repeatability: This course may be repeated for additional credit.

CHI 3001. Chinese Advanced I. 3 Credit Hours.
Fifth semester of Mandarin Chinese.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CHI 2002|Minimum Grade of C-|May not be taken concurrently.

CHI 3002. Chinese Advanced II. 3 Credit Hours.
Sixth semester of Mandarin Chinese.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CHI 3001|Minimum Grade of C-|May not be taken concurrently.

CHI 3010. Chinese Special Topics II. 3 Credit Hours.
Arranged each semester. Please consult with the instructor and/or check the course schedule for specific topic.
Repeatability: This course may be repeated for additional credit.

CHI 3031. Women in Chinese Literature. 3 Credit Hours.
This course focuses on women writers and women as characters in premodern, modern, and contemporary Chinese literature. Texts will include poetry, novels, short stories, and drama. Gender, representation, and women's roles in the history of Chinese literature are among the topics that will be covered. Knowledge of Chinese is not required. The class will be conducted in English, and all readings will be in English translation.
Repeatability: This course may not be repeated for additional credits.

CHI 4182. Chinese Independent Study I. 3 Credit Hours.
Arranged each semester. Please consult with the instructor.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
CHI 3002|Minimum Grade of C-|May not be taken concurrently.

CHI 4282. Chinese Independent Study II. 3 Credit Hours.
Arranged each semester. Please consult with the instructor.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
CHI 3002|Minimum Grade of C-|May not be taken concurrently.
Courses

CEE 0845. The Environment. 3 Credit Hours.
You can extend your longevity and improve your health by identifying and avoiding the top 10 environmental toxins that enter and persistently stay in your body. Develop connections between the environment and everyday life. Enhance your awareness of current environmental issues by taking part in discussion and debate: Is Global Warming for real? Should the U.S. sign the Kyoto protocol? Are we running out of oil? Learn as you go on campus field trips, try hands-on experiments and hear presentations from experts on the energy crisis, global climate change, acid rain, ozone depletion, resource sustainability, biodiversity and the environmental impact of natural phenomenon. Sharpen your strategies and leave a better environment for future generations. NOTE: This course fulfills a Science & Technology (GS) requirement for students under GenEd and Science & Technology Second Level (SB) for students under Core. Students cannot receive credit for this course if they have successfully completed CEE 0945, CEE 1051, ENVT 0845, ENVT 0945, or ENVT 1051.

Course Attributes: GS
Repeatability: This course may not be repeated for additional credits.

CEE 0945. Honors: The Environment. 3 Credit Hours.
You can extend your longevity and improve your health by identifying and avoiding the top 10 environmental toxins that enter and persistently stay in your body. Develop connections between the environment and everyday life. Enhance your awareness of current environmental issues by taking part in discussion and debate: Is Global Warming for real? Should the U.S. sign the Kyoto protocol? Are we running out of oil? Learn as you go on campus field trips, try hands-on experiments and hear presentations from experts on the energy crisis, global climate change, acid rain, ozone depletion, resource sustainability, biodiversity and the environmental impact of natural phenomenon. Sharpen your strategies and leave a better environment for future generations. (This is an Honors course.) NOTE: This course fulfills a Science & Technology (GS) requirement for students under GenEd and Science & Technology Second Level (SB) for students under Core. Students cannot receive credit for this course if they have successfully completed CEE 0845, CEE 1051, ENVT 0845, or ENVT 0945.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GS, HO
Repeatability: This course may not be repeated for additional credits.

CEE 1001. Introduction to Civil Engineering. 3 Credit Hours.
This course provides an understanding of the study and practice associated with Civil Engineering. It stresses the importance of good communications and teamwork skills in a successful engineering career. Students will understand the basics of problem solving and design. Laboratory included.

Repeatability: This course may not be repeated for additional credits.

CEE 1051. Introduction to the Environment. 3 Credit Hours.
Basic environmental issues, systems and change; biogeochemical cycles; human population; ecosystems and their management and restoration; biological diversity, productivity and energy flow; biogeography; environmental health, pollution and toxicology; energy; and global warming. Hands on laboratory exercises are an integral part of the course. The lab exercises are conducted within the class schedule at each campus. NOTE: Students cannot receive credit for this course if they have successfully completed CEE 0845, CEE 0945, ENVT 0845, ENVT 0945 or ENVT 1051.

Repeatability: This course may not be repeated for additional credits.

CEE 1105. Surveying. 2 Credit Hours.
Calculating closure and area of a traverse; computing offset angles and chord distances to layout circular and spiral curves; determine elevations to layout vertical curves; computing volumes from terrain cross sections. Field problems using surveying instruments to layout a traverse and a circular curve. Students will work on teams, which will be responsible for performing field work, analytic calculations, and report presentation associated with loop leveling and closed-loop traverse surveys.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
MATH 1021 to 4999| Required Courses:1|Minimum Grade of C-|May not be taken concurrently
OR MC5 Y|May not be taken concurrently
OR MC6 Y|May not be taken concurrently.

CEE 1115. Surveying Laboratory. 1 Credit Hour.
Students will work on teams, which will be responsible for performing field work, analytic calculations, and report presentation associated with loop leveling and closed-loop traverse surveys.

Repeatability: This course may not be repeated for additional credits.

CEE 2011. Civil Engineering Materials. 2 Credit Hours.
Basic laboratory and field tests conducted with aggregate, soil, concrete, steel, masonry, wood and other construction materials.

Repeatability: This course may not be repeated for additional credits.

CEE 2341. Construction Materials Laboratory. 2 Credit Hours.
Basic laboratory and field tests conducted with aggregate, soil, concrete, steel, masonry, wood and other construction materials. Students are required to submit lab reports on the test results of various materials.

Repeatability: This course may not be repeated for additional credits.
CEE 2711. Environmental Chemistry & Microbiology. 3 Credit Hours.
This course covers the structure of atoms; chemical bonds and reactions; water, solutions, and colloids; acids, bases, and pH; carbohydrates, lipids, proteins; nucleotides and nucleic acids; commonly occurring organic contaminants; and microorganisms and contamination remediation.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(CHEM 1031|Minimum Grade of C-|May not be taken concurrently
OR CHEM 1035|Minimum Grade of C-|May not be taken concurrently)
AND (CHEM 1033|Minimum Grade of C-|May not be taken concurrently).

CEE 2712. Introduction to Environmental Engineering. 3 Credit Hours.
This course will provide an introduction to the sources, effects, and control of pollution in different environmental compartments. Topics include air and water quality (indicator parameters), mass transport, solid and hazardous waste classification, risk assessment, environmental regulations (air, water, solids). Water and wastewater treatment are introduced as well as water resources engineering (rainfall/runoff analysis).
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(CHEM 1032|Minimum Grade of C-|May not be taken concurrently
OR CHEM 1952|Minimum Grade of C-|May not be taken concurrently)
AND (MATH 1042|Minimum Grade of C|May not be taken concurrently
OR MATH 1942|Minimum Grade of C|May not be taken concurrently).

CEE 2715. Principles of Sustainable Engineering. 3 Credit Hours.
Sustainable engineering principles include calculations of environmental emissions and resource consumption. Mass and energy balance calculations in context of pollution generation and prevention, resource recovery and life-cycle assessment. Economic aspects of sustainable engineering decision-making. Social impacts of technology system design decisions including ethical frameworks, government legislation and health risks. Students will gain an awareness of challenges to sustainable water and energy and inter-linkages between these. Energy-water design trade-offs will be investigated for various energy and water processing facilities, e.g. electric power or desalination plants.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CEE 2712|Minimum Grade of C-|May not be taken concurrently.

CEE 2811. Sustainable Projects in the Developing World I. 2 Credit Hours.
This course focuses on multiple aspects of developing and implementing projects in underserved areas of the world following guidelines established by Engineers Without Borders. This course will prepare students for international travel to work on projects currently being undertaken or considered by the EWB Temple University student chapter. The course topics include development of community partnerships, identification of community needs, budgeting, fundraising, communication, and sustainable project design. Topics covered each semester will be dependent on the current project status. The course is open to students across all disciplines with an interest in applying their education to projects in the developing world. This is the first of a two course sequence with CEE 2812.
Repeatability: This course may be repeated for additional credit.

CEE 2812. Sustainable Projects in the Developing World II. 1 Credit Hour.
This course focuses on multiple aspects of developing and implementing projects in underserved areas of the world following guidelines established by Engineers Without Borders. In this course students will develop a topic related to the service learning trip undertaken as part of CEE 2811 and write an in-depth technical report. Topics may include, but are not limited to, development of community partnerships, identification of community needs, and sustainable engineering design. This course is open to students across all disciplines who have successfully completed CEE 2811 and traveled on an EWB-Temple, or similar, service trip. This is the second of a two course sequence (with CEE 2811).
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
CEE 2811|Minimum Grade of C-|May not be taken concurrently.

CEE 3048. Probability, Statistics & Stochastic Methods. 3 Credit Hours.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 3041|Minimum Grade of D-|May not be taken concurrently.
CEE 3211. Transportation Engineering. 3 Credit Hours.
The principal modes of transportation including highway, rail, and air; analysis of elements of transport technology; transportation system development, planning, design, construction, and maintenance.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(CEE 1105|Minimum Grade of D-|May not be taken concurrently
AND ENGR 2331|Minimum Grade of C-|May not be taken concurrently).

CEE 3311. Construction Engineering. 3 Credit Hours.
Contracts, construction contract documents, and construction specifications; estimating construction costs, planning and estimating earthwork, concrete formwork design and estimating; planning and scheduling construction projects, critical path method; project cash flow, funding and cost control; construction equipment: types, ownership and operating costs. Computer applications.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CEE 2011|Minimum Grade of D-|May not be taken concurrently.

CEE 3331. Soil Mechanics. 3 Credit Hours.
Soil as a multiphase material, strength and deformation properties, earth pressure, bearing capacity, stability of slopes, soils laboratory. Written reports and oral presentations required.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ENGR 2333|Minimum Grade of C-|May not be taken concurrently.

CEE 3332. Soil Mechanics Laboratory. 1 Credit Hour.
Students will work on teams, which will be responsible for performing laboratory work, analytic calculations, and report preparation associated with soil classification according to USCS and AASHTO systems and with soil compaction according to ASTM specifications.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ENGR 2333|Minimum Grade of C-|May not be taken concurrently.

CEE 3334. Structural Design of Pavements. 3 Credit Hours.
Basic characteristics of different pavement structures, various modes of failure and design of pavement structures, identification and analysis of stresses, strains and deflections in flexible and rigid pavements, computation of the traffic loading and volume for the structural design of pavements, engineering properties of pavement materials, pavement performance, distress, empirical and mechanistic-empirical approaches.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CEE 3331|Minimum Grade of D-|May not be taken concurrently.

CEE 3411. Structural Analysis. 3 Credit Hours.
Elastic analysis of statically indeterminate structures using force and deformation methods. Introduction to numerical methods and computer techniques. The analysis includes determination of stresses and deflections using stiffness method, force method, and moment-distribution methods.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ENGR 2333|Minimum Grade of C-|May not be taken concurrently.

CEE 3412. Structural Analysis Laboratory. 1 Credit Hour.
Introduction to the basic theory and concepts of the Stiffness Method and the Finite Element Method. Students will gain experience in analyzing structural systems and structural mechanics by general-purpose finite element programs such as STAAD PRO and ANSYS.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ENGR 2333|Minimum Grade of C-|May not be taken concurrently.

CEE 3421. Steel Design. 3 Credit Hours.
Loadings on structures. Design criteria and procedures for steel members subjected to axial forces, bending and shear. Buckling of columns. Plastic design and load and resistances factor theories. Computer-based design methods are included.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CEE 3411|Minimum Grade of D-|May not be taken concurrently.

CEE 3431. Concrete Design. 3 Credit Hours.
Load and strength factor design methods for plain and reinforced concrete elements of structural systems. Serviceability checks at service loads. Manual and computer-based design methods are included.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CEE 3411|Minimum Grade of D-|May not be taken concurrently.
CEE 3441. Steel & Concrete Design. 4 Credit Hours.
The course's design objective is to develop within the student an awareness of the fundamentals that are required to produce safe, functional, and economical steel and reinforced concrete structures, which are in conformance with national building codes and with industry codes, specifications and standards and to formulate applied load criteria and make reasonable assumptions regarding structural behavior. Then through an interactive process, the student will determine the most cost-effective solution.

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
CEE 3411|Minimum Grade of D-|May not be taken concurrently.

CEE 3611. Hydraulic Engineering. 3 Credit Hours.
The course deals with the design of hydraulic systems based on various flow regimes (laminar and turbulent). Students will learn to design pipe and network systems along with open channels. The design of various hydraulic structures such as, culverts and spillways, will be taught. Widely used software such as MWH Soft and HECRAS (US Army Corps of Engineers) will be taught and used in the class. Field studies will be conducted and students will get to experiment with various instruments used in water systems (e.g., pumps, flowmeters, diffuser, etc). NOTE: Prior to spring 2010, the course title was "Hydrology and Hydraulic Engineering."

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
ENGR 3553|Minimum Grade of C-|May not be taken concurrently.

CEE 3711. Environmental Engineering. 3 Credit Hours.
Sources, effect, and control of environmental pollution. Topics include air and water pollution, solid and hazardous waste, noise, radiation and risk assessment. Effects across media, and applications to current concerns such as global warming and ozone depletion are emphasized. Course material and problem solving are reinforced through application of appropriate computer models.

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
(CHEM 1031|Minimum Grade of C-|May not be taken concurrently)
OR CHEM 1035|Minimum Grade of C-|May not be taken concurrently)
AND (MATH 1042|Minimum Grade of C-|May not be taken concurrently)
OR MATH 1942|Minimum Grade of C-|May not be taken concurrently).

CEE 3712. Environmental Fluids and Contaminant Dynamics. 3 Credit Hours.
Dynamics of fluids in motion; laminar and turbulent flow, Bernoulli's equation, friction in conduits; open-channel flow. Introduction to the processes controlling the migration and fate of chemicals in all phases of the environment, including surface and subsurface water as well as the atmosphere. Boundary layers, turbulence, mixing, convection, stratification and plumes and their impacts on contaminant dynamics will be discussed.

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
(CEE 2712|Minimum Grade of C-|May not be taken concurrently)
AND (MATH 3041|Minimum Grade of C-|May not be taken concurrently).

CEE 3715. Microbiological Principles of Environmental Engineering. 3 Credit Hours.
Introduction to underlying microbiological principles dealing with fate and transport of contaminants in the natural and built environment; reactor configurations for water and air quality control; and contaminant partitioning and contemporary environmental issues. The diverse roles of microorganisms in natural and engineered environments will be discussed.

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
CEE 2712|Minimum Grade of C-|May not be taken concurrently.

CEE 3717. Chemical Principles of Environmental Engineering. 3 Credit Hours.
Introduction to chemical equilibrium, thermodynamics and kinetics in water, atmosphere, and soils and sediments. The objective of this course is to develop a basis for understanding the behavior of chemical processes in the natural and built environment.

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
CEE 2712|Minimum Grade of C-|May not be taken concurrently.

CEE 3725. Water Quality and Analysis Lab. 1 Credit Hour.
Environmental lab methods to measure properties and characteristics of dissolved, particulate, and microbiological constituents in water, air, and soil systems.

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
(CEE 3715|Minimum Grade of C-|May be taken concurrently)
AND (CEE 3717|Minimum Grade of C-|May be taken concurrently).
CEE 3727. Environmental Hydrology and Stormwater Management. 3 Credit Hours.
The course covers the relationship between precipitation and runoff, unit hydrographs, flood routing, and water supply principles and applications. Impacts of improperly controlled runoff on urban streams and how the rate, volume and quality of urban stormwater runoff can be properly controlled through appropriate Best Management Practice (BMP) implementation.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(MATH 2043|Minimum Grade of C-|May not be taken concurrently)
OR MATH 2943|Minimum Grade of C-|May not be taken concurrently)
AND (CEE 3712|Minimum Grade of C-|May not be taken concurrently).

CEE 4040. Special Topics. 1 to 3 Credit Hour.
A course designed to present new and emerging areas of engineering. The course may also be used to present areas not normally taught in the College. Course requirements vary with the topic and instructor. Offered as needed or as appropriate.

Repeatability: This course may be repeated for additional credit.

CEE 4072. Update and Assessment. 3 Credit Hours.
The course objective is to facilitate the process of Civil Engineering, Senior-Level Students preparing for and taking the NCEES Fundamentals of Engineering (FE) Examination. Students will take in-class examinations on each review topic.

Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits

Repeatability: This course may not be repeated for additional credits.

CEE 4201. Transportation Systems Management. 3 Credit Hours.
This course covers cost-effective techniques for the rebuilding of deteriorated transportation systems, pavement management and traffic systems management; extensive use of advanced computer software packages.

Repeatability: This course may not be repeated for additional credits.

CEE 4211. Bridge Engineering. 3 Credit Hours.
Design criteria, loads, construction techniques, state codes, superstructure components design-modeling and analysis, method, rating, computer software, detailing, new bridge, replacement, widening, rehabilitation, state codes, technical proposal, structural planning, feasibility studies, preliminary and final design, and post design services.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
CEE 3441|Minimum Grade of D-|May not be taken concurrently.

CEE 4221. Intelligent Transportation Systems. 3 Credit Hours.
To understand the multidimensional upgrades needed for highway and vehicles to develop intelligent transportation systems. The new system should be able to handle higher traffic safely in lesser time. Several case studies are an integral part of the course.

Repeatability: This course may not be repeated for additional credits.

CEE 4231. Airport Engineering. 3 Credit Hours.
This course deals with the various aspects of airport engineering, planning, design and development of 21st century airports. The course covers airport master and system planning, airside layout, landside access design, passenger and cargo facilities, terminal design, drainage and pavement design.

Repeatability: This course may not be repeated for additional credits.

CEE 4244. Introduction to Geosynthetics. 3 Credit Hours.
This course will enhance your critical understanding of Geosynthetic Materials used in civil engineering applications and develop the knowledge and skills required for designing and applying geosynthetic materials in civil engineering and environmental applications. Geosynthetics properties, testing of properties, design of geotextiles, geogrids, geonets, and geomembranes for applications in separation, pavement design, embankment and retaining wall reinforcement, soil stabilization, filtration, drainage and liquid barrier, construction guidelines and case histories. The module will also develop critical understanding of the processes and materials used for the manufacture of geosynthetic materials.

Repeatability: This course may not be repeated for additional credits.

CEE 4301. Construction Administration. 3 Credit Hours.
The engineering and construction industry; basis of construction contracting; organizational structure and its functions; management structure and its functions, office administration, employment practices and labor relations; organizational financing and accounting; safety practices, risk management, and industrial insurance.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
CEE 3311|Minimum Grade of C-|May not be taken concurrently.
CEE 4302. Engineering Project Management. 3 Credit Hours.
Overview of the basic principles underlying all methods of project management, including project estimating, planning and scheduling, budgeting, cost accounting and cost control, project documentation, tracking and resource leveling. Utilization of project management software packages for selected civil engineering projects. Different types of projects, organizing the project management functions, setting up the project team, starting up and managing engineering projects and ensuring the effective completion of the project on time, within budget and meeting specifications.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CEE 3311|Minimum Grade of C-|May not be taken concurrently.

CEE 4303. Construction Financial Management. 3 Credit Hours.
Overview of the basic principles underlying all methods of project management and financial accounting methods, construction cost accounting systems, construction project costing approaches, project budgeting, financial reporting procedure. Computer applications as required.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CEE 3311|Minimum Grade of C-|May not be taken concurrently.

CEE 4312. Construction Equipment Management. 3 Credit Hours.
Concepts and theories of construction equipment operation and ownership costs and their relationship to production systems. Production planning and Productivity Analysis. Analysis of depreciation and fixed costs for equipment pricing on construction projects. Selection and use of construction equipment. Equipment economics and financing.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CEE 3311|Minimum Grade of C-|May not be taken concurrently.

CEE 4321. Geotechnical Engineering. 3 Credit Hours.
Soil testing, site investigation, design of both shallow and deep foundations, bulkheads, soil-structure interaction and advanced topics in soil behavior and stability. Students are required to submit lab reports on the test results of various materials.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CEE 3331|Minimum Grade of D-|May not be taken concurrently.

CEE 4421. Structural Dynamics. 3 Credit Hours.
This course is designed for civil engineering students interested in pursuing careers in Structural Engineering. The course will enable students to explain the dynamic equilibrium of a structural system under dynamic loading; formulate equations of motion for single and multi-degree-of-freedom structures subjected to various dynamic loads; compute responses of structural systems to harmonic, pulse and earthquake loads; use spectral analysis and numerical methods to compute the response of structures to dynamic loading; recognize the basis for building code provisions related to dynamic loading; and use and evaluate modern commercial dynamic analysis software.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(CEE 3411|Minimum Grade of D-|May not be taken concurrently
AND ENGR 2332|Minimum Grade of D-|May not be taken concurrently
AND MATH 3041|Minimum Grade of D-|May not be taken concurrently).

CEE 4431. Behavior and Design of Steel Structures. 3 Credit Hours.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CEE 3441|Minimum Grade of D-|May not be taken concurrently.

CEE 4432. Behavior and Design of Reinforced Concrete Structures. 3 Credit Hours.
Behavior, analysis, and design of advanced reinforced concrete structures and components including columns subjected to flexure in one or two directions, slender columns, floor systems including two-way slabs, and analysis, design application using modern software.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CEE 3441|Minimum Grade of D-|May not be taken concurrently.

CEE 4433. Behavior and Design of Masonry Structures. 3 Credit Hours.
Masonry materials, structural behavior of masonry assemblages, deformational characteristics of brick, block, and natural stone masonry. Performance of load-bearing wall systems, design of unreinforced and reinforced masonry members including beams, columns and pilasters, and walls; special design and construction topics; application of design to low and high-rise masonry buildings.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CEE 3411|Minimum Grade of D-|May not be taken concurrently.
CEE 4443. Finite Element Analysis. 3 Credit Hours.
Covers application of modern, computer-aided graphics techniques and the use of state-of-the-art, computer-aided design/drafting package(s) for finite
element modeling. Includes 3-D modeling, solid modeling, shading, and rendering; and file transfer.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: (CEE 3411|Minimum Grade of D-|May not be taken concurrently AND CEE 3412|Minimum Grade of D-|May not be taken concurrently).

CEE 4445. Earthquake Engineering and Seismic Design. 3 Credit Hours.
Basic knowledge of and introduction to earthquake engineering, seismic design and analysis methods, and seismic design based on International
Repeatability: This course may not be repeated for additional credits
Pre-requisites: CEE 4421|Minimum Grade of D-|May not be taken concurrently.

CEE 4531. Life Cycle Assessment and Carbon Footprinting. 3 Credit Hours.
Life Cycle Analysis (LCA) examines the environmental impacts of products, processes and policies beyond their direct production. Cradle to grave
analysis in this manner provides the full picture needed to understand the true impact. This course provides an overview of Life Cycle Assessment
principles and practice in relation to environmental and energy concerns. Regulatory and economic decision support tools and software analysis
packages will be included. The course is structured such that students will start an LCA from the beginning of the course and progress on it as topics are
covered.
Repeatability: This course may not be repeated for additional credits.

CEE 4622. Fate Pollutants in Subsurface Environments. 3 Credit Hours.
This course focuses on integrated chemical, physical, and microbiological principles of contaminant fate and transport processes necessary in the use
of engineered approaches toward selecting and implementing subsurface cleanup options. It also covers abiotic processes, biotic processes, empirical
models, and vulnerability mapping.
Repeatability: This course may not be repeated for additional credits.

CEE 4623. Contaminant Dynamics in Urban Streams. 3 Credit Hours.
Contaminant Dynamics in Urban Streams is designed to teach undergraduate students fundamental concepts of solute exchange at the air:water
interface and the water:sediment interface. These systems are by definition boundary or edge systems and are therefore exceptionally important to
aquatic ecosystem functioning. After briefly discussing the air:water interface in rivers and lakes, the course will focus on the water:sediment interface.
It is here that steep gradients in chemical concentration can be found and significant nutrient cycling occurs. In addition, studies have shown that
significant ecosystem productivity and respiration occurs within the bed sediments of flowing water. The course will discuss the concept of transient
storage and hyporheic exchange; issues surrounding modeling of transient storage and hyporheic exchange; phosphorus and nitrogen biogeochemistry
within the hyporheic zone; and biotic/abiotic nutrient cycling.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: (CHEM 1031|Minimum Grade of C-|May not be taken concurrently AND (CEE 4621|Minimum Grade of C-|May not be taken concurrently OR CEE 4631|Minimum Grade of C-|May not be taken concurrently).

CEE 4631. Environmental Hydrology. 3 Credit Hours.
A study of the physical laws affecting the occurrence, distribution, movement, storage, and contamination of water in watersheds. The physics of surface
and subsurface circulation and storage of water and the transport of contaminants in watersheds, soils, aquifers, rivers, the ocean, and the atmosphere.
The laws and equations which govern the recharge, flow, storage, and discharge of water in natural environments. The laws and equations governing
the occurrence, absorption, propagation and fate of contaminants in natural environments. Hydrologic effects of global climate change. Engineering
methods for the sustainable use of water resources. Engineering methods for the containment and treatment of surface and groundwater pollution, and
the restoration of aquifers.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: (MATH 3041|Minimum Grade of D-|May not be taken concurrently AND (ENGR 3553|Minimum Grade of C-|May not be taken concurrently).
CEE 4641. Urban Streams and Stormwater Management. 3 Credit Hours.
Stormwater management has become a significant issue in recent years. In the past, the typical thinking was ‘get it out of my town’ which resulted in downstream communities suffering the brunt of poor or inadequate management. In fact, only the rate of runoff was addressed, not the volume, nor the quality of that runoff. In urban areas, the volume of runoff increases significantly due to the additional impervious cover (e.g. pavement and rooftops) and urban stormwater runoff causes water quality degradation due to excess amounts of nutrients, metals, bacteria and sediment. This course will address the impacts of improperly controlled runoff on urban streams and how the rate, volume and quality of urban stormwater runoff can be properly controlled through appropriate Best Management Practice (BMP) implementation.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Civil Engineering, Electrical Engineering, Environmental Engineering, Mechanical Engineering

Repeatability: This course may not be repeated for additional credits
Pre-requisites: (CEE 3711|Minimum Grade of C-|May not be taken concurrently) AND (CEE 4621|Minimum Grade of C-|May not be taken concurrently) OR (CEE 4631|Minimum Grade of C-|May not be taken concurrently).

CEE 4711. Air Pollution Control System. 3 Credit Hours.
Principles of design and operation of the major categories of air pollution control equipment. Theory and principles are presented to reinforce extensive application and design components.

Repeatability: This course may not be repeated for additional credits
Pre-requisites: (ENGR 3553|Minimum Grade of C-|May not be taken concurrently) AND (PHYS 1062|Minimum Grade of C-|May not be taken concurrently).

CEE 4721. Water and Wastewater Systems Design. 3 Credit Hours.
Unit operations in water treatment, design objectives and parameters of water treatment; coagulation and flocculation; filtration plant design; physical unit operations; biological unit processes; design of facilities for biological treatment of waste water.

Repeatability: This course may not be repeated for additional credits
Pre-requisites: (CEE 3711|Minimum Grade of D-|May not be taken concurrently) AND (ENGR 3553|Minimum Grade of C-|May not be taken concurrently).

CEE 4722. Water/Wastewater Lab. 1 Credit Hour.
Quantitative laboratory studies of operations such as coagulation/flocculation, adsorption/ion exchange, filtration, disinfection, biological oxidation, advanced oxidation processes, and gas transfer. Laboratory safety and technical writing skills are emphasized. The course will include field trips to water and wastewater treatment plants as well as a solid waste management facility.

Repeatability: This course may not be repeated for additional credits
Pre-requisites: CEE 4721|Minimum Grade of C-|May be taken concurrently.

CEE 4725. Environmental Systems Design. 3 Credit Hours.
Systems-based design and integration of various unit operations at treatment plants dealing with potable water, industrial wastewater, municipal wastewater, high purity industrial water, groundwater, and soil remediation.

Repeatability: This course may not be repeated for additional credits
Pre-requisites: (CEE 3712|Minimum Grade of C-|May not be taken concurrently) AND (CEE 4721|Minimum Grade of C-|May not be taken concurrently).

CEE 4731. Solid & Hazardous Waste Management. 3 Credit Hours.
This course covers the principles of integrated solid waste management. The planning and engineering principles needed to address the growing and increasingly intricate problem of controlling and processing the refuse (solid waste) created by urban societies. Federal regulations and management practices associated with hazardous waste are also covered. Situations dealing with real world settings are covered through worked examples and field trips to solid waste management facilities. NOTE: Prior to spring 2010, the course title was "Solid & Hazardous Waste Engineering."

Repeatability: This course may not be repeated for additional credits
Pre-requisites: CHEM 1031|Minimum Grade of C-|May not be taken concurrently.

CEE 4741. Professional Issues I. 1 Credit Hour.
This environmental engineering seminar series will focus on contemporary environmental topics, innovation, entrepreneurship, and life-long skills.

Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may not be repeated for additional credits.

CEE 4742. Professional Issues II. 1 Credit Hour.
This environmental engineering seminar series will focus on contemporary environmental topics, innovation, entrepreneurship, and life-long skills.

Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may not be repeated for additional credits.
CEE 4761. Environmental Chemistry. 3 Credit Hours.
This is an advanced course focusing on examination of processes that affect the behavior and fate of anthropogenic organic contaminants in aquatic environments. The lectures will begin with intermolecular interactions and thermodynamic principles governing the kinetics of some of the important chemical and physicochemical transformation reactions of organic contaminants. From this class, students will learn to predict chemical properties and to apply the knowledge of chemical properties and transformation reactions to assess the environmental fate of organic contaminants.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CHEM 2201|Minimum Grade of C-|May not be taken concurrently.

CEE 4762. Environmental Organic Chemistry. 3 Credit Hours.
This is an advanced course focusing on examination of processes that affect the behavior and fate of anthropogenic organic contaminants in aquatic environments. The lectures will focus on intermolecular interactions and thermodynamic principles governing the kinetics of some of the important chemical and physiochemical transformation reactions of organic contaminants.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CHEM 2201|Minimum Grade of C-|May not be taken concurrently.

CEE 4773. Sustainability Aspects of Water Supply and Wastewater Treatment. 3 Credit Hours.
Major environmental, economic and social trends are influencing the application of sustainability principles within the engineering profession. This course will examine the sustainability principles that will transform future engineering practice regarding drinking water supply and the treatment of wastewater. The term, wastewater, will be replaced by one more representative of the fact that ‘wastewater’ is in fact a largely untapped source of raw materials. It is in the areas of energy recovery, small molecule harvesting, and the water energy nexus where the next generation of environmental engineers will have a major impact on meeting societal needs regarding the provision of adequate drinking water as well as industrial requirements for this increasingly scarce resource. The course will introduce the underlying principles of sustainability directly relevant to meeting this need. Case studies will evaluate the above mentioned principles and the applicable areas of energy, chemical intermediates, and reclamation of previously used water, with a focus on dealing with emerging microconstituents in the water environment.
Repeatability: This course may not be repeated for additional credits.

CEE 4811. Advanced Soil Mechanics. 3 Credit Hours.
Advanced concepts related to behavior of soil as an engineering material. Topics include consolidation magnitude and time rate, evaluation of secondary compression, mitigation of consolidation of settlements, shear strength of soils and other geologic materials, principles of critical state soil mechanics, and normalization of undrained shear strength.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CEE 3331|Minimum Grade of C-|May not be taken concurrently.

CEE 4821. Foundation Engineering. 3 Credit Hours.
Principles of foundation engineering and design. Topics include soil stress distributions, bearing capacity of shallow (footings, mats) and deep foundations (driven piles, drilled shafts), tolerable settlements, construction techniques, and field quality control.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CEE 3331|Minimum Grade of C-|May not be taken concurrently.

CEE 4822. Earth Retaining Systems. 3 Credit Hours.
Principles related to design of earth retaining systems and stability of earth slopes. Topics include lateral earth pressure theory, temporary and permanent retaining structures, in-situ reinforcement, and braced evacuations. Shear strength of cohesive and granular soils and slope stability analysis using limited equilibrium, design charts and numerical methods.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CEE 3331|Minimum Grade of C-|May not be taken concurrently.

CEE 4823. Geotechnical Earthquake Engineering. 3 Credit Hours.
An introduction to seismology and earthquake hazards in geotechnical engineering. Topics include plate tectonics and earthquake faulting, strong ground motions, dynamic soil properties, and characterization of design ground motions based on deterministic and probabilistic seismic hazard analysis. Analysis of earthquake-induced ground failures, seismic design of earth retaining systems and slopes, and effects of soil-structure interaction.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CEE 3331|Minimum Grade of C-|May not be taken concurrently.

CEE 4871. Fundamentals of Engineering in Civil Engineering. 1 Credit Hour.
Review of subject areas in preparation for the Fundamentals of Engineering examination in Civil Engineering.
Repeatability: This course may not be repeated for additional credits.
CEE 4882. Independent Study in Civil Engineering. 2 to 5 Credit Hours.
Student may complete a regular course during semester the course is not offered to meet prerequisite or graduation requirements. NOTE: An instructor is assigned to supervise the student.
Repeatability: This course may be repeated for additional credit.

CEE 4883. Directed Study in Civil Engineering. 1 to 4 Credit Hour.
An opportunity to study specialized topics not covered in currently available courses and providing significant progress towards the technical/professional objectives of the program. An instructor is assigned to define the scope and direct, supervise, and evaluate student progress.
Repeatability: This course may be repeated for additional credit.

CEE 4891. Independent Research in Civil Engineering. 2 to 5 Credit Hours.
A project assigned with the approval of the department chair and conducted under the supervision of a faculty sponsor.
Repeatability: This course may be repeated for additional credit.

Coll Health Prof & Social Work (CHP)

Courses

CHP 3385. Diamond Peer Teachers - Internship I. 1 Credit Hour.
The Diamond Peer Teachers Program provides students with a mentored university-level teaching experience in their major. Course requirements include participation in the three-day pre-semester Teaching Institute and regular participation in the Peer Teachers support group throughout the semester. Peer Teachers provide supplemental instruction in first- and second-year courses, promote student engagement, and model successful study habits and academic preparedness for students with whom they work. For Diamond Peer Teachers only.
Repeatability: This course may be repeated for additional credit.

CHP 3386. Diamond Peer Teachers - Internship II. 1 Credit Hour.
The Diamond Peer Teachers Program provides students with a mentored university-level teaching experience in their major. Course requirements include participation in the three-day pre-semester Teaching Institute and regular participation in the Peer Teachers support group throughout the semester. Peer Teachers provide supplemental instruction in first- and second-year courses, promote student engagement, and model successful study habits and academic preparedness for students with whom they work. For Diamond Peer Teachers only.
Repeatability: This course may be repeated for additional credit.

College of Education (COED)

Courses

COED 3385. Diamond Peer Teachers - Internship I. 1 Credit Hour.
The Diamond Peer Teachers Program provides students with a mentored university-level teaching experience in their major. Course requirements include participation in the three-day pre-semester Teaching Institute and regular participation in the Peer Teachers support group throughout the semester. Peer Teachers provide supplemental instruction in first- and second-year courses, promote student engagement, and model successful study habits and academic preparedness for students with whom they work. For Diamond Peer Teachers only.
College Restrictions: Must be enrolled in one of the following Colleges: Education
Repeatability: This course may be repeated for additional credit.

COED 3386. Diamond Peer Teachers - Internship II. 1 Credit Hour.
The Diamond Peer Teachers Program provides students with a mentored university-level teaching experience in their major. Course requirements include participation in the three-day pre-semester Teaching Institute and regular participation in the Peer Teachers support group throughout the semester. Peer Teachers provide supplemental instruction in first- and second-year courses, promote student engagement, and model successful study habits and academic preparedness for students with whom they work. For Diamond Peer Teachers only.
College Restrictions: Must be enrolled in one of the following Colleges: Education
Repeatability: This course may be repeated for additional credit.

College of Liberal Arts (CLA)

Courses

CLA 1001. The CLA First Year Experience. 1 Credit Hour.
The CLA First Year Experience is a one credit, nine week course that introduces students to the rich diversity of opportunities and resources available to them both university wide and especially in the College of Liberal Arts. The course is designed to help students in making the often-difficult transition to college life and college level coursework. The primary goal of the course is to give students the tools to make responsible decision about their academic careers and better understand how to navigate the complex university system. This course covers a wide array of topics, including: time management, study skills, major/minor selection, internship opportunities, study abroad programs, faculty guidance and course planning/sequencing. It uses student-initiated goals as the context through which to view these topics and many other areas critical to success in the first year of college and beyond.
Repeatability: This course may not be repeated for additional credits.
CLA 1002. Professional Development for Liberal Arts Majors. 1 Credit Hour.
Given the rapidly changing nature of the world economy, a degree in the liberal arts has never been more valuable. This seminar will focus on how you
as a student in the College of Liberal Arts can best leverage your unique skills to prepare for a career in a broad array of fields, including government,
non-profit, corporate, human services, and education. You will participate in group discussions, exercises, and projects that will help you determine
which sectors and occupations best match your interests and aptitudes. You will also learn what coursework and additional credentials might enhance
the likelihood of obtaining the type of position you want. You will develop an application-ready résumé and will be well prepared for networking and
professional interviews. Upon successful completion of this course you will possess the ability to communicate effectively and professionally and to
employ different strategies to search for internship and career opportunities.
Repeatability: This course may not be repeated for additional credits.

CLA 1009. Discovering the Liberal Arts. 2 Credit Hours.
The courses in this series provide a sweeping overview of the liberal arts curriculum and connections with the world of work. Through an interdisciplinarity
approach, students are exposed to examples of the content as well as the tools of the disciplines while learning how a liberal arts education translates
into a career in business, law, health care, education, government and more. Each time the courses are offered they focus on a particular theme such
as popular culture, conflict resolution and globalization, and faculty from a variety of departments are invited to present their perspectives. NOTE:
Participation in a Discovery Series course helps students acquire a better understanding of the liberal arts majors and associated careers, and the skills
needed to plan an effective course of study.
Repeatability: This course may not be repeated for additional credits.

CLA 1701. The Washington Center Leadership Forum. 3 Credit Hours.
This course is restricted to participation in The Washington Center program. Students participate in a combination of academic seminars and intern in
the Washington DC area. More details can be found at www.cla.temple.edu/ipa.
Repeatability: This course may not be repeated for additional credits.

CLA 1801. Career Seminar in the Liberal Arts. 3 Credit Hours.
Specially designed workshops will walk students through the various stages of career search strategies: informational interviewing, identifying
appropriate positions, writing effective cover letters and resumes, obtaining references, and identifying employer expectations and interview preparation,
all in a way that helps the student identify and promote the skills learned in their liberal arts major(s). This course examines several workplace settings
including: working in the non-profit sector, corporate environment, research, education, and mental health facilities. Most sections of this course will
include 3 or more of these modules, depending on student interest.
Repeatability: This course may not be repeated for additional credits.

CLA 1919. Honors Discovering the American Legal System. 2 Credit Hours.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.

CLA 2010. Special Topics in Liberal Arts I. 1 Credit Hour.
Specific topics vary each semester. Contact department chair for information.
Repeatability: This course may be repeated for additional credit.

CLA 2020. Special Topics in Liberal Arts II. 2 Credit Hours.
Specific topics vary each semester. Contact department chair for information.
Repeatability: This course may be repeated for additional credit.

CLA 2030. Special Topics in Liberal Arts III. 3 Credit Hours.
Specific topics vary each semester. Contact department chair for information.
Repeatability: This course may be repeated for additional credit.

CLA 2685. Internship. 1 to 12 Credit Hour.
Consult with instructor.
Repeatability: This course may be repeated for additional credit.

CLA 2701. The Washington Center Seminar. 3 Credit Hours.
This course is restricted to participation in The Washington Center program. Students participate in a combination of academic seminars and intern in
the Washington DC area. More details can be found at www.cla.temple.edu/ipa.
Repeatability: This course may not be repeated for additional credits.

CLA 2785. The Washington Center Internship. 3 to 9 Credit Hours.
This course is restricted to participation in The Washington Center program. Students participate in a combination of academic seminars and intern in
the Washington DC area. More details can be found at www.cla.temple.edu/ipa.
Repeatability: This course may not be repeated for additional credits.
CLA 3075. Corporate Interdisciplinary Seminar. 3 Credit Hours.
Drawing on the literature from the disciplines of sociology, psychology, economics, history and others, this interdisciplinary seminar is the academic component accompanying an internship in the corporate sector for CLA juniors and seniors. It will appeal to those students interested in future employment in for-profit companies regardless of CLA major. These upper division students will learn to understand the importance and relevance in corporate settings of the skills developed through their liberal arts academic experience. NOTE: Junior or senior standing in CLA (preference given to seniors); 3.0 cumulative GPA; approval of instructor required.
Repeatability: This course may not be repeated for additional credits.

CLA 3085. Corporate Interdisciplinary Internship. 3 Credit Hours.
In this internship, Liberal Arts students will have the opportunity to work for ten hours a week in a for-profit industry such as financial services, healthcare, insurance, technology, human services, and communication. They will work and interact with a variety of departments including legal, human resources, marketing, public relations, technology, customer service, and community relations. NOTE: Junior or senior standing in CLA (preference given to seniors); 3.0 cumulative GPA; approval of instructor required.
Repeatability: This course may be repeated for additional credit.

CLA 3385. Diamond Peer Teachers - Internship I. 1 Credit Hour.
The Diamond Peer Teachers Program provides students with a mentored university-level teaching experience in their major. Course requirements include participation in the three-day pre-semester Teaching Institute and regular participation in the Peer Teachers support group throughout the semester. Peer Teachers provide supplemental instruction in first- and second-year courses, promote student engagement, and model successful study habits and academic preparedness for students with whom they work. For Diamond Peer Teachers only.
Repeatability: This course may be repeated for additional credit.

CLA 3386. Diamond Peer Teachers - Internship II. 1 Credit Hour.
The Diamond Peer Teachers Program provides students with a mentored university-level teaching experience in their major. Course requirements include participation in the three-day pre-semester Teaching Institute and regular participation in the Peer Teachers support group throughout the semester. Peer Teachers provide supplemental instruction in first- and second-year courses, promote student engagement, and model successful study habits and academic preparedness for students with whom they work. For Diamond Peer Teachers only.
Repeatability: This course may be repeated for additional credit.

CLA 3900. Honors Interdisciplinary Special Topics I. 3 Credit Hours.
Variable offerings on special topics that explore topics or issues from an interdisciplinary perspective. Check with the Honors Program office and/or web site (www.temple.edu/honors) for details on Special Topics courses. NOTE: Restricted to Honors students only.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.

CLA 4900. Honors Interdisciplinary Special Topics II. 3 Credit Hours.
Variable offerings on special topics that explore topics or issues from an interdisciplinary perspective. Check with the Honors Program office and/or web site (www.temple.edu/honors) for details on Special Topics courses.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.

CLA 4901. Honors Interdisciplinary Research Methods. 3 Credit Hours.
This course is designed for upper-level Honors students interested in developing an interdisciplinary research project. This course introduces the student to the techniques and disciplines used in interdisciplinary research in addition to how to design such research, how to communicate with specialists in other fields, and how to use existing sources of data to address an interdisciplinary problem or issue selected by the student. Students will be able to pursue research topics of their own design, and use this course to develop the topic of their Honors Thesis.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.

CLA 4902. Honors Interdisciplinary Thesis. 3 Credit Hours.
Designed as a continuation of Liberal Arts 4901, this course provides the student support during the development of the research project, the writing, completion, and presentation of the Honors Thesis project in interdisciplinary studies.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.

CLA 4910. Honors Humanities Special Topics. 3 Credit Hours.
Variable offerings on special topics that explore topics or issues in the humanities. Check with the Honors Program office and/or web site (www.temple.edu/honors) for details on Special Topics courses.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.
CLA 4911. Honors Humanities Research Methods. 3 Credit Hours.
This course is designed for upper-level Honors students majoring in the humanities. The course focuses on the research methods common to disciplines in the humanities and provides experiences in developing a meaningful research question, understanding the basic tools available, and developing an individual research project. Students will be able to pursue research topics of their own design, and use this course to develop the topic of their Honors Thesis.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.

CLA 4912. Honors Humanities Thesis. 3 Credit Hours.
Designed as a continuation of Liberal Arts 4911, this course provides the student support during the development of the research project, the writing, completion, and presentation of the Honors Thesis project in the humanities.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.

CLA 4920. Honors Social Science Special Topics. 3 Credit Hours.
Variable offerings on special topics that explore topics or issues in the social sciences. Check with the Honors Program office and/or web site (www.temple.edu/honors) for details on Special Topics courses.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.

CLA 4921. Honors Social Science Research Methods. 3 Credit Hours.
This course is designed for upper-level Honors students majoring in the social sciences. The course focuses on the research methods common to disciplines in the social sciences and provides experiences in developing a meaningful research question, understanding the basic tools available, and developing an individual research project. Students will be able to pursue research topics of their own design, and use this course to develop the topic of their Honors Thesis.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.

CLA 4922. Honors Social Science Thesis. 3 Credit Hours.
Designed as a continuation of Liberal Arts 4921, this course provides the student support during the development of the research project, the writing, completion, and presentation of the Honors Thesis project in the social sciences.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.

College of Science and Technology (SCTC)

Courses

SCTC 0712. Mathematical Concepts I. 0 Credit Hours.
The goal of this course is to give students a firm foundation in the topics of intermediate algebra as a basis for subsequent courses in mathematics and other disciplines. Included in this goal is the development and strengthening of one's skill in interpreting and solving application problems. Intermediate Algebra begins with a presentation of topics of Algebra including use of variables, exponents, order of operations. Further topics include solving linear equations and inequalities, understanding and graphing linear equations in two variables, finding the equation of a line, applying the laws of exponents, performing operations with polynomials, factoring polynomials, and solving polynomial equations. The skill of solving equations will be extended to formulating and solving equations of applied problems. Students will be offered the opportunity to use MyMath Test with instructor support as they work through the course material and will be offered the opportunity to re-take the Math Placement Test upon completion of the course. Note: The fee for this course may be found in the Detailed Class Information, which can be reached from the class schedule listing.

SCTC 0721. Mathematical Concepts II. 0 Credit Hours.
This course emphasizes techniques of problem solving using algebraic concepts. This course will prepare students for Pre-calculus by review of multiple algebraic concepts. This course covers polynomial, rational and algebraic expressions, solving linear equations and inequalities, algebra and graphs of quadratic expressions, and an introduction to the concept of a function. Approaches to problem solving will be emphasized. Students will be offered the opportunity to use MyMath Test with instructor support as they work through the course material and will be offered the opportunity to re-take the Math Placement Test upon completion of the course. Note: The fee for this course may be found in the Detailed Class Information, which can be reached from the class schedule listing.
SCTC 0727. Chemical Concepts. 0 Credit Hours.
In this course quantitative practices in chemistry will be emphasized. Topics include empirical and molecular formula, reaction quantities, stoichiometry, thermochemistry and gas properties. Core concepts and principles will be reviewed. A significant component of the course will focus on problem solving skills. A discussion of expectation and test taking practices in preparation for General Chemistry will be provided. Note: The fee for this course may be found in the Detailed Class Information, which can be reached from the class schedule listing.

SCTC 1001. Introduction to Academics in the Sciences. 1 Credit Hour.
This course is typically offered in Fall. Preparation for the academic requirements of science curricula, and development of the skills necessary to succeed in college. A guided exploration of potential career opportunities. There will be guest lecturers. NOTE: Registration for this course is restricted to first semester freshman only. This course meets for the first twelve weeks of the semester.
Class Restrictions: Must be enrolled in one of the following Classes: Freshman 0 to 29 Credits
College Restrictions: Must be enrolled in one of the following Colleges: Science & Technology
Repeatability: This course may not be repeated for additional credits.

SCTC 1189. Step 1: Inquiry Approaches to Teaching. 1 Credit Hour.
This course is typically offered in Fall and Spring. This is the first course in the TUteach pedagogy sequence. This course will provide students with an opportunity to explore teaching in science or mathematics as a career; early field experiences in teaching; and an introduction to the theory and practice necessary to prepare and deliver excellent instruction. To obtain first-hand experience with planning and implementing inquiry-based curriculum, students will teach science/mathematics lessons (designed in NSF-funded project) in elementary classrooms in a local school district. Students will attend 1.5 hours of class on campus each week, where they will learn to prepare and deliver excellent science/mathematics lessons. Students, working in teams, will present three lessons in a third, fourth, fifth or sixth grade classroom during the semester. These classrooms are selected both for the diversity of the student body and for the quality of the classroom teacher. Each team of students will have a district classroom teacher and a TUteach master teacher who will work with them to improve their teaching skills as the semester progresses. The district classroom teacher will remain in the classroom at all times and provide immediate feedback on the quality of the instruction. A tuition remission stipend will be paid to those students who successfully complete this course.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
MATH 1021 | Minimum Grade of C | May not be taken concurrently
OR MATH 1022 to 4999 | Required Courses: 1 | Minimum Grade of C | May be taken concurrently
OR MC5 Y | May not be taken concurrently
OR MC6 Y | May not be taken concurrently
OR MA03 Y | May not be taken concurrently
OR STAT 1001 | Minimum Grade of C | May not be taken concurrently
OR STAT 1102 | Minimum Grade of C | May not be taken concurrently
OR STAT 1902 | Minimum Grade of C | May not be taken concurrently.

SCTC 1289. Step 2: Inquiry Based Lesson Design with Strategies for English Learners. 1 Credit Hour.
This course is typically offered in Fall & Spring. This is the second course in the TUteach pedagogy sequence. This course offers students the opportunity to explore science or mathematics teaching as a career, first-hand experience planning inquiry-based curriculum, and an introduction to theory, research and practice in teaching English language learners in the middle grades. Students will explore the philosophies of bilingual and ESL education as well as different program models that address the education of linguistically diverse students. Students attend 1.5 hours of class on campus each week, where they learn to design and deliver inquiry-based lessons with an understanding of how to adapt standards-based lessons for English language learners. Students teach three lessons in middle grade classroom during the semester. Students will also develop cross-cultural competence through interactions with ELLs, teachers and school staff in the middle grades. After Step 2, students can decide whether they want to pursue teacher certification through the TUteach program.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
SCTC 1189 | Minimum Grade of C | May not be taken concurrently.
SCTC 1301. Problem Solving in Science. 2 Credit Hours.
This course is typically offered in Fall and Summer II. <p>As a gateway into science majors, this introductory course will show students how to apply critical thinking and build problem solving skills in all science disciplines. We will look at a vast array of actual problems that you will be confronted with in courses in Biology, Chemistry, Computer Science, Geology, Mathematics and Physics. Problem solving processes and techniques that will be beneficial in solving complex and intricate problems that naturally arise in the sciences will be examined. Rote problems designed to give you practice at learning subject matter are straightforward. Actual science takes place, however, in conceptual, non-formulaic problems, which form the essence of the course.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 0701 to 0702|Required Courses:1|Minimum Grade of C|May not be taken concurrently
OR MATH 0800 to 4999|Required Courses:1|Minimum Grade of C|May be taken concurrently
OR MC3 Y|May not be taken concurrently
OR MC4 Y|May not be taken concurrently
OR MC5 Y|May not be taken concurrently
OR MC6 Y|May not be taken concurrently
OR STAT 1001|Minimum Grade of C|May not be taken concurrently
OR STAT 1102|Minimum Grade of C|May not be taken concurrently
OR STAT 1902|Minimum Grade of C|May not be taken concurrently

SCTC 1385. Community Engagement: Science and Mathematics Tutoring Mentoring and Service. 1 to 3 Credit Hour.
Students, sophomores and above, will apply in a real world setting, teaching, tutoring, mentoring and/or curriculum development skills. Students will work with the instructor to identify a set of background readings on: a) science and math background content, b) populations to be served, particular needs of these populations, and proven approaches to tutoring, mentoring, or developing curriculum for inquiry-based science or mathematics lessons for in-school or out-of-school activities to be offered, and c) the relationship of science to society for the particular placement. After this background research, students will develop a proposal, carry out the teaching/tutoring/mentoring/curriculum development they proposed, and reflect on the efficacy of their project.
Repeatability: This course may not be repeated for additional credits.

SCTC 1389. Step 1 and 2: Inquiry-Based Lesson Design in Science and Mathematics Modified for English Learners. 2 Credit Hours.
This course is typically offered in Fall and Spring. <p>This is the first course in the TUteach pedagogy sequence. This course will provide students with an opportunity to explore teaching in science or mathematics as a career: early field experiences in teaching; and an introduction to the theory and practice necessary to prepare and deliver excellent instruction. Students will attend 3 hours of class on campus each week, where they will learn to prepare and deliver excellent inquiry-based science/mathematics lessons. Each team of students will have a district classroom teacher and a TUteach master teacher who will work with them to improve their teaching skills as the semester progresses. The district classroom teacher will remain in the classroom at all times and provide immediate feedback on the quality of the instruction. Students will become familiar with exemplary science curricula for the middle school setting. This course also offers students an introduction to theory, research, and practice in teaching English language learners in the middle grades. Lesson plans will be designed using a modified SIOP (Sheltered Instruction Observation Protocol) model, a model teachers use to differentiate instruction for ELLs. As a result, they will gain an understanding of how to adapt standards-based lessons for English language learners. Students will also develop cross-cultural competence through interactions with ELLs, teachers and school staff in the middle grades. As a result of the SCTC 1389 experiences, students generally are able to make a decision as to whether they want to pursue a pathway to teacher certification through the TUteach program. Students will be required to obtain all clearances and background checks needed to work in schools—please see the TUteach advisor or coordinator for details immediately upon registering.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 1021|Minimum Grade of C|May not be taken concurrently
OR MATH 1022 to 4999|Required Courses:1|Minimum Grade of C|May be taken concurrently
OR MC5 Y|May not be taken concurrently
OR MC6 Y|May not be taken concurrently
OR MA03 Y|May not be taken concurrently
OR STAT 1001|Minimum Grade of C|May not be taken concurrently
OR STAT 1102|Minimum Grade of C|May not be taken concurrently
OR STAT 1902|Minimum Grade of C|May not be taken concurrently

SCTC 2001. Introduction to Academics in the Sciences for Transfer Students. 1 Credit Hour.
This course introduces new transfer students to the academic requirements of science curricula, and provides guided exploration of the opportunities and resources at Temple University. Topics will include exploring individual strengths, academic majors, potential career paths, obtaining internships, research opportunities, getting involved on campus, and graduate school preparation. Additionally, students will become familiar with the Temple community and offices. The topics covered in this seminar will help transfer students develop and meet short and long term career goals.
Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
Repeatability: This course may not be repeated for additional credits.
SCTC 2100. Special Topics in Science and Technology. 1 to 6 Credit Hour.
This course is typically offered in Fall and Spring. This course will challenge students to examine topics in the sciences (Earth Science, Environmental Science, Chemistry, Biology, Physics, Computer and Information Science, Mathematics) and appreciate that the sciences are inter- and cross-disciplinary. Students may also be required to use a variety of problem solving skills to address specific issues related to the topic selected.
Selected topics include current discoveries or analysis of seminal works in various scientific fields.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(BIOL 1111|Minimum Grade of C-|May not be taken concurrently
OR BIOL 1911|Minimum Grade of C-|May not be taken concurrently
OR BIOL 2112|Minimum Grade of C-|May not be taken concurrently
OR BIOL 2912|Minimum Grade of C-|May not be taken concurrently
OR CHEM 1031|Minimum Grade of C-|May not be taken concurrently
OR CHEM 1951|Minimum Grade of C-|May not be taken concurrently
OR CIS 1068|Minimum Grade of C-|May not be taken concurrently
OR CIS 1968|Minimum Grade of C-|May not be taken concurrently
OR EES 2001|Minimum Grade of C-|May not be taken concurrently
OR PHYS 1061|Minimum Grade of C-|May not be taken concurrently
OR PHYS 2021|Minimum Grade of C-|May not be taken concurrently
OR PHYS 2921|Minimum Grade of C-|May not be taken concurrently
AND (MATH 1022|Minimum Grade of C-|May be taken concurrently
OR MATH 1038 to 4999| Required Courses:1|Minimum Grade of C-|May be taken concurrently
OR MC6 Y|May not be taken concurrently).

SCTC 2101. Medical Imaging Physics - Seeing Through Ourselves. 3 Credit Hours.
From practically the very day x-rays were discovered in 1895, the use of physics-based methods to see inside the body without surgery has helped greatly reduce suffering from disease and injury. Accuracy and certainty of diagnosis have continuously improved, and the effectiveness of treatment can easily be monitored. This course will provide descriptions of the basic physical science behind conventional and modern medical imaging methods. Topics include endoscopy, laser light scattering, ultrasound, conventional and tomographic x-ray imaging, PET and other nuclear medicine methods, and MRI.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(CHEM 1022|Minimum Grade of C-|May not be taken concurrently
OR CHEM 1032|Minimum Grade of C-|May not be taken concurrently
OR CHEM 1952|Minimum Grade of C-|May not be taken concurrently
AND (PHYS 1021|Minimum Grade of C-|May not be taken concurrently
OR PHYS 1061|Minimum Grade of C-|May not be taken concurrently
OR PHYS 2021|Minimum Grade of C-|May not be taken concurrently
OR PHYS 2921|Minimum Grade of C-|May not be taken concurrently
OR CIS 2168|Minimum Grade of C-|May not be taken concurrently).

SCTC 3001. History of Science. 3 Credit Hours.
This course is not offered every year. The first two objectives of this course are to give the students a working knowledge of the broad developments in science since the ancient world and to give them familiarity with the concept of the Scientific Method necessary for understanding areas of science not covered in the course. The ultimate objective is to provide students with the skill to evaluate claims and classify them as scientific or un-scientific. Students will take an inquiry-based approach through readings and discussions and will address both the scientific history and its role in controversial social and moral issues such as pollution, child labor in the Industrial Revolution, weapons in wartime, attitudes toward women, and science and religion. The course will survey the genesis of the Scientific Revolution and go on to examine the work of scientists in the 16th century through today.
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may not be repeated for additional credits.

SCTC 3385. Diamond Peer Teachers - Internship I. 1 Credit Hour.
This course is typically offered in Fall and Spring. The Diamond Peer Teachers Program provides students with a mentored university-level teaching experience in their major. Course requirements include participation in the three-day pre-semester Teaching Institute and regular participation in the Peer Teachers support group throughout the semester. Peer Teachers provide supplemental instruction in first- and second-year courses, promote student engagement, and model successful study habits and academic preparedness for students with whom they work. For Diamond Peer Teachers only.
Repeatability: This course may be repeated for additional credit.
SCTC 3386. Diamond Peer Teachers - Internship II. 1 Credit Hour.
This course is typically offered in Fall and Spring. The Diamond Peer Teachers Program provides students with a mentored university-level teaching experience in their major. Course requirements include participation in the three-day pre-semester Teaching Institute and regular participation in the Peer Teachers support group throughout the semester. Peer Teachers provide supplemental instruction in first- and second-year courses, promote student engagement, and model successful study habits and academic preparedness for students with whom they work. For Diamond Peer Teachers only.
Repeatability: This course may be repeated for additional credit.

SCTC 4001. Responsible Conduct of Research. 2 Credit Hours.
This course is not offered every year. The course is designed to expose undergraduate students to the research environment in terms of a research code of conduct and ethical standards. The course is open to senior undergraduate students of all majors with special authorization required. The course has no specific prerequisites and it does not count as a biology major elective. The course will fulfill the requirement for training in responsible conduct of research for students funded by the National Institutes of Health.
Repeatability: This course may not be repeated for additional credits.

SCTC 4321. Entrepreneurship in Science and Technology. 3 Credit Hours.
This course is not offered every year. The theme of this course is identifying opportunity and application. It will demonstrate that in every area of interest, or course of study, there is an entrepreneurial potential. Students will be given the basic knowledge to pursue their ideas and to understand the steps required to finance, promote, staff, and manage a business. The goal, however, is not establishing an enterprise but rather developing the skills to relate interests and opportunities; and to apply knowledge of a particular field to its commercial possibilities. The course will use case studies from diverse fields and discuss specific entrepreneurial ventures. There will also be guest speakers from industry to discuss their entrepreneurial endeavors.
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may not be repeated for additional credits.

SCTC 4351. Paradigms of Scientific Knowledge: Knowledge Discovery from Scientific Data. 3 Credit Hours.
This course is not offered every year. The goal of this course is to teach science students the necessary skills for knowledge discovery from large collections of data. The course is designed to introduce students to various data mining algorithms and illustrate how they can be applied to real-life knowledge discovery problems in sciences. Case studies will be discussed that illustrate application of data mining systems in biology, chemistry and physics. One emphasis of the course will be in teaching students how to use various data mining software to solve various knowledge discovery problems. Through this course, students will develop abilities in problem solving and critical thinking, both of which are necessary for the practice of data mining. This will be accomplished by demonstrating the practical applications of each presented algorithm, by emphasizing each algorithm's limitations, and by assigning research-like course projects.
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may not be repeated for additional credits

Pre-requisites:
CIS 1051|Minimum Grade of C-|May not be taken concurrently
OR CIS 1053|Minimum Grade of C-|May not be taken concurrently
OR CIS 1056|Minimum Grade of C-|May not be taken concurrently
OR CIS 1057|Minimum Grade of C-|May not be taken concurrently
OR CIS 1068|Minimum Grade of C-|May not be taken concurrently
OR CIS 1073|Minimum Grade of C-|May not be taken concurrently

Communication Sciences and Disorders (CSCD)

Courses

CSCD 0815. Language in Society. 3 Credit Hours.
How did language come about? How many languages are there in the world? How do people co-exist in countries where there are two or more languages? How do babies develop language? Should all immigrants take a language test when applying for citizenship? Should English become an official language of the United States? In this course we will address these and many other questions, taking linguistic facts as a point of departure and considering their implications for our society. Through discussions and hands-on projects, students will learn how to collect, analyze, and interpret language data and how to make informed decisions about language and education policies as voters and community members. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: ANTH 0815/0915, Asian Studies 0815, Chinese 0815, EDUC 0815/0915, English 0815, Italian 0815, PSY 0815, Russian 0815, or Spanish 0815.
Course Attributes: GB
Repeatability: This course may not be repeated for additional credits.

CSCD 1001. American Sign Language I. 3 Credit Hours.
The linguistic structure of American Sign Language is taught in this course. Students learn about American deaf culture and the history of the deaf in the United States. This course assumes no prior knowledge of American Sign Language or deaf culture. NOTE: Check school/college policy regarding the use of this course to fulfill the degree's foreign language requirements, if applicable.
Repeatability: This course may not be repeated for additional credits.
CSCD 1002. American Sign Language II. 3 Credit Hours.
This is the second semester of a two-semester sequence in American Sign Language. This class teaches students to reach an advanced beginner level of proficiency in providing and understanding American Sign Language. The course also discusses deaf culture in a global framework. Students must have successfully completed American Sign Language I (CSCD 1001) to enroll in this course. NOTE: Check school/college policy regarding the use of this course to fulfill the degree's foreign language requirements, if applicable.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CSCD 1001|Minimum Grade of C|May not be taken concurrently.

CSCD 1003. American Sign Language III. 3 Credit Hours.
This intermediate level ASL course focuses on interactive experiences with language structures, functions, and vocabulary necessary for building narrative and conversational skills that enable efficient communication in ASL and Deaf Cultural contexts. The course also aims to expand students' range of cultural and personal topics of discussion, and to use the target language meaningfully and creatively.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CSCD 1002|Minimum Grade of C-|May not be taken concurrently
OR CSCD 1902|Minimum Grade of C-|May not be taken concurrently.

CSCD 1004. American Sign Language IV. 3 Credit Hours.
This is the fourth in a sequence of ASL courses, which focuses on expanded interactive experiences with language structures, functions, and vocabulary necessary for efficient communication in ASL and Deaf Cultural contexts. Particular attention is given to enhanced fluency in the use of ASL classifiers, non-manuals, role shift, and spatial mapping within both conversational and more formal situations. Attention is also given to expanding the range of cultural and personal topics of discussion in meaningful and creative ways.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CSCD 1003|Minimum Grade of C-|May not be taken concurrently.

CSCD 1108. Introduction to Linguistics. 3 Credit Hours.
A survey of methods and results in the study of natural language syntax, phonology, semantics, historical change, and dialect variation. English is the primary language of investigation, but facts from other languages are introduced as appropriate. NOTE: Only one of the following two courses may be credited toward the baccalaureate degree: CSCD 1108 (0108); English 2821 (0111).
Repeatability: This course may not be repeated for additional credits.

CSCD 1596. Introduction to Human Communication. 3 Credit Hours.
Summarizes the psychological and biological bases of communication. Compares animal vs. human communication and examines human communication across a range of modalities and contexts. Topics such as verbal vs. nonverbal communication, vocal vs. sign language, normal vs. disordered communication, language acquisition processes, and aspects of social communication are addressed. NOTE: This course is no longer offered.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

CSCD 1901. Honors American Sign Language 1. 3 Credit Hours.
This is an introductory course in American Sign Language that emphasizes beginning receptive and expressive skills. The linguistic structure of American Sign Language (ASL) is emphasized as students gain practical skills. The honors course also emphasizes the ways in which ASL differs from other signed languages used around the world and explores Deaf culture and history. This course assumes no prior knowledge of American Sign Language or Deaf culture. NOTE: Check school/college policy regarding the use of this course to fulfill the degree's foreign language requirements, if applicable.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.

CSCD 1902. Honors American Sign Language 2. 3 Credit Hours.
This is the second semester of a two-semester Honors sequence in American Sign Language. Students in this class achieve an advanced beginner level of expressive and receptive skills in American Sign Language. This course emphasizes genetic and social factors that lead to and follow from a high incidence of deafness within selected communities. Students must have successfully completed Honors American Sign Language 1 (CSCD 1901) to enroll in this course. NOTE: Check school/college policy regarding the use of this course to fulfill the degree's foreign language requirements, if applicable.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CSCD 1901|Minimum Grade of C|May not be taken concurrently.
CSCD 2049. Language and the Brain. 3 Credit Hours.
This course introduces students to the major issues and results in neurolinguistics, the study of the representation of language in the brain. Major topics include localization of language function in the brain, the use of linguistic knowledge in producing and comprehending words and sentences, and the effects of brain damage on language behavior.
Repeatability: This course may not be repeated for additional credits.

CSCD 2111. Language and Race. 3 Credit Hours.
This course investigates the relationship between language and race in order to accurately and objectively evaluate many common beliefs about the connections between the two. How all languages systematically organize sounds, grammar, and meanings with a special emphasis on the structure of African American English is demonstrated. Also investigated is how particular ways of speaking may or may not affect thought patterns or social identity. Public policy issues involving language and race are also examined. NOTE: This course can be used to satisfy the university Core Studies in Race (RS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: RS
Repeatability: This course may not be repeated for additional credits.

CSCD 2197. Communication Deviations and Disorders. 3 Credit Hours.
This introductory course to the field of speech-language pathology examines the impact of communication deviations and disorders on the individual and society, including the disabling nature of various disorders; their prevention, identification, assessment, and treatment; and the ways in which individuals deal with the social, educational, and vocational effects of these disorders. Includes observations within the scheduled class periods.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

CSCD 2201. Research Methods in Communication Sciences. 3 Credit Hours.
Introduces quantitative research methods in the communication sciences. Covers a variety of study domains including field/descriptive, correlational, survey, clinical, ethnographic, and experimental research designs. Students learn various research methods for addressing particular types of research questions. Concepts covered include types of variables, parametric and nonparametric inferential statistics, sampling designs, hypothesis testing, and publication policies.
Repeatability: This course may not be repeated for additional credits.

CSCD 2202. Sociolinguistics. 3 Credit Hours.
Sociolinguistics connects languages with the societies and social situations in which they are used. We study regional and social dialects and the judgments listeners make when they hear language and its variations. This course includes the study of African American Vernacular English as well as other dialects and variants of English. We also study pidgins and creoles and the social situations in which they evolve and their relation to so-called "full-fledged" languages.
Repeatability: This course may not be repeated for additional credits.

CSCD 2209. Phonetics and Phonology. 4 Credit Hours.
This course examines the subsystems of language that govern (1) the physical properties of speech sounds and (2) the cognitive representation and function of speech sounds in the grammatical system that underlies spoken language. The course also focuses on (1) the acquisition of a body of knowledge relating to phonetic taxonomy, (2) the mastery of techniques of data description and analysis in phonetics (the study of speech production & perception), (3) analytical reasoning skills, and (4) techniques of data description and analysis in phonology.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CSCD 1108|Minimum Grade of C|May not be taken concurrently
OR ENG1 Y|May not be taken concurrently.

CSCD 2219. Psycholinguistics. 4 Credit Hours.
The focus of this course is a basic functional knowledge of the lexical and syntactic structure of natural language and an understanding of what is currently known and suggested about how our subconscious knowledge of lexical and syntactic structure is put to use in the comprehension and production of language. The course also focuses on basic linguistic structure underlying human communication, including lexical structure, morphological analysis, syntactic phrase structure, and constituent deletion and displacement.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CSCD 1108|Minimum Grade of C|May not be taken concurrently
OR ENG1 Y|May not be taken concurrently.

CSCD 3233. Basic Speech Science. 4 Credit Hours.
An in-depth study of speech production, including respiration, phonation, articulation, and acoustics. An introduction also to the domain of speech perception. Includes classroom and laboratory instruction, basic readings, and current theoretical papers.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Linguistics, Spch Lang Hearing Science
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CSCD 2209|Minimum Grade of C|May not be taken concurrently.
CSCD 3234. Basic Hearing Science. 4 Credit Hours.
The physics of sound, acoustics, sound measurement, anatomy, and physiology of the auditory periphery, neuroanatomy, and neurophysiology of the auditory central system, and an introduction to psychoacoustics.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Linguistics, Spch Lang Hearing Science
Repeatability: This course may not be repeated for additional credits.

CSCD 3235. Human Neuroscience. 4 Credit Hours.
Introduction to the anatomy, organization, and function of the human nervous system, with an emphasis on the disorders that result from damage to the brain.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Cognitive Neuroscience, Linguistics, Spch Lang Hearing Science
Repeatability: This course may not be repeated for additional credits.

CSCD 3297. Syntax. 3 Credit Hours.
This course investigates the structure of sentences in natural language, drawing data from a number of languages including English. Theoretical issues related to the analysis of a variety of sentence patterns are explored.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Linguistics, Spch Lang Hearing Science
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

CSCD 3301. Speech and Language Development. 3 Credit Hours.
The acquisition of language by children is investigated and related to broader issues in cognitive science, development, and the theory of knowledge. Students are required to conduct observations of language behavior in preschool children.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Linguistics, Spch Lang Hearing Science
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(CSCD 2209|Minimum Grade of C|May not be taken concurrently)
AND (CSCD 2219|Minimum Grade of C|May not be taken concurrently).

CSCD 3382. Independent Study in Communication Sciences. 1 to 3 Credit Hour.
Creative projects, including research and design, which are supervised on an individual basis and which fall outside the scope of formal courses.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Linguistics, Spch Lang Hearing Science
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may be repeated for additional credit.

CSCD 3900. Honors Special Topics in Communication Sciences and Disorders. 3 Credit Hours.
This Honors Elective course in CSCD will challenge students to think critically and analytically about pressing issues and questions in Communication Sciences and Disorders. The topics will change from semester to semester, enabling students to take the course up to 3 times in order to explore different topics.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.

CSCD 4301. Principles of Audiology. 3 Credit Hours.
An introductory course in the field of audiology, including assessment of disorders of the auditory system, acoustic measurements, testing environment and testing protocol, electrophysical measurements, test interpretation, and professional development.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Linguistics, Spch Lang Hearing Science
Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits, Graduate 0 to 17 Credits, Graduate 18 to 35 Credits
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CSCD 3234|Minimum Grade of C|May not be taken concurrently.

CSCD 4396. Orientation to Clinical Management. 3 Credit Hours.
This course is designed to provide information about the principles underlying the diagnostic and therapeutic processes in communication disorders, with particular reference to speech and language disorders, and to begin to train students in the application of these principles. The application of principles is accomplished in two-hour laboratory sessions held periodically throughout the first half of the semester and weekly during the second half of the semester. NOTE: The labs will be conducted in individual two-hour blocks that complement students' schedules.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Linguistics, Spch Lang Hearing Science
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits,
Graduate 0 to 17 Credits, Graduate 18 to 35 Credits
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(CSCD 2209|Minimum Grade of C|May not be taken concurrently
AND CSCD 2219|Minimum Grade of C|May not be taken concurrently
AND CSCD 3301|Minimum Grade of C|May not be taken concurrently).
CSCD 4397. Fieldwork in Linguistics. 3 Credit Hours.
This is a project course in which students conduct guided research on a topic in the structure of some language. It is taken in the last year of undergraduate study and is the capstone course for the Linguistics major.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Linguistics
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites: (CSCD 2209|Minimum Grade of C|May not be taken concurrently
AND CSCD 3297|Minimum Grade of C|May not be taken concurrently).

CSCD 4730. Topics in Communication Sciences and Disorders. 1 to 3 Credit Hour.
Special topics in Communication Sciences and Disorders will change from semester to semester. Topics and instructors for a specific semester will be announced by the department and posted on the CSCD Department's web site and undergraduate listserv. This course is variable credit ranging from 1 to 3 credits.
Repeatability: This course may be repeated for additional credit.

CSCD 4979. Honors in Communication Sciences. 3 Credit Hours.
Students are expected to write and support a major paper under the supervision of a designated honors advisor. The work must be of honors quality and accepted by the honors advisor and a second reader. Students who complete this course satisfactorily, perform 20 hours of volunteer work in consultation with the departmental honors advisor, and meet the other requirements described in the Bulletin about CSCD programs will graduate with distinction in Communication Sciences and Disorders. NOTE: Registration in CSCD 4979 requires a GPA of 3.50 or better both within the major and overall, and having no grade below B in the major. Eligible seniors should consult the Undergraduate Program Director, Dr. Krakow, for details.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Linguistics, Spch Lang Hearing Science
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.

Communication Studies (CMST)

Courses

CMST 1111. Communication and Public Life. 3 Credit Hours.
This course will introduce students to the interrelationships between communication and public life, including the engagements that take place in social institutions, politics, the professions and the arts. It will look at the basic literature on the concept of civil society. Finally, it will introduce students to the issues to be discussed in the four tracks that make up Communication Studies: Policy, Regulation and Advocacy; Contemporary Media Environments; Global Civil Society; and Arts in the Public Sphere.
Repeatability: This course may not be repeated for additional credits.

CMST 2111. Communications Seminar. 3 Credit Hours.
This course will introduce a case study analysis of a contemporary public issue in communication. Students will examine the selected issue from the range of disciplinary approaches and methodologies introduced in the Communication Studies foundation courses: Communication Studies 1111 (Communication and Public Life) and MSP 1021 (Media and Society). They will discuss how disciplinary approaches and methodologies can condition conclusions, and consider the options available to them in interdisciplinary study. In the process, students will also focus on professional and academic preparation skills that will equip them to approach their futures.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: (MSP 1021|Minimum Grade of C|May not be taken concurrently
OR BTMM 1021|Minimum Grade of C|May not be taken concurrently)
AND (CMST 1111|Minimum Grade of C|May not be taken concurrently).

CMST 3185. Communication Studies Internship. 1 to 4 Credit Hour.
Students will arrange for an internship in an appropriate area of Communication Studies. Students must fill out all paperwork in the Communication Studies Manual, particularly areas related to internship supervisor's documentation. Additionally, students must meet with the Communication Studies director during pre-registration meetings. Students will complete a total of 15 short paper responses, 2 evaluations, and 1 final review paper. Students must have an overall GPA of 3.0 and director's permission to take part in an internship.
Department restrictions: Must be enrolled in one of the following Departments: SMC: School of Media & Comm
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may be repeated for additional credit.
Pre-requisites: CMST 2111|Minimum Grade of C|May be taken concurrently.

Communications and Theater (COMM)
Courses

COMM 1001. SMC Freshman Seminar. 1 Credit Hour.
The School of Media and Communication Freshman Seminar introduces first year students in the school to the purposes of higher education and to the skills needed to use academic resources and technology successfully, both in college and beyond. The course covers topics such as time management and study skills, as well as university support services and areas of interest specific to SMC students. NOTE: This course is for School of Media and Communication students only.

Class Restrictions: Must be enrolled in one of the following Classes: Freshman 0 to 29 Credits
College Restrictions: Must be enrolled in one of the following Colleges: Media and Communication
Repeatability: This course may not be repeated for additional credits.

COMM 3081. Communications Special Projects. 1 to 4 Credit Hour.
Individualized project proposed by the student and approved by a faculty advisor which will contribute to and enhance the student's general education and add to specific interest of the student in the field of communications. NOTE: Permission of faculty advisor required.
Repeatability: This course may be repeated for additional credit.

COMM 3082. Communications Independent Study. 1 to 4 Credit Hour.
Student proposed independent study/research in an area of interest to the student which will enhance their general education and a specific area of the field of communications. NOTE: Permission of Instructor/Faculty Advisor required.
Repeatability: This course may be repeated for additional credit.

COMM 3085. Communications Major Internship. 1 to 4 Credit Hour.
Student will research internship opportunities, set up interviews, secure position, and work a minimum of five hours per week and a maximum of twenty-five hours in a professional environment. Experiences will be shared with classmates and documented with written submission to the faculty advisor. Students should visit the Internship Manual through the Communication Studies Program web page at https://smc.temple.edu/commstudies/student-resources/internships/ for additional information and requirements. NOTE: This course is for majors only. Director permission required. Please see Internship Manual for prerequisites and information.
Repeatability: This course may be repeated for additional credit.

COMM 3385. Diamond Peer Teachers - Internship I. 1 Credit Hour.
The Diamond Peer Teachers Program provides students with a mentored university-level teaching experience in their major. Course requirements include participation in the three-day pre-semester Teaching Institute and regular participation in the Peer Teachers support group throughout the semester. Peer Teachers provide supplemental instruction in first- and second-year courses, promote student engagement, and model successful study habits and academic preparedness for students with whom they work. For Diamond Peer Teachers only.
Repeatability: This course may be repeated for additional credit.

COMM 3386. Diamond Peer Teachers - Internship II. 1 Credit Hour.
The Diamond Peer Teachers Program provides students with a mentored university-level teaching experience in their major. Course requirements include participation in the three-day pre-semester Teaching Institute and regular participation in the Peer Teachers support group throughout the semester. Peer Teachers provide supplemental instruction in first- and second-year courses, promote student engagement, and model successful study habits and academic preparedness for students with whom they work. For Diamond Peer Teachers only.
Repeatability: This course may be repeated for additional credit.

COMM 3380. Honors Special Topic: An Introduction to Communication in Public Life. 3 Credit Hours.
Variable topics course which can be used for partial fulfillment of the requirements for completion of the University Honors Program. Topics cover aspects of communication studies, including applications of theory, performance, advocacy, media, and analysis. NOTE: For University Honors Program students only.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.

COMM 3390. Honors Special Topics. 3 Credit Hours.
Subject matter varies each semester. Please consult the Course Schedule for further information.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.

COMM 4111. Communications Major Senior Seminar. 3 Credit Hours.
A capstone experience concerning the various components of the field and discipline of communications. This seminar will synthesize the academic preparation posited by the Communications Program, focusing on aspects of theoretical and applied contributions. Particular focus is on both fortifying academic skills and preparation for post graduation goals. NOTE: This course is for senior communications majors only.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Communications
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may not be repeated for additional credits.

Community & Regional Planning (CRP)
Courses

CRP 0807. People, Places, and Environment. 3 Credit Hours.
Have you ever thought about the relationship people have to their place - home, neighborhood, town, or city? How about to the environment? Have you ever thought about how people have shaped the places of our everyday lives - suburban housing developments, shopping malls, and small towns? And, have you ever thought about what will happen in the future to the Earth's natural resources - the air, water, and land - as we continue to build and expand? Explore these kinds of questions through readings, lectures, video presentations, and group discussions. Challenge your mind - and imagination - and open up new avenues of discovery. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for CRP 0807 if they have successfully completed CRP 1007 or C061.

Course Attributes: GU
Repeatability: This course may not be repeated for additional credits.

CRP 0821. Digital Mapping: From Mercator to Mashups. 4 Credit Hours.
From web-based applications like Google Maps, to automobile navigation systems, to satellite pictures of hurricanes, digital maps are widely used to display information about the Earth. This course unmasks the underlying technologies used for computer-based mapping, including Global Positioning Systems (GPS), satellite remote sensing, and Geographic Information Systems (GIS). We will investigate how computers store and analyze digital maps, and see how mapping technologies can be used to address a variety of societal problems, such as analyzing the environmental impacts of urban growth, tracking the spread of a deadly disease, and planning for earthquakes and other natural disasters. NOTE: This course fulfills the Quantitative Literacy (QG) requirement for students under GenEd and a Quantitative Reasoning (QA or QB) requirement for students under Core. Students cannot receive credit for CRP 0821 if they have successfully completed GUS 0821 or GUS 0921.

Course Attributes: QG
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 0701|Minimum Grade of C-|May not be taken concurrently
OR MATH 0702 to 4999| Required Courses:1|Minimum Grade of D-|May be taken concurrently
OR MC3 Y|May not be taken concurrently
OR MC4 Y|May be taken concurrently
OR MC5 Y|May not be taken concurrently
OR MC6 Y|May not be taken concurrently.

CRP 0861. Urban Dynamics: Global, Regional, and Local Connections. 3 Credit Hours.
U.S. cities in the 21st century face enormous challenges as globalization shapes flows of people, capital, information, resources, and ideas/culture in an increasingly interconnected, yet geographically dispersed world. The course asks: What is globalization? How are different people's lives in cities shaped by these flows? How do gender, age, race/ethnicity, class, and citizenship status affect people's experiences in different urban contexts? How do urban interventions - from public policy to social movements - advance social justice across groups, places, and spaces? Topics include economic and political restructuring, the globalization of ethnic/racial relations, citizenship and public space, the spatial dynamics of uneven development, and urban inequalities. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed GUS 0861 or SOC 0861.

Course Attributes: GU
Repeatability: This course may not be repeated for additional credits.

CRP 1001. Freshman Seminar/Discovery Series. 1 Credit Hour.
Introduces first-year students to the purpose of higher education and the skills needed to use information technology and academic resources successfully in college and the workplace. Focuses on topics useful to college students, including time management, teamwork, study skills, and academic and career planning.

Repeatability: This course may not be repeated for additional credits.

CRP 1017. Introduction to Community and Regional Planning. 3 Credit Hours.
Theory and practice of urban planning in the United States. Discussion of planning policy, methodology, and implementation in such areas as land use, housing, environment, economic development, and transportation. Particular emphasis is given to the ways in which values and ethics inform the planning process, as well as how societal changes are affecting our land use options.

Repeatability: This course may not be repeated for additional credits.

CRP 2114. Urban Form and Design. 3 Credit Hours.
Basic design principles, techniques, and practices of sustainable urban form and design. The topics for most readings, projects, and guest lectures are people oriented and examine the many elements that contribute to the aesthetic and human quality of communities of all sizes. Through poster presentations, field visits, and other assignments, students analyze the nature of public spaces, streets and boulevards, landscaping, water, materials, light, scale, mass, and time. Explores the roles of unity, harmony, symbolism, and cultural values. Course readings have both historical and current references. Students participate in real-world urban design projects, visual design analyses, and presentations in a studio setting.

Repeatability: This course may not be repeated for additional credits.
CRP 2166. Land Use Planning. 3 Credit Hours.
At the heart and soul of community and regional planning is land use. How we use land and the institutional and legal basis by which we establish and implement land use goals are key elements in how our communities and regions are shaped. This course examines the foundations of land use planning, which begins with an understanding of attitudinal, value, and ethical perspectives of how land resources are used. The range of land use implementation approaches - regulatory, fiscal, incentives, and public investment - are also evaluated. The course additionally discusses the importance of ecological planning and design as prospects for contemporary land use planning to create sustainable communities and regions. NOTE: This course is not open to students who have taken Geography and Urban Studies 4015 (0215).
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CRP 1017|Minimum Grade of D-|May not be taken concurrently
OR CRP 1027|Minimum Grade of D-|May not be taken concurrently.

CRP 2213. Environmental Planning. 3 Credit Hours.
A comprehensive overview of physical and environmental systems, including land, air, and water, and how planning can be conducted to protect such systems. Topics include environmental assessments and impact statements, storm water and floodplain management, water conservation, protection of open spaces and water supplies, waste management, and air pollution control.
Repeatability: This course may not be repeated for additional credits.

CRP 2251. Sustainable Food Systems Planning. 3 Credit Hours.
Planners are paying attention to the notion of food system planning: farm land preservation and environmental stewardship; economic development including distribution, processing, employment and globalization; and food security, involving access to affordable, healthy foods. There are also issues of public health, food cultures, consumer spending patterns, and education. This course explores all of these concerns. Guest speakers and field trips provide a focus on regionally based food systems initiatives. Course readings and lectures address work that is underway elsewhere in North America. Students develop an appreciation for the ways in which a food systems perspective can enrich community planning efforts and create more sustainable and vital places in which to live and flourish.
Repeatability: This course may not be repeated for additional credits.

Basic principles and techniques of GIS, a computer-based system that uses spatial (geographic) data to analyze and solve real-world issues. Lab exercises, exams, and projects emphasize spatial data collection, entry, storage, analysis, and output using ArcGIS, the most widely used desktop GIS software. Students are expected to create maps, following basic cartographic rules and techniques, and to understand basic spatial data analysis techniques, including spatial query, geo-processing, and surface analysis. NOTE: This course is not open to students who have taken Geography and Urban Studies 3062 (0262). This course is the prerequisite for Advanced GIS (CRP 5525) for all students (both undergraduate and graduate).
Repeatability: This course may not be repeated for additional credits.

CRP 3155. Ecological Planning and Development. 3 Credit Hours.
The fundamentals of the ecological planning method developed by landscape architect and regional planner, Ian McHarg, establish a basis to plan and develop both individual projects and entire communities that can be enduring (sustainable). Students examine both theory and practice in the relationship between ecological planning and actual development. Case studies, field trips, and guest presenters will highlight specific examples of the successful implementation of ecological planning by the private development sector.
Repeatability: This course may not be repeated for additional credits.

CRP 3255. Sustainability in Suburban Communities. 3 Credit Hours.
The physical forms of suburban communities and the social and economic patterns that shape residents' lives make achieving sustainability in suburbia challenging and problematic. Distances between homes, businesses, and worksites are long, transportation choices are few, infrastructure needs are extensive and costly, and impacts on ecological systems can be severe. Many argue that higher-density, urban living holds our best promise for an environmentally sustainable future in the United States, but half of all Americans live in suburbia and finding sustainable solutions for them and their communities must be part of the solution. Lectures, readings, and discussions in this course address sustainability in suburban communities by covering the history of the American suburb and processes of suburbanization; architecture and housing; landscape and community design; transportation and infrastructure; built and natural environments and ecological systems; and planning, administration, and regionalism.
Repeatability: This course may not be repeated for additional credits.

CRP 3256. Sustainable Community Design and Development. 3 Credit Hours.
Introduces students to the concept of sustainable development and how it has been applied to the design and development of communities. Beginning with an examination of the historical evolution of the concept of sustainable development, students then review the discourse of theory and practice of sustainable development at local, regional, and global levels. Review of case studies to understand how to evaluate the level of sustainable development principles being incorporated into planning practice.
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may not be repeated for additional credits.
CRP 3555. Internet and Digital Technologies for Community Engagement. 3 Credit Hours.
Emerging technologies are directly influencing the planning and management of our urban areas in very profound and pervasive ways. Planning and related professionals increasingly are adopting new technologies to develop plans, communicate ideas and concepts, and engage citizens in the decision-making process. The course introduces many fundamental technology concepts including: e-Planning and e-Government; Cybeercities; e-Commerce & Economic Development; Web 1.0, 2.0, 3.x, Web Conferencing Tools; Online Project Collaboration Methods; IT Project Management; Section 508 Accessibility; Planning in Virtual Worlds; Municipal Wireless Networks & Public Spaces; and Digital Divide. Through a series of labs and assignments, students gain hands-on experience with each of these technologies.
Repeatability: This course may not be repeated for additional credits.

CRP 3655. Transportation Planning. 3 Credit Hours.
Provides an overview of the history of transportation in the United States and the fundamentals of present day transportation planning and policies. Explores the influences of urban form on: modal choice; accessibility and mobility of various population subsets (such as the economically- and physically-disadvantaged); regional and local travel demand; and the operational efficiency of transit, highways, bicycle, pedestrian and other modes of transportation. Covers the impact of transportation investments on land use and regional population growth, and on environmental, community, and economic sustainability. Introduces students to currently used transportation planning methodologies, legal requirements, and decision-making processes. By studying actual transportation projects, students develop a plan for an assigned project.
Repeatability: This course may not be repeated for additional credits.

CRP 3755. Introduction to Emergency Management Planning. 3 Credit Hours.
Provides a fundamental understanding of the emergency planning process, the phases of emergency management, and the roles and responsibilities of all parties involved. Students work in a classroom environment, interacting with others on various assignments, projects and presentations.
Repeatability: This course may not be repeated for additional credits.

CRP 3860. Topics in Community & Regional Planning. 1 to 3 Credit Hour.
Variable offerings from semester to semester of selected topics not part of the regular listing of courses. The topic can be in an area of specialization of a faculty member or an examination of a current development in the field. NOTE: Students may obtain a description of the current version at the department office and in the schedule of classes. This course may be repeated for credit.
Repeatability: This course may be repeated for additional credit.

CRP 3870. Special Topics. 1 to 3 Credit Hour.
Variable offerings from semester to semester of selected topics not part of the regular listing of courses. The topic can be in an area of specialization of a faculty member or an examination of a current development in the field. NOTE: Students may obtain a description of the current version at the department office and in the schedule of classes. This course may be repeated for credit.
Repeatability: This course may be repeated for additional credit.

CRP 3882. Independent Study. 1 to 3 Credit Hour.
Explorative study or research not met in any established course. Initiated by the student, the project must be sponsored by a faculty member with an approved agreement outlining the content and requirements, including readings, meetings, and papers. NOTE: Students must have the agreement of a faculty sponsor and must submit a formal proposal to this faculty member and Department before registering for the course. A maximum of 3 s.h. of Community and Regional Planning directed reading/study or independent study may be used as elective credit toward the Community and Regional Planning major.
Repeatability: This course may be repeated for additional credit.

CRP 3883. Directed Reading/Study. 1 to 3 Credit Hour.
Advanced reading/study tutorial arranged between the student and a faculty member. Requirements are jointly determined relative to the specific focus of the course and may include literature review; preparation of journals, bibliographies and/or paper(s); and participation in regularly scheduled discussions. The level of work required is equivalent to a traditional course. Writing skills are evaluated for the final grade. Students are expected to demonstrate personal initiative in framing and meeting course requirements. NOTE: A maximum of 3 s.h. of Community and Regional Planning directed reading/study or independent study may be used as elective credit toward the Community and Regional Planning major.
Repeatability: This course may be repeated for additional credit.

CRP 3889. Planning Studio. 3 Credit Hours.
A culminating experience for undergraduates that demonstrates their abilities to resolve real-life problems. Working in small teams, students integrate and apply the previous years of educational experience to a community planning problem: analysis of the problem, data collection, communication of goals and objectives, formulation of a solution, and implementation. NOTE: Studio topics vary. This course may be repeated for credit.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Community and Regional Planning
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Science
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(CRP 1027)Minimum Grade of D-|May not be taken concurrently
AND CRP 2496)Minimum Grade of D-|May not be taken concurrently
AND CRP 2513)Minimum Grade of D-|May not be taken concurrently
AND CRP 2524)Minimum Grade of D-|May not be taken concurrently
AND CRP 4896)Minimum Grade of C-|May not be taken concurrently).
CRP 4885. Internship and Professional Practice in Planning. 3 Credit Hours.
Student must be a Community and Regional Planning major who has completed: CRP 1017, 1027, 2014, 2213, 2496, 2513, 2524; plus at least one CRP elective. Students may register for CRP 4885 only once. Requires 180 hours of supervised internship experience with public agencies, non-profit institutions, and private entities. Must have a designated field supervisor. Emphasizes the acquisition and application of practical skills in planning.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Community and Regional Planning
Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Science
Repeatability: This course may be repeated for additional credit.

CRP 4896. Community and Regional Planning Senior Capstone Seminar. 3 Credit Hours.
Students complete a capstone project that simulates the type of work and project research likely to be undertaken in the first years of employment in a planning office. This involves developing and researching a planning topic. NOTE: Fulfills the capstone writing intensive requirement for the Community and Regional Planning major.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Community and Regional Planning
Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Science
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(CRP 1027 Minimum Grade of D-|May not be taken concurrently
AND CRP 2014 Minimum Grade of D-|May not be taken concurrently
AND CRP 2114 Minimum Grade of D-|May not be taken concurrently
AND CRP 2213 Minimum Grade of D-|May not be taken concurrently
AND CRP 2496 Minimum Grade of D-|May not be taken concurrently
AND CRP 2513 Minimum Grade of D-|May not be taken concurrently
AND CRP 2524 Minimum Grade of D-|May not be taken concurrently).

Community Development (CDEV)

Courses

CDEV 1113. Introduction to Community Development. 3 Credit Hours.
Community development refers to the broad set of skills and institutions that local communities utilize in an effort to improve the quality of life for all residents. The course examines the history of housing, economic trends, and social policies that have affected low-income communities across the US, and the various ways through organizing and capacity building that community development professionals and activists have sought to improve these conditions. Topics include the provision of affordable housing, community economic development and finance, public education and workforce development, local food systems, and environmental sustainability.
Repeatability: This course may not be repeated for additional credits.

CDEV 2155. Housing and Community Development. 3 Credit Hours.
A comprehensive study of housing and community development within the context of its environment, both natural and built. Explores the implications on housing of topography, public policy, demographics, transportation, adjacent uses, local culture, building practices, zoning, climate, and historical patterns. A broad range of housing types and densities are examined along with housing as both shelter and social symbol. This course has both historical and current references and introduces the role of the community development professional or planner as a community designer and advocate.
Repeatability: This course may not be repeated for additional credits.

CDEV 2596. Community Planning Analysis. 3 Credit Hours.
Community development and planning practitioners use tools to gather, analyze, and present information. This course provides an introduction to a broad range of analytical methods and techniques used in the field to understand communities. Students learn to obtain data, select and use the most appropriate analytical methods (with an emphasis on computer applications, such as Microsoft Excel), and present results effectively. Topics to be covered include primary and secondary data collection, basic methods of descriptive statistics, demographic models, population projections and forecasts, economic analysis, housing indicators, surveys, interviews, questionnaires, community asset mapping and zoning. Classes consist of a mix of lectures, small group exercises, and hands-on computer labs. Students, over the course of the semester, develop a portfolio of analytical tools for an assigned community. Consistent with the University’s Writing Intensive Program, each weekly assignment will be returned with comments for revision and compilation into a single portfolio. This ‘thick description’ of a community demonstrates competency with the wide range of methods used in community development. Note: Basic computer skills required. By lecture 4, students must have familiarity with Microsoft Excel. Go to http://www.temple.edu/cs/training/ for information on free seminars offered by Temple University Computer Services.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.
CDEV 3113. Nonprofit Management. 3 Credit Hours.
The course provides an overview of management of nonprofit organizations, including issues pertinent for nonprofit managers and leaders faced with changing organizational environments. Most community development activities are centered within a nonprofit organization or work closely with these community-based organizations. Students are introduced to the major aspects of nonprofits and voluntary organizations that distinguish them from public and private organizations: mission/vision; legal definitions/IRS rulings; voluntary governance structures; and a social change agenda. Topics covered include the history and scope of the nonprofit sector, variations within the sector, contemporary theories of nonprofit enterprise, growth in the international nonprofit sector, management issues which pertain to nonprofits, financial management, accountability, human resources management, strategic planning, collaborative partnerships, leadership, advocacy, and the future of the sector. 
Repeatability: This course may not be repeated for additional credits.

CDEV 3197. Community-based Organizations. 3 Credit Hours.
For the past 50 years, community-based organizations (CBOs) have played an important role in the housing, economic and social development in low-income communities: community development corporations (CDCs) were established to construct and manage affordable housing; community economic development programs seek to empower local residents through job training and entrepreneurial assistance; and faith-based organizations continue to play an important role in social service provision in many communities. Fundamentally, CBOs strive to build community leadership and empower low-income people to take charge of their own future. Understanding the role of such organizations is crucial in being an effective planner. Synthesizing skills developed in lower-level courses within the Community Development major, students in this writing-intensive course produce — over the course of the full semester — a strategic plan for a community-based organization of their choosing. Beginning with a profile of the community served, students develop a profile of a specific CBO within the Philadelphia region. After meeting with stakeholders, students develop and present a strategic plan to assist that organization in meeting the needs of its client community, both now and in the future. The plan produced is a result of ongoing feedback from classmates, stakeholders, and the instructor.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(CDEV 1113|Minimum Grade of C-|May not be taken concurrently)
AND (CDEV 2596|Minimum Grade of C-|May not be taken concurrently).

CDEV 3313. Community Development Finance. 3 Credit Hours.
The course examines the history and practice of community development finance in the United States. Low-income communities face particular challenges in meeting their credit needs through the traditional financial sector. Over the past 100 years, various institutions have developed to both advocate for change and to cover this gap. The course explores strategies for developing assets for low-income families and low-income communities. Different types of community development finance projects are discussed, including affordable housing, charter schools, community facility, small business lending, and nonprofit real estate projects. The course concludes with an examination of continuing challenges to meet the depository and credit needs of low-income communities.
Repeatability: This course may not be repeated for additional credits.

CDEV 3455. Community Engagement and Empowerment. 3 Credit Hours.
This class explores the theory and practice of involving citizens in agency-led and community-based planning processes. Readings, class discussions, case studies, and guest lectures emphasize building knowledge and skills necessary to develop open and inclusive processes using a continuum of civic engagement practices such as community organizing, outreach and education, interactive tools and technologies, charrettes and full empowerment.
Repeatability: This course may not be repeated for additional credits.

CDEV 3860. Topics in Community Development. 1 to 3 Credit Hour.
Variable offerings from semester to semester of selected topics not part of the regular listing of courses. The topic can be in an area of specialization of a faculty member or an examination of a current development in the field. NOTE: Students may obtain a description of the current version at the department office and in the schedule of classes. This course may be repeated for credit.
Repeatability: This course may be repeated for additional credit.

CDEV 3870. Special Topics in Community Development. 1 to 3 Credit Hour.
Variable offerings from semester to semester of selected topics not part of the regular listing of courses. The topic can be in an area of specialization of a faculty member or an examination of a current development in the field. Students may obtain a description of the current version at the department office and in the schedule of classes. This course may be repeated for credit.
Repeatability: This course may be repeated for additional credit.

CDEV 3882. Independent Study in Community Development. 1 to 3 Credit Hour.
An advanced course that involves explorative study or research not met in any established course. Initiated by the student, the project must be sponsored by a faculty member with an approved agreement outlining the content and requirements, including readings, meetings, and papers. NOTE: Students must have the agreement of a faculty sponsor and must submit a formal proposal to this faculty member and Department before registering for the course. A maximum of 3 s.h. of Community Development directed reading/study or independent study may be used as elective credit toward the B.S. in Community Development.
Repeatability: This course may be repeated for additional credit.
CDEV 3883. Directed Reading/Study in Community Development. 1 to 3 Credit Hour.
Prerequisite: Written contract with faculty member and approval of the Department Chair. Advanced reading/study tutorial arranged between the student and a faculty member. Requirements are jointly determined relative to the specific focus of the course and may include literature review; preparation of journals, bibliographies and/or paper(s); and participation in regularly scheduled discussions. The level of work required is equivalent to a traditional course. Writing skills are evaluated for the final grade. Students are expected to demonstrate personal initiative in framing and meeting course requirements. NOTE: This course may be repeated for credit. A maximum of 3 s.h. of Community Development directed reading/study or independent study may be used as elective credit toward the B.S. in Community Development.
Repeatability: This course may be repeated for additional credit.

CDEV 4885. Internship and Professional Practice in Community Development. 3 Credit Hours.
The course requires 180 hours of supervised internship experience with public agencies, non-profit institutions, and private entities. The internship must have a designated field supervisor and must emphasize the acquisition and application of practical skills in community development. Undergraduates may register for CDEV 4885 only once.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(CDEV 1113|Minimum Grade of C-|May not be taken concurrently)
AND (CDEV 2596|Minimum Grade of C-|May not be taken concurrently)
AND (CRP 2524|Minimum Grade of C-|May not be taken concurrently)
AND (CDEV 3113|Minimum Grade of C-|May not be taken concurrently)
OR CDEV 3197|Minimum Grade of C-|May not be taken concurrently).

CDEV 4889. Community Development Workshop. 3 Credit Hours.
This capstone course in the Community Development major focuses the practice of contemporary community development in collaboration with a community-based organization. It builds upon the knowledge and skills students acquired earlier in the degree program and demonstrate their abilities to resolve real-life problems. Students work in small teams to formulate a research design and scope of services to investigate existing conditions; collect and analyze data needed to devise effective solutions to local problems which build on available community assets; and produce reports local leaders can use to guide their future revitalization efforts.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(CDEV 1113|Minimum Grade of C-|May not be taken concurrently)
AND (CDEV 2596|Minimum Grade of C-|May not be taken concurrently)
AND (CRP 2524|Minimum Grade of C-|May not be taken concurrently)
AND (CDEV 3197|Minimum Grade of C-|May not be taken concurrently).

Computer & Information Science (CIS)

Courses
CIS 0823. Math for a Digital World. 4 Credit Hours.
This course is typically offered in Fall, Spring, Summer I and Summer II. How can I tell if an e-mail message is really from my bank? If I do online banking, can other people see the information? Does playing the lottery make sense? Does it make sense to draw for an inside straight? How can polling results differ so much from the election --- or do they? Sometimes the winner of an election in the U.S. gets much less than 50% of the vote. Would it make sense to have a run-off in such cases? How long will the world’s oil last, assuming that we use more each year? How long will a million dollars last you, assuming it earns interest until you spend it? If you bought your text online, could someone tap into the Internet and get your credit card number when it’s transmitted? Why does the VIN on your car have so many digits? NOTE: (1)This course fulfills the Quantitative Literacy (GQ) requirement for students under GenEd and a Quantitative Reasoning (QA or QB) requirement for students under Core. (2) Duplicate Course: Students cannot receive credit for CIS 0823/0923 if they have successfully completed MATH 0823/0923.
Course Attributes: GQ
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 0701 to 0702| Required Courses:1|Minimum Grade of C-|May not be taken concurrently
OR MATH 0800 to 4999| Required Courses:1|Minimum Grade of C-|May be taken concurrently
OR MC3 Y|May not be taken concurrently
OR MC4 Y|May not be taken concurrently
OR MC5 Y|May not be taken concurrently
OR MC6 Y|May not be taken concurrently
OR STAT 1001|Minimum Grade of C-|May be taken concurrently
OR STT2 Y|May not be taken concurrently
OR STAT 1102|Minimum Grade of C-|May be taken concurrently
OR STAT 1902|Minimum Grade of C-|May be taken concurrently.
CIS 0835. Cyberspace & Society. 3 Credit Hours.
This course is typically offered in Fall, Spring, Summer I and Summer II.<p>This course provides students with an understanding of the underlying foundations of technology that have an impact on their lives and integrates those principles with real-world activities. It promotes information fluency by giving students an understanding of the foundational concepts from which the technology is derived and helping them to develop higher-level intellectual capabilities for applying the technology. The class is broken into three sections - technology principles, technology's impact in society and labs. It is the combination of these three sections that will enable students to understand the foundation and the implementation of technology in their daily lives. Class lectures incorporating a myriad of digital technologies including computer hardware, readings, labs and student discussions will be utilized to integrate the application of technology and the impact facing society. NOTE: (1) Duplicate Course: No credit for students who have taken CIS 1055 (C055), 1955 (H095) or 0935. (2) This course fulfills a Science & Technology (GS) requirement for students under GenEd and Science & Technology Second Level (SB) for students under Core.
Course Attributes: GS
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 0701 to 0702| Required Courses:1|Minimum Grade of C-|May not be taken concurrently
OR MATH 0800 to 4999| Required Courses:1|Minimum Grade of C-|May be taken concurrently
OR MC2 Y|May not be taken concurrently
OR MC3 Y|May not be taken concurrently
OR MC4 Y|May not be taken concurrently
OR MC5 Y|May not be taken concurrently
OR MC6 Y|May not be taken concurrently.

CIS 0923. Honors Math for a Digital World. 4 Credit Hours.
This course is typically offered in Fall.<p>How can I tell if an e-mail message is really from my bank? If I do online banking, can other people see the information? Does playing the lottery make sense? Does it make sense to draw for an inside straight? How can polling results differ so much from the election --- or do they? Sometimes the winner of an election in the U.S. gets much less than 50% of the vote. Would it make sense to have a run-off in such cases? How long will the world's oil last, assuming that we use more each year? How long will a million dollars last you, assuming it earns interest until you spend it? If you bought your text online, could someone tap into the Internet and get your credit card number when it's transmitted? Why does the VIN on your car have so many digits? NOTE: (1) This is an Honors course. (2) This course fulfills the Quantitative Literacy (GQ) requirement for students under GenEd and a Quantitative Reasoning (QA or QB) requirement for students under Core. (3) Duplicate Course: Students cannot receive credit for CIS 0823/0923 if they have successfully completed MATH 0823/0923.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GQ, HO
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 0701 to 0702| Required Courses:1|Minimum Grade of C-|May not be taken concurrently
OR MATH 0800 to 4999| Required Courses:1|Minimum Grade of C-|May be taken concurrently
OR MC3 Y|May not be taken concurrently
OR MC4 Y|May not be taken concurrently
OR MC5 Y|May not be taken concurrently
OR MC6 Y|May not be taken concurrently
OR STAT 1001|Minimum Grade of C-|May be taken concurrently
OR STT2 Y|May not be taken concurrently
OR STAT 1102|Minimum Grade of C-|May be taken concurrently
OR STAT 1902|Minimum Grade of C-|May be taken concurrently.
CIS 0935. Honors Cyberspace & Society. 3 Credit Hours.
This course is typically offered in Fall and Spring.<p>This course provides students with an understanding of the underlying principles of technology that have an impact on their lives and how those principles are related to real-world activities. The course promotes information fluency by giving students an understanding of the foundational concepts on which the technology is derived and helping them to develop higher-level intellectual capabilities for applying the technology. The class is broken into three equal sections - technology, ethics and virtual labs. It is the combination of these three sections that will enable students to understand the foundation and the implementation of technology in their daily lives. Class lectures, readings, virtual labs and student discussions will be utilized to integrate the application of technology with social and ethical issues facing society. As examples, discussions might include: What is the impact of the Internet on intellectual property? How far can government surveillance go to detect criminal behavior without reducing our civil liberties? How can vulnerable groups be protected from predators, scam artists, and identity theft? Is it ethical to download free music and video from the Internet? NOTE: (1) Duplicate Course: No credit for students who have taken CIS 1055 (C055), 1955 (H095) or 0835. (2) This course fulfills a Science & Technology (GS) requirement for students under GenEd and Science & Technology Second Level (SB) for students under Core. (3) This is an Honors course.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR

Course Attributes: GS, HO

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
MATH 0701 to 0702| Required Courses:1|Minimum Grade of C-|May not be taken concurrently
OR MATH 0800 to 4999| Required Courses:1|Minimum Grade of C-|May be taken concurrently
OR MC2 Y|May not be taken concurrently
OR MC3 Y|May not be taken concurrently
OR MC4 Y|May not be taken concurrently
OR MC5 Y|May not be taken concurrently
OR MC6 Y|May not be taken concurrently.

CIS 1001. Introduction to Academics in Computer Science. 1 Credit Hour.
This course is typically offered in Fall and Spring.<p>Students will be introduced to the field of computing, including potential career opportunities, the Computer & Information Sciences department and its resources, the departmental faculty, and the Computer Science degree programs, as well as the opportunities for internships and research. There will be guest lectures by Computer & Information Sciences faculty, students and alumni, demonstrations of computing technology, and discussions to illustrate the interdisciplinary nature of Computer Science and Information Science and Technology. NOTE: This is a required course for all Computer Science and Information Science and Technology majors. It is also recommended for undecided students looking for a major.

Repeatability: This course may not be repeated for additional credits.

CIS 1006. Informatics for Scientists. 2 to 3 Credit Hours.
This course is not offered every year.<p>This course introduces students to the interdisciplinary nature of science and shows how the use of computational tools facilitates better understanding and improvements in research and technology. The applications will be at the intersection of biological and computer sciences, using basic probabilistic/machine learning techniques to address biological problems and mine data sets including topics such as genome sequencing, drug screening, and DNA micro-arrays.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
MATH 0701 to 0702| Required Courses:1|Minimum Grade of C-|May not be taken concurrently
OR MATH 0800 to 4999| Required Courses:1|Minimum Grade of C-|May be taken concurrently
OR MC3 Y|May not be taken concurrently
OR MC4 Y|May not be taken concurrently
OR MC5 Y|May not be taken concurrently
OR MC6 Y|May not be taken concurrently
OR STAT 1001|Minimum Grade of C-|May be taken concurrently
OR STAT 1102|Minimum Grade of C-|May be taken concurrently
OR STAT 1902|Minimum Grade of C-|May be taken concurrently.
CIS 1048. Introduction to IS&T. 3 Credit Hours.
This course is typically offered in Fall and Spring.<p>This course introduces students to the field of Information Systems Technology and outlines the material covered throughout the entire IS&T Program at Temple. The course addresses the three core issues: 1) Information (the basic science of data encoding, transmission and storage); 2) People (the interactions among technologies, users, institutions, and regulations); and 3) Technology (the design and operation of basic information technology devices). The course will be conducted as lectures and case studies where the students will learn how information flows in organizations, how data is stored and processed and how we can use technology to help people and organizations to perform efficiently. Students will work in teams to analyze scenarios and propose solutions by applying analytic techniques and theories covered in the course. Examples and cases will be drawn from a range of domains including: high tech, medical, business and government. Emphasis will be placed on writing proper reports and presentations. NOTE: For Information Science and Technology Majors. It is also recommended for undecided students looking for a major.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
MATH 1021|Minimum Grade of C-|May not be taken concurrently
OR MATH 1022 to 3080| Required Courses:1|Minimum Grade of C-|May be taken concurrently
OR MC5 Y|May not be taken concurrently
OR MC6 Y|May not be taken concurrently
OR STAT 1001|Minimum Grade of C-|May be taken concurrently
OR STAT 1101|Minimum Grade of C-|May be taken concurrently
OR STAT 1902|Minimum Grade of C-|May be taken concurrently.

CIS 1049. Comp Tools Competency. 1 Credit Hour.
Repeatability: This course may not be repeated for additional credits.

CIS 1051. Introduction to Problem Solving and Programming in Python. 4 Credit Hours.
This course is typically offered in Spring.<p>This course introduces computer programming using Python, a computer language which is widely used in industry, scientific research, game programming and web applications. Students will solve programming problems of these fields in an intuitive way, using procedural programming constructs such as loops, branching structures, and functions. Students will write programs that are testable (using assertions) and maintainable (using good programming style, naming conventions, indentation, and comments). This course is a good introduction for students who want to explore Python programming, and for beginners who feel that they need extra preparation for CIS 1068 Program Design and Abstraction (object oriented java).

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
MATH 1021|Minimum Grade of C|May not be taken concurrently
OR MATH 1022 to 4999| Required Courses:1|Minimum Grade of C-|May be taken concurrently
OR MC5 Y|May not be taken concurrently
OR MC6 Y|May not be taken concurrently
OR MA03 Y|May not be taken concurrently
OR STAT 1001|Minimum Grade of C|May not be taken concurrently
OR STAT 1102|Minimum Grade of C-|May not be taken concurrently
OR STAT 1902|Minimum Grade of C-|May not be taken concurrently.

CIS 1052. Introduction to Web Technology and Programming. 4 Credit Hours.
This course is typically offered in Fall and Spring.<p>This course is designed to introduce students with no programming experience to the programming languages and techniques associated with the World Wide Web. The course will introduce web-based media-rich programming tools for creating interactive web pages. Basic animation programming is also introduced with an emphasis on media-rich content creation, distribution and tracking capabilities.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
MATH 0701 to 0702| Required Courses:1|Minimum Grade of C-|May not be taken concurrently
OR MATH 0800 to 4999| Required Courses:1|Minimum Grade of C-|May be taken concurrently
OR MC3 Y|May not be taken concurrently
OR MC4 Y|May not be taken concurrently
OR MC5 Y|May not be taken concurrently
OR MC6 Y|May not be taken concurrently
OR STAT 1001|Minimum Grade of C-|May be taken concurrently
OR STAT 1102|Minimum Grade of C-|May be taken concurrently
OR STAT 1902|Minimum Grade of C-|May be taken concurrently.
CIS 1053. Programming in Matlab. 4 Credit Hours.
This course is typically offered in Fall, Spring and Summer I. Introduces students to computers and computer programming. Topics covered include the general characteristics of computers, techniques of problem solving and algorithm specifications, and the debugging and testing of computer programs in Matlab. NOTE: This course can be used to satisfy the university Core Quantitative Reasoning B (QB) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: QB
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 1021 | Minimum Grade of C | May not be taken concurrently
OR MATH 1022 to 4999 | Required Courses: 1 | Minimum Grade of C | May be taken concurrently
OR MC5 Y | May not be taken concurrently
OR MC6 Y | May not be taken concurrently
OR MA03 Y | May not be taken concurrently
OR STAT 1001 | Minimum Grade of C | May not be taken concurrently
OR STAT 1102 | Minimum Grade of C | May not be taken concurrently
OR STAT 1902 | Minimum Grade of C | May not be taken concurrently.

CIS 1055. Computers and Applications. 4 Credit Hours.
This course is typically offered in Fall, Spring, Summer I and Summer II. With the explosion of computer technology, knowledge of computing applications as tools for all disciplines has become a necessary asset. This course will introduce the student to understanding the components of a computer system; the use of the computer to process information; the technology behind computers and networks and how this technology is likely to change; purchasing and maintaining a personal computer system; understanding the technology of the Internet; and social and ethical implications of computing. The laboratory portion of this class will provide students with hands-on experience to supplement the lecture material. Operating system concepts, a working knowledge of collaborative software and the following applications are covered: advanced features of word processing, spreadsheets, presentation software and the resources of the Internet including developing a web site using sound design techniques to publish course documents and incorporating multi-media components. NOTE: (1) Duplicate Course: No credit for students who have taken CIS 0835 (GE-SCI 0060) or 935 (GE-SCI H060). (2) This course can be used to satisfy the university Core Science & Technology Second Level (SB) requirement.

Course Attributes: SB
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 0701 to 0702 | Required Courses: 1 | Minimum Grade of C- | May not be taken concurrently
OR MATH 0800 to 4999 | Required Courses: 1 | Minimum Grade of C- | May be taken concurrently
OR MC3 Y | May not be taken concurrently
OR MC4 Y | May not be taken concurrently
OR MC5 Y | May not be taken concurrently
OR MC6 Y | May not be taken concurrently
OR STAT 1001 | Minimum Grade of C- | May be taken concurrently
OR STT2 Y | May not be taken concurrently
OR STAT 1102 | Minimum Grade of C- | May be taken concurrently
OR STAT 1902 | Minimum Grade of C- | May be taken concurrently.

CIS 1056. Advanced Web Technology and Programming. 4 Credit Hours.
This course is typically offered in Fall. In this course, students will learn how to write web applications using Java and JSP (Java Server Pages). This course focuses on fundamental programming concepts such as data types, type conversion, exception handling, assignment statements, methods, objects, conditions, and loops. SQL (Structured Query Language) will be used to communicate with a database. JSP implicit objects (e.g., session, response) will be employed for the management of log-in and security. Students are expected to have prior knowledge of basic web design, since HTML, CSS, and Javascript will be reviewed only briefly. By the end of the course, each student will have created a simple web application that accesses a database. For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CIS 1052 | Minimum Grade of C | May not be taken concurrently.
CIS 1057. Computer Programming in C. 4 Credit Hours.
This course is typically offered in Fall, Spring and Summer II.<p>Introduces students to computer and computer programming. Topics covered include the general characteristics of computers, techniques of problem solving, and algorithm specification, and the debugging and testing of computer programs in the C language. NOTE: This course can be used to satisfy the university Core Quantitative Reasoning B (QB) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. <p>For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.
Course Attributes: QB
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 1021|Minimum Grade of C|May not be taken concurrently
OR MATH 1022 to 4999| Required Courses:1|Minimum Grade of C-|May be taken concurrently
OR MC5 Y|May not be taken concurrently
OR MC6 Y|May not be taken concurrently
OR MA03 Y|May not be taken concurrently
OR STAT 1001|Minimum Grade of C|May not be taken concurrently
OR STAT 1102|Minimum Grade of C-|May not be taken concurrently
OR STAT 1902|Minimum Grade of C-|May not be taken concurrently.

CIS 1066. Mathematics Concepts for Computers. 4 Credit Hours.
This course is typically offered in Fall and Spring.<p>Introduction to mathematical concepts fundamental to IS&T. Topics include: number systems, data representation in computers, data structures, logic, set theory, and algorithms. NOTE: For Information Science and Technology Majors.<p>For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(MATH 1021|Minimum Grade of C|May not be taken concurrently
OR MATH 1022 to 4999| Required Courses:1|Minimum Grade of C-|May be taken concurrently
OR MC5 Y|May not be taken concurrently
OR MC6 Y|May not be taken concurrently
OR MA03 Y|May not be taken concurrently
OR STAT 1001|Minimum Grade of C|May not be taken concurrently
OR STAT 1102|Minimum Grade of C-|May not be taken concurrently
OR STAT 1902|Minimum Grade of C-|May not be taken concurrently). AND (CIS 1048|Minimum Grade of C-|May be taken concurrently)
AND (CIS 1073|Minimum Grade of C-|May be taken concurrently).

CIS 1068. Program Design and Abstraction. 4 Credit Hours.
This course is typically offered in Fall, Spring and Summer II.<p>Introduction to problem solving and programming in Java, software engineering, procedural and data abstraction, and object-oriented programming, including class hierarchies, inheritance and interfaces. Data types covered include primitive data types, strings, classes, arrays, vectors, and streams. Programming techniques include at least one technique for searching and sorting an array and an introduction to file processing. Note: For Computer Science Majors and IST Majors.<p>For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 1022|Minimum Grade of C-|May not be taken concurrently
OR MATH 1038 to 4999| Required Courses:1|Minimum Grade of C-|May be taken concurrently
OR MC6 Y|May not be taken concurrently
OR MA04 Y|May not be taken concurrently.

CIS 1166. Mathematical Concepts in Computing I. 4 Credit Hours.
This course is typically offered in Fall and Spring.<p>Introduction to the mathematical concepts fundamental to computer and information science. Topics include an introduction to predicate and propositional calculus; sets and set operations; functions and mappings; big-O notation and the growth of functions; algorithms, integers, and matrices; mathematical induction and recursive definitions; combinations, permutations, and binomial coefficients; discrete probability, expected value and variance. Students will also learn formal methods for writing mathematical proofs. Applications to computer science will be illustrated. NOTE: For Computer Science and Information Science and Technology Majors.<p>For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 1022|Minimum Grade of C-|May not be taken concurrently
OR MATH 1038 to 4999| Required Courses:1|Minimum Grade of C-|May be taken concurrently
OR MC6 Y|May not be taken concurrently
OR MA04 Y|May not be taken concurrently.
An honors version of CIS 1166, this course provides an introduction to the mathematical concepts fundamental to computer and information science. Topics include an introduction to predicate and propositional calculus; sets and set operations; functions, sequences and matrices; big-O notation and the growth of functions; algorithms; number theory; mathematical induction and recursive definitions; combinations, permutations, and binomial coefficients; probability, relations. Students will also learn formal methods for writing mathematical proofs. Additional topics beyond the scope of an introductory course will be included. These topics will not only enrich the class, but also show how the concepts can be applied to solve cutting edge problems in science and technology.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
- MATH 1041|Minimum Grade of C|May be taken concurrently
- OR MATH 1941|Minimum Grade of C|May be taken concurrently
- OR MATH 1038|Minimum Grade of C|May be taken concurrently
- OR MATH 1042|Minimum Grade of C-|May be taken concurrently
- OR MATH 1942|Minimum Grade of C-|May be taken concurrently
- OR MATH 1951|Minimum Grade of C-|May be taken concurrently
- OR MATH 2043 to 3080| Required Courses:1|Minimum Grade of D|May be taken concurrently
- OR MA06 Y|May not be taken concurrently.

CIS 1968. Honors Program Design and Abstraction. 4 Credit Hours.
An honors version of CIS 1068, this course provides an introduction to problem solving and programming in Java, software engineering, procedural and data abstraction, and object-oriented programming, including class hierarchies, inheritance and interfaces. Data types covered include primitive data types, strings, classes, arrays, vectors, and streams. Programming techniques include at least techniques for searching and sorting an array. In addition to the standard materials for 1068, this course will look more deeply into the underlying representations of numeric data types, it will consider some more advanced language topics including a more detailed look at polymorphism, and it may consider additional techniques such as linked data structures and recursion. Expect the usual boundary between lab and lecture to be somewhat blurred as we look at design and implementation in both places, often in the context of small group activities. The course will end with small group programming projects of modest complexity chosen jointly by the students and instructor based on their areas of interest. These could include elements of graphics, robotics, applied mathematics, engineering, or projects from other disciplines.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
- MATH 1041|Minimum Grade of C|May be taken concurrently
- OR MATH 1941|Minimum Grade of C|May be taken concurrently
- OR MATH 1038|Minimum Grade of C|May be taken concurrently
- OR MATH 1042|Minimum Grade of C-|May be taken concurrently
- OR MATH 1942|Minimum Grade of C-|May be taken concurrently
- OR MATH 1951|Minimum Grade of C-|May be taken concurrently
- OR MATH 2043 to 3080| Required Courses:1|Minimum Grade of D|May be taken concurrently
- OR MA06 Y|May not be taken concurrently.
CIS 2033. Computational Probability and Statistics. 4 Credit Hours.
This course is typically offered in Spring. The goal is to introduce students to modern and extremely useful topics in computational statistics. It focuses on computational aspects and provides a hands-on introduction to fundamental concepts of data analysis. The course is composed of 3 hours lecture and 2 hours lab with programming assignments in Matlab. Consequently, the students will be able to immediately see their results with programming assignments in Matlab. No prior Matlab knowledge is required. The course offers a solid foundation for further courses in data mining, machine learning, artificial intelligence, robotics, computer vision, and in general in computational statistics and scientific computing. For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(CIS 1068|Minimum Grade of C-|May not be taken concurrently
OR CIS 1073|Minimum Grade of C-|May not be taken concurrently)
AND (CIS 1166|Minimum Grade of C-|May not be taken concurrently)
AND (MATH 1041|Minimum Grade of C-|May not be taken concurrently
OR MATH 1038|Minimum Grade of C-|May not be taken concurrently
OR MATH 1022|Minimum Grade of C-|May not be taken concurrently)
AND MATH 1031|Minimum Grade of C-|May not be taken concurrently
OR MATH 1941|Minimum Grade of C-|May not be taken concurrently
OR MATH 1042|Minimum Grade of C-|May be taken concurrently
OR MATH 1942|Minimum Grade of C-|May be taken concurrently
OR MATH 1951|Minimum Grade of C-|May be taken concurrently
OR MATH 2043 to 3080|Required Courses:1|Minimum Grade of C-|May be taken concurrently
OR MA05 Y|May not be taken concurrently
OR MA06 Y|May not be taken concurrently).

CIS 2082. Independent Research I. 1 to 4 Credit Hour.
This course is typically offered in Fall, Spring, Summer I and Summer II.

Prerequisites: Completion of CIS 2168 with at least a C-, and a GPA of 3.0 or better in the major. Supervised research under the direction of a faculty member in the Department of CIS. All students must obtain the approval of the CIS Administrative Coordinator. NOTE: Not available for major credit and does not count in the major GPA. This course is repeatable.

Repeatability: This course may be repeated for additional credit.

CIS 2107. Computer Systems and Low-Level Programming. 4 Credit Hours.
This course is typically offered in Fall and Spring.

This course introduces computer systems architecture at the level required to understand low-level systems programming. It examines issues of information representation, the form of machine instructions and addressing, the implementation of programming language constructs in terms of machine instructions, the interfaces to peripheral devices. Programming is done in assembly language and in C. NOTE: For Computer Science Majors.

For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Computer & Information Science, Computer Science, Electrical Engineering, Mathematics/Computer Science, Mathematics & Comp Sci w/Teach

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(CIS 1068|Minimum Grade of C-|May not be taken concurrently
OR CIS 1073|Minimum Grade of C-|May not be taken concurrently)
AND (CIS 1166|Minimum Grade of C-|May not be taken concurrently).

CIS 2109. Database and File Management Systems. 4 Credit Hours.
This course is typically offered in Fall and Spring.

This is an introductory course in database management systems (DBMS) and file management systems. The course covers data modeling concepts, various file management techniques, data definition and manipulation using SQL, issues in data management, development and implementation of database applications, and a perspective on emerging issues in database systems. Students work in the Lab on various assignments including prototyping and SQL, utilizing state of the art DBMS and CASE tools. NOTE: (1) Duplicate Course: No credit for students who have completed CIS 4331 (0331). (2) For Information Science and Technology Majors.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
CIS 1073|Minimum Grade of C-|May not be taken concurrently
OR CIS 1068|Minimum Grade of C-|May not be taken concurrently.
CIS 2166. Mathematical Concepts in Computing II. 4 Credit Hours.
This course is typically offered in Fall and Spring. A continuation of CIS 1166. Concepts include recursion and recursive algorithms; relations including equivalence, congruence, and order; introduction to graphs and trees. Additional topics include Boolean algebra and finite automata. Applications to computer science will be illustrated. NOTE: For Computer Science Majors. For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(MATH 1041|Minimum Grade of C|May not be taken concurrently)
OR MATH 1941|Minimum Grade of C|May not be taken concurrently
OR MATH 1038|Minimum Grade of C|May not be taken concurrently
OR MATH 1042|Minimum Grade of C|May be taken concurrently
OR MATH 1942|Minimum Grade of C|May be taken concurrently
OR MATH 1951|Minimum Grade of C|May be taken concurrently
OR MATH 2043 to 3080|Required Courses:1|Minimum Grade of C|May be taken concurrently
OR MA06 Y|May not be taken concurrently)
AND (CIS 1068|Minimum Grade of C|May not be taken concurrently)
AND (CIS 1166|Minimum Grade of C|May not be taken concurrently).

CIS 2168. Data Structures. 4 Credit Hours.
This course is typically offered in Fall and Spring. A continuation of CIS 1068. Program style organization and design with continued emphasis on the object-oriented design paradigm. Understanding and use of data abstraction through Java classes and class libraries. Understanding and use of the following Abstract Data Types: strings, stacks, queues, priority queues, lists, linked lists, binary trees, heaps, and hash tables. Introduction to expression evaluation and other applications. Introduction to recursion and comparative analysis of searching and sorting algorithms and data structures. Sorting algorithms include insertion sort, mergesort, heapsort, and quicksort. Searching algorithms include binary search, hashing, and Huffman coding. NOTE: For Computer Science and Information Science and Technology Majors.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(CIS 1068|Minimum Grade of C|May not be taken concurrently)
AND (CIS 1166|Minimum Grade of C|May not be taken concurrently)
AND (MATH 1022|Minimum Grade of C|May be taken concurrently
OR MATH 1038 to 4999|Required Courses:1|Minimum Grade of C|May be taken concurrently
OR MC6 Y|May not be taken concurrently
OR MA04 Y|May not be taken concurrently).

CIS 2229. Architecture, Operating Systems and Networking. 4 Credit Hours.
This course is typically offered in Fall and Spring. This course provides an introduction to computer system architecture, operating systems concepts, and network organization, structure, and management. NOTE: For Information Science and Technology Majors. For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(CIS 1048|Minimum Grade of C|May be taken concurrently)
AND (CIS 1068|Minimum Grade of C|May not be taken concurrently
OR CIS 1073|Minimum Grade of C|May not be taken concurrently).

CIS 2305. Mobile Computing Technologies. 4 Credit Hours.
This course is typically offered in Fall. This course provides an environment for students to learn and experiment with mobile computing technologies in different platforms, such as iPhone, Android and Windows Mobile (in partnership with Microsoft Research). The actual platform may rotate according to students’ interest, device and instructor availability. The course is tutorial and project oriented. The first eight weeks are for tutorials and laboratories. The remaining weeks are for group projects. Each team will consist of students with programming, management and critical analysis skills. NOTE: For Information Science & Technology Majors. For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CIS 1068|Minimum Grade of C|May not be taken concurrently
OR CIS 1073|Minimum Grade of C|May not be taken concurrently
OR CIS 1056|Minimum Grade of C|May not be taken concurrently.
CIS 2308. Web Application Programming. 4 Credit Hours.
This course is typically offered in Fall and Spring. This course introduces the techniques used in the design and implementation of web applications. Using development environments such as Dreamweaver, Visual Studio, Eclipse, Netbeans, and SQL Management Studio, students write code for the browser (HTML, Cascading Style Sheets, javascript, ajax), web application server (JSP, PHP, or C#.NET), and database server (SQL, stored procedures, triggers). Students learn about internet protocols and how to work with web application objects (e.g., request, response, session). Students learn how design patterns such as MVC (Model-View-Controller) can and should be applied to the multi-tiered, distributed software that make up today's web applications. XML (a format commonly used to transfer data over the internet) and web services (a method call to a remote computer over the internet) are discussed and demonstrated. Each student will program their own web application, expanding on its functionality each week in the lab. For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(CIS 2107|Minimum Grade of C-|May not be taken concurrently)
(CIS 2166|Minimum Grade of C-|May not be taken concurrently)
(CIS 2168|Minimum Grade of C-|May not be taken concurrently)

CIS 3033. Computational Probability and Statistics. 4 Credit Hours.
This course is typically offered in Fall. The goal is to introduce students to modern and extremely useful topics in computational statistics. It focuses on computational aspects and provides a hands-on introduction to fundamental concepts of data analysis. The course is composed of 3 hours lecture and 2 hours lab with programming assignments in Matlab. Consequently, the students will be able to immediately see their results with programming assignments in Matlab. No prior Matlab knowledge is required. The course offers a solid foundation for further courses in data mining, machine learning, artificial intelligence, robotics, computer vision, and in general in computational statistics and scientific computing. For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(CIS 1068|Minimum Grade of C|May not be taken concurrently)
(CIS 1073|Minimum Grade of C|May not be taken concurrently)
(MATH 1042|Minimum Grade of C|May not be taken concurrently).

CIS 3191. Independent Research II. 1 to 4 Credit Hour.
This course is typically offered in Fall, Spring, Summer I and Summer II. Prerequisites: Completion of CIS 2168 and [CIS 3223 or CIS 3309] with at least a C-, and a GPA of 3.0 or better in the major. Research under the direction of a faculty member in the Department of CIS. All students must obtain the approval of the CIS Administrative Coordinator. NOTE: Not available for major credit and does not count in the major GPA. This course is repeatable.
Repeatability: This course may be repeated for additional credit.

CIS 3203. Introduction to Artificial Intelligence. 4 Credit Hours.
This course is typically offered in Fall. An introduction to the issues and ideas of artificial intelligence using LISP and PROLOG. Knowledge of representation, search, problem solving, learning and mathematical reasoning. NOTE: For Computer Science Majors. For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Computer & Information Science, Computer Science, Mathematics/Computer Science, Mathematics & Comp Sci w/Teach
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(CIS 2033|Minimum Grade of C|May not be taken concurrently)
(CIS 2168|Minimum Grade of C|May not be taken concurrently)
(CIS 3223|Minimum Grade of C|May not be taken concurrently)

CIS 3207. Introduction to Systems Programming and Operating Systems. 4 Credit Hours.
This course is typically offered in Fall and Spring. This course is concept-oriented, not specialized to a particular operating system, and not trying to teach how to code the kernel of an operating system. After reviewing a number of system programming issues, it examines the basic components of modern operating systems in terms of their function, domain, design, principles and implementation techniques, use and impact on systems programming. It describes and uses in programming homework two modern operating systems (UNIX and Windows NT). Design and implementation of a number of concurrent programs is examined. Hardware support for operating system functions is discussed. Performance issues are considered through the course. NOTE: For Computer Science Majors. For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Computer & Information Science, Computer Science, Mathematics/Computer Science, Mathematics & Comp Sci w/Teach
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(CIS 1166|Minimum Grade of C|May not be taken concurrently)
(CIS 2107|Minimum Grade of C|May not be taken concurrently)
(CIS 2168|Minimum Grade of C|May not be taken concurrently)
CIS 3211. Automata, Computability, and Languages. 3 Credit Hours.
This course is not offered every year. <p>Finite automata, their limitations and capabilities, and Kleen's theorem or regular expressions. Other types of automata and their events. Turing machine and computability, computable functions, and halting problems. Introduction to context-free languages. Syntactical analysis of such languages with application to translation. NOTE: For Computer Science Majors. <p>For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Computer & Information Science, Computer Science, Mathematics/Computer Science
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CIS 2166|Minimum Grade of C-|May not be taken concurrently.

CIS 3219. Computer Graphics and Image Processing. 4 Credit Hours.
This course is typically offered in Spring. <p>An analysis of the techniques used in computer manipulation of two- and three-dimensional images. Hardware and software for displaying images, two- and three-dimensional transformations, the hidden line problem, picture processing, character recognition, and two-dimensional filtering. NOTE: For Computer Science Majors. <p>For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Computer & Information Science, Computer Science, Mathematics/Computer Science, Mathematics & Comp Sci w/Teach
Repeatability: This course may not be repeated for additional credits
Pre-requisites: (CIS 1166|Minimum Grade of C-|May not be taken concurrently)
AND (CIS 2107|Minimum Grade of C-|May not be taken concurrently)
AND (CIS 2168|Minimum Grade of C-|May not be taken concurrently)
AND (MATH 1042|Minimum Grade of C-|May not be taken concurrently)
OR MATH 1942|Minimum Grade of C-|May not be taken concurrently
OR MATH 1951|Minimum Grade of C-|May not be taken concurrently
OR MATH 2043 to 3080| Required Courses:1|Minimum Grade of C-|May be taken concurrently
OR MA07 Y|May not be taken concurrently).

CIS 3223. Data Structures and Algorithms. 3 Credit Hours.
This course is typically offered in Fall and Spring. <p>Comparative analysis of algorithms and data structures. Data structures include heaps, priority queues, binary and general trees, binary search trees, AVL trees, Red-Black trees, B-trees, and graphs. Algorithms include heapsort, topological sort, breadth-first search, depth-first search, shortest path algorithms, and Greedy algorithms. Students will gain experience working in a group on at least one moderate-size project. NOTE: For Computer Science Majors. <p>For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Computer & Information Science, Computer Science, Mathematics/Computer Science, Mathematics & Comp Sci w/Teach
Repeatability: This course may not be repeated for additional credits
Pre-requisites: (CIS 2166|Minimum Grade of C-|May not be taken concurrently)
AND (CIS 2168|Minimum Grade of C-|May not be taken concurrently)
AND (MATH 1042|Minimum Grade of C-|May not be taken concurrently)
OR MATH 1942|Minimum Grade of C-|May not be taken concurrently
OR MATH 1951|Minimum Grade of C-|May not be taken concurrently
OR MATH 2043 to 3080| Required Courses:1|Minimum Grade of C-|May be taken concurrently
OR MA07 Y|May not be taken concurrently).

CIS 3238. Software Design. 4 Credit Hours.
This course is typically offered in Spring. <p>Provides direct experience in the design, development, documentation, testing and maintenance of medium size software projects, in the use of modern software problem solving abstractions and solution patterns, and in the use of software development environments. This course is the capstone of the programming course sequence. <p>For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: (CIS 2168|Minimum Grade of C-|May not be taken concurrently)
AND (CIS 3207|Minimum Grade of C-|May not be taken concurrently).
CIS 3242. Discrete Structures. 3 Credit Hours.
This course is typically offered in Fall.<p>This course introduces algebraic structures fundamental to various areas of computer science. Graphs, planar graphs, algorithms on graphs and their analysis, sequential machines and their minimization, semi-groups, and groups and their application to computer science. NOTE: For Computer Science Majors.<p>For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Computer & Information Science, Computer Science, Mathematics/Computer Science
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CIS 2166|Minimum Grade of C-|May not be taken concurrently.

CIS 3281. Cooperative Education Experience in Information Science & Technology. 4 Credit Hours.
This course is typically offered in Fall, Spring and Summer I.<p>Prerequisites: Completion of CIS 2168 with at least a C-. All students must obtain the approval of the IST Faculty Advisor. In this course, students undertake directed study in Information Science and Technology, which integrates academic program and work experience. The course is coordinated by an Information Science & Technology faculty member, but supervised by the student's work supervisor. At the end of the semester students will turn in a final report detailing the work done on the project. NOTE: For Information Science and Technology Majors.<p>For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.
Repeatability: This course may be repeated for additional credit.

CIS 3287. Software Design/Practicum. 4 Credit Hours.
This course is typically offered in Fall.<p>Provides direct experience in the design, development, documentation, testing and maintenance of medium size software projects, in the use of modern software problem solving abstractions and solution patterns, and in the use of software development environments. This course is the capstone of the programming course sequence. NOTE: For Computer Science Majors.<p>For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Computer & Information Science, Computer Science, Mathematics/Computer Science
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(CIS 2168|Minimum Grade of C-|May not be taken concurrently)
AND (CIS 3207|Minimum Grade of C-|May not be taken concurrently).

CIS 3309. Component-Based Software Design. 4 Credit Hours.
This course is typically offered in Fall and Spring.<p>This course emphasizes component-based software development using a modern object-oriented programming (OOP) language (currently C#). Students are introduced to software development techniques applicable in a component (class)-based, integrated software development environment (IDE). Students will learn and practice using the OOP language, object-oriented software design techniques, and the principles of good user interface design. Students will also learn how to navigate in, and take full advantage of, an IDE in building quality software, including user interfaces to databases, sequential files, and graphics tools. Object-oriented concepts such as inheritance, polymorphism, static and dynamic binding, and interface (abstract class) components will be covered. The primary focus is on windows-based software products, but the use of ASP.NET for client-server systems development is also introduced. NOTE: (1) Duplicate Course: Students may not get credit for both CIS 4309 and 3309. (2) For Information Science and Technology Majors.<p>For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Information Science & Technolo
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(CIS 2109|Minimum Grade of C-|May be taken concurrently)
OR CIS 4331|Minimum Grade of C-|May not be taken concurrently)
AND (CIS 2168|Minimum Grade of C-|May not be taken concurrently)
OR CIS 2173|Minimum Grade of C-|May not be taken concurrently)
AND (MATH 1022|Minimum Grade of C-|May not be taken concurrently)
OR MATH 1038 to 4999|Required Courses:1|Minimum Grade of C-|May not be taken concurrently
OR MC6 Y|May not be taken concurrently
OR MA04 Y|May not be taken concurrently).

CIS 3319. Wireless Networks and Security. 4 Credit Hours.
This course is typically offered in Spring.<p>The students are expected to learn fundamental knowledge of cryptography, several types of important wireless networks, and security issues and defenses in the wireless networks and systems.<p>For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Computer & Information Science, Computer Science, Mathematics/Computer Science, Mathematics & Comp Sci w/Teach
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(CIS 2107|Minimum Grade of C-|May not be taken concurrently)
AND (CIS 2168|Minimum Grade of C-|May not be taken concurrently).
CIS 3329. Network Architectures. 4 Credit Hours.

This course covers the operation of computer networks and internets. It provides the background to enable students to evaluate alternative approaches to client-server computing and n-tier software development. To accomplish this the course includes communications technology, computer network technology internetworking using the TCP/IP protocol suite, client-server protocols, client-server computing, network program component models as well as issues involving security, privacy, authentication, intellectual property rights, and social changes related to computer networking. NOTE: For Information Science and Technology Majors and Minors only.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Information Science & Technology

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(CIS 2168|Minimum Grade of C-|May not be taken concurrently)
AND (CIS 2107|Minimum Grade of C-|May not be taken concurrently)
OR CIS 2229|Minimum Grade of C-|May not be taken concurrently).

CIS 3342. Networked Application Systems. 4 Credit Hours.

This course is typically offered in Fall and Spring.<p>The objective of this course is to provide further depth, beyond CIS 3309, into the development of network deployed systems. Its emphasis is on distributed, multi-tier architectures. The course is divided into 3 parts. First is the theory associated with software engineering design principles and distributed processing in client/server architectures and database systems. The second part is a deeper knowledge of the ASP.NET and C#.NET languages beyond CIS 3309. This would include such topics as web and windows applications, user interfaces, event handling, database design and ADO.NET, Web Services, Ajax, user controls, and report generation. The third part of the course is a project that the student will perform in the design and programming of a distributed client/server application. NOTE: For Information Science and Technology Majors.<p>For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Information Science & Technology

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(CIS 2109|Minimum Grade of C-|May not be taken concurrently)
AND (CIS 3309|Minimum Grade of C-|May not be taken concurrently)

CIS 3344. Advanced Web Application Design and Scripting. 4 Credit Hours.

This course is typically offered in Fall and Spring.<p>A principal objective of the course is to present web site design and web application programming as separate technical disciplines and, at the same time, to show how they must be carefully integrated to produce effective results. The course will provide the student with the principal design techniques and associated implementation languages for creating dynamic web pages and for both client and server side processing via scripting and an object oriented, event driven language. The new concepts associated with Web 2.0 are presented. These capabilities are sometimes collectively described as Rich Internet Applications (RIA). They greatly enhance the dynamics and interactivity of web presentation and include the "push" vs. "pull" paradigms. Prevalent technologies and languages for web design to be taught are XHTML, CSS, XML, XSL, and DaM, Javascript, Action Script and Adobe FLEX. The prerequisite courses will provide students with the necessary elements of VB.NET for server side processing as well as SQL for database design. Together, the client side scripting languages and the server side NET and SQL languages will enable students to create applications for the complete client/server cycle. Two other technologies will also be introduced as important contributors to RIA: (1) AJAX, which enhances the effectiveness and speed of the client/server interaction, and (2) Really Simple Syndication (RSS), which provides new delivery modes of web based information in terms of the "push" paradigm. Online tutorials and reference manuals will be made available for all languages used in the course as a supplement to the Text Book. The course will emphasize good web design practice, client server architecture, and the principles of event oriented programming. It will be shown how the use of an Integrated Development Environment (IDE) and other specialized tools can enhance programmer/designer productivity and quality of the final product. NOTE: For Information Science and Technology Majors. Prior to spring 2011, the course title was "Client/Server Scripting Languages for Web Development."<p>NOTE: For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
CIS 3309|Minimum Grade of C-|May not be taken concurrently.

CIS 3374. Quality Assurance & Testing. 4 Credit Hours.

This course is typically offered in Fall.<p>Learn the techniques for creating quality systems. This course discusses the crucial steps to be taken to assure that systems: do what they are intended to do; work reliably; satisfy the client's requirements; are completed on time and within budget. Quality practices will be introduced and reviewed to give you a perspective as to why some systems succeed and others fail. Most importantly, students will learn techniques for building quality systems. A number of software tools will be introduced and discussed. Participants will be expected to complete one research paper on test automation, write test plans, and develop the skills to improve the software development process. NOTE: For Information Science and Technology Majors.<p>For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
CIS 2168|Minimum Grade of C-|May not be taken concurrently.
CIS 3376. Enterprise Resource Planning (ERP) Design and Implementation. 3 Credit Hours.
This course is typically offered in Spring.<p>This course is designed to teach students about implementation of integrated information system for the enterprise using SAP ERP. The course will explain the fundamental concepts of ERP implementations, including cost/benefit, infrastructure design and integration issues. Online tutorials will be used to provide an introduction to the SAP and navigation exercises to acquaint students with getting around within SAP ERP. Students then will work in teams on case studies that execute business process integration in five key areas: sales logistics, production logistics, procurement logistics, accounting/controlling, and human resources. Additionally, students are introduced to SAP master data creation and use. NOTE: For Information Science & Technology Majors.<p>NOTE: This is a new course number for the SAP course, which had been offered as CIS 4340. Students may not take this course if you already took CIS 4340. For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(CIS 2109|Minimum Grade of C-|May not be taken concurrently) AND (CIS 2168|Minimum Grade of C-|May not be taken concurrently).

CIS 3381. Cooperative Education Experience in Computer Science. 4 Credit Hours.
This course is typically offered in Fall, Spring, Summer I and Summer II.<p>Students undertake directed study in Computer Science, which integrates academic program and work experience. The course is coordinated by a Computer Science faculty member, but supervised by the student's work supervisor. Students will submit a weekly log and turn in a final report detailing the work completed at the end of the semester. NOTE: For Computer Science Majors.<p>For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.
Repeatability: This course may be repeated for additional credit.

CIS 3515. Introduction to Mobile Application Development. 4 Credit Hours.
This course is typically offered in Fall and Spring.<p>This course will introduce students to application development for mobile devices, and the various concerns of mobile platforms. Students will learn about the various constraints inherent to mobile applications as well as the new opportunities that they present. They will learn how to address challenges in hardware and mobile interface modalities by incorporating software design and user-interaction design principles. Additionally, students will be exposed to new models of software and data distribution, leveraging third party software, and managing local and remote data.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CIS 2168|Minimum Grade of C-|May not be taken concurrently.

CIS 3603. User Experience Design. 3 Credit Hours.
This course is typically offered in the Fall and Spring.<p>This course will focus on the effective understanding and implementation of the iterative UX design process. Students will learn to have empathy for users by putting into practice each phase of the design process, including Scoping, Research, Analysis, Ideation, Design, Validation, and more. Students will gain exposure and experience in a simulation of a real-world experience.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CIS 2168|Minimum Grade of C-|May not be taken concurrently.

CIS 3605. Introduction to Digital Forensics. 3 Credit Hours.
This course is typically offered in Fall.<p>This course is a broad introduction to the field of Digital Forensics. It covers various fundamental topics necessary for digital forensics investigation. The course begins with foundations of electronic evidence including cyber crime laws, the 4th Amendment, compliance and requirements, collection and handling, analysis, and reporting. The course also covers fundamentals of file systems with specific details pertaining to Microsoft FAT file systems. Students will learn two important forensics techniques—file recovery and file carving—among other things. Finally, forensics artifacts relevant to Windows Systems and Networks are discussed with relevant lab activities and students are also introduced to Antiforensics. Hands-on lab activities familiarize students with several relevant investigation techniques and the use of open source forensics tools.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(CIS 2107|Minimum Grade of C-|May not be taken concurrently) OR CIS 2229|Minimum Grade of C-|May not be taken concurrently) AND (CIS 2168|Minimum Grade of C-|May not be taken concurrently).

CIS 3715. Principles of Data Science. 4 Credit Hours.
This course is typically offered in Spring.<p>Introduction to the practice of data science. Students will leave the class with a broad set of practical data analytic skills based on building real analytic applications on real data. Skills include collecting, accessing, and transferring data, applying methods from machine learning and data mining to analyze data, and visualization and presentation of results. The students will gain experience in processing “big data” which are too big to fit in the computer’s memory. NOTE: For Computer Science and Information Science and Technology Majors.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(CIS 1166|Minimum Grade of C-|May not be taken concurrently) AND (CIS 2033|Minimum Grade of C-|May not be taken concurrently) AND (CIS 2168|Minimum Grade of C-|May not be taken concurrently).
CIS 3775. Information Technology Project Management. 3 Credit Hours.
This course will be offered in the Fall and Spring semesters. Strong business leaders in today's marketplace use project management knowledge and skills as a key differentiator driving success in their organizations. This course will use case studies to examine basic components of time, scope and resources within the project management processes defined by the Project Management Institute. This course lays the foundation for learning project management with practical examples and tools used in actual business situations. Learn how project management can be driven not only from a monitoring and numbers perspective but also from a people perspective to reach business goals. NOTE: For Information Science and Technology Majors.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
CIS 2168|Minimum Grade of C-|May not be taken concurrently.

CIS 4083. Directed Reading/Study. 1 to 4 Credit Hour.
This course is typically offered in Fall, Spring, Summer I and Summer II. Prerequisites: Completion of CIS 2168 and [CIS 3223 or CIS 3309] with at least a C- and a GPA of 3.0 or better in the major. A tutorial opportunity for a student to work with a faculty member to investigate areas of study not covered by courses in the department. All students must obtain the approval of the CIS Administrative Coordinator. NOTE: Not available for major credit. Counts toward the major GPA. This course is repeatable.

Repeatability: This course may be repeated for additional credit.

CIS 4105. Information Technology Process Management. 3 Credit Hours.
This course is typically offered in Fall. An introduction to essential techniques for successfully creating, organizing and managing IT projects. The course provides the foundation for more advanced studies in process management and software engineering. Enterprise-wide requirements, long-range planning and managing all aspects of the development process will be emphasized. The course will stress the use of appropriate software tools and process modeling throughout the development lifecycle. Quality assurance techniques are introduced at the outset to guide IT processes and decision making. Methods and tools for the technical development of IT systems are presented and used in case projects. The course follows the normal development lifecycle, starting with the recognition and justification of the need for either a new system or an upgrade to an existing system. It then proceeds through analysis, specification, design, implementation, testing (quality assurance), client training and turnover, and maintenance. The importance of each development stage will be taught within the framework of systems reliability, effectiveness, security, scalability, and development cost. NOTE: For Information Science & Technology Majors.

NOTE: For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
CIS 2168|Minimum Grade of C-|May not be taken concurrently.

CIS 4106. System Development Process. 3 Credit Hours.
This course is typically offered in Spring. Methods and tools for the technical development of IT systems are presented and used in case projects. The course follows the normal development lifecycle, starting with the recognition and justification of the need for either a new system or an upgrade to an existing system. It then proceeds through analysis, specification, design, implementation, testing (quality assurance), client training and turnover, and maintenance. The importance of each development stage will be taught within the framework of systems reliability, effectiveness, security, scalability, and development cost. NOTE: For Information Science & Technology Majors.

NOTE: For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
CIS 3309|Minimum Grade of C-|May not be taken concurrently.

CIS 4108. Emerging Technologies and Tools for Enterprise Management. 3 Credit Hours.
This course is typically offered in Spring. The purpose of this course is to provide students with an understanding of maturing and emerging technologies and their likely impact on the networked information paradigm and enterprise management. Both hardware and software technologies will be covered. Students will be introduced to advanced software tools that demonstrate how agency enterprises make use of vast information flows and interconnectivity. NOTE: For Information Science & Technology Majors.

NOTE: For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
CIS 3309|Minimum Grade of C-|May not be taken concurrently.

CIS 4282. Independent Study. 1 to 6 Credit Hour.
This course is typically offered in Fall, Spring, Summer I and Summer II. Research under supervision of a faculty member. NOTE: For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.

Repeatability: This course may be repeated for additional credit.
CIS 4305. Real Time Computer Systems. 4 Credit Hours.  
This course is not offered every year. <p>Introduction to computer networks and communications. Local and wide area networks. Network topology and routing. Internet and ISO protocols. Applications including remote procedure calls, remote logon, and file transfer. Network operating systems. NOTE: For Computer Science Majors. <p>For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.  

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Computer & Information Science, Computer Science, Mathematics/Computer Science  
Repeatability: This course may not be repeated for additional credits  
Pre-requisites: 
(CIS 3207|Minimum Grade of C-|May not be taken concurrently)  
AND (CIS 3223|Minimum Grade of C-|May not be taken concurrently).

CIS 4307. Introduction to Distributed Systems and Networks. 4 Credit Hours.  
This course is not offered every year. <p>Introduction to the problems and techniques of designing and developing real-time systems. Topics will include components of real-time and embedded systems, system and device architecture, synchronous and asynchronous event handling, multi-tasking in real-time systems, scheduling and synchronization, and real-time data acquisition and control. The laboratory component involves building systems and simulations in real-time environments, with real-time kernels. NOTE: For Computer Science Majors. <p>For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.  

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Computer & Information Science, Computer Science, Mathematics/Computer Science  
Repeatability: This course may not be repeated for additional credits  
Pre-requisites: 
(CIS 3207|Minimum Grade of C-|May not be taken concurrently)  
AND (CIS 3223|Minimum Grade of C-|May not be taken concurrently).

CIS 4308. Development of Multi-tier Client/Server Systems. 4 Credit Hours.  
This course is not offered every year. <p>The objective of this course is to teach the principles and development of multi-tiered distributed systems. It is introduced with a basic review of internet communications and the architecture of client and server sites, including the functions of and relationships among the browser, web server, operating and file systems, middleware, database server, and application servers. Concepts involving various types of client/server side processing and remote connectivity methodologies are reviewed, including scripting languages, HTML, Dynamic HTML, XML, ASP, CGI, and DCOM. About 30% of the course is devoted to the above-described theory. The remainder of the course will be devoted to putting some of these principles and techniques into practice using the DCOM technology. A series of progressively sophisticated problems will be studied and programmed in the lab. NOTE: For Computer Science Majors. <p>For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.  

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Computer & Information Science, Computer Science, Mathematics/Computer Science  
Repeatability: This course may not be repeated for additional credits  
Pre-requisites: 
(CIS 3207|Minimum Grade of C-|May not be taken concurrently)  
AND (CIS 3223|Minimum Grade of C-|May not be taken concurrently). 

CIS 4319. Computer Networks and Communications. 4 Credit Hours.  
This course is not offered every Fall. <p>Introduction to computer networks and communications. Local and wide area networks. Network topology and routing. Internet and ISO protocols. Applications including remote procedure calls, remote logon, and file transfer. Network operating systems. NOTE: For Computer Science Majors. <p>For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.  

Repeatability: This course may not be repeated for additional credits  
Pre-requisites: 
(CIS 3207|Minimum Grade of C-|May not be taken concurrently)  
AND (CIS 2166|Minimum Grade of C-|May not be taken concurrently).
CIS 4324. Compiler Design. 4 Credit Hours.
This course is not offered every year. The student will learn what a compiler is and how it works. Topics covered include: how to specify what a legal program is in a language (syntax); how to specify what a legal program does (semantics); how a computer uses these specifications to recognize a legal program and translate this program into the machine's language. Students will develop a working compiler for a simple object-oriented programming language using an Object-Oriented approach, using Java, and the compiler construction tool ANTLR. The target will be the Java Virtual Machine. NOTE: For Computer Science Majors. Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(CIS 2168|Minimum Grade of C-|May not be taken concurrently)
AND (CIS 2166|Minimum Grade of C-|May not be taken concurrently).

CIS 4330. Current Topics in Information Science & Technology. 3 Credit Hours.
This course is typically offered in Fall and Spring. Current problems in information science and technology. NOTE: For Information Science and Technology Majors. Repeatability: This course is repeatable for credit
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Information Science & Technology
Pre-requisites:
(CIS 2168|Minimum Grade of C-|May not be taken concurrently).

CIS 4331. Principles of Database Systems. 4 Credit Hours.
This course is not offered every Fall. This course will cover the fundamental concepts of database systems, with an emphasis on relational database systems. It will cover both the theory and practice of relational databases, including Codd's original relational model, the relational algebra and calculus, and normalization. Students will learn how to do database design using the (extended) entity-relationship model. There will be a semester-long project in which students will design and implement an actual database, using an existing relational database management system, such as Access, MySQL, or Oracle. NOTE: (1) Duplicate Course: No credit for students who have completed CIS 2109. (2) For Computer Science Majors. Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(CIS 3207|Minimum Grade of C-|May not be taken concurrently)
AND (CIS 2166|Minimum Grade of C-|May not be taken concurrently).

CIS 4340. Seminar in Information Science & Technology. 4 Credit Hours.
This course is typically offered in Spring. Current problems in information science and technology. NOTE: For Information Science and Technology Majors. Repeatability: This course is repeatable for credit
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Information Science & Technology
Pre-requisites:
(CIS 2168|Minimum Grade of C-|May not be taken concurrently).

CIS 4344. Advanced Web Application Design & Scripting. 4 Credit Hours.
This course is typically offered in Fall and Spring. A principal objective of the course is to present web site design and web application programming as separate technical disciplines and, at the same time, to show how they must be carefully integrated to produce effective results. The course will provide the student with the principal design techniques and associated implementation languages for creating dynamic web pages and for both client and server side processing via scripting and an object oriented, event driven language. The new concepts associated with Web 2.0 are presented. These capabilities are sometimes collectively described as Rich Internet Applications (RIA). They greatly enhance the dynamics and interactivity of web presentation and include the "push" vs. "pull" paradigms. Prevalent technologies and languages for web design to be taught are XHTML, CSS, XML, XSL, and DaM, Javascript, Action Script and Adobe FLEX. The prerequisite courses will provide students with the necessary elements of VB.NET for server side processing as well as SQL for database design. Together, the client side scripting languages and the server side .NET and SQL languages will enable students to create applications for the complete client/server cycle. Two other technologies will also be introduced as important contributors to RIA: (1) AJAX, which enhances the effectiveness and speed of the client/server interaction, and (2) Really Simple Syndication (RSS), which provides new delivery modes of web based information in terms of the "push" paradigm. Online tutorials and reference manuals will be made available for all languages used in the course as a supplement to the Text Book. The course will emphasize good web design practice, client server architecture, and the principles of event oriented programming. It will be shown how the use of an Integrated Development Environment (IDE) and other specialized tools can enhance programmer/designer productivity and quality of the final product. NOTE: For Information Science and Technology Majors. Prior to spring 2011, the course title was "Client/Server Scripting Languages for Web Development." Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(CIS 3309|Minimum Grade of C-|May not be taken concurrently)
AND (CIS 2168|Minimum Grade of C-|May not be taken concurrently).
CIS 4350. Seminar on Topics in Computer Science. 4 Credit Hours.
This course is typically offered in Fall. Current problems in computer science. NOTE: For Computer Science Majors. For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required. This course is repeatable for credit.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Computer & Information Science, Computer Science, Mathematics/Computer Science, Mathematics & Comp Sci w/Teach
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
CIS 2168|Minimum Grade of C-|May not be taken concurrently.

CIS 4360. Seminar on Topics in Computer Science. 3 Credit Hours.
Course content varies from semester to semester and is concerned with current issues in computer science. Note: For Computer Science Majors.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Computer & Information Science, Computer Science, Mathematics/Computer Science, Mathematics & Comp Sci w/Teach
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
CIS 2168|Minimum Grade of C-|May not be taken concurrently.

CIS 4362. Application System Development Using Relational Technology. 4 Credit Hours.
This course is not offered every year. This course will assist in achieving a significant level of understanding and synergy of a variety of Oracle tools, environments and languages including SQL*Plus, PL/SQL, Oracle Forms and Reports. As a parallel line it will be supported by a course project done in a team environment where every team member will do independent work in addition to learning how to work in a team. The course project will include a functional requirements specification, database design, SQL queries, SQL-based listings and reports, reports developed using Oracle Reports, online interface using Oracle Forms, and PL/SQL code supporting the developed application system. NOTE: For Information Science and Technology Majors. For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Information Science & Technology
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CIS 2109|Minimum Grade of C-|May not be taken concurrently
OR CIS 4331|Minimum Grade of C-|May not be taken concurrently.

CIS 4372. C++ Applications Programming. 4 Credit Hours.
This course is not offered every year. The C++ programming language is used extensively for interest and applications programming. This course is aimed at providing students with the object-oriented programming experience needed in applying C++ to these problem areas. The objectives are two-fold. One aim is to enhance the student's ability to organize large scale programming tasks using the object oriented approach. The second aim is to further the student's ability to develop error-free maintainable code. NOTE: For Information Science and Technology Majors. For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Information Science & Technology
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(CIS 2229|Minimum Grade of C-|May not be taken concurrently)
AND (CIS 3309|Minimum Grade of C-|May not be taken concurrently).

CIS 4376. E-Commerce System Development. 4 Credit Hours.
This course is typically offered in Fall. The objective of this course is to teach the technical aspects of developing a commercial web site. This process combines a number of technologies: (1) web page and style sheet design, (2) dynamic web pages that access data from relational and XML databases, (3) client and server side transaction processing, (4) principles of internet security, scalability, and database reliability, (5) distributed component integration using packages for major functions such as credit card validation, shopping cart management, order fulfillment and inventory management. Students will develop a site as a course project. They will use the Microsoft Visual Studio.NET as the principal software development tool. This includes the ASP.NET and VB.NET languages. Tools to perform the other tasks include Front Page for web design, an XML editor for XML pages, and the Microsoft Enterprise Manager for the management of SQL Server databases and VS.NET component deployment. The course will provide numerous online references to all of these languages and tools. NOTE: For Information Science and Technology Majors. For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Information Science & Technology
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CIS 2168|Minimum Grade of C-|May not be taken concurrently.
CIS 4378. Computer and Network Security. 4 Credit Hours.
This course is typically offered in Spring.<p>This course provides an introduction to the inherent insecurities in today's computer systems and networks, and the commonly used tools and techniques used to secure them. Topics include cryptography basics, virtual private networks, secure sockets, e-mail security, firewalls, building secure software, kerberos, web server security, viruses, intrusion detection systems, and privacy issues. NOTE: For Information Science and Technology Majors.<p>For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Information Science & Technolo
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(CIS 2229)|Minimum Grade of C-|May not be taken concurrently
AND (CIS 3329)|Minimum Grade of C-|May not be taken concurrently).

CIS 4382. Independent Study. 1 to 6 Credit Hour.
This course is typically offered in Fall, Spring, Summer I and Summer II.<p>Research under supervision of a faculty member.<p>For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.
Repeatability: This course may be repeated for additional credit.

CIS 4396. Information Systems Implementation. 4 Credit Hours.
This course is typically offered in Fall and Spring.<p>This is a capstone course where teams of students implement the information system for which they developed specifications in CIS 4296 (W281). The teams create the database, programs, procedures and documentations necessary for their project. Techniques of modular design, program development, testing and integration are employed. Emphasis is placed on writing documentations, oral presentations and project management. NOTE: (1) Duplicate Course: No credit for students who have completed CIS 4398 (4339, 0339). (2) For Information Science and Technology Majors.<p>For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.

Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(CIS 4296)|Minimum Grade of C-|May not be taken concurrently
AND (CIS 3342)|Minimum Grade of C-|May not be taken concurrently
OR CIS 4342)|Minimum Grade of C-|May not be taken concurrently).

CIS 4397. Independent Research in Computer Science. 3 Credit Hours.
This course is typically offered in Fall, Spring, Summer I and Summer II.<p>Students undertake research under the supervision of a CIS faculty member. The research project must be approved by the chair of the Computer Science undergraduate program. Students must apply by 11/15 for Spring and 4/15 for Fall; minimum requirements include a 3.0 GPA overall and a 3.3 GPA in the major as well as readiness for CIS 4398. Students are strongly urged to take an independent study with their research professor prior to enrolling in this course. NOTE: (1) This course can be used to fulfill the capstone requirement. (2) For Computer Science Majors (For Math/CS Majors see your advisor).<p>For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.

Course Attributes: WI
Repeatability: This course may be repeated for additional credit.

CIS 4398. Projects in Computer Science. 3 Credit Hours.
This course is typically offered in Fall and Spring.<p>Team-oriented design and implementation of large programming project. Students will propose topics for review and acceptance early in the semester. Students will provide written documentation of their completed projects and will demonstrate the operation of their completed projects in an oral presentation. Projects will be solicited from industry and other departments at the University. NOTE: For Computer Science Majors (For Math/CS Majors see your advisor).<p>For any CIS prerequisite course taken prior to Spring 2012 a grade of C or better is required.

Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(CIS 3328)|Minimum Grade of C-|May not be taken concurrently
OR CIS 3287)|Minimum Grade of C-|May not be taken concurrently
AND (CIS 2166)|Minimum Grade of C-|May not be taken concurrently).

CIS 4515. Advanced Mobile Application Development. 4 Credit Hours.
This course is typically offered in Spring.<p>This course will introduce students to advanced concepts in application development for mobile devices. Students will learn to leverage the various novel components found in modern mobile devices such as NFC, Bluetooth, and GPS, to build applications that are aware of and act based on their environment. Students will learn to work in teams to design and implement complex applications and learn how to address challenges in hardware and user interfaces by incorporating software design and user-interaction design principles. Students will also be introduced to current software distribution models and the ethics of managing user data.<p>Note: Students can enroll in this course without the prerequisite if instructor permission is granted.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CIS 3515)|Minimum Grade of C-|May not be taken concurrently.
CIS 4615. Ethical Hacking and Intrusion Forensics. 3 Credit Hours.
This course is typically offered in Spring. This class teaches students how to use hacking techniques to perform a hack within legal confines. Such hacking is more commonly referred to as a white-hat or an ethical hack. The course will focus on both technical and social aspects of security, ranging from cryptography and biometrics to risk mitigation and disaster recovery aspects of security. Based on the ethical concepts built during the first half of the semester, students will learn the process involved with intrusion attack detection and forensics investigation. Finally, the course will significantly emphasize the key factors that differentiate a hacker (adversary/black-hat) from an ethical hacker, stressing the importance of being within legal confines, an important prerequisite for a successful ethical hacking career. NOTE: For Computer Science and Information Science and Technology Majors.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CIS 3319|Minimum Grade of C-|May not be taken concurrently
OR CIS 4378|Minimum Grade of C-|May not be taken concurrently.

CIS 4625. Audit and Compliance for Security and Digital Forensics. 3 Credit Hours.
This course is typically offered in Spring. This course will provide students with a basic understanding of IT systems and the need for audit and compliance. Students will learn about IT terminology, governance, and the IT audit practice that has matured into given sets of frameworks, methodologies, approaches, and models with certain sets of underlying assumptions such as COBIT and SOX. Students will be exposed to various governance standards and federal compliance requirements. NOTE: For Computer Science and Information Science and Technology Majors.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(CIS 2229|Minimum Grade of C-|May not be taken concurrently)
AND (CIS 4378|Minimum Grade of C-|May not be taken concurrently).

Construction Management Tech (CMT)

Courses

CMT 1005. Elements of Surveying. 3 Credit Hours.
Activities that will acquaint the student with instruments and tools of the surveyor, including their use in the techniques of field surveying. Emphasis on actual layouts and areas and elevations as performed in the civil and construction discipline.
Repeatability: This course may not be repeated for additional credits.

CMT 2010. Computers and Special Topics. 3 Credit Hours.
The application of computers for computer-aided drawings, graphical presentations, communications, data base operations and engineering computations, which require the writing of higher level language program segments to solve engineering application problems in statics and dynamics; with laboratory.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
PHYS 1021|Minimum Grade of C-|May not be taken concurrently.

CMT 2124. Construction Methods and Materials. 3 Credit Hours.
Materials and construction processes of importance to the designer and constructor; construction equipment and methods of handling and placing these materials on the job.
Repeatability: This course may not be repeated for additional credits.

CMT 2125. Construction Contracts and Specifications. 3 Credit Hours.
Analysis of construction contract law cases, analysis of selected contracts, bidding and contract award procedures, interpretation of specifications. Preparation of written reports and oral presentations are required.
Repeatability: This course may not be repeated for additional credits.

CMT 2271. Building Systems. 3 Credit Hours.
A basic study of the primary mechanical and electrical equipment and systems used in buildings. Design principles for selecting and sizing various systems are stressed throughout the course. Mechanical topics include plumbing, heating, ventilating, air conditioning, water supply, fire protection, and sanitary sewer systems. Electrical topics include basic principles of electricity, single and three phase systems, transformers, branch circuits and feeders, and residential and commercial illumination.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(PHYS 1022|Minimum Grade of C-|May not be taken concurrently)
AND (CMT 2124|Minimum Grade of D-|May not be taken concurrently).
CMT 3121. Construction Estimating. 3 Credit Hours.
Estimating quantities of materials, labor, and equipment for various construction tasks; pricing of cost items; indirect costs; types of bids and bidding process; term project using actual construction blueprints; written and oral presentations; computer applications using spreadsheet program and Timberline Precision Estimating Software.

Co-requisites: CMT 3123

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(CMT 2124|Minimum Grade of D-|May not be taken concurrently
AND CMT 2125|Minimum Grade of D-|May not be taken concurrently).

CMT 3123. Construction Estimating Laboratory. 1 Credit Hour.
Introduction of the construction bidding process and construction documents; blueprint reading; programming and database generation with spreadsheet software; computer applications using Timberline Precision Estimating Software.

Co-requisites: CMT 3121

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(CMT 2124|Minimum Grade of D-|May not be taken concurrently
AND CMT 2125|Minimum Grade of D-|May not be taken concurrently).

CMT 3145. Structural Analysis. 3 Credit Hours.
The analysis of statically determinant structures under static and moving loads, techniques for determining the deflection of structural members, and analysis of indeterminate structures.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
ENGR 2333|Minimum Grade of C-|May not be taken concurrently.

CMT 3322. Construction Planning and Scheduling. 3 Credit Hours.
Field office planning, quality control plan development, construction planning and scheduling; term project using actual construction blueprints; written and oral presentations; computer applications using Primavera Project Planner Software.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(CMT 2124|Minimum Grade of D-|May not be taken concurrently
AND CMT 2125|Minimum Grade of D-|May not be taken concurrently).

CMT 3333. Soils Mechanics. 3 Credit Hours.
Physical composition of soils, weight-volume relationships, absorption, soil classifications, seepage and flow nets, settlement analysis, lateral earth pressure, and foundation design.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
ENGR 2333|Minimum Grade of C-|May not be taken concurrently.

CMT 3351. Applied Hydraulics. 3 Credit Hours.
The design of water conveying and containment systems; pumps, sewers, open channels, dams, reservoirs, and water-related structures.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
ENGR 2331|Minimum Grade of D-|May not be taken concurrently.

CMT 3396. Environmental and Safety Aspects of Construction. 2 Credit Hours.
Construction-related environmental issues, erosion control, wetland areas, habitat protection. Issues which relate to protective equipment, safety and potential hazards for construction workers, construction equipment operators, and others impacted by on-going construction activities; with laboratory.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

CMT 4040. CMT - Special Topics. 1 to 4 Credit Hour.
A course designed to present new and emerging areas of Construction Management Technology. The course may also be used to present areas not normally taught in the College. Course requirements vary with the topic and instructor. Offered as needed or as appropriate.

Repeatability: This course may be repeated for additional credit.

CMT 4182. Independent Study in Construction Management Technology. 2 to 5 Credit Hours.
Student may complete a regular course during a semester the course is not offered, to meet prerequisite or graduation requirements. An instructor is assigned to supervise the student.

Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits

Repeatability: This course may be repeated for additional credit.
CMT 4183. Directed Study in Construction Management Technology. 1 to 4 Credit Hour.
An opportunity to study specialized topics not covered in currently available courses and providing significant progress towards the technical/ professional objectives of the program. An instructor is assigned to define the scope, direct, supervise, and evaluate student progress.
Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may be repeated for additional credit.

CMT 4191. Independent Research in Construction Management Technology. 2 to 5 Credit Hours.
A project assigned with the approval of the department chair and conducted under the supervision of a faculty sponsor.
Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may be repeated for additional credit.

CMT 4335. Steel and Wood Structures. 3 Credit Hours.
Structural systems and framing plans are developed for simple wood and steel structures. Typical framing members are designed and analyzed for adequate strength and serviceability.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: CMT 3145|Minimum Grade of D-|May not be taken concurrently.

CMT 4336. Concrete and Masonry Design. 3 Credit Hours.
Structural systems and framing plans are developed for simple concrete and masonry structures. Typical sub-systems and framing members are designed and analyzed for adequate strength and serviceability. The design of plain and reinforced concrete footings is included.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: CMT 3145|Minimum Grade of D-|May not be taken concurrently.

CMT 4355. Transportation Systems Management. 3 Credit Hours.
Transportation systems of the United States; design and technology of signalized traffic intersections, coordinated for the design of flexible and rigid pavements.
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may not be repeated for additional credits.

CMT 4373. Construction Financial Management. 3 Credit Hours.
Construction cost accounting systems, job costing approaches, project budgeting, financial reporting procedure. Term project; written and oral presentations. Computers applied as required.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: (CMT 3121|Minimum Grade of D-|May not be taken concurrently AND CMT 3322|Minimum Grade of D-|May not be taken concurrently).

CMT 4396. Capstone in Construction. 3 Credit Hours.
Synthesis of estimating, scheduling, and cost control for selected construction projects. Project management computer application. Preparation of written reports and oral presentations is required.
Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites: (CMT 2125|Minimum Grade of D-|May not be taken concurrently AND CMT 3121|Minimum Grade of D-|May not be taken concurrently AND CMT 3322|Minimum Grade of D-|May not be taken concurrently).

CMT 4397. Capstone in Design. 3 Credit Hours.
Senior team design projects involving the application of previous construction, soil mechanics, and structural analysis/design course information to formulate economical and code compliant building structural systems; including the establishment of design criteria and thereafter the design of typical foundation elements, superstructure members, and connections. The development of technical writing skills is also stressed via the preparation of a proposal, weekly progress reports, and final report for the project. Oral presentations required.
Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

Counseling Psychology (CPSY)
Courses

CPSY 3571. Introduction to Counseling Psychology. 3 Credit Hours.
A lecture course providing an overview of the field of counseling psychology as well as the role and function of the counselor in community and educational settings. Basic theories and principles of the counseling process, skills career, assessment, and group counseling approaches (couples, families, addictions and others) are covered.
Repeatability: This course may not be repeated for additional credits.

CPSY 3572. Interviewing Techniques. 3 Credit Hours.
The theory and techniques of interviewing, especially as they apply to problems of educational, vocational, and social counseling, rehabilitation, and employment. Course includes learning skills and applying techniques in various work settings.
Repeatability: This course may not be repeated for additional credits.

Crafts (CRFT)

Courses

CRFT 2149. Primitive Ceramics. 3 Credit Hours.
A course concentrating on the use of primitive ceramic techniques. This course is structured to develop skills in locating and refining clay, forming processes, and a variety of low temperature firing processes. This course utilizes many of the pottery techniques of Native American ceramics as one of the sources of investigation.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts, Bach of Science Educ
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CRFT 2151|Minimum Grade of C-|May not be taken concurrently.

CRFT 2151. Beginning Ceramics. 3 Credit Hours.
Wheel thrown and hand formed pottery and sculpture, glazing, and firing, with an emphasis on design as an organic outgrowth of the ceramic process.
NOTE: This course is a prerequisite for all other ceramic courses.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts, Bach of Science Educ
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
FDPR 1531|Minimum Grade of C-|May not be taken concurrently
OR FDPR 1532|Minimum Grade of C-|May not be taken concurrently
OR VS 1351|Minimum Grade of C-|May not be taken concurrently.

CRFT 2152. Introduction to Beginning Ceramics for Non-Tyler BFA Majors. 3 Credit Hours.
This course introduces the aesthetic, concept and design of functional objects. Investigates tactility and the process of realizing form, and the effective use of the wheel as a creative tool. Introduces historic and contemporary approaches, firing techniques, and glaze application. NOTE: This course does not fulfill Tyler BFA requirements.
Repeatability: This course may not be repeated for additional credits.

CRFT 2161. Intermediate Ceramics. 3 Credit Hours.
Creative problems in pottery for the student who has mastered use of the wheel and basic ceramic processes. Kiln firing techniques and simple glaze formulation will also be covered.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts, Bach of Science Educ
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CRFT 2151|Minimum Grade of C-|May not be taken concurrently.

CRFT 2237. Glass Construction, Topic: Kiln Working. 3 Credit Hours.
Predominantly a course in glass object-making. This class will provide beginning instruction through advanced tutelage in kiln forming techniques. Traditional and contemporary processes covered include frit casting from both clay and wax positives, fusing, and slumping. Moldmaking is emphasized and a variety of refractory mold materials will be introduced. A repertoire of finishing processes will be offered to aid in taking the kiln worked object to its completed state.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts, Bach of Science Educ
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
FDPR 1531|Minimum Grade of C-|May not be taken concurrently
OR FDPR 1532|Minimum Grade of C-|May not be taken concurrently
OR VS 1351|Minimum Grade of C-|May not be taken concurrently.
CRFT 2238. Glass Construction, Topic: Cold Glass. 3 Credit Hours.
This studio course provides comprehensive instruction with regard to "cold" glass-working techniques. 2-D and 3-D glass objects will be constructed with the employment of a variety of procedures without the introduction of heat. The classes will encourage the areas of student expertise. Thus, information on surface treatment (glass texturing), joining (glass to glass, to other materials), and finishing processes will be covered. Proficiency in the creation of structurally and conceptually cohesive objects is stressed.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts

College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School

Repeatability: This course may be repeated for additional credit.

Pre-requisites:
FDPR 1531|Minimum Grade of C-|May not be taken concurrently
OR FDPR 1532|Minimum Grade of C-|May not be taken concurrently
OR VS 1351|Minimum Grade of C-|May not be taken concurrently.

CRFT 2258. Introduction to Glass. 3 Credit Hours.
An introductory studio class for students who are interested in learning the basic processes of off-hand glass working techniques. A brief history of glass, studio operations and studio safety will be covered in slide lectures and studio demonstrations. Glassblowing, mold blowing, glass finishing and team work will be emphasized through demonstrations. NOTE: This course is a prerequisite for all glass courses. Studio work outside of class time is required.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts, Bach of Science Educ

College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
FDPR 1531|Minimum Grade of C-|May not be taken concurrently
OR FDPR 1532|Minimum Grade of C-|May not be taken concurrently
OR VS 1351|Minimum Grade of C-|May not be taken concurrently.

CRFT 2259. Introduction to Glass for Non-Tyler BFA Majors. 3 Credit Hours.
This is a studio course that will introduce the student to a variety of glass studio methods and processes. It will include glassblowing, glass casting, and glass fabrication. NOTE: This course does not fulfill Tyler BFA requirements.

Repeatability: This course may not be repeated for additional credits.

CRFT 2261. Intermediate Glass. 3 Credit Hours.
An advanced introductory studio course for learning off-hand blowing techniques. Advanced team work, finishing glass objects, and studio operations will be demonstrated the use of color and its application to hot glass will be introduced.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts

College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
CRFT 2258|Minimum Grade of C-|May not be taken concurrently.

CRFT 2302. Book Structures. 3 Credit Hours.
This course is an introduction to Book Arts. It includes both traditional and contemporary approaches as well as working with the book as a sculptural medium. Students will be encouraged to experiment with a wide variety of materials and processes and will learn to make several book structures to use as a means of expressing narrative and sequential concepts through which they will develop conceptual abilities and technical proficiencies. NOTE: Formerly titled "Fiber Structures I: Dimensional Form."

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts

College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
FDPR 1531|Minimum Grade of C-|May not be taken concurrently
OR VS 1351|Minimum Grade of C-|May not be taken concurrently.

CRFT 2304. Introduction to Fibers for Non-Tyler BFA Majors. 3 Credit Hours.
This course focuses on the fundamental structural and surface techniques of fibers. Techniques including weaving, surface dyeing, felt making, embroidery, basketry, and basic hand and machine sewing will be introduced. Students will be encouraged to explore their own unique interpretations using alternative and traditional fiber materials to create contemporary works of art. NOTE: This course does not fulfill Tyler BFA requirements.

Repeatability: This course may not be repeated for additional credits.
CRFT 2305. Fabric Pattern and Image I. 3 Credit Hours.
An investigation of the unique properties of dye color application on fabric. Discharge, resisting and patterning techniques are covered, with an emphasis on color relationships and imagery.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts, Bach of Science Educ
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
FDPR 1521|Minimum Grade of C-|May not be taken concurrently
OR VS 1151|Minimum Grade of C-|May not be taken concurrently.

CRFT 2312. Alternative Materials. 3 Credit Hours.
This course involves the exploration of alternative materials. Products such as Tyvek, rubber, adhesives, found and recycled materials will be combined with processes such as collage, layering, stitching, and heating. These materials and processes will be used in conjunction with other media and uncommon methods of joining to create a sculptural surface. Students are encouraged to develop a personal vocabulary by combining these techniques with images and found, purchased and recycled materials as well as media from other disciplines. Emphasis on the process of collecting will be used as a basis for the creation of work which involves a contemporary, mixed-media approach to surface treatment and its relationship to structure, form and content. Historical and contemporary issues and practices involving alternative media are explored through readings, field trips, lectures and class discussions.
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
VS 1351|Minimum Grade of C-|May not be taken concurrently
OR ARCH 1011|Minimum Grade of C-|May not be taken concurrently
OR FDPR 1531|Minimum Grade of C-|May not be taken concurrently
OR FDPR 1521|Minimum Grade of C-|May not be taken concurrently
OR AR11 Y|May not be taken concurrently.

CRFT 2317. Off Loom Structure I. 3 Credit Hours.
Single and multiple element structures including wrapping, netting, knotting, plaiting, rope making and felting. Both two- and three-dimensional construction will be explored.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts, Bach of Science Educ
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits.

CRFT 2318. Woven Structure I. 3 Credit Hours.
An introduction to weaving using the floor loom. Tapestry and other structural techniques will be taught. Both an historical and a contemporary approach will be encouraged.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts, Bach of Science Educ
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits.

CRFT 2408. Electroforming Workshop. 3 Credit Hours.
Students with prior metalworking experience have the opportunity to explore nontraditional electrochemical processes for the creation of unique forms in metal.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CRFT 2453|Minimum Grade of C-|May not be taken concurrently.

CRFT 2409. Color in Metals. 3 Credit Hours.
Aspects of applying color to metals or changing the existing color of metallic surfaces are explored. Students are introduced to the new techniques, color anodizing aluminum, and the space-age metals titanium and niobium. Application of color resin and vitreous enamels are also examined.
Field of Study Restrictions: May not be enrolled in one of the following Majors: Art History
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CRFT 2453|Minimum Grade of C-|May not be taken concurrently.
CRFT 2413. Machine Tool Processes. 3 Credit Hours.
The lathe, milling machine, drill press, and other machines are examined for their creative potential.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CRFT 2453|Minimum Grade of C-|May not be taken concurrently.

CRFT 2415. Production Processes. 3 Credit Hours.
Introduction to production processes and marketing. Students will design and produce an object in quantity and be assisted in the marketing of that object.

Field of Study Restrictions: May not be enrolled in one of the following Majors: Art History
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CRFT 2453|Minimum Grade of C-|May not be taken concurrently.

CRFT 2432. Introduction to CAD for Non-Tyler BFA Students. 3 Credit Hours.
Using Rhinoceros 3D CAD modeling software and Flamingo photorealistic rendering software the student will learn to customize the modeling environment and create basic graphic objects: lines, circles, arcs, curves, solids, and surfaces. Students will proceed to draw with precision using coordinate input and object snaps and modify objects with edit commands. This course will show students how to display any portion of the model, import and merge models and output models to different file formats. Creating, testing and verifying solid models in STL file format for production of rapid prototypes will be a focus of this course. Finally, photorealistic rendering of CAD models will be practiced. NOTE: This course does not fulfill Tyler BFA requirements.

Repeatability: This course may not be repeated for additional credits.

CRFT 2433. CAD/CAM I Computer-Aided-Design/Computer-Aided-Manufacture. 3 Credit Hours.
In this introduction to CAD/CAM the student learns to: customize the modeling environment; create basic graphic objects-lines, circles, arcs, curves, solids, and surfaces; draw with precision, using coordinate input and merge models to different file formats; create, test and verify solid models in STL file format for production of rapid prototypes; and render models. NOTE: This course is sometimes offered as an online course under Section Number 701.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts, Bach of Science Educ
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CRFT 2453|Minimum Grade of C-|May be taken concurrently.

CRFT 2434. CAD/CAM II Computer-Aided-Design/Computer-Aided-Manufacture. 3 Credit Hours.
This course is a continuation of CAD/CAM I. The primary objective of this course is to create a solids model in Rhino. The model is then verified for accuracy using Magics RP and prepared for rapid prototyping (RP). Students create a ring model to be produced via the Sanders Model Maker wax rapid prototyping system. These models are verified using Sanders Model/Works and Bview software. The student is assisted in having the model produced and cast. The concepts and principles of computer rendering the 3-D models is a major component of this course. Photorealistic renderings of the student’s Rhino models are produced using the NuGraf rendering system. Course Software: Rhinoceros, Magics RP, Model/Works, Bview and NuGraf.

Field of Study Restrictions: May not be enrolled in one of the following Majors: Art History
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CRFT 2433|Minimum Grade of C-|May not be taken concurrently.

CRFT 2452. Introduction to Jewelry for Non-Tyler BFA Students. 3 Credit Hours.
This course teaches the student to design and create objects in metal, and combine metal with other materials. The course focuses upon both design and technique. The student learns the fundamentals of design, current styles and formal characteristics of jewelry and metal objects through a series of design problems. Basic techniques of metal manipulation are covered from working with pre-existing metal forms as well as transforming objects into metal from non-metal models. The student learns to understand the field of metal as it relates to contemporary society, and the potentials of a career as an artist, working in metal and plastics. Students will be encouraged to design jewelry and/or objects that have personal meaning. Students will be asked to conceptualize each assignment, research historical precedents, and develop their ideas through a series of drawings and/or models. NOTE: This course does not fulfill Tyler BFA requirements.

Repeatability: This course may not be repeated for additional credits.
CRFT 2453. Jewelry. 3 Credit Hours.
An introduction to the design and fabrication of small scale functional objects and jewelry, exploring metalsmithing, casting, mold making, machine use, anodizing, linkages, plastics and finishing. The course focuses upon both design and technique. The student learns the fundamentals of design, current styles and formal characteristics of jewelry and metal objects through a series of design problems. Basic techniques of metal manipulation are covered from working with pre-existing metal forms as well as transforming objects into metal from non-metal models. The student learns to understand the field of metal as it relates to contemporary society, and the potentials of a career as an artist, working in metal and plastics. Students will be encouraged to design jewelry and/or objects that have personal meaning. Students will be asked to conceptualize each assignment, research historical precedents, and develop their ideas through a series of drawings and/or models.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts, Bach of Science Edu
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
FDPR 1531|Minimum Grade of C-|May not be taken concurrently
OR FDPR 1532|Minimum Grade of C-|May not be taken concurrently
OR VS 1351|Minimum Grade of C-|May not be taken concurrently.

CRFT 2454. Jewelry. 3 Credit Hours.
This is a continuation of Crafts 2453 Jewelry.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
CRFT 2453|Minimum Grade of C-|May not be taken concurrently.

CRFT 2455. Plastics for Jewelry and Objects. 3 Credit Hours.
An introduction to forming, fabricating, joining, and casting a variety of plastic materials. This 20th and 21st century material is studied for its visual and artistic potential, as well as its applications in product design. Students learn to combine these materials with metals and other media.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CRFT 2453|Minimum Grade of C-|May not be taken concurrently.

CRFT 2456. Metalsmithing. 3 Credit Hours.
Advanced metal forming techniques are explored. Students are encouraged to produce functional hollowware and objects of a non-traditional source.
Field of Study Restrictions: May not be enrolled in one of the following Majors: Art History
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CRFT 2453|Minimum Grade of C-|May not be taken concurrently.

CRFT 2457. Lapidary and Stone Setting. 3 Credit Hours.
Advanced lapidary processes are demonstrated which include the cutting and polishing of faceted stones designed by the student. Traditional and innovative stone setting methods are also explored.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CRFT 2453|Minimum Grade of C-|May not be taken concurrently.

CRFT 2458. Enameling. 3 Credit Hours.
All basic enameling techniques, which include Plique A Jour, Limoges, Champeleve, Bustail, etc. The course explores the use of synthetic resins as an addition to the enamelist's repertoire.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CRFT 2453|Minimum Grade of C-|May not be taken concurrently.
CRFT 2475. Casting. 3 Credit Hours.
Controlled inertial (centrifugal) casting, rubber moldmaking, wax injection, vacuum assisted casting, high frequency melting, sand casting, and other specialized casting processes are used to produce jewelry and other objects in precious and non-precious metal.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CRFT 2453|Minimum Grade of C-|May not be taken concurrently.

CRFT 2476. Casting. 3 Credit Hours.
Controlled inertial (centrifugal) casting, rubber moldmaking, wax injection, vacuum assisted casting, high frequency melting, sand casting, and other specialized casting processes are used to produce jewelry and other objects in precious and non-precious metal.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CRFT 2453|Minimum Grade of C-|May not be taken concurrently.

CRFT 2479. Photo Processes and Etching Jewelry. 3 Credit Hours.
All aspects of the photographic processes that can be used with metals and plastics are introduced. This includes photo-resist techniques for metal etching, plating, and anodizing, along with photo embedments in plastics. NOTE: This course is for majors only.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CRFT 2453|Minimum Grade of C-|May not be taken concurrently.

CRFT 3121. Tyler Art Workshop in Scotland. 3 or 6 Credit Hours.
Tyler Art Workshop in Scotland is a four-week studio art workshop in London and Scotland in conjunction with the Glasgow School of Art, Glasgow, Scotland. The students use their travel and research experiences from the first three weeks of the trip as source material for the creation of finished work during the final week of the program.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.

CRFT 3148. Ceramic Mold Making. 3 Credit Hours.
Students produce both two and three-piece plaster molds to be used in the slip casting process for the production of multiple ceramic items. The course examines both the historical and contemporary use of molds and slip casting. During the semester the students are encouraged to incorporate the use of slip casting into their current style of work.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
CRFT 2161|Minimum Grade of C-|May not be taken concurrently.

CRFT 3149. Primitive Ceramics. 3 Credit Hours.
A course concentrating on the use of primitive ceramic techniques. This course is structured to develop skills in locating and refining clay, forming processes, and a variety of low temperature firing processes. This course utilizes many of the pottery techniques of Native American ceramics as one of the sources of investigation.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
CRFT 2161|Minimum Grade of C-|May be taken concurrently.

CRFT 3151. Two-Dimensional Ceramics. 3 Credit Hours.
The making and production of tiles and other essentially two-dimensional ceramic items for application to interior and exterior architecture. Several processes, techniques and firing methods are explored. These include both high and low temperature firing, mold, and hand pressing techniques. The history of tiles and ceramic wall reliefs are surveyed with concentration on relevant periods and countries.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
CRFT 2161|Minimum Grade of C-|May be taken concurrently.
CRFT 3153. Ceramic Materials. 3 Credit Hours.
An advanced level examination of ceramic processes, the formulation of clay bodies and glazes, common firing practices, and the construction of kilns.
NOTE: The course required and intended for ceramic majors.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CRFT 2161|Minimum Grade of C-|May be taken concurrently.

CRFT 3158. Porcelain. 3 Credit Hours.
A ceramic course that covers the special properties of porcelain clay. Various hand building, throwing and casting techniques are explored as well as experiments in glazing and the preparation of clay bodies. Historical importance of porcelain is reviewed along with many contemporary uses of this material in vessel and sculptural forms.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
CRFT 2161|Minimum Grade of C-|May be taken concurrently.

CRFT 3161. Advanced Throwing and Wheel Work. 3 Credit Hours.
A course concentrating on the use of the potter's wheel, using a problem-solving approach. Structured to develop the necessary skills to enable the student in making personal aesthetic choices with regard to three-dimensional ceramic forms created on the wheel.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CRFT 2161|Minimum Grade of C-|May be taken concurrently.

CRFT 3162. Advanced Ceramics. 3 Credit Hours.
Problems in ceramics for the advanced student with emphasis on individual research projects and upon portfolio development.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
CRFT 2161|Minimum Grade of C-|May be taken concurrently.

CRFT 3167. Ceramic Structures. 3 Credit Hours.
The approach to this course is to utilize ceramic materials for the creation of sculpture. The history of ceramic sculpture as well as contemporary movements is stressed. Various techniques used in ceramic sculpture, techniques and materials used in conjunction with ceramics are explored.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CRFT 2161|Minimum Grade of C-|May be taken concurrently.

CRFT 3170. Ceramic Workshop. 3 Credit Hours.
Ceramic Workshop is a course where a variety of skill levels and aesthetic points of view can interact. The course itself rotates through several specialty topics corresponding to current themes in Ceramics.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
CRFT 2161|Minimum Grade of C-|May be taken concurrently.

CRFT 3185. Field Internship in Ceramics. 3 Credit Hours.
This program has been established to provide practical experience for students in the Ceramics area that is relevant and useful to the student's course of study. This experience can include: the creation of craft, art sales, design, the acquisition of business skills, as well as the participation in retail and wholesale craft exhibitions. NOTE: In order to get credit for this Field Internship, the student must agree to write a comprehensive paper as described in the guidelines for the Tyler Field Internship Program.
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
CRFT 3231. **Hot Glass, Topic: Blowing. 3 Credit Hours.**
A glass course primarily for the glass major who wants to learn advanced skills in off-hand techniques for blowing traditional and non-traditional glass forms. Advanced color work, team work and advanced methods for combining complicated glass forms will be a major component of this studio class.
NOTE: Six hours of studio work outside of class time is required.
**Degree Restrictions:** Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
**College Restrictions:** Must be enrolled in one of the following Colleges: Art, Tyler School
**Repeatability:** This course may be repeated for additional credit.
**Pre-requisites:**
(CRFT 2258|Minimum Grade of C-|May not be taken concurrently)
AND (CRFT 2261|Minimum Grade of C-|May not be taken concurrently).

CRFT 3237. **Glass Construction, Topic: Kiln Working. 3 Credit Hours.**
Predominantly a course in glass object-making. This class will provide beginning instruction through advanced tutelage in kiln forming techniques. Traditional and contemporary processes covered include frit casting from both clay and wax positives, fusing, and slumping. Moldmaking is emphasized and a variety of refractory mold materials will be introduced. A repertoire of finishing processes will be offered to aid in taking the kiln worked object to its completed state.
**Degree Restrictions:** Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
**College Restrictions:** Must be enrolled in one of the following Colleges: Art, Tyler School
**Repeatability:** This course may not be repeated for additional credits
**Pre-requisites:**
FDPR 1531|Minimum Grade of C-|May not be taken concurrently
OR FDPR 1532|Minimum Grade of C-|May not be taken concurrently
OR VS 1351|Minimum Grade of C-|May not be taken concurrently.

CRFT 3238. **Glass Construction, Topic: Cold Glass. 3 Credit Hours.**
This studio course provides comprehensive instruction with regard to "cold" glass-working techniques. 2-D and 3-D glass objects will be constructed with the employment of a variety of procedures without the introduction of heat. The classes will encourage the areas of student expertise. Thus, information on surface treatment (glass texturing), joining (glass to glass, to other materials), and finishing processes will be covered. Proficiency in the creation of structurally and conceptually cohesive objects is stressed.
**Degree Restrictions:** Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
**College Restrictions:** Must be enrolled in one of the following Colleges: Art, Tyler School
**Repeatability:** This course may be repeated for additional credit.
**Pre-requisites:**
(CRFT 2258|Minimum Grade of C-|May not be taken concurrently)
AND CRFT 2261|Minimum Grade of C-|May not be taken concurrently.

CRFT 3241. **Glass Workshop. 3 Credit Hours.**
An intensive daily studio course designed for beginning students through advanced glass majors. This studio course meets each day. Studio demonstrations in all hot glass applications are the focus. Individual problem solving through guided team work will be emphasized. NOTE: Three hours of studio work outside of class each day is required.
**Degree Restrictions:** Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
**College Restrictions:** Must be enrolled in one of the following Colleges: Art, Tyler School
**Repeatability:** This course may not be repeated for additional credits
**Pre-requisites:**
CRFT 2258|Minimum Grade of C-|May not be taken concurrently.

CRFT 3242. **Hot Glass Casting. 3 Credit Hours.**
A glass class that will provide beginning advanced instruction on using molten glass as a material for casting into a wide variety of mold materials. Methods of mold setup, methods for pouring hot glass and finishing glass will be provided and demonstrated. A survey of contemporary craft-artists using these materials and methods will be shown. Presentation and evaluation of finished work will be an important aspect of this studio course.
**Degree Restrictions:** Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
**College Restrictions:** Must be enrolled in one of the following Colleges: Art, Tyler School
**Repeatability:** This course may be repeated for additional credit.
**Pre-requisites:**
FDPR 1531|Minimum Grade of C-|May not be taken concurrently
OR FDPR 1532|Minimum Grade of C-|May not be taken concurrently
OR VS 1351|Minimum Grade of C-|May not be taken concurrently.
CRFT 3243. Advanced Glass Seminar. 3 Credit Hours.
This studio course is for the junior glass major. The emphasis is on historical glass research topics. A survey of glass making from ancient cultures to early American glass will be covered by slide lectures, museum visits, and research projects.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(CRFT 2258|Minimum Grade of C-|May not be taken concurrently)
AND (CRFT 2261|Minimum Grade of C-|May not be taken concurrently).

CRFT 3244. Advanced Glass, Topic: Visiting Artist Series. 3 Credit Hours.
This course is for the junior glass major.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(CRFT 2258|Minimum Grade of C-|May not be taken concurrently)
AND (CRFT 2261|Minimum Grade of C-|May not be taken concurrently).

CRFT 3285. Field Internship in Glass. 3 Credit Hours.
This program has been established to provide practical experience for students in the Glass area that is relevant and useful to the student's course of study. This experience may include: the creation of crafts, art sales, design; the acquisition of business skills, as well as the participation in retail and wholesale craft exhibitions. A written proposal must be developed and agreed upon in advance of the beginning of the semester, describing the intended setting of the Field Internship and the time commitment that must equal at least eight to ten hours per week for the full semester (13 weeks). NOTE: In order to get credit for this Field Internship, the student must agree to write a comprehensive paper as described in the guidelines for the Tyler Field Internship Program.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(CRFT 2258|Minimum Grade of C-|May not be taken concurrently)
AND (CRFT 2261|Minimum Grade of C-|May not be taken concurrently).

CRFT 3300. Special Topics in Fibers and Material Studies. 3 Credit Hours.
This course varies from semester to semester; the class content responds to current themes in Fibers and Material Studies and the varying discourses associated. Special topics classes typically include studio work, readings, lectures, writing and field trips.

Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
FDPR 1521|Minimum Grade of C-|May not be taken concurrently
OR FDPR 1522|Minimum Grade of C-|May not be taken concurrently
OR FDPR 1531|Minimum Grade of C-|May not be taken concurrently
OR FDPR 1532|Minimum Grade of C-|May not be taken concurrently.

CRFT 3306. Mixed Media Construction: Structural Embellishment I. 3 Credit Hours.
This course focuses on the stitch as a form of mark-making, exploring surface and structural applications such as embroidery, applique and quilting. Image transfers on cloth and free beading will also be explored. Projects will emphasize combining these "traditional" techniques with contemporary art issues and practices.

Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits.

CRFT 3307. Soft Sculpture. 3 Credit Hours.
This course examines the transformation of traditional and nontraditional materials to three-dimensional forms, surfaces, and spaces. The exploration of pliable materials will be realized through hand and machine stitching, mark making, embellishment, felting, stuffing, and manipulation of armature. Students are encouraged to develop a personal direction in soft sculptural practice, with emphasis on material investigation and research. Individual and group critiques and discussion of both historic and contemporary artists and concepts augment the course.

College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits.
CRFT 3308. Shibori Cloth Techniques. 3 Credit Hours.
This course is open to majors and non-majors from sophomore to graduate level. An in-depth exploration of traditional Shibori resist techniques are combined with alternative techniques such as heat setting to create sculptural surfaces, intricate patterns and complex, multi-layered pieces of cloth. Innovative solutions are encouraged in the investigation of color, pattern and composition while fabric is explored in relation to function and intent. Students are encouraged to master the technical aspects of Shibori and surface design techniques on fabric while also working toward developing their own visual, conceptual and innovative language through the projects. Historical and contemporary issues and practices involving Shibori are explored through readings, slide lectures, field trips and class discussions.
Repeatability: This course may not be repeated for additional credits.

CRFT 3309. Body Wear Construction. 3 Credit Hours.
This course focuses on the structure and construction of body wear. Body wear has the ability to change the wearer into another being. It expresses bold emotion and explosive creativity. Students will be encouraged to regard the human body itself as the object to "wear" and design innovative creations to address this topic. All cultures tap into power, real or imagined, of dress. After the mid-20th century, society entered into a mass consumption and production of garments and clothing. Students will be encouraged to break from the trend of universal uniformity and think beyond the idea that only fabric can be used to make garments.

Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.

CRFT 3311. Body Art & Adornment. 3 Credit Hours.
This course is the exploration of the histories and techniques involved in the construction of clothing, costume, fashion, and haute couture. The term clothing implies protection against the elements and to preserve modesty. Costume functions beyond simple utility, becoming a means of seduction by enhancing nature, or adding artificial attraction. Fashion and haute couture indulges the fantasy of the creator. Students will be encouraged to explore their own interpretations of these terms through construction: machine knitting, crochet, hand and machine sewing, and embroidery. Students may also experiment with documentation methods, including performance, fashion shows, photography, and video as media to exhibit cumulated work.

Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.

CRFT 3314. Mixed Media Printing. 3 Credit Hours.
This course involves the exploration of printing processes that utilize the computer as an image generator. Creative scanning and manipulation of images on the computer using Photoshop will be introduced. These images will then be printed utilizing numerous digital printing surfaces on a variety of fabrics, papers, and plastics. This course will also involve the use of uncommon imaging techniques including Xerox, Polaroid, heat and solvent based transfers. Basic bookbinding and papermaking techniques will also be introduced. Students are encouraged to develop a personal vocabulary by combining these techniques with images and found, purchased and recycled materials as well as media from other disciplines. Historical and contemporary issues and practices involving digital media are explored through slide lectures, readings, class discussions, and field trips. NOTE: Previous course title was "Digital Printing Fabric."

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits.

CRFT 3315. Textile Design for Print Production. 3 Credit Hours.
Textile Design for Print Production prepares students to be competent in designing unique patterns that align with market trends and push contemporary design. The course focuses on the development of a cohesive portfolio collection that is ready for production. Students will be introduced to the historical movements of print and trends in both fashion and interior textiles. Emphasis will be placed on understanding color relationships and how color is used in marketing patterns. Drawing and painting skills will be an important element in developing designs. Students are encouraged to combine hand and computer processes. This course balances learning industry methods and the business of pattern design with creating original artwork and colorways. Students will print their patterns on fabrics using inkjet printing and hand applications. NOTE: Students must have a basic understanding of Photoshop.

College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits.

CRFT 3317. Off Loom Structure II. 3 Credit Hours.
Emphasis will be on three-dimensional constructions using nontraditional materials. Miniature forms will also be explored.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits

Pre-requisites:
CRFT 2317|Minimum Grade of C-|May not be taken concurrently.
CRFT 3318. Woven Structure II. 3 Credit Hours.
Exploration of dyeing and printing including space dyed ikat and printing on the woven surface.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CRFT 2318|Minimum Grade of C-|May not be taken concurrently.

CRFT 3371. Silkscreen on Fabric I. 3 Credit Hours.
Screen printed imagery on fabric using various stencil techniques, including photo-emulsion with computer generated imagery. Both dye and pigment printing will be covered, with an emphasis on color relationships and the construction of imagery and texture. NOTE: Special authorization required for non-majors.
Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
FDPR 1521|Minimum Grade of C-|May not be taken concurrently
OR FDPR 1522|Minimum Grade of C-|May not be taken concurrently
OR VS 1151|Minimum Grade of C-|May not be taken concurrently.

CRFT 3385. Field Internship in Fibers. 3 Credit Hours.
This program has been established to provide practical experience for students in the Fibers area that is relevant and useful to the student's course of study. This experience can include: the creation of craft, art sales, design, the acquisition of business skills, as well as the participation in retail and wholesale craft exhibitions. A written proposal must be developed and agreed upon in advance of the beginning of the semester, describing the intended setting of the Field Internship and the time commitment that must equal at least eight-ten hours per week for the full semester (13 weeks). NOTE: In order to get credit for this Field Internship, the student must agree to write a comprehensive paper as described in the guidelines for the Tyler Field Internship Program.
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.

CRFT 3407. Plastics for Jewelry. 3 Credit Hours.
Introduction to the forming, fabricating, and casting of plastic materials. The student works with acrylics, polyesters, urethanes, epoxies, and silicones, and learns to combine these materials with metal. NOTE: This course is for majors only. Metals/Jewelry/CAD-CAM Major.
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CRFT 2453|Minimum Grade of C-|May not be taken concurrently.

CRFT 3409. Color in Metals. 3 Credit Hours.
Aspects of applying color to metals or changing the existing color of metallic surfaces are explored. Students are introduced to the new techniques, color anodizing aluminum, and the space-age metals titanium and niobium. Application of color resin and vitreous enamels are also examined.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Metals, Jewelry, CAD-CAM
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
CRFT 2453|Minimum Grade of C-|May not be taken concurrently.

CRFT 3415. Production Processes. 3 Credit Hours.
Introduction to production processes and marketing. Students will design and produce an object in quantity and be assisted in the marketing of that object.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Metals, Jewelry, CAD-CAM
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
CRFT 2453|Minimum Grade of C-|May not be taken concurrently.
CRFT 3433. CAD/CAM I Computer-Aided-Design/Computer-Aided-Manufacture. 3 Credit Hours.
In this introduction to CAD/CAM the student learns to: customize the modeling environment; create basic graphic objects-lines, circles, arcs, curves, solids, and surfaces; draw with precision, using coordinate input and merge models to different file formats; create, test and verify solid models in STL file format for production of rapid prototypes; and render models. NOTE: This course is sometimes offered as an online course under Section Number 701.

College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CRFT 2453|Minimum Grade of C-|May not be taken concurrently.

CRFT 3434. CAD/CAM II Computer-Aided-Design/Computer-Aided-Manufacture. 3 Credit Hours.
This course is a continuation of CAD/CAM I. The primary objective of this course is to create a solids model in Rhino. The model is then verified for accuracy using Magics RP and prepared for rapid prototyping (RP). Students create a ring model to be produced via the Sanders Model Maker wax rapid prototyping system. These models are verified using Sanders Model/Works and Bview software. The student is assisted in having the model produced and cast. The concepts and principles of computer rendering the 3-D models is a major component of this course. Photorealistic renderings of the student's Rhino models are produced using the NuGraf rendering system. Course Software: Rhinoceros, Magics RP, ModelWorks, Bview and NuGraf.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Metals, Jewelry, CAD-CAM
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CRFT 2433|Minimum Grade of C-|May not be taken concurrently
OR CRFT 3433|Minimum Grade of C-|May not be taken concurrently.

CRFT 3435. Advanced CAD/CAM. 3 Credit Hours.
This course is a continuation of CAD/CAM II. Students will be encouraged to produce Three-D CAD models for rapid prototyping and photo-realistic rendering.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Metals, Jewelry, CAD-CAM
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CRFT 2443|Minimum Grade of C-|May not be taken concurrently
OR CRFT 3443|Minimum Grade of C-|May not be taken concurrently.

CRFT 3457. Plastics for Jewelry and Objects. 3 Credit Hours.
An introduction to forming, fabricating, joining, and casting a variety of plastic materials. This 20th and 21st century material is studied for its visual and artistic potential, as well as its applications in product design. Students learn to combine these materials with metals and other media.

College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
CRFT 2453|Minimum Grade of C-|May not be taken concurrently.

CRFT 3459. Metalsmithing. 3 Credit Hours.
Advanced metal forming techniques are explored. Students are encouraged to produce functional hollowware and objects of a non-traditional source.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Metals, Jewelry, CAD-CAM
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
CRFT 2453|Minimum Grade of C-|May not be taken concurrently.

CRFT 3463. Enameling. 3 Credit Hours.
All basic enameling techniques, which include Plique A Jour, Limoges, Champeleve, Bustail, etc. The course explores the use of synthetic resins as an addition to the enamelist's repertoire.

College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
CRFT 2453|Minimum Grade of C-|May not be taken concurrently.

CRFT 3465. Junior Metalsmithing. 3 Credit Hours.
Advanced problems exploring the design and fabrication of functional objects and jewelry. Three-dimensional sheet metal development, fabrication of hollow structures, mechanisms, linkage systems and mold making will be introduced. NOTE: This course is for majors only.

College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CRFT 2453|Minimum Grade of C-|May not be taken concurrently.
CRFT 3466. Junior Metalsmithing. 3 Credit Hours.
Advanced problems exploring the design and fabrication of functional objects and jewelry. Three-dimensional sheet metal development, fabrication of hollow structures, mechanisms, linkage systems and mold making will be introduced. NOTE: This course is for majors only.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Metals, Jewelry, CAD-CAM
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CRFT 3465|Minimum Grade of C-|May not be taken concurrently.

CRFT 3467. Tyler Metals Workshop, England/Scotland. 6 Credit Hours.
A four-week summer art workshop in England and Scotland. Students first fly to London for an introductory week visiting contemporary metalsmiths, museums and galleries, followed by three weeks traveling in Scotland, working in studio facilities operated by the Glasgow School of Art. The course structure is directed toward studio art majors with a concentration in Metals/Jewelry/CAD-CAM, and emphasizes the creation of artwork based on the student's cross-cultural experiences during the trip. Access to English and Scottish metalsmiths and artist/educators, travel and museum visits supplement the curriculum.
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
CRFT 2453|Minimum Grade of C-|May not be taken concurrently.

CRFT 3469. Metals Workshop. 1 to 3 Credit Hour.
Summer classes for variable credit in specialized subjects: advanced fabrication, mechanisms, machine tool processes, advanced lapidary and stone setting, linkages and advanced casting. Students have the opportunity to learn and utilize specialized technologies. It is also an opportunity to complete projects or participate in a class designed for students who studied abroad. This class requires special permission from the instructor.
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
CRFT 2453|Minimum Grade of C-|May not be taken concurrently.

CRFT 3471. Lapidary and Stone Setting. 3 Credit Hours.
Advanced lapidary processes are demonstrated which include the cutting and polishing of faceted stones designed by the student. Traditional and innovative stone setting methods are also explored.
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CRFT 2453|Minimum Grade of C-|May not be taken concurrently.

CRFT 3479. Photo Processes and Etching Jewelry. 3 Credit Hours.
All aspects of the photographic processes that can be used with metals and plastics are introduced. This includes photo-resist techniques for metal etching, plating, and anodizing, along with photo embedments in plastics. NOTE: This course is for majors only.
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CRFT 2453|Minimum Grade of C-|May not be taken concurrently.

CRFT 4152. Senior Ceramics. 3 Credit Hours.
Fourth-year concentration in ceramics and thesis work.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CRFT 3162|Minimum Grade of C-|May not be taken concurrently.

CRFT 4162. Advanced Ceramics. 3 Credit Hours.
Problems in ceramics for the advanced student with emphasis on individual research projects with emphasis upon portfolio development.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
CRFT 3162|Minimum Grade of C-|May not be taken concurrently.
CRFT 4196. Art Workshop in Scotland. 3 Credit Hours.
A four-week summer studio art workshop on location in Scotland. After an introductory week in London visiting museums, contemporary art galleries, and art schools, students spend the next three weeks working in studio facilities in Scotland at the Glasgow School of Art. Artists from that institution and Tyler School of Art staff conduct a series of intensive workshops in a variety of media. The students' travel and research experiences while in Great Britain are utilized as sources of inspiration for the development of their art work in general and for an exhibition to be held at Tyler in the fall.

Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

CRFT 4237. Glass Construction, Topic: Kiln Working. 3 Credit Hours.
Predominantly a course in glass object-making. This class will provide beginning instruction through advanced tutelage in kiln forming techniques. Traditional and contemporary processes covered include frit casting from both clay and wax positives, fusing, and slumping. Moldmaking is emphasized and a variety of refractory mold materials will be introduced. A repertoire of finishing processes will be offered to aid in taking the kiln worked object to its completed state.

Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
FDPR 1531|Minimum Grade of C-|May not be taken concurrently
OR FDPR 1532|Minimum Grade of C-|May not be taken concurrently
OR VS 1351|Minimum Grade of C-|May not be taken concurrently.

CRFT 4238. Glass Construction, Topic: Cold Glass. 3 Credit Hours.
This studio course provides comprehensive instruction with regard to "cold" glass-working techniques. 2-D and 3-D glass objects will be constructed with the employment of a variety of procedures without the introduction of heat. The classes will encourage the areas of student expertise. Thus, information on surface treatment (glass texturing), joining (glass to glass, to other materials), and finishing processes will be covered. Proficiency in the creation of structurally and conceptually cohesive objects is stressed.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(CRFT 2258|Minimum Grade of C-|May not be taken concurrently)
AND (CRFT 2261|Minimum Grade of C-|May not be taken concurrently).

CRFT 4241. Hot Glass Blowing. 3 Credit Hours.
A glass course primarily for the glass major who wants to learn advanced skills in off-hand techniques for blowing traditional and non-traditional glass forms. Advanced color work, team work and advanced methods for combining complicated glass forms will be a major component of this studio class. NOTE: Six hours of studio work outside of class time is required.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(CRFT 2258|Minimum Grade of C-|May not be taken concurrently)
AND (CRFT 2261|Minimum Grade of C-|May not be taken concurrently).

CRFT 4242. Hot Glass Casting. 3 Credit Hours.
A glass class that will provide beginning advanced instruction on using molten glass as a material for casting into a wide variety of mold materials. Methods of mold setup, methods for pouring hot glass and finishing glass will be provided and demonstrated. A survey of contemporary craft-artists using these materials and methods will be shown. Presentation and evaluation of finished work will be an important aspect of this studio course.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
FDPR 1531|Minimum Grade of C-|May not be taken concurrently
OR FDPR 1532|Minimum Grade of C-|May not be taken concurrently
OR VS 1351|Minimum Grade of C-|May not be taken concurrently.
CRFT 4244. Advanced Glass Seminar: Visiting Artist Series. 3 Credit Hours.
This course is for the senior glass major.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(CRFT 2258|Minimum Grade of C-|May not be taken concurrently)
AND (CRFT 2261|Minimum Grade of C-|May not be taken concurrently)
AND (CRFT 3243|Minimum Grade of C-|May not be taken concurrently)
AND (CRFT 3244|Minimum Grade of C-|May not be taken concurrently).

CRFT 4252. Advanced Glass Seminar. 3 Credit Hours.
This studio course is for the senior glass major. The emphasis is on historical glass research topics. A survey of glass making from ancient cultures to early American glass will be covered by slide lectures, museum visits, and research projects.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(CRFT 2258|Minimum Grade of C-|May not be taken concurrently)
AND (CRFT 2261|Minimum Grade of C-|May not be taken concurrently)
AND (CRFT 3243|Minimum Grade of C-|May not be taken concurrently)
AND (CRFT 3244|Minimum Grade of C-|May not be taken concurrently).

CRFT 4282. Independent Study. 1 to 3 Credit Hour.
Self-directed study and research for upper-level Crafts majors developed in conjunction with, and supervised by, a senior faculty member in the major area of the student.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.

CRFT 4300. Special Topics in Fibers and Material Studies. 3 Credit Hours.
This course varies from semester to semester; the class content responds to current themes in Fibers and Material Studies and the varying discourses associated. Special topics classes typically include studio work, readings, lectures, writing and field trips.
Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits, Sophomore 30 to 59 Credits
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
FDPR 1521|Minimum Grade of C-|May not be taken concurrently
OR FDPR 1522|Minimum Grade of C-|May not be taken concurrently
OR FDPR 1531|Minimum Grade of C-|May not be taken concurrently
OR FDPR 1532|Minimum Grade of C-|May not be taken concurrently.

CRFT 4305. Fabric Pattern and Image II. 3 Credit Hours.
An investigation of alternative applications on the fabric surface. Computer generated, scanned and Xerox transfer methods are covered, with more advanced investigations of imagery.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CRFT 2305|Minimum Grade of C-|May not be taken concurrently.

CRFT 4306. Structural Embellishment II. 3 Credit Hours.
An exploration of clothing and costume construction for weavables or performance work.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CRFT 3306|Minimum Grade of C-|May not be taken concurrently.
CRFT 4317. Off Loom Structure III. 3 Credit Hours.
Environmental and installation explorations using off loom and other construction techniques.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(CRFT 2317|Minimum Grade of C-|May not be taken concurrently
AND CRFT 3317|Minimum Grade of C-|May not be taken concurrently).

CRFT 4318. Woven Structure III. 3 Credit Hours.
An exploration of advanced weaving techniques: computer loom drafting and weaving, three-dimensional investigations and structural manipulations.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(CRFT 2318|Minimum Grade of C-|May not be taken concurrently
AND CRFT 3318|Minimum Grade of C-|May not be taken concurrently).

CRFT 4371. Silkscreen on Fabric II. 3 Credit Hours.
Screen printed imagery on fabric using various stencil techniques, including photo-emulsion with computer constructed imagery. Both dye and pigment printing will be covered, with an emphasis on color relationships and the construction of imagery and texture. NOTE: Special authorization required for non-majors.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CRFT 3371|Minimum Grade of C-|May not be taken concurrently.

CRFT 4435. Rapid Prototyping. 3 Credit Hours.
The advanced CAD/CAM student will learn to use the ZCorp, Z406 3D color printer to test computer-aided-design solid models. Students will also be encouraged to find innovative methods for the use of the Z406 in the creation of finished tangible objects.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Metals, Jewelry, CAD-CAM
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
CRFT 3435|Minimum Grade of C-|May not be taken concurrently.

CRFT 4436. Rapid Prototyping. 3 Credit Hours.
The advanced CAD/CAM student will learn to use the ZCorp, Z406 3D color printer to test computer-aided-design solid models. Students will also be encouraged to find innovative methods for the use of the Z406 in the creation of finished tangible objects. NOTE: Special authorization for non-majors.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
CRFT 3435|Minimum Grade of C-|May not be taken concurrently.

CRFT 4463. Senior Metals and Plastics. 3 Credit Hours.
The course introduces the student to portfolio preparation. An independent senior project is also encouraged.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
CRFT 3466|Minimum Grade of C-|May not be taken concurrently.

CRFT 4464. Senior Metals and Plastics. 3 Credit Hours.
The course introduces the student to portfolio preparation. An independent senior project is also encouraged.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Metals, Jewelry, CAD-CAM
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CRFT 4463|Minimum Grade of C-|May not be taken concurrently.
Criminal Justice (CJ)

Courses

CJ 0812. Criminal Behavior. 3 Credit Hours.
Although we like to think differently, committing crime is an extremely common human behavior. From the extremes of armed robbery or serial murder to the ordinary failure to declare income on tax returns or the tendency to speed on the highway, nearly everyone has broken the law and committed a crime at some point. Considering physiological, psychological and pharmacological factors, we explore the influences of family, peers and the effects of alcohol and drugs on the incidence of criminal behavior. And we examine how the urban and social environment encourages (or inhibits) opportunities to commit crime. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed CJ 0912.

Course Attributes: GB

Repeatability: This course may not be repeated for additional credits.

CJ 0852. Justice in America. 3 Credit Hours.
This course invites students to engage in an interdisciplinary examination of one of U.S. society's most enduring conflicts - the struggle to achieve an acceptable balance between state power to prevent and control crime, and the rights of individuals to be free from undue government coercion. Within the context of the structures and processes of the criminal justice system, students will investigate a select number of critical policy issues/problems, and ponder questions about the legitimacy of the criminal law method of social control. Against a brief introductory background to some of the major criminal justice policies and practices, students will have the opportunity to question their effectiveness, efficiency, and fairness, and to increase their skill in being able to articulate reasoned, logical, and evidence-based grounds for their conclusions and opinions. Key questions include: How well is society doing in its efforts to prevent/control crime? How do those efforts rate in terms of securing a just balance between the rights of individuals and the coercive powers of the government? Are we doing things right? Are we doing the right things? What improvements should be made? How can we know/decide? NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed CJ 0952.

Course Attributes: GU

Repeatability: This course may not be repeated for additional credits.
CJ 0853. Doing Justice. 3 Credit Hours.
Justice agencies - the juvenile justice system, police, judges and juries in courts, and prisons - are expected to create justice in response to lawbreakers. These agencies, however, often operate under enormous political, cultural, social, organizational and economic pressures. Further, what citizens or local leaders sometimes want from these agencies may create challenges and temptations. Thus, just outcomes are sometimes elusive. Focusing on the period 1925-2025 and largely on Philadelphia data, students will explore conceptual frameworks in the sociology of law, research articles, movies, maps, Census data, historical documents and newspaper archives to help understand these outcomes. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed CJ 0953.

Course Attributes: GU
Repeatability: This course may not be repeated for additional credits.

CJ 0912. Honors Criminal Behavior. 3 Credit Hours.
Although we like to think differently, committing crime is an extremely common human behavior. From the extremes of armed robbery or serial murder to the ordinary failure to declare income on tax returns or the tendency to speed on the highway, nearly everyone has broken the law and committed a crime at some point. Considering physiological, psychological and pharmacological factors, we explore the influences of family, peers and the effects of alcohol and drugs on the incidence of criminal behavior. And we examine how the urban and social environment encourages (or inhibits) opportunities to commit crime. (This is an Honors course.) NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed CJ 0812.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GB, HO
Repeatability: This course may not be repeated for additional credits.

CJ 0952. Honors: Justice in America. 3 Credit Hours.
This course invites students to engage in an interdisciplinary examination of one of U.S. society's most enduring conflicts - the struggle to achieve an acceptable balance between state power to prevent and control crime, and the rights of individuals to be free from undue government coercion. Within the context of the structures and processes of the criminal justice system, students will investigate a select number of critical policy issues/problems, and ponder questions about the legitimacy of the criminal law method of social control. Against a brief introductory background to some of the major criminal justice policies and practices, students will have the opportunity to question their effectiveness, efficiency, and fairness, and to increase their skill in being able to articulate reasoned, logical, and evidence-based grounds for their conclusions and opinions. Key questions include: How well is society doing in its efforts to prevent/control crime? How do those efforts rate in terms of securing a just balance between the rights of individuals and the coercive powers of the government? Are we doing things right? Are we doing the right things? What improvements should be made? How can we know/decide? (This is an Honors course.) NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed CJ 0852.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GU, HO
Repeatability: This course may not be repeated for additional credits.

CJ 0953. Honors: Doing Justice. 3 Credit Hours.
Justice agencies - the juvenile justice system, police, judges and juries in courts, and prisons - are expected to create justice in response to lawbreakers. These agencies, however, often operate under enormous political, cultural, social, organizational and economic pressures. Further, what citizens or local leaders sometimes want from these agencies may create challenges and temptations. Thus, just outcomes are sometimes elusive. Focusing on the period 1925-2025 and largely on Philadelphia data, students will explore conceptual frameworks in the sociology of law, research articles, movies, maps, Census data, historical documents and newspaper archives to help understand these outcomes. (This is an Honors course.) NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed CJ 0853.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GU, HO
Repeatability: This course may not be repeated for additional credits.

CJ 1001. Introduction to Criminal Justice. 3 Credit Hours.
This course, provides an overview of a broad range of ways of understanding "criminal justice" - as an academic discipline, a philosophical construct, and, most especially, a system and process defining a large-scale enterprise characterized by a complex and fascinating array of public and private agencies, laws, rules, theories, policies, practices, technologies, problems and controversies. Emphasis is placed upon a critical understanding of the key foundations [e.g., constitutions, statutes, case law, administrative rules], components [e.g., law enforcement, courts, corrections], processes [e.g., legislation, arrest, prosecution, conviction, sentencing, correctional intervention], and goals [e.g., due process, crime prevention and control, retribution, reparation] of the criminal justice system and, to a far lesser degree, related social control mechanisms such as mental health, juvenile, and civil justice systems. NOTE: This course can be used to satisfy the university Core Individual and Society (IN) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: IN
Repeatability: This course may not be repeated for additional credits.
CJ 1009. Discovering Criminal Justice. 1 Credit Hour.
This course is designed to introduce students to the field of criminal justice as a major. The primary goal is to provide prospective criminal justice majors with resources and support to help them make an informed decision about pursuing a career in the field of criminal justice. NOTE: Restricted to students with less than 30 credits.
Repeatability: This course may not be repeated for additional credits.

CJ 1901. Honors Introduction to Criminal Justice. 3 Credit Hours.
Honors version of Criminal Justice 1001 (C050). NOTE: This course can be used to satisfy the university Core Individual and Society (IN) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: HO, IN
Repeatability: This course may not be repeated for additional credits.

CJ 2000. Special Topics. 3 Credit Hours.
Topics will be arranged each semester. Please consult with the instructor for more information.
Repeatability: This course may be repeated for additional credit.

CJ 2001. Introduction to Juvenile Justice. 3 Credit Hours.
Study of the juvenile justice system, including its origins, and development and contemporary calls for reform. Topics include definition of juvenile delinquency, philosophy and procedures of the juvenile justice system. Processes and policies used to control juvenile offenders, correctional treatment of juveniles, and prevention and intervention strategies will also be discussed.
Repeatability: This course may not be repeated for additional credits.

CJ 2002. Victims in Society. 3 Credit Hours.
This course explores the problem of victimization - both general and criminal; the types of victims involved -- direct and indirect, and individual and collective; and the harms they sustain -- financial, physical and mental. It also examines the fairness and efficacy of a wide variety of preventive and reactive ways of dealing with it -- by society in general and by the criminal justice system in particular. Emphasis is upon data sets and research studies shedding light upon the levels, correlates, dynamics, and consequences of major forms of victimization, as a basis for critical assessment of victimization theory, as well as existing and potential laws, policies, programs, practices, and technologies for reducing its incidence and impact.
Repeatability: This course may not be repeated for additional credits.

CJ 2101. Introduction to Law Enforcement. 3 Credit Hours.
Explores major trends and issues in law enforcement. The history and contemporary operation of police organizations, as well as the legal framework within which they operate. Examines police behavior and attitudes, especially as they effect discretionary decision making, and issues such as police brutality and corruption.
Repeatability: This course may not be repeated for additional credits.

CJ 2201. Criminal Courts and Criminal Justice. 3 Credit Hours.
Comprehensive introduction to the U.S. criminal court system including the structure and administration of federal and state court systems. The course focuses on several significant stages in the criminal process, including decision to charge, pretrial release, preliminary hearings, the grand jury, jury trials, and sentencing. Examines the roles of the prosecutor, defense attorney, judge, and victim. The course contrasts the popular image with the reality of the court system.
Repeatability: This course may not be repeated for additional credits.

CJ 2301. Introduction to Corrections. 3 Credit Hours.
An overview of sentencing, punishment, and treatment of convicted offenders. Beginning with sentencing, the course explores the options for dealing with convicted persons, including institutional and community dispositions.
Repeatability: This course may not be repeated for additional credits.

CJ 2302. Rehabilitation of the Offender. 3 Credit Hours.
Community and institutional correctional interventions are considered, examination of various treatments for certain kinds of offenders, problems in providing services in correctional settings, and research findings on the effectiveness of correctional interventions.
Repeatability: This course may not be repeated for additional credits.

CJ 2401. Nature of Crime. 3 Credit Hours.
Overview of the various theories explaining crime and deviance. Emphasis on understanding the wide range of theoretical perspectives on crime and criminals, and how these theories impact criminal justice policy and treatment of offenders.
Repeatability: This course may not be repeated for additional credits.

CJ 2501. Introduction to Criminal Law. 3 Credit Hours.
Study of the general principles of substantive criminal law. Topics include the American legal system and appellate process; nature, origin and purposes of criminal law; constitutional limits on criminal law; elements of crime - actus reus, mens rea, causation; and defenses to charges of crime. The course emphasizes the application of legal rules to solve hypothetical and real life legal problems.
Repeatability: This course may not be repeated for additional credits.
CJ 2601. Introduction to Criminal Justice Research. 3 Credit Hours.
Examines different research tools used to gather empirical information on criminal justice issues. Reviews benchmarks of scientific quality, and research tools like qualitative field methods, survey research, experiments, quasi-experiments, and career research. Special attention devoted to research problems often salient when researching criminal justice topics.
**Repeatability:** This course may not be repeated for additional credits.

CJ 2602. Criminal Justice Research and Analysis. 3 Credit Hours.
Introduction to basic statistical methods and their application to criminal justice data. Covers both descriptive and inferential statistics. Topics include frequency distributions, measures of central tendency and dispersion, and basic hypothesis testing. NOTE: This course can be used to satisfy the university Core Quantitative Reasoning B (QB) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
**Course Attributes:** QB
**Repeatability:** This course may not be repeated for additional credits.

CJ 2696. Planned Change. 3 Credit Hours.
Introduction to strategies and techniques of change in criminal justice. Important theories, methods of analysis, and techniques employed in changing individuals, organizations, and communities. This writing intensive course is required for the major. The course is open to criminal justice majors and minors only.
**Course Attributes:** WI
**Repeatability:** This course may not be repeated for additional credits.

CJ 2701. Inside-Out Prison Exchange. 3 Credit Hours.
The "Inside-Out" Prison Exchange Program is an opportunity for a small group of Temple students to go behind the walls of an area prison or jail to take a course with a comparable number of residents of the correctional facility. Using a unique pedagogical approach, approximately 15 "inside" students and 15 "outside" students (from Temple) meet for class once a week to explore issues of crime and justice, the criminal justice system, corrections and imprisonment. These topics are examined in depth, through an ongoing facilitated dialogue involving all participants, both in small groups and in the full class. There are numerous texts for the course, as well as several reflective/analytical assignments throughout the semester. Additionally, students work on a project together towards the end of the semester, developing solutions to the problems examined during the term. The course offers a chance for all participants to gain a deeper understanding of the criminal justice system through the marriage of theoretical knowledge and practical experience achieved by weekly meetings throughout the semester inside the facility.
**Repeatability:** This course may not be repeated for additional credits.

CJ 3000. Special Topics. 3 Credit Hours.
Topics will be arranged each semester. Please consult with the instructor for more information.
**Repeatability:** This course may be repeated for additional credit.

CJ 3101. Police Organization and Management. 3 Credit Hours.
Historical and contemporary management practices as applied to law enforcement organizations are examined, with particular concern for assessing police management accountability. Theories of organization and management are examined with regard to the police role and the efficient and effective provision of law enforcement services to the community.
**Repeatability:** This course may not be repeated for additional credits
**Pre-requisites:**
CJ 2101|Minimum Grade of C-|May not be taken concurrently.

CJ 3201. The American Jury System. 3 Credit Hours.
Examination of the role of the jury within the larger context of the criminal justice system. Explores the origins of the concept of "trial by jury" in an historical and philosophical context. Analyzes obstacles to definitions and operationalization of the notion of a "trial by jury of one's peers." Discusses contribution of juries to attainment of criminal justice system goals and critiques suggestions for jury reform.
**Repeatability:** This course may not be repeated for additional credits.

CJ 3301. Community Corrections. 3 Credit Hours.
Various dimensions of community corrections, including the effect of the community on the formation of correctional policy, as well as the numerous intermediate sanctions (community corrections) available on the continuum between probation and incarceration. Analysis of correctional policy making. Topics include probation, parole, electronic monitoring, day reporting centers, boot camps, and many other sentencing options.
**Repeatability:** This course may not be repeated for additional credits.

CJ 3302. Prisons in America. 3 Credit Hours.
Focus on development, current state of, and issues related to the U.S. prison system. Examination of the reality of the prison experience. Analysis of the system's efficacy and strategies for prison reform. Topics include prison life and culture, correctional management, the history of incarceration, and AIDS, drugs, sexual activity, and prison privatization.
**Repeatability:** This course may not be repeated for additional credits
**Pre-requisites:**
CJ 2301|Minimum Grade of C-|May not be taken concurrently.
CJ 3401. White Collar Crime. 3 Credit Hours.
The nature, extent, and cost of white collar crime. Analysis of several forms of white collar (corporate and individual) crime, the relevance of law-making to lawbreaking, problems of detection and punishment and the causes of this social problem. Discussion of policy evaluation and suggested reforms.
Repeatability: This course may not be repeated for additional credits.

CJ 3402. Street-Level Criminology. 3 Credit Hours.
This course introduces a set of crime theories that emphasize the role of the built environment in shaping human behavior and consequently where crime happens. The basic question asked in environmental criminology is why crime occurs where it does. Theoretical frameworks used to explore this question include: behavioral geography, routine activities, crime pattern theory, rational choice and human territorial functioning. In addition, various crime prevention strategies are examined such as situational crime prevention, CPTED, and defensive space. Note: This course was formerly known as "Environmental Criminology." Students who received credit under the prior title will not receive additional credit because the content overlaps significantly.
Department restrictions: Must be enrolled in one of the following Departments: CLA:Criminal Justice
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Criminal Justice
Repeatability: This course may not be repeated for additional credits
Pre requisites: CJ 2401|Minimum Grade of C-|May not be taken concurrently.

CJ 3403. Organized Crime. 3 Credit Hours.
Analysis of definitional issues and methodological problems in the study of organized crime. This course studies a variety of organized criminal activities on the local, national and international level. It explores the origins, opportunity, motives for criminal enterprises and examines the interconnections between organized criminals and legitimate organizations. Legislative and policy responses are investigated.
Repeatability: This course may not be repeated for additional credits.

CJ 3404. Urban Crime Patterns. 3 Credit Hours.
The spatial variation of crime is analyzed at three levels. Cultural variables are used to explain crime in regions of the United States within which the cities are located. Economic base is used to explain variation in crime between cities. Finally, housing and income segregation are used to explain the spatial variation of crime within a city. Much of the course focuses on Philadelphia.
Repeatability: This course may not be repeated for additional credits.

CJ 3405. Terrorism, Transnational Crime and Global Security. 3 Credit Hours.
Acts of terrorism can include crimes committed to disrupt governments, change political will, instigate religious furor, and impose a transformation by violent means. These actions can interrupt or damage critical infrastructure, cause fear amongst citizens and require governments to expend huge resources and efforts to marginalize the effect of terrorist acts or prevent them from occurring. This course will address the causes and consequences of terrorism and transnational crime; the interaction between terrorist groups, other criminal elements such as organized crime and other entities that provide material support to these groups; the mechanisms employed by global organizations to conduct terrorist acts; and how dealing with terrorist events has changed the global concept of security and its implications on the rule of law.
Repeatability: This course may not be repeated for additional credits.

CJ 3501. Criminal Procedure: Police Phase. 3 Credit Hours.
In depth exploration of the law of criminal procedure applicable to the police phase of the criminal process, based primarily on reading and analysis of Supreme Court opinions establishing the legal rules that govern searches and seizures, arrests, interrogation, identification procedures, investigating grand juries, and entrapment. The course includes investigation of the historical roots of the "Bill of Rights" and study of the process by which criminal procedure became constitutionalized. Emphasis is on application of legal rules to real and hypothetical situations and critical analysis of rules' impact on the criminal justice system. Note: This course was formerly known as "Criminal Procedure: Law Enforcement Practices and Procedures." Students who received credit under the prior title will not receive additional credit because the content overlaps significantly.
Department restrictions: Must be enrolled in one of the following Departments: CLA:Criminal Justice
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Criminal Justice
Repeatability: This course may not be repeated for additional credits.

CJ 3502. Criminal Procedure: Prosecution & Adjudication. 3 Credit Hours.
The legal principles governing the post-investigation phase of the criminal justice process: bail, pretrial detention, arraignment, preliminary hearings, guilty pleas, right to counsel, speedy trial, double jeopardy, and the right to trial by jury, including practical impact of these rules on the criminal justice system. Law and legal issues are examined primarily through study of U.S. Supreme Court cases.
Repeatability: This course may not be repeated for additional credits
Pre requisites: CJ 2501|Minimum Grade of C-|May not be taken concurrently.

CJ 3601. Legal Research. 0 or 2 Credit Hours.
Students will explore different areas of legal research. Topics include the introduction to the use of legal materials including federal and state sources, legislation, legal periodicals and treatises. Techniques of conducting legal research are taught through written student research projects. NOTE: Enrollment through special permission.
Repeatability: This course may not be repeated for additional credits
Pre requisites: CJ 1001|Minimum Grade of C-|May not be taken concurrently
OR CJ 1901|Minimum Grade of C-|May not be taken concurrently.
CJ 3901. Honors Issues in Criminal Procedure. 3 Credit Hours.
Students in this class will get a "taste of law school" while studying the constitutional law that governs the police phase of the criminal process. Students will learn what police can and cannot do when they initiate an encounter with a citizen, search the citizen's person or property, and seek to obtain a confession. The rules that have developed are the result of a constant tension between safeguarding our personal liberty and protecting public safety. By exploring the impact of these rules on real and hypothetical situations, students will critically analyze and debate the balance that the Supreme Court has established in this on-going conflict. Students will also learn about the Supreme Court; the historical roots of the Bill or Rights and the process by which the law of criminal procedure became constitutionalized; and how to find, read, and analyze U.S. Supreme Court decisions.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.

CJ 3902. Honors: Environmental Criminology. 3 Credit Hours.
This course introduces a set of crime theories that emphasize the role of the built environment in shaping human behavior and consequently where crime happens. The basic question asked in environmental criminology is why crime occurs where it does. Theoretical frameworks used to explore this question include: behavioral geography, routine activities, crime pattern theory, rational choice and human territorial functioning. In addition, various crime prevention strategies are examined such as situational crime prevention, CPTED, and defensible space.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.

CJ 4000. Special Topics. 3 Credit Hours.
Topics will be arranged each semester. Please consult with the instructor for more information.
Repeatability: This course may be repeated for additional credit.

CJ 4001. Crime and Social Policy. 3 Credit Hours.
This course explores the social policy implications of various perspectives on crime. Through an analysis of different criminal justice policies, reforms and recommendations, it examines the assumptions of political authorities and government decision-makers about the nature of disorder, crime and criminals in contemporary society. Policies in areas such as drugs, sexual offending, domestic violence, and child abuse will be analyzed. While this course centers on policies in the United States, it will offer a comparative perspective by discussing policy responses from other countries.
Repeatability: This course may not be repeated for additional credits.

CJ 4002. Drugs, Crime, and Criminal Justice. 3 Credit Hours.
This course examines the role that drugs play in the U.S. criminal justice system. Topics covered include the history of drug prohibition in the U.S.; the types of illegal drugs currently available in the United States; patterns, trends, and scope of illicit drug use; consideration of the relationship between drugs and crime; and manifestations and consequences of the criminal justice system response. The course includes hands-on experiential learning including site visits to locations such as drug court and rehabilitation programs.
Repeatability: This course may not be repeated for additional credits.

CJ 4003. Race and Criminal Justice. 3 Credit Hours.
Study of the social, cultural, economic, psychological, and political factors associated with race and crime in the United States. This course examines the real and perceived relationship between race/ethnicity and criminal activity, as well as the impact of both personal and institutional racism on the criminal justice system. NOTE: This course was formerly taught as "Urban Minorities and the Criminal Justice System." Students who received credit under the prior title will not receive additional credit because the content overlaps significantly. This course can be used to satisfy the university Core Studies in Race (RS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Department restrictions: Must be enrolled in one of the following Departments: CLA:Criminal Justice
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Criminal Justice
Course Attributes: RS
Repeatability: This course may not be repeated for additional credits.

CJ 4004. Women and Criminal Justice. 3 Credit Hours.
Examination of historic and contemporary treatment of women involved in the criminal justice system as offenders, victims of crime, and workers in criminal justice professions. Specific topics may include: criminological theories of women's crime, prostitution, infanticide, women's prisons, sexual offenses, domestic violence, and women's experience in policing, corrections, and law.
Repeatability: This course may not be repeated for additional credits.

CJ 4005. Historical Roots of Urban Crime. 3 Credit Hours.
The historical development of organized crime (gambling, prostitution, narcotics, and bootlegging), professional theft, juvenile delinquency, and deviant subcultures in American cities since the Civil War. The development of criminal justice institutions, especially police, and their relationship to criminal activity. NOTE: Prior background in history or criminal justice preferred, but not required.
Repeatability: This course may not be repeated for additional credits.
CJ 4006. Comparative Criminal Justice. 3 Credit Hours.
Philosophies, practices, and institutions of criminal justice in other countries.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CJ 1001|Minimum Grade of C-|May not be taken concurrently
OR CJ 1901|Minimum Grade of C-|May not be taken concurrently.
CJ 4007. Computer Crime. 3 Credit Hours.
This course will provide students with an overview of computer crime, the legislative responses to computer crime, and the issues encountered by police when enforcing laws in cyberspace. Emphasis is on how communication technologies (e.g., computers and related networking technologies) can be targets of crime, instruments of crime, and important sources of criminal evidence.
Repeatability: This course may not be repeated for additional credits.
CJ 4077. Criminal Justice Practicum. 3 Credit Hours.
Mandatory weekly seminar to be taken in conjunction with field service internship with law enforcement and other criminal justice agencies, rehabilitation and prevention programs, and community organizations dealing with the crime problem.
Co-requisites: CJ 4087
Repeatability: This course may not be repeated for additional credits.
CJ 4082. Independent Study. 3 Credit Hours.
For students wishing to engage in intensive study of a specific topic in consultation with a faculty member. Not intended to be a substitute for any required course. The student and faculty member must enter into an agreement regarding the content and requirements, including readings, meetings, and papers. NOTE: The agreement must be filed in the department office before the end of the first two weeks of the semester.
Repeatability: This course may be repeated for additional credit.
CJ 4087. Criminal Justice Practicum Lab. 3 to 9 Credit Hours.
Field Service Training is provided with law enforcement and other criminal justice agencies, rehabilitation and prevention programs, and community organizations dealing with the crime problem. Allows a student to clarify career interests, synthesize prior knowledge from the classroom with direct experience, critically examine the criminal justice system in operation, and sharpen analytic and observational skills. NOTE: Students may register for 3 (10 hours per week), 6 (20 hours per week), or 9 credits (30 hours per week). NOTE: Enrollment requires permission of the Instructor.
Co-requisites: CJ 4077
Repeatability: This course may be repeated for additional credit.
CJ 4096. Writing Seminar: Crime and Social Policy. 3 Credit Hours.
This writing intensive course explores the social policy implications of various perspectives on crime. Through an analysis of different criminal justice policies, reforms and recommendations, it examines the assumptions of political authorities and government decision-makers about the nature of disorder, crime and criminals in contemporary society. Policies in areas such as drugs, sexual offending, domestic violence, and child abuse will be analyzed. While this course centers on policies in the United States, it will offer a comparative perspective by discussing policy responses from other countries.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(CJ 1001|Minimum Grade of C-|May not be taken concurrently
OR CJ 1901|Minimum Grade of C-|May not be taken concurrently)
AND (CJ 2696|Minimum Grade of C-|May not be taken concurrently).
CJ 4098. Writing Seminar: Gender and Criminal Justice. 3 Credit Hours.
In this Writing Intensive course, students will explore the historic and contemporary treatment of women involved in the criminal justice system as offenders, victims of crime, and workers in criminal justice related professions. Specific topics include: feminist and other criminological theories regarding women's crime, prostitution, infanticide, women's prisons, sexual offenses, domestic violence, and women's experience working in policing, corrections, and law.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(CJ 1001|Minimum Grade of C-|May not be taken concurrently
OR CJ 1901|Minimum Grade of C-|May not be taken concurrently)
AND (CJ 2696|Minimum Grade of C-|May not be taken concurrently).
CJ 4101. Critical Issues in Law Enforcement. 3 Credit Hours.
This course examines trends and issues in policing and their philosophical and operational implications. It discusses the challenges involved with managing complex threats to security such as cybercrime and organized crime. Other topics include measuring effectiveness in policing; community and problem oriented policing; intelligence-led policing; corruption; use of force; women and policing; and policing ethnic minority communities. Developments in private policing are also examined. While this course focuses on issues in the United States, it will situate trends in a global context and offer examples from different parts of the world.
Repeatability: This course may not be repeated for additional credits.
CJ 4102. Community and Crime Prevention. 3 Credit Hours.
Course links features of community and individuals with different responses to crime and disorder, including individual and community prevention efforts. Examines causes of fear of crime, impacts of neighborhood features on reactions to crime, and types of prevention efforts mounted in different types of neighborhoods. The course emphasizes the links among individuals, community context, and psychological and behavioral reactions to disorder.
Repeatability: This course may not be repeated for additional credits.

CJ 4196. Writing Seminar: Critical Issues in Law Enforcement. 3 Credit Hours.
This writing intensive course examines trends and issues in policing and their philosophical and operational implications. It discusses the challenges involved with managing complex threats to security such as cybercrime and organized crime. Other topics include measuring effectiveness in policing; community and problem oriented policing; intelligence-led policing; corruption; use of force; women and policing; and policing ethnic minority communities. Developments in private policing are also examined. While this course focuses on issues in the United States, it will situate trends in a global context and offer examples from different parts of the world.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites: (CJ 1001|Minimum Grade of C-|May not be taken concurrently)
OR CJ 1901|Minimum Grade of C-|May not be taken concurrently)
AND (CJ 2696|Minimum Grade of C-|May not be taken concurrently).

CJ 4301. Capital Punishment. 3 Credit Hours.
An examination of the highly controversial subject of the death penalty. The history of capital punishment in America and the types of offenses to which it has been applied; arguments for and against its use; its status in current legislation; significant cases; the current death row population and the likelihood of execution; public attitudes toward capital punishment; and the moral issues it raises.
Repeatability: This course may not be repeated for additional credits.

CJ 4401. Youth and Crime. 3 Credit Hours.
An examination of key issues associated with youth and crime in the United States, and the educational, social, and cultural efforts to reduce youth involvement with guns, drugs, and gangs. Emphasis will be on the nature and structure of youth gangs, drug use by juveniles, and risk factors associated with youth violence. Other issues may include curfews, gun violence, victims of youth violence, and the over-representation of minority youth in the juvenile justice system.
Repeatability: This course may not be repeated for additional credits.

CJ 4402. Violence, Crime, and Justice. 3 Credit Hours.
Exploration of violence in its diverse aspects as well as collective and individual questions about its nature and causes. Of particular interest are definitions of violence: when is violence criminal, when is it political? In addition to discussion of the causes of violence, emphasis will be placed on society's response to violent acts.
Repeatability: This course may not be repeated for additional credits.

CJ 4403. Psychology and Criminal Justice. 3 Credit Hours.
The contribution of psychology to our understanding of various aspects of, and decisions within, the criminal justice process. The psychological implications of criminal behavior, criminal justice decision-making, jury selection, witness recall, sentencing, prisonization, and correctional treatment.
Repeatability: This course may not be repeated for additional credits.

CJ 4501. Sex Crimes and the Law. 3 Credit Hours.
An exploration of the definition and nature of sexual crimes, the experiences of victims of sexual violence, and the criminal justice system and community response to sex crime offenders.
Repeatability: This course may not be repeated for additional credits.

CJ 4901. Honors Reform Strategies in Criminal Justice. 3 Credit Hours.
This course engages students in critical analysis of the criminal justice system and of significant innovations and proposals for reform of policies, programs and practices. Specific topics, teaching methods and materials vary by semester. The course typically runs as an Inside-Out Prison Exchange Program class in which a marriage of theoretical knowledge with practical understanding and experience is achieved by holding class inside an area prison or jail throughout the semester. Involving roughly equal numbers of Temple students and incarcerated students, these classes utilize a variety of active learning techniques and lead to production of class projects by the end of the course.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.

CJ 4902. Honors: Drugs, Crime, and Criminal Justice. 3 Credit Hours.
This course examines the role that drugs play in the U.S. criminal justice system. Topics covered include the history of drug prohibition in the United States; the types of illegal drugs currently available in the United States; patterns, trends, and scope of illicit drug use; consideration of the relationship between drugs and crime; and manifestations and consequences of the criminal justice system response. The course includes hands-on experiential learning, including site visits to locations such as drug court and rehabilitation programs.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.
CJ 4903. Honors: Psychology and Criminal Justice. 3 Credit Hours.
The contribution of psychology to our understanding of various aspects of, and decisions within, the criminal justice process. The psychological
implications of criminal behavior, criminal justice decision-making, jury selection, witness recall, sentencing, prisonization, and correctional treatment.
NOTE: This is the honors version of Criminal Justice 4403.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.

CJ 4911. Honors Crime and Social Policy. 3 Credit Hours.
This course explores the social policy implications of various perspectives on crime. Through an analysis of different criminal justice policies, reforms
and recommendations, it examines the assumptions of political authorities and government decision-makers about the nature of disorder, crime and
criminals in contemporary society. Policies in areas such as drugs, sexual offending, domestic violence, and child abuse will be analyzed. While this
course centers on policies in the United States, it will offer a comparative perspective by discussing policy responses from other countries.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.

CJ 4941. Honors Youth and Crime. 3 Credit Hours.
An examination of key issues associated with youth and crime in the United States, and the educational, social, and cultural efforts to reduce youth
involvement with guns, drugs, and gangs. Emphasis will be on the nature and structure of youth gangs, drug use by juveniles, and risk factors
associated with youth violence. Other issues may include curfews, gun violence, victims of youth violence, and the over-representation of minority youth
in the juvenile justice system.
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.

Critical Languages Center (CRIT)

Courses

CRIT 0811. Asian Behavior & Thought. 3 Credit Hours.
We incessantly engage ourselves in doing things. We are beings-at-doing. We define ourselves by the kind of actions we perform. How we act or
conduct ourselves is shaped by the kind of self we construct for ourselves. And that self is shaped by the society into which we happen to be born.
Self-identity, which is socially and culturally constructed by our experiences and interactions with others, carries a personal as well as an interpersonal
meaning. Learn the four Asian paradigmatic cases of self-identity and examine your self in light of them. NOTE: This course fulfills the Human Behavior
(GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they
have successfully completed any of the following: ASST 0811, PHIL 0811, REL 0811/0911, Chinese 0811, or Japanese 0811.
Course Attributes: GB
Repeatability: This course may not be repeated for additional credits.

CRIT 0831. Immigration and the American Dream. 3 Credit Hours.
As a Temple student, you go to school and live in a city full of immigrants. Perhaps your own relatives were immigrants to the United States. But have
you ever listened to their stories? With an historical and sociological framework as a basis, we will take an in-depth and more personal look at the
immigrant experience as expressed through the immigrants’ own voices in literature and film. Topics explored include: assimilation, cultural identity and
Americanization, exploitation and the American Dream, ethnic communities, gender, discrimination and stereotyping. NOTE: This course fulfills the Race
& Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they
have successfully completed any of the following: ANTH 0831, History 0831, Italian 0831/0931, Russian 0831, SOC 0831, or SPAN 0831/0931.
Course Attributes: GD
Repeatability: This course may not be repeated for additional credits.

CRIT 0857. The Detective Novel. 3 Credit Hours.
The detective novel remains the most popular of literary forms since its American origins in Edgar Allan Poe. The form has spread to virtually every
part of the world, taking on different perspectives in the different societies where it has prospered. Our course analyzes the global travels of this prolific
literary genre, paying particular attention to the manner in which its formula of crime-detection-resolution has evolved from its classic phase in the
Sherlock Holmes mysteries, to its hard-boiled phase in the 1940's US, to the transformation of the private detective working outside the formal apparatus
of the law into the police detective working within the law in places as different as Sweden, Holland, Nigeria, and India. We will read bestselling detective
novels by figures such as Emile Gaboriau, Poe, Arthur Conan Doyle, Wilkie Collins, Agatha Christie, Raymond Chandler, Jorge Borges (Argentina),
Vikram Chandra (India), Henning Mankell (Sweden), Janwillem van de Wetering (Holland), Kole Omotosho (Nigeria), and Soji Shimada (Japan). We
will pay special attention to the conventions of the form and analyze its evolution as it travels the world. In exploring its global travels, we will attend
to a number of issues, including: the changing definition of crime; the evolving representation of the criminal; the changing methods for "solving" the
crime; the ideology of justice; the conflicts between community and individuality; and the varying social and national anxieties that the form reveals.
DUPLICATE CREDIT WARNING: Students who have received credit for English 0857 will not receive additional credits for this course.
Course Attributes: GG
Repeatability: This course may not be repeated for additional credits.
CRIT 0863. Religion in the World. 3 Credit Hours.
Learn about the major religious traditions found worldwide today: Hinduism, Buddhism, Judaism, Christianity, Islam, and several indigenous traditions. Examine the beliefs, practices, and values of these groups in order to understand the worldviews and ways of life of the people who practice them. Our interdisciplinary analysis and interpretation of specific examples of religious experience will help shed light on the overall meaning of religion and human existence. We will carefully consider examples while also focusing on particular thematic issues, like cosmology and ritual. Develop appreciation for the religious vibrancy and diversity that exist in human cultures while you actively engage in the learning process through class presentation, class participation, paper-writing, and a self-selected field trip. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Duplicate Credit Warning: Students may take only one of the following courses for credit; all other instances will be deducted from their credit totals: Religion 0863, 0963, 1101, C053, Asian Studies 0863, Critical Languages 0863, or Philosophy 0863.
Course Attributes: GG
Repeatability: This course may not be repeated for additional credits.

CRIT 1801. Chinese & Japanese Literature in Cultural Context. 3 Credit Hours.
A literary and cultural exploration into the worlds of classical and modern China and Japan. NOTE: (1) No knowledge of Chinese or Japanese expected. (2) This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. In addition to meeting the university Core International Studies requirement, this course meets the Non-Western/Third World IS requirement for Communication Sciences majors. Please note the recent update to the Core IS requirement at www.temple.edu/vpus/resources/coreupdates.htm#coreisupdate.
Course Attributes: IS
Repeatability: This course may not be repeated for additional credits.

CRIT 1901. Honors Chinese & Japanese Literature in Cultural Context. 3 Credit Hours.
A literary and cultural exploration into the worlds of classical and modern China and Japan. NOTE: (1) No knowledge of Chinese or Japanese expected. (2) This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO, IS
Repeatability: This course may not be repeated for additional credits.

CRIT 2000. Special Topics. 3 Credit Hours.
Topics vary each semester. See advisor for more information.
Repeatability: This course may be repeated for additional credit.

Dance (DANC)

Courses

DANC 0806. The Jazz Century in America. 3 Credit Hours.
What is jazz? Students will explore its roots and reinventions in Ragtime, Hot Jazz, Blues, Swing, Bebop, Free Jazz, Rhythm & Blues, and Hip Hop throughout the 20th century in America. We'll experience its manifestations across media, screening dance films, listening to music, viewing visual art works, and reading poetry. Then we'll move into the studio to experience first-hand its rhythms, moods, dynamics, creative expression and improvisation. A key theme will be how the individual and the collective nurture each other in jazz. Intellectually, we'll examine the historical and social backdrop and analyze the essential components of jazz. NOTE: This course fulfills the Arts (GA) requirement for students under GenEd and Arts (AR) for students under Core.
Department restrictions: May not be enrolled in one of the following: Music:Dance
Field of Study Restrictions: May not be enrolled in one of the following: Dance
Course Attributes: GA
Repeatability: This course may not be repeated for additional credits.

DANC 0827. Philadelphia Dance Experience. 3 Credit Hours.
Open your eyes to the wealth of culture right at your doorstep. Deepen your appreciation of dance as you become an educated audience member about the various styles and layers of meaning present in any one dance. We will look at dance primarily from a cultural studies perspective, focusing specifically on European, African, Asian, and Latin influences in the Philadelphia experience. We will attend performances in the city, interact with guest artists and lecturers, observe performances on video, and engage in guided viewing exercises to enhance your knowledge and understanding of dance. Dance concerts are selected from a variety of styles, including classical and contemporary forms from around the world. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core.
Course Attributes: GG
Repeatability: This course may not be repeated for additional credits.
DANC 0828. Embodying Pluralism. 3 Credit Hours.

How do dance and the arts represent diversity? Were we humans born to dance? From everyday interactions to dance theater to music videos, movement expresses human identity and difference. Through a variety of media, we will explore these themes in relation to race, ethnicity, gender, sexuality, and other constructions that form our perceptions of self and others. Embodying Pluralism combines dance and movement experiences with reading, writing, discussion, and viewing of videos and live performance. Classes and assignments emphasize active learning in small groups. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core.

Course Attributes: GD

Repeatability: This course may not be repeated for additional credits.

DANC 0831. Shall We Dance? Dance as Narrative in American Film. 3 Credit Hours.

Investigate the role dance plays and has played in informing and acknowledging social trends in the twentieth and early twenty-first centuries. Connections are made between dance and immigration, industry, politics, fashion, social change, class and gender, nationalism, education and popular culture. Dance both perpetuates and challenges social and cultural issues of power, class, gender, sexual orientation, and age, and acts as a mirror of our society. We will study popular perceptions of dance, dance in Hollywood, and dance as a reflection of social change, dance as social ritual, dance and contemporary notions of the "Impossible Body." You will not be dancing in the course, but will learn through lecture, discussion and film/videotape viewing.

NOTE: This course fulfills the Arts (GA) requirement for students under GenEd and Arts (AR) for students under Core. Students cannot receive credit for this course if they have successfully completed Dance 0831.

Course Attributes: GA

Repeatability: This course may not be repeated for additional credits.

DANC 0831. Honors Shall We Dance? Dance as Narrative in American Film. 3 Credit Hours.

Investigate the role dance plays and has played in informing and acknowledging social trends in the twentieth and early twenty-first centuries. Connections are made between dance and immigration, industry, politics, fashion, social change, class and gender, nationalism, education and popular culture. Dance both perpetuates and challenges social and cultural issues of power, class, gender, sexual orientation, and age, and acts as a mirror of our society. We will study popular perceptions of dance, dance in Hollywood, and dance as a reflection of social change, dance as social ritual, dance and contemporary notions of the "Impossible Body." You will not be dancing in the course, but will learn through lecture, discussion and film/videotape viewing.

NOTE: This course fulfills the Arts (GA) requirement for students under GenEd and Arts (AR) for students under Core. Students cannot receive credit for this course if they have successfully completed Dance 0831.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR

Course Attributes: GA, HO

Repeatability: This course may not be repeated for additional credits.

DANC 1801. First Year Seminar in Dance. 1 or 3 Credit Hour.

Through a varied range of movement experiences, students investigate the conceptual and theoretical foundations of modern dance. NOTE: Required of freshman dance majors. Prior to fall 2010, the course titles were "Freshman Seminar in Dance" and "Movement Sources and Concepts."

Field of Study Restrictions: Must be enrolled in one of the following Majors: Dance Foundation

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College

Repeatability: This course may not be repeated for additional credits.

DANC 1804. Jazz Dance I. 2 Credit Hours.

Jazz Dance I presents introductory experience in the movement vocabularies used in contemporary dance and theater.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College

Repeatability: This course may be repeated for additional credit.

DANC 1805. Tap Technique I. 2 Credit Hours.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College

Repeatability: This course may be repeated for additional credit.

DANC 1807. Hatha Yoga I. 2 Credit Hours.

This course promotes the health of the entire body through the performance of asanas or postures.

Repeatability: This course may be repeated for additional credit.

DANC 1808. Flamenco. 2 Credit Hours.

This is a basic level Flamenco dance class that introduces the complex history, the "compas" (rhythm structure) of the "palo" (rhythm families) of "Alegrias." The study will involve the "colocacion" (body placement) specific technique of arm work and footwork in relation to the "compas" and "palo." Flamenco "paleos" have a specific rhythm and "cante" (verse/song) structure that will be studied through the phrase work and rhythm training with "palmas" (hand clapping).

Repeatability: This course may not be repeated for additional credits.

DANC 1811. Movement Improvisation I. 2 Credit Hours.

This course provides experiences in the spontaneous use of movement structures derived from movement concepts, games, imagery, and media sources. It is designed to help students discover and develop their own movement potential.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Dance Foundation

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College

Repeatability: This course may be repeated for additional credit.
DANC 1812. Movement Improvisation II. 2 Credit Hours.
Weight, speed, momentum, inertia, and relationships are explored through structural improvisational exercises. These techniques provide the basis for improvised duets and group dances. Issues of performance are also addressed.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
DANC 1811|Minimum Grade of C-|May not be taken concurrently.

DANC 1813. Dance Repertory I. 2 or 3 Credit Hours.
This course for entering dance majors is designed to provide a structured rehearsal experience with a faculty choreographer that culminates in performance in the fall. NOTE: Required of freshman dance majors. Prior to fall 2010, the course title was “Freshman Repertory.”

Field of Study Restrictions: Must be enrolled in one of the following Majors: Dance Foundation

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College

Repeatability: This course may be repeated for additional credit.

DANC 1814. Graham-Based Technique. 2 Credit Hours.
Introduces students to the fundamentals of the modern dance technique developed by Martha Graham. Students will learn the principals of contraction and release, and to increase the strength and mobility of the spine, and to find the full use of the breath.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College

Repeatability: This course may not be repeated for additional credits.

DANC 1815. Modern Dance Technique I A. 2 Credit Hours.
This course addresses the development of basic movement skills and concepts as a means toward effective performance. Note: Prior to fall 2010, the course title was “Elements of Modern Dance I.”

Field of Study Restrictions: Must be enrolled in one of the following Majors: Dance Foundation

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College

Repeatability: This course may be repeated for additional credit.

DANC 1816. Rhythmic Analysis. 3 Credit Hours.
This course explores temporal and rhythmic organizations of movement and dance analyzed for the purpose of enhancing clarity in performance, choreography, and teaching. Elementary musical notation, scoring, and accompaniment skills developed. NOTE: This course is for dance majors only.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Dance

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College

Repeatability: This course may not be repeated for additional credits.

DANC 1817. Modern Dance Technique I B. 2 Credit Hours.
This course addresses the development of basic movement skills and concepts as a means toward effective performance. Note: Prior to fall 2010, the course title was “Elements of Modern Dance II.”

Field of Study Restrictions: Must be enrolled in one of the following Majors: Dance Foundation

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College

Repeatability: This course may be repeated for additional credit.

DANC 1818. Elements of Modern Dance III. 2 Credit Hours.
This course addresses the development of basic movement skills and concepts as a means toward effective performance.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College

Repeatability: This course may not be repeated for additional credits.

DANC 1819. Dance Production. 1 Credit Hour.
This course provides dance majors with an introduction to the technical aspects of dance production. Students will gain practical experience in the theater, learning about the equipment and tasks necessary for effective dance production. Production participation is required. NOTE: Required of freshman dance majors.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Dance Foundation

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College

Repeatability: This course may not be repeated for additional credits.

DANC 1831. Ballet I A. 2 Credit Hours.
This course provides further skills in basic classical ballet vocabulary and preparation for professional study at the intermediate level.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Dance Foundation

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College

Repeatability: This course may be repeated for additional credit.
DANC 1851. Global Dance Traditions. 2 Credit Hours.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Dance Foundation
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits.

DANC 1852. Ways of Knowing Dance. 2 Credit Hours.
"Ways of Knowing Dance" is a foundation course that seeks to provide students with a basic knowledge of ways in which we might study dance. It commences with the fundamental questions of 'what is dance' and 'what is the dancing body' before moving on to other approaches to reading and understanding dance.
Department restrictions: Must be enrolled in one of the following Departments: Music: Dance
Repeatability: This course may not be repeated for additional credits.

DANC 2801. Entry to Dance as Art. 3 Credit Hours.
This course is designed to provide the basis for understanding, appreciating, and participating in dance as art in culture and individual life. Concepts, intuitions, and communication in dance will be cultivated through lectures, films, live performances, and studio experiences. NOTE: This course can be used to satisfy the university Core Arts (AR) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: AR
Repeatability: This course may not be repeated for additional credits.

DANC 2802. Pathways in American Dance. 3 Credit Hours.
This course provides participants with concentrated beginning level studio experiences in urban popular dance forms, jazz, and modern dance, each presented in a five-week unit. Through active participation, students will dance, observe videos, and read articles to gain insight into these three approaches to dancing. Learning the movement vocabularies, values, aesthetics, and techniques of these different traditions will move students into a physical and conceptual understanding of the kinetic and cultural sources that inform dance as a contemporary performance art. NOTE: This course can be used to satisfy the university Core Arts (AR) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: AR
Repeatability: This course may not be repeated for additional credits.

DANC 2803. Dance in Human Society. 3 Credit Hours.
This course offers students an opportunity to explore the world of dance. Through video observation, readings, and dancing, students will be exposed to many faces of dance as an expression of cultural values. Dance as art, religion, social custom, and political action will be examined as evidenced in many human societies. Examples will be primarily drawn from North America, West Africa, Brazil, Japan, India, Bali, and the Cook Islands. Students will be introduced to the field of dance anthropology and have the opportunity for on-site observation of dance events. NOTE: This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. In addition to meeting the university Core International Studies requirement, this course meets the Non-Western/Third World IS requirement for Communication Sciences majors.
Please note the recent update to the Core IS requirement at www.temple.edu/vpus/resources/coreupdates.htm#coreisupdate.
Course Attributes: IS
Repeatability: This course may not be repeated for additional credits.
DANC 2805. Dance, Movement, and Pluralism. 3 Credit Hours.
This course will focus on movement as a language of expression that conveys culturally learned values. From pedestrian behaviors to social dance to artistic traditions, movement will be explored as a carrier of cultural and aesthetic meaning. The works of contemporary dance artists will be examined within their socio-cultural and historical contexts. Issues of race and racism will be addressed in relationship to the content, context, and appreciation of the specific works viewed. Students will participate in movement improvisations and theater games. NOTE: This course can be used to satisfy the university Core Studies in Race (RS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: RS
Repeatability: This course may not be repeated for additional credits.

DANC 2813. Dance Composition I. 2 Credit Hours.
The fundamentals of choreography are explored in this course. Solo studies based on choreographic problems are presented and performed. NOTE: Required of sophomore dance majors.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Dance Foundation
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
DANC 1811|Minimum Grade of C-|May not be taken concurrently.

DANC 2814. Dance Composition II. 2 Credit Hours.
This course addresses problems in presentation, form, design, and content. Experiences include experimentation with musical settings, voice, spoken word, and duets. NOTE: Required of sophomore dance majors.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Dance Foundation
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
DANC 2813|Minimum Grade of C-|May not be taken concurrently.

DANC 2815. Modern Dance Technique II A. 2 Credit Hours.
This course addresses the extension of range, control, and clarity of performance for more complex dance sequences. Note: Prior to fall 2010, the course title was "Intermediate Modern Dance I."
Field of Study Restrictions: Must be enrolled in one of the following Majors: Dance Foundation
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
DANC 1815|Minimum Grade of C-|May not be taken concurrently.

DANC 2816. Intermediate Modern Dance II. 3 Credit Hours.
This course addresses the extension of range, control, and clarity of performance for more complex dance sequences.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits.

DANC 2817. Modern Dance Technique II B. 2 Credit Hours.
This course addresses the extension of range, control, and clarity of performance for more complex dance sequences. Note: Prior to fall 2010, the course title was "Intermediate Modern Dance III."
Field of Study Restrictions: Must be enrolled in one of the following Majors: Dance Foundation
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
DANC 1817|Minimum Grade of C-|May not be taken concurrently.

DANC 2818. Intermediate Modern Dance IV. 3 Credit Hours.
This course addresses the extension of range, control, and clarity of performance for more complex dance sequences.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits.

DANC 2822. Pilates: Body Conditioning. 1 to 2 Credit Hour.
The course will begin with an in-depth exploration of Joseph Pilates original mat work, its origins, and its applications. We will focus on skills of self-assessment, using the system as a tool to improve both strength and alignment. We will look at multiple facets of the Pilates system and industry, as well as the benefits and limitations of the system as a wellness tool. Finally, each student will examine multiple ways of integrating the fundamental concepts of the system into both their movement training and their pedagogy.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may be repeated for additional credit.
DANC 2823. Pilates II: Applications. 1 to 2 Credit Hour.
This course is designed for students looking to further their already in-depth understanding of Joseph Pilates original mat and tower work. This course seeks to expose students to the current philosophies and schools of thought on the Pilates method. Students will emerge from the course with an understanding of the history of the method, and the ways in which it has evolved to meet the needs of today's practitioners. During this course, students will advance in their practice from intermediate to advanced level mat and tower exercises, visit and report on a Philadelphia Pilates studio, practice peer teaching, and report on relevant articles from Pilates publications.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
DANC 2822|Minimum Grade of C-|May not be taken concurrently.

DANC 2831. Ballet II A. 2 Credit Hours.
This course addresses increased vocabulary and skills for increasing demands of more complex combinations and sequences.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Dance Foundation
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may be repeated for additional credit.

DANC 2832. Ballet II B. 2 Credit Hours.
This course addresses increased vocabulary and skills for increasing demands of more complex combinations and sequences. Note: Prior to fall 2010, the course title was "Classical Ballet III."
Field of Study Restrictions: Must be enrolled in one of the following Majors: Dance, Dance Foundation
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
DANC 1832|Minimum Grade of C-|May not be taken concurrently.

DANC 2836. Pointe I. 2 Credit Hours.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Dance
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits.

DANC 2844. Hip Hop. 2 Credit Hours.
Initially an U.S. black urban expressive culture, hip-hop has become a formidable global cultural phenomenon. In going global, hip-hop has taken the angst, hope, social and political conditions of life in the inner cities to the global stage. It has become an anti-establishment culture, spawning its own special mode of communication and dress styles, and fostering a culture of resistance to institutional dominance, class exploitation, and middle class values. This course will study the development, history, communication style, dance form, moral framework, and processes of globalization. It begins by asking what hip-hop is. Next, it outlines the relationship between rap, dub, and hip-hop, and determines who the key figures of this global movement are. In reconstructing the growth and key moments of this life form, we will examine the myriad dimensions of this culture, through its music, music videos, dance styles, and films.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may be repeated for additional credit.

DANC 2853. African Dance I. 1 to 3 Credit Hour.
This introductory studio course is a survey of core movements and rhythms from Africa and the Diaspora. Students learn the Umfundalai technique as a way to integrate song, dance and music into a meaningful and aesthetic experience.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Dance Foundation
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may be repeated for additional credit.

DANC 2861. Non-Western Dance Traditions. 3 Credit Hours.
Different modes of choreographic and movement inquiry will be used to interpret and create movement and movement styles. Students will learn skills in culturally specific spatial designs and explorations in order to expand their choreographic landscape. Choreographic explorations will include definition, explanation, and evaluation of movements. Non-Western movement vocabularies will be explored examining a variety of non-western performance aesthetics. Experiences with visual arts, literature, drama, and music will govern the class' approach to the study of non-western performance. Movement studies will be assigned to incorporate various interpretations of non-western performance genres in the context of students' individual expressions and experiences.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits.
DANC 2862. Foundations of Dance Pedagogy. 3 Credit Hours.
The purpose of this course is to introduce, explore and practice basic principles of teaching and learning in dance. Acknowledging that teaching is a very complex activity, the course will try to delineate specific needs, skills and materials that might be helpful in planning and executing a class or course in dance. The teacher must ultimately make the decisions in a class. This course will offer information and skills so that those decisions are based on thoughtful reflection on why you want to teach, what constitutes good teaching, and how you can continue to improve as well as incorporate student participation. Remember--the best teacher never stops being a student! This course will strive to be a hands-on practical "How do I do this?" class. It will explore such questions as: Who am I as a learner? What do I consider good teaching? Why do I want to teach? A general outline of essential elements in the classroom/studio will be presented and discussed, followed by practice in designing within that framework for materials and experiences. The course will address the role/use of such topics as anatomy/kinesiology, learning theory, technology, texts, movement analysis/design, history/aesthetics in teaching various parts in a dance curriculum.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits.

DANC 2868. Studies in Dance. 1 to 3 Credit Hour.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may be repeated for additional credit.

DANC 2869. Studies in Dance Technique. 2 Credit Hours.
This course will focus on dance technique. It will only be recommended for those students who have shown competence at a specific level of technique and it would be in their interests to pursue further in-depth study at this particular level.

Department restrictions: Must be enrolled in one of the following Departments: Music:Dance
Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may be repeated for additional credit.

DANC 2872. Foundations of Dance Education. 3 Credit Hours.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Dance Foundation
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
DANC 1801|Minimum Grade of C-|May not be taken concurrently.

DANC 2897. Creative Process in Dance. 3 Credit Hours.
In this course, students investigate motives and values in creating dance. The development of individual aesthetics and the ability to articulate these is cultivated. NOTE: Required of junior dance majors.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

DANC 2901. Honors Entry to Dance as Art. 3 Credit Hours.
This course is designed to provide the basis for understanding, appreciating, and participating in dance as art in culture and individual life. Concepts, intuitions, and communication in dance will be cultivated through lectures, films, live performances, and studio experiences. NOTE: (1) Open to Honors students only. (2) This course can be used to satisfy the university Core Arts (AR) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: AR, HO
Repeatability: This course may not be repeated for additional credits.

DANC 2904. Honors Dance in Human Society. 3 Credit Hours.
This course offers students an opportunity to explore the world of dance. Through video observation, readings, and dancing, students will be exposed to many faces of dance as an expression of cultural values. Dance as art, religion, social custom, and political action will be examined as evidenced in many human societies. Examples will be primarily drawn from North America, West Africa, Brazil, Japan, India, Bali, and the Cook Islands. Students will be introduced to the field of dance anthropology and have the opportunity for on-site observation of dance events. NOTE: (1) Required for dance majors and is for University Honors Program students. (2) This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. In addition to meeting the university Core International Studies requirement, this course meets the Non-Western/Third World IS requirement for Communication Sciences majors. Please note the recent update to the Core IS requirement at www.temple.edu/vpus/resources/coreupdates.htm#coreisupdate.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO, IS
Repeatability: This course may not be repeated for additional credits.
DANC 3385. Diamond Peer Teachers - Internship I. 1 Credit Hour.
The Diamond Peer Teachers Program provides students with a mentored university-level teaching experience in their major. Course requirements include participation in the three-day pre-semester Teaching Institute and regular participation in the Peer Teachers support group throughout the semester. Peer Teachers provide supplemental instruction in first- and second-year courses, promote student engagement, and model successful study habits and academic preparedness for students with whom they work. For Diamond Peer Teachers only.
Repeatability: This course may be repeated for additional credit.

DANC 3386. Diamond Peer Teachers - Internship II. 1 Credit Hour.
The Diamond Peer Teachers Program provides students with a mentored university-level teaching experience in their major. Course requirements include participation in the three-day pre-semester Teaching Institute and regular participation in the Peer Teachers support group throughout the semester. Peer Teachers provide supplemental instruction in first- and second-year courses, promote student engagement, and model successful study habits and academic preparedness for students with whom they work. For Diamond Peer Teachers only.
Repeatability: This course may be repeated for additional credit.

DANC 3811. Field Experience in Dance. 1 to 8 Credit Hour.
Opportunity for experience in teaching dance.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Dance
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits

DANC 3812. Creative Process in Dance. 3 Credit Hours.
This course explores the creative process, particularly as it applies to dance making. The course will focus on the development of skills that facilitate creative processes in art. We will look at our own ways of working as well as those of other artists. One objective of the course is for each student to further define his/her personal tastes, commitments, and passions within the field of dance, while also expanding current preferences and practices.
NOTE: This course is for junior dance majors.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Dance
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits

DANC 3813. Dance Repertory II. 3 Credit Hours.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Dance, Dance Foundation
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits.

DANC 3815. Dance Composition III. 2 Credit Hours.
This course addresses various approaches to group composition. Students choreograph a series of studies for small groups of dancers that address counterpoint, stage space, and movement manipulation and development. NOTE: Required of junior dance majors.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Dance
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits.

DANC 3817. Modern Dance Technique III A. 2 Credit Hours.
This course addresses increased technical accuracy, sensitivity, and versatility of performance. The dance material offered covers a wide range of spatial, dynamic, and rhythmic qualities. Note: Prior to fall 2010, the course title was “Advanced Modern Dance I.”

Field of Study Restrictions: Must be enrolled in one of the following Majors: Dance
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may be repeated for additional credit.

Pre-requisites:
DANC 2815 Minimum Grade of C-May not be taken concurrently.

DANC 3818. Modern Dance Technique III B. 2 Credit Hours.
This course addresses increased technical accuracy, sensitivity, and versatility of performance. The dance material offered covers a wide range of spatial, dynamic, and rhythmic qualities. Note: Prior to fall 2010, the course title was “Advanced Modern Dance II.”

Field of Study Restrictions: Must be enrolled in one of the following Majors: Dance Foundation
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may be repeated for additional credit.

Pre-requisites:
DANC 2817 Minimum Grade of C-May not be taken concurrently.

DANC 3831. Ballet Technique III A. 2 Credit Hours.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Dance
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may be repeated for additional credit.
DANC 3832. Ballet Technique III B. 2 Credit Hours.
This course provides movement experience to develop confidence and skill for an authoritative and expressive performance. The full range of classical ballet vocabulary is used.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Dance
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
DANC 2832|Minimum Grade of C-|May not be taken concurrently.

DANC 3851. Lighting Design for Dance. 3 Credit Hours.
This course introduces concepts and techniques through lecture-demonstrations focusing on the impact of light as a supportive medium and a source for dance composition, problems and projects.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Dance Foundation
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
DANC 1819|Minimum Grade of C-|May not be taken concurrently.

DANC 3853. African Dance II. 1 to 3 Credit Hour.
This is the second course in the series of Umfundalai dance studies. Students learn to recognize rhythms and movements by region, country and selected ethnic groups. More advanced studio work is performed as students develop their expressive voices via movement studies.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Dance Foundation
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
DANC 2853|Minimum Grade of C-|May not be taken concurrently.

DANC 3868. Studies in Dance. 1 to 3 Credit Hour.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may be repeated for additional credit.

DANC 3871. Dance and the Child. 3 Credit Hours.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Dance
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits.

DANC 3876. Rhythmic Analysis. 3 Credit Hours.
This course explores temporal and rhythmic organizations of movement and dance analyzed for the purpose of enhancing clarity in performance, choreography, and teaching. Musical notation, scoring, and accompaniment skills are developed.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits.

DANC 3882. Independent Study in Dance. 1 to 4 Credit Hour.
Student may propose individual projects in areas such as choreography, production, and history.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may be repeated for additional credit.

DANC 3896. Dancing Cultures. 3 Credit Hours.
In “Dancing Cultures” we seek to examine how dance practice forms an important expression of our cultural landscape and, in return, how dance maintains, negotiates and challenges the social, political, historical and economic frameworks through which it exists.
Department restrictions: Must be enrolled in one of the following Departments: Music:Dance
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
DANC 1811|Minimum Grade of C-|May not be taken concurrently.

DANC 3897. Making Meaning in Dance. 3 Credit Hours.
“Making Meaning in Dance” focuses students with a broad set of theoretical tools with which to describe, interpret and evaluate dance in a broad spectrum of contexts. Students will learn to utilize both structuralist and poststructuralist modes of looking at dance to their analyses of multiple dance genres.
Department restrictions: Must be enrolled in one of the following Departments: Music:Dance
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
DANC 1852|Minimum Grade of C-|May not be taken concurrently
OR DANC 1851|Minimum Grade of C-|May not be taken concurrently.
DANC 4806. Somatic Theater. 3 Credit Hours.
This interdisciplinary studio course utilizes specific experimental theater techniques to explore new avenues of expression and to expand the
participants' understanding of performance. Conventional categorical divisions between movement, dance, drama and play are blurred as are the
divisions between "art" and "entertainment." Areas for investigation may include stories, myths, playscripts, poetry, and personal journals. Improvisation,
structured and free-form, is used as an end in itself and as a means of arriving at composition.
**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
**Repeatability:** This course may not be repeated for additional credits.

DANC 4811. African Dance Repertory. 1 to 3 Credit Hour.
Students learn selected neo-traditional dances and study the performance qualities of African dances. This course is the last in the series of Umfundalai
dance studies.
**Field of Study Restrictions:** Must be enrolled in one of the following Majors: Dance Foundation
**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
**Repeatability:** This course may be repeated for additional credit.
**Pre-requisites:**
DANC 3853|Minimum Grade of C-|May not be taken concurrently.

DANC 4815. Modern Dance Technique IV A. 2 Credit Hours.
**Field of Study Restrictions:** Must be enrolled in one of the following Majors: Dance
**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
**Repeatability:** This course may be repeated for additional credit.

DANC 4817. Modern Dance Technique IV B. 2 Credit Hours.
**Field of Study Restrictions:** Must be enrolled in one of the following Majors: Dance
**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
**Repeatability:** This course may be repeated for additional credit.

DANC 4819. Advanced Modern Dance III. 3 Credit Hours.
This class seeks to train the student in a variety of fundamental issues in dance performance for the concert dance stage. Major emphasis is placed on
performance practice and artistry.
**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
**Repeatability:** This course may not be repeated for additional credits.

DANC 4821. Adv Modern Dance IV. 3 Credit Hours.
**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
**Repeatability:** This course may not be repeated for additional credits.

DANC 4831. Introduction to Laban Movement Analysis. 3 Credit Hours.
This course introduces the theoretical framework of Laban Movement Analysis as a system of movement description. It investigates application in the
fields of dance, education, anthropology, and non-verbal communications research.
**Field of Study Restrictions:** Must be enrolled in one of the following Majors: Dance
**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
**Repeatability:** This course may not be repeated for additional credits.
**Pre-requisites:**
DANC 1801|Minimum Grade of C-|May not be taken concurrently.

DANC 4832. Ballet Technique IV A. 2 Credit Hours.
**Field of Study Restrictions:** Must be enrolled in one of the following Fields of study: Dance
**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
**Repeatability:** This course may be repeated for additional credit.

DANC 4833. Ballet Technique IV B. 2 Credit Hours.
**Field of Study Restrictions:** Must be enrolled in one of the following Fields of study: Dance
**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
**Repeatability:** This course may be repeated for additional credit.

DANC 4842. Jazz Dance II. 2 Credit Hours.
This course provides a more sophisticated approach to jazz dance vocabularies and sensitivities used in contemporary dance and theater.
**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
**Repeatability:** This course may not be repeated for additional credits.

DANC 4843. Jazz Dance III. 2 Credit Hours.
This course provides a complete integration to the approach to jazz dance vocabularies and sensitivities used in contemporary dance and theater.
**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
**Repeatability:** This course may not be repeated for additional credits.
DANC 4861. Dance Science and Somatics. 3 Credit Hours.
Six themes are interwoven through this course: physiological basis of dance training; conditioning to address individual needs in dance training; dance injuries - their causes, pathology, care rehabilitation, and prevention; dancers and wellness; application of motor learning and control to dance pedagogy; and mental imagery to enhance performance.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Dance
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
DANC 2872|Minimum Grade of C-|May not be taken concurrently.

DANC 4864. Dance Education Project. 3 Credit Hours.
Field of Study Restrictions:
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits.

DANC 4865. Studies in Dance. 1 to 3 Credit Hour.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may be repeated for additional credit.

DANC 4871. Movement Improvisation II. 2 Credit Hours.
Weight, speed, momentum, inertia and relationships are explored through structural improvisational exercises. These techniques provide the basis for improvised duets and group dances. Issues of performance are also addressed.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
DANC 1811|Minimum Grade of C-|May not be taken concurrently.

DANC 4872. Creative Process in Dance. 3 Credit Hours.
The course will focus on the development of skills that facilitate the role of imagination, imagery and intuition in the creation of dances. Students will look at their own ways of working as well as those of other artists. One objective of the course is for each student to further define his/her personal tastes, commitments, and passions within choreography and creative practice.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits.

DANC 4874. Dance Repertory III. 3 Credit Hours.
This course provides students with an opportunity to learn and perform a work by an established choreographer.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Dance
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may be repeated for additional credit.

DANC 4875. Contact Improvisation. 1 to 2 Credit Hour.
This course provides experiences in improvisational duet dancing involving weight sharing, touch, lifting, carrying, and active use of momentum. Activities develop sensitivity to partnering and spontaneous creativity.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
DANC 1811|Minimum Grade of C-|May not be taken concurrently.

DANC 4884. Senior Choreographic Project. 3 Credit Hours.
This course facilitates production of a major creative dance work that will be performed in the BFA Senior Concert as the culmination of the student's study in the BFA program. NOTE: Successful completion is prerequisite to graduation.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Dance
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
DANC 3812|Minimum Grade of C-|May not be taken concurrently.

DANC 4896. Senior Seminar. 3 Credit Hours.
In this course, students examine and clarify professional goals, values, and actions consistent with personal competencies. Dance in the larger society is discussed and professional resources and issues are addressed.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Dance
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.
DANC 4897. Creating Dance Histories. 3 Credit Hours.
This course will focus on historical research methods. The class provides students with the necessary research skills to understand how those who undertake historical research shape historiography. In addition, students are equipped with the tools necessary to undertake their own historical investigations. We will explore a broad range of dance genres and time periods in dance history, ensuring students encounter a significant amount of both conceptual and concrete dance historical content.

Department restrictions: Must be enrolled in one of the following Departments: Music: Dance

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
DANC 1852 Minimum Grade of C- May not be taken concurrently
OR DANC 1851 Minimum Grade of C- May not be taken concurrently.

Disability Studies (DSST)

Courses

DSST 0825. Marginalized Citizenship: Disability and Sexuality. 3 Credit Hours.
In an age of 24/7 instant information, what happens when headlines and opinions are considered facts? What are the consequences to individuals, communities and society when "headline facts" are the underpinning for legitimatizing fear and biases? Marginalized populations are frequently sidelined from enjoying the life styles and opportunities we assume are available to all Americans. This course will explore the evolution and influence of disability and sexuality and their interconnectedness from the Industrial Revolution through to modern times. Students will be challenged to explore cultural and societal attitudes towards issues such as the quality of life versus sanctity of life argument, at what age is it medically feasible to change one's gender, and is it ever permissible for a government to exclude sexual activity for a particular group of people.

Course Attributes: GB

Repeatability: This course may not be repeated for additional credits.

Early Childhood Education (ECED)

Courses

ECED 2101. Child Development, Birth to Nine. 3 Credit Hours.
This class introduces students to trends and variations in children's physical, cognitive, and socioemotional development from the birth through the start of adolescence (around 4th grade). Specifically we will discuss how children's development proceeds in terms of physical changes to the body (and the brain), thinking skills, and social competence. We will also examine developmental differences across individual children (including those with exceptional characteristics and/or special needs) and, more broadly, across cultures within and beyond the US. Six hours of field experience required for this course.

Repeatability: This course may not be repeated for additional credits.

ECED 2105. Cognition and Learning in the Classroom. 3 Credit Hours.
Understanding how people learn is a critical part of understanding how best to teach. This course will address theories of cognition and learning and provide practice in weaving key ideas into the design, implementation, and assessment of classroom instruction. This class is not a methods class; rather, it is a perspectives class designed to help students flexibly organize and use the teaching methods that you will add to your "tool belt" in the coming semesters. NOTE: Background clearances required.

College Restrictions: Must be enrolled in one of the following Colleges: Education

Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
ECED 2101 Minimum Grade of C- May not be taken concurrently.
ECED 2106. Language and Literacy Development in Early Childhood: Birth through Kindergarten. 3 Credit Hours.

The main focus of this course is to develop an understanding of the development of language skills and how language lays the critical foundation for pre-literacy skills, which are necessary for learning to read. The course will cover the important theories of language development and the developmental course of language acquisition. Woven throughout the class will be a discussion of dual language learners and ESL learners as they encounter the task of reading at the same time that they may be learning to speak English. Early childhood classroom activities will be discussed in relation to the six critical language and pre-literacy precursors suggested by the National Early Literacy Panel (2009). A unique emphasis is on the children’s language and literacy development from birth to 6 years of age. There has been a dramatic shift in how early childhood language and pre-literacy development is perceived, taught, and learned. However, these new theoretical understandings have not translated into effective classroom practices. Through current readings and class discussion the following questions will be addressed: How should we think about language and the learning and teaching of literacy? How will we prepare young children for a world in which reading, specifically vocabulary development and comprehension will be increasingly important? How can activities be developed that embody the changes in reading teaching and learning advocated by recent recommendations? How can we form these changes to include all children, especially children in poverty and ESL children? NOTE: Background clearances required.

College Restrictions: Must be enrolled in one of the following Colleges: Education

Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education

Co-requisites: ECED 2187

Repeatability: This course may not be repeated for additional credits.

ECED 2108. Engaging Children in the Learning Process through Classroom Management. 3 Credit Hours.

The purpose of this course is to prepare pre-service early childhood educators with the knowledge and skills required to create classroom climates that support positive social, emotional, and academic outcomes for all learners. This course follows Child Development and is taken in conjunction with Cognition and Learning because we will work on applying these ideas about how children learn and grow in service of creating an optimal environment to foster this change. Specifically, this course will address relationship-building approaches and classroom management techniques and strategies that have been shown to promote resiliency, and mediate/moderate risk factors. Course work will focus on prevention of learner problem situations, preparation to deal with learner problem situations that cannot always be prevented, and proactively responding to learner problem situations in the future, all in the context of developmentally appropriate practices for young learners. Prevention content will explore how to create a classroom ecology that promotes safety and access to the social and academic curriculum; creating a positive and psychologically safe classroom climate; establishing relationships; using class rules and routines; and making instructional and curricular decisions that foster pro-social and emotional growth along with positive academic outcomes. Preparation to deal with concerns as they arise will include collaborative problem-solving for group and individual interventions (e.g., conflict resolution, social skills). Content on how to proactively respond to problem situations in the future will include methods on how to collaborate in the design, implementation, and monitoring of individual interventions for young learners with challenging behaviors, regardless of disability classification status and the role and function of early childhood educators in crisis responding. Across these topic areas, we will discuss how to adjust real-world techniques to a variety of children (i.e., taking a focus on every child), with attention to gender, ethnicity, language learning status, special needs, or levels of classroom engagement and attention. NOTE: Background clearances required.

College Restrictions: Must be enrolled in one of the following Colleges: Education

Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education

Co-requisites: ECED 2187

Repeatability: This course may not be repeated for additional credits.

ECED 2187. Practicum for Pre-K and Kindergarten. 3 Credit Hours.

This course provides pre-service teachers with opportunities to apply theories of learning and development, observe classroom management skills, and practice effective methods of instruction under the guidance of a cooperating teacher and through interactions with the practicum instructor. This three-credit practicum integrates content from three courses (ECED 2105, ECED 2106, and ECED 2108) through practical application and implementation of assignments in pre-kindergarten and kindergarten classrooms. Pre-service teachers complete 45 hours of field experience. The majority of time is spent on classroom experience and related professional development. Three stages of field experience are incorporated into this practicum. Observation (Stage 1) occurs throughout the semester as students experience the culture of an early childhood setting and the everyday life of classrooms, teachers, and children. Exploration (Stage 2) takes place as pre-service teachers conduct individual tutorials and work with a small group of students. Activities often include subject matter experiences, such as language and literacy, as well as outdoor play, and monitoring classroom routines and procedures. Pre-student Teaching (Stage 3) occurs as students design pedagogical materials and implement instructional plans with individuals, small groups and the whole class.

College Restrictions: Must be enrolled in one of the following Colleges: Education

Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education

Repeatability: This course may not be repeated for additional credit.

ECED 2251. Effective Use of Instructional Technology in Early Childhood Classrooms. 3 Credit Hours.

This 3-semester-hour undergraduate course will provide Early Childhood pre-service teachers with knowledge and experiences necessary for incorporating appropriate educational technology into their classrooms. The course will provide hands-on experiences to examine, interact with, and evaluate educational software and web sites, along with technology intended for young learners. Students will learn to develop classroom applications for use by both teachers and students, and to develop instructional materials for use in the classroom.

Repeatability: This course may not be repeated for additional credits.
ECED 2321. Curriculum Development and Implementation in Early Childhood Program. 3 Credit Hours.
This course provides an introduction to the field of early education. Special emphasis is placed on understanding diverse program models and practices for children from birth to age eight. Students learn how to organize the classroom and plan educationally appropriate experiences for young children. Practicum experiences in local schools and child care centers offer opportunities for students to implement curricular activities in areas such as language and literacy, mathematics, science, social studies, expressive arts, and play. NOTE: This is an introductory course that serves as a prerequisite to all other early childhood courses.

College Restrictions: Must be enrolled in one of the following Colleges: Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY
Repeatability: This course may not be repeated for additional credits.

ECED 2322. Family/School/Community Environments for Young Children. 3 Credit Hours.
The purpose of this course is to provide early childhood educators with information about (a) what school-family-community relations are, (b) how they can promote children's early academic and social development as well as other family and school outcomes, and (c) how teachers and other educators can build strong, healthy, mutually beneficial relationships with families and communities.

College Restrictions: Must be enrolled in one of the following Colleges: Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY
Repeatability: This course may not be repeated for additional credits.

ECED 3106. Literacy Foundations for the Primary Grades: First Grade through Fourth Grade. 3 Credit Hours.
The main focus of this course is to develop knowledge of the theories, methods, and materials that can be used to teach reading concepts and skills in the elementary classroom (from first grade through fourth grade). The core curriculum for reading education should equip graduating teachers with the theoretical and practical knowledge to teach young children how to read and comprehend written text and to produce readers who are successful in the classroom and on standardized tests and use reading effectively to negotiate the world. There is growing consensus around a set of six foundational elements that teachers must use to produce proficient readers that should be included in any systematic program of study. These six foundational elements-- foundations in theory and research, word-level instructional strategies, text-level comprehension strategies, reading and writing connections, Instructional approaches and materials, and integrated assessment-- are the key components of the syllabus. Current research has provided important insight into how young children acquire literacy skill-- reading, writing, and comprehension of text. However, these new theoretical understandings have not entirely translated into effective classroom practices. Through current readings and class discussion the following questions will be addressed: How should we think about reading and the teaching of reading? How will we motivate young children to learn to read? How do we approach instruction for children who are struggling to learn to read? How do we prepare young children to approach different types of text and text from different subject areas? How can classroom activities be developed that emphasize reading and comprehension? How can assessment be used to help tailor the literacy curriculum? How can these changes to include all children? NOTE: Must be admitted to candidacy.

College Restrictions: Must be enrolled in one of the following Colleges: Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY
Co-requisites: ECED 3108, ECED 3187
Repeatability: This course may not be repeated for additional credits.

ECED 3107. Learning Mathematics for the Primary Grades: First through Fourth Grade. 3 Credit Hours.
The main focus of this course is to develop knowledge of the theories, methods and materials that can be used to teach mathematics concepts and skills in preschool through fourth grade classrooms. Students will develop both a) a conceptual understanding of the important identified math concepts for first through fourth graders and b) procedural knowledge of how to teach children mathematical concepts using developmentally appropriate strategies and activities. The purpose of this course is to help pre-service teachers discover how early childhood and elementary children think about and learn mathematics. The overall objective of teaching mathematics should be to help each child understand mathematical concepts, enabling them to become mathematically literate. The foundations for this course are the Professional Standards for Teaching Mathematics set forth by the National Council of Teachers of Mathematics. These standards propose significant change in mathematics teaching in the Pre-K - 12 classrooms, as well as how mathematical learning is assessed and evaluated. They are available online at http://www.nctm.org/standards/. NOTE: Must be admitted to candidacy.

College Restrictions: Must be enrolled in one of the following Colleges: Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY
Co-requisites: ECED 3109, ECED 3187
Repeatability: This course may not be repeated for additional credits.
ECED 3108. Social Studies for the Early Years, Pre K-4. 3 Credit Hours.
The main focus of this course is to develop an understanding of the development of social skills and how they lay the critical foundation for civic and citizenship skills and habits, which are necessary for being a citizen in a democracy. The course will cover the important theories of social education and the developmental course of learning history, economics, civics, and geography. Woven throughout the class will be a discussion of culture and diversity as children encounter the world. A unique emphasis is on the children's social development from pre-K to grade 4. There has been a dramatic shift in how young children understand cultural universals, the core of the early childhood social studies curriculum. These new theoretical understandings are slowly being translated into effective classroom practices. Through current readings and class discussion the following questions will be addressed: What do young children understand about cultural universals (e.g., food, clothing, shelter)? How will we prepare young children for a world in which respect for the environment, diversity, and the principles of democracy have become increasingly important? How can activities be developed that embody the principles of children's concept development in history, economics, geography, and citizenship? How can we create learning experiences that include and value all children's backgrounds? NOTE: Must be admitted to candidacy

College Restrictions: Must be enrolled in one of the following Colleges: Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY
Co-requisites: ECED 3106, ECED 3187
Repeatability: This course may not be repeated for additional credits.

ECED 3109. Science for the Early Years. 3 Credit Hours.
This three-credit course will draw on inquiry, instructional technology (e.g., video vignettes of classroom activities and science websites), and collaborative lab-based activities to explore current issues of teaching and learning science in the pre-K and early elementary school classroom. It is very important that young children develop scientific habits of mind from the outset. As a result, this course will be based on developing these habits of mind while giving students an understanding of the “Big Ideas” in the field. Therefore, the first part of this course will be devoted to developing an understanding for those habits of minds and how to engage young children. The second part of the course will examine the Big Ideas in science as a whole, focusing heavily on scientific inquiry as a pedagogical approach and a learning goal. Throughout the course, investigating the preconceptions that young children bring to the science classroom will be emphasized, as well as discovering the pedagogical approaches to uncovering and addressing them. Students will apply, evaluate, and reflect upon early childhood science teaching methods through class activities and field experience assignments that address the interdisciplinary nature of science. The assignments for the course will use the foundation fostered in the course to (a) examine science content, (b) student conceptions, (c) the meeting of theory and practice, (d) instructional resources (e.g., museums, websites, children's literature), and (e) lesson planning. Students will have opportunities to develop their own philosophy of science education and explore each of the major content domains in science. NOTE: Must be admitted to candidacy

College Restrictions: Must be enrolled in one of the following Colleges: Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY
Co-requisites: ECED 3107, ECED 3187
Repeatability: This course may not be repeated for additional credits.

ECED 3187. Practicum for the Primary Grades. 3 Credit Hours.
This practicum is a continuation of the early childhood field experiences with 3- to 5-year-old children. For this practicum with school age children, students will be placed in 1st through 4th grade classrooms for the purpose of implementing lessons and activities in reading, math, science, and social studies. Students will be expected to implement activities and lessons with individual children, as well as small and large groups. This practicum experience is an integral part of the methods courses with which it is associated and is under the direct supervision of a university instructor and the cooperating teacher. NOTE: Must be admitted to candidacy.

College Restrictions: Must be enrolled in one of the following Colleges: Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY
Co-requisites: ECED 3107
Repeatability: This course may be repeated for additional credit.

ECED 3205. Assessment in Early Childhood Education. 3 Credit Hours.
This course is designed to provide early childhood educators with the ability to use a variety of assessment methods to determine the developmental levels and needs of young children. Learners are introduced to the meaning and uses of authentic assessment as well as various tools and assessment strategies. The course addresses the interpretation of observational and assessment data to monitor children's progress, guide instructional practice, and identify at-risk children. This course requires 15 hours of field experience and, therefore, background clearances prior to enrollment. The purpose of the field work is to provide experiences for students to learn how to conduct focused, systematic, and unbiased observations useful for making informed instructional and assessment decisions on an individual case study child. In addition, students will learn ways to gather documentation on all the children in the class in multiple developmental areas.

College Restrictions: Must be enrolled in one of the following Colleges: Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY
Co-requisites: ECED 3209, ECED 3296
Repeatability: This course may not be repeated for additional credits.
ECED 3209. Teaching English Language Learners in the Early Grades. 3 Credit Hours.
This course offers students an introduction to theory, research and practice in teaching English language learners in the early grades (i.e. PreK-4). The course begins with an overview of sociocultural characteristics of ELLs, legal responsibilities, and educational and language policies in the United States. Students will also learn the basic theories and principles associated with second language acquisition. Students will explore the philosophies of bilingual and ESL education as well as different program models that address the education of linguistically diverse students. Students will be introduced to an array of contemporary, research-based instructional approaches, including content-based instruction, task-based language teaching, and sheltered English instruction. As a result, they will gain an understanding of how to adapt standards-based lessons for English language learners. Through a practicum component, students will learn to design lessons and assessments for small-group instruction. Students will also develop cross-cultural competence through interactions with ELLs, teachers and school staff in the middle grades.

College Restrictions: Must be enrolled in one of the following Colleges: Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY
Co-requisites: ECED 3205, ECED 3296
Repeatability: This course may not be repeated for additional credits.

ECED 3296. Differentiated Reading Instruction in the Early Grades. 3 Credit Hours.
This course will focus on four basics classroom elements in discussing differentiated instruction - content, process, product, and learning environments. The content is what the student needs to learn about reading and what various methods will be used to help the student access that information. The process is the specific activities that the student will engage in order to master the reading content. The products are the various projects and activities that require the student to rehearse, apply and extend the information that he has learned. The learning environments are the way the classroom is structured to support the differentiate instruction activities and grouping practices. Key aspects of differentiated instruction are a) the understanding of cognitive development and the different ways in which students’ process and encode information and b) the understanding of the role that ongoing assessment and flexible grouping plays in varying instruction to meet individual students' needs. This course requires obtaining background clearances prior to conducting observations.

College Restrictions: Must be enrolled in one of the following Colleges: Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY
Co-requisites: ECED 3205, ECED 3209
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

ECED 3322. Observing, Documenting, and Assessing Young Children’s Learning. 3 Credit Hours.
This course gives students experience in using effective methods for observing and documenting young children's development. Various recording methods are featured along with principles of child development and appropriate practice. Practicum experiences in local schools and centers provide opportunities for students to conduct focused, systematic, and unbiased observations useful for making instructional and assessment decisions.

College Restrictions: Must be enrolled in one of the following Colleges: Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY
Repeatability: This course may not be repeated for additional credits.

ECED 4101. Integrating the Arts into Early Childhood Education. 3 Credit Hours.
This course is a joint project between the College of Education and the Boyer College of Music and Dance. It is designed to provide an overview of the role and the significance of the arts in the education of children from Pre-K through fourth grade. Pre-service teachers will be exposed to art experiences that support standards, increase learning of content, teach basic aesthetic principles, and help them learn specific techniques and ideas. Through numerous hands-on experiences, students will start with their own skills and perspectives as creators of art and then move to explore the power and potential of the arts to reach children in new and effective ways. Students will be introduced to four art forms --dance, music, drama, and the visual arts -- and their unique histories and pedagogies. Students will learn from disciplinary experts in each of these four domains, who also have expertise in engaging young children in developmentally appropriate ways.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Early Childhood Education
College Restrictions: Must be enrolled in one of the following Colleges: Education
Repeatability: This course may not be repeated for additional credits.

ECED 4102. Children's Literature: Pre-K through Fourth Grade. 3 Credit Hours.
Books are a valuable source of learning and pleasure for children at every stage of development. This course focuses on literature for children in pre-kindergarten through fourth grade. Students in the course will engage in selecting, interpreting, discussing, and evaluating children's books in preparation for their professional careers. They will also examine theory and research as well as classroom practice relating to children's literature, with and without pictures, in a variety of genres. The field of children's literature is expanding rapidly. Vibrant picture books display many artistic media, styles and text-picture relationships. Works of fiction and non-fiction not only pertain to an increasing diversity of themes and issues but also exhibit an array of writing styles and formats. This introductory course surveys literature written for children with varied abilities, cultural backgrounds and book preferences. Its ultimate purpose is to develop future teachers' appreciation of (and passion for) a broad range of children's literature that they will be able to use effectively in the classroom.

College Restrictions: Must be enrolled in one of the following Colleges: Education
Repeatability: This course may not be repeated for additional credits.
ECED 4106. The Learning Community: Family and Community Relationships. 3 Credit Hours.
The purpose of this course is to provide pre-service early childhood and elementary grade teachers with critical information about what school-family-community relationships are; how they can promote children's early academic and social development as well as other family and school outcomes; and how teachers and other educators can build strong, healthy, mutually beneficial relationships with families and communities. An important theme in this course is that all children, families, schools, and communities are different, thus students in this course will learn about this diversity, develop knowledge about general guidelines for good practice, and spend time tailoring these guidelines to specific situations that they have encountered or are likely to encounter in their careers as educators. Special attention will be devoted to diversity in terms of family culture, language, ethnicity, income, household structure, and disability status of children.

College Restrictions: Must be enrolled in one of the following Colleges: Education
Repeatability: This course may not be repeated for additional credits.

ECED 4324. Integrated Programming for Young Children. 3 Credit Hours.
This advanced seminar is designed to prepare students for educating infants, toddlers, and young children who are at risk or have disabilities. The main focus is on differentiation of teaching method, curriculum content and resources considered to be key components of inclusive classroom practice. NOTE: This is an advanced seminar and should be taken as the final early childhood course.

College Restrictions: Must be enrolled in one of the following Colleges: Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY
Repeatability: This course may not be repeated for additional credits.

ECED 4588. Student Teaching in Early Childhood Education. 9 to 11 Credit Hours.
Involves a school placement where students demonstrate their knowledge of and competence in early childhood teaching, birth through third grade (N-3). Students work with a certified cooperating teacher and are supervised by a Temple University faculty member. NOTE: All coursework must be completed before taking this course. There is a $50 fee associated with all sections of this course. Student Teaching Applications are now online at http://education.temple.edu/ofp/studentteaching. Obtain your advisor's signature and return the completed application to the Student Teaching coordinator in 150 Ritter Hall.

College Restrictions: Must be enrolled in one of the following Colleges: Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY
Co-requisites: ECED 4801
Repeatability: This course may not be repeated for additional credits.

ECED 4801. Senior Seminar and Performance Assessment in Early Childhood Education. 3 Credit Hours.
Students will be involved in experiences that prepare them for making the transition from college to the practice setting, and engage in activities that foster professionalism in school and community settings. The senior performance assessment, a requirement for teacher certification students, is also a part of the course. NOTE: This is a required course for all teacher certification candidates, which is taken during the student teaching semester.

College Restrictions: Must be enrolled in one of the following Colleges: Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY
Co-requisites: ECED 4588
Repeatability: This course may not be repeated for additional credits.

Earth & Environmental Science (EES)

Courses

EES 0836. Disasters: Geology vs. Hollywood. 3 Credit Hours.
This course is typically offered in Fall, Spring, and Summer I.<p>Clips from Hollywood disaster movies will drive our inquiry into geologic phenomena. Can you really drive over a lava flow in a jeep? (Dante's Peak) Are we foolish not to prepare for a major earthquake in New York City? (Aftershock) Could global warming melt the polar ice caps turning "dry land" into a myth? (Waterworld) Would the impact of an asteroid the "size of Texas" kill half the Earth by heat and freeze the remainder in a nuclear winter? (Armageddon) Learn the fundamentals of plate tectonics, how petrologic properties control volcanic explosivity, how to calculate earthquake locations from seismic data, and prepare a disaster readiness plan for a major U.S. city. NOTE: This course fulfills a Science & Technology (GS) requirement for students under GenEd and Science & Technology Second Level (SB) for students under Core.

Course Attributes: GS
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 0701 to 0702| Required Courses:1|Minimum Grade of C|May not be taken concurrently
OR MATH 0800 to 4999| Required Courses:1|Minimum Grade of C|May be taken concurrently.
EES 0837. Evolution & Extinctions. 3 Credit Hours.
This course is typically offered in Fall, Spring, and Summer I.<p>Basic geologic principles and the fundamentals of evolutionary thought combine to bring to life the 4.5 billion year story of our planet and its creatures. Through hands-on experience with fossils and rocks, students discover how to decipher past environments from the geologic record and investigate changes in life through time. You may have read that an asteroid impact wiped out the dinosaurs, but can “natural” Earth-based processes also cause mass extinctions? Should we be less worried about rocks from space, and more about “down to Earth” phenomena such as climate change? NOTE: This course fulfills a Science & Technology (GS) requirement for students under GenEd and Science & Technology Second Level (SB) for students under Core.

Course Attributes: GS
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 0701 to 0702| Required Courses:1|Minimum Grade of C|May not be taken concurrently
OR MATH 0800 to 4999| Required Courses:1|Minimum Grade of C-|May be taken concurrently.

EES 0842. Sustainable Environments. 3 Credit Hours.
This course is typically offered in Fall, Spring, and Summer II.<p>Americans account for over a quarter of all fossil fuel consumption, own more cars than there are licensed drivers, and build new homes 40 percent larger than they did in 1975, despite shrinking household size. We feel for the pandas and polar bears, while contributing mightily to global climate change, resource inequity, and ecosystem destruction. How do we reckon with environmental crises at multiple scales, from the neighborhood to the atmosphere and oceans? “Think globally, act locally” environmentalists admonish us! Direct our vast human ingenuity and collective spirit toward technologies and behaviors that bring peace with the planet. Course mission: enhance your capability to make informed choices, based on a sound understanding of the ecological, technological, economic, political, and ethical dimensions of environmental sustainability. NOTE: This course fulfills a Science & Technology (GS) requirement for students under GenEd and Science & Technology Second Level (SB) for students under Core. Students cannot receive credit for this course if they have successfully completed GUS 0842 or ENST 0842.

Course Attributes: GS
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 0701 to 0702| Required Courses:1|Minimum Grade of C|May not be taken concurrently
OR MATH 0800 to 4999| Required Courses:1|Minimum Grade of C-|May be taken concurrently.

EES 0854. Geology of the National Parks. 3 Credit Hours.
This course is typically offered in Fall and Spring.<p>The primary purpose of the National Park Service is to preserve areas of natural or cultural interest for current and future generations. Quite commonly these areas of interest, such as the Grand Canyon, or Yellowstone National Park, are the result of extreme geologic forces which have shaped the landscape. The goal of this class is to use geologic principles to understand the “science of the scenery” of individual parks. Students will also address key issues within individual parks, such as the competing interests of visitor access vs. land management, the societal need for natural resources, and the preservation of unique or delicate ecosystems. NOTE: (1) This course fulfills a Science & Technology (GS) requirement for students under GenEd and Science & Technology Second Level (SB) for students under Core. (2) Students cannot receive credit for this course if they have successfully completed EES 0954.

Course Attributes: GS
Repeatability: This course may not be repeated for additional credits

EES 0954. Honors Geology of the National Parks. 3 Credit Hours.
This course is typically offered in Fall.<p>The primary purpose of the National Park Service is to preserve areas of natural or cultural interest for current and future generations. Quite commonly these areas of interest, such as the Grand Canyon, or Yellowstone National Park, are the result of extreme geologic forces which have shaped the landscape. The goal of this class is to use geologic principles to understand the “science of the scenery” of individual parks. Students will also address key issues within individual parks, such as the competing interests of visitor access vs. land management, the societal need for natural resources, and the preservation of unique or delicate ecosystems. NOTE: (1) This course fulfills a Science & Technology (GS) requirement for students under GenEd and Science & Technology Second Level (SB) for students under Core. (2) Students cannot receive credit for this course if they have successfully completed EES 0954. (3) This is an Honors course.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GS, HO
Repeatability: This course may not be repeated for additional credits.
EES 1001. Introductory Geology. 4 Credit Hours.
This course is typically offered in Fall, Summer I and Summer II.<p>An introduction to the basic principles and processes of geology. Wide range of topics, including rocks and minerals, surface processes, plate tectonics, and the earth's interior. NOTE: This course can be used to satisfy the university Core Science & Technology First Level (SA) requirement. To determine if this course in combination with another course can satisfy the GenEd Science & Technology requirement, see your advisor.

Course Attributes: SA
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 0701 to 0702| Required Courses:1|Minimum Grade of C|May not be taken concurrently
OR MATH 0800 to 4999| Required Courses:1|Minimum Grade of C|May be taken concurrently
OR MC3 Y|May not be taken concurrently
OR MC4 Y|May not be taken concurrently
OR MC5 Y|May not be taken concurrently
OR MC6 Y|May not be taken concurrently
OR STAT 1001|Minimum Grade of C|May be taken concurrently
OR STT2 Y|May not be taken concurrently
OR STAT 1102|Minimum Grade of C|May be taken concurrently
OR STAT 1902|Minimum Grade of C|May be taken concurrently.

EES 2001. Physical Geology. 4 Credit Hours.
This course is typically offered in Fall, Spring, and Summer I.<p>Introductory geology course designed for geology and environmental science majors and focused on theory and concepts needed for advanced study. Laboratory sessions (3 hrs/week) focus on the properties of mineral and rock specimens, map skills, and the development of basic field techniques.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 0701 to 0702| Required Courses:1|Minimum Grade of C|May not be taken concurrently
OR MATH 0800 to 4999| Required Courses:1|Minimum Grade of C|May be taken concurrently
OR MC3 Y|May not be taken concurrently
OR MC4 Y|May not be taken concurrently
OR MC5 Y|May not be taken concurrently
OR MC6 Y|May not be taken concurrently
OR MA01 Y|May not be taken concurrently
OR STAT 1001|Minimum Grade of C|May be taken concurrently
OR STT2 Y|May not be taken concurrently
OR STAT 1102|Minimum Grade of C|May be taken concurrently
OR STAT 1902|Minimum Grade of C|May be taken concurrently.

EES 2011. Mineralogy I. 4 Credit Hours.
This course is typically offered in Fall.<p>Fundamentals of hand-specimen analysis including crystallography, bonding, physical properties, chemical composition and growth of common minerals.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(EES 2001|Minimum Grade of C|May not be taken concurrently)
AND (CHEM 1031|Minimum Grade of C|May be taken concurrently
OR CHEM 1041|Minimum Grade of C|May be taken concurrently
OR CHEM 1951|Minimum Grade of C|May be taken concurrently).

EES 2012. Mineralogy II. 4 Credit Hours.
This course is typically offered in Spring.<p>Microanalysis by polarized light microscopy, powder x-ray diffractometry and microprobe including site occupancy, crystal growth, and microstructural defects with emphasis on silicates.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
EES 2011|Minimum Grade of C|May not be taken concurrently.

EES 2021. Facies Models. 4 Credit Hours.
This course is typically offered in Fall and Spring.<p>Analysis of sedimentological and stratigraphic data to derive facies interpretations. Laboratory and field exercises emphasize data collection, interpretation and graphical presentation. NOTE: Several required day-long field trips.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
EES 2001|Minimum Grade of C|May not be taken concurrently.
EES 2022. Paleontology and Stratigraphy. 4 Credit Hours.
This course is typically offered in Spring.<p> Fundamental concepts of stratigraphy combined with functional/ecological analysis of fossil invertebrates. Two multi-day field trips focused on correlation of strata, paleoecologic analysis, and reconstruction of geologic history. NOTE: Two multi-day (including weekends) field trips are required.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
EES 2021|Minimum Grade of C-|May not be taken concurrently.

EES 2061. Introduction to Geochemistry. 4 Credit Hours.
This course is typically offered in Spring.<p> Application of chemical principles and quantitative methods to understand and solve various geological problems. Field trips and laboratory exercises will emphasize techniques of obtaining and measuring geological samples. Students will analyze, summarize, and present data in oral and written reports.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(EES 2001|Minimum Grade of C-|May not be taken concurrently)
AND (CHEM 1031|Minimum Grade of C-|May be taken concurrently
OR CHEM 1041|Minimum Grade of C-|May be taken concurrently
OR CHEM 1951|Minimum Grade of C-|May be taken concurrently).

EES 2065. Nanogeoscience and Technology. 4 Credit Hours.
This course is typically offered in Fall.<p> Today, everyone is talking about nanomaterials, even advertisements for consumer products use the prefix “nano” as a keyword for special features. Nanotechnology is one of the most important new technologies of the 21st century. Through this course, history, principles, mechanisms, many exciting phenomena and the processes of nano-scale materials, as well as their applications and environmental impact, will be covered in great detail. The lab component of this course will consist of analyzing nanoparticles in water samples, extracting nanomaterials from consumer products, and monitoring plant growth from soils amended with nanomaterials. Through the course of the lab exercises, students will have hands-on experience on various instruments, including inductively-coupled plasma spectrometry, x-ray diffraction, scanning electron microscopy, and transmission electron microscopy.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(EES 2001|Minimum Grade of C-|May not be taken concurrently)
AND (CHEM 1032|Minimum Grade of C-|May be taken concurrently
OR CHEM 1042|Minimum Grade of C-|May be taken concurrently
OR CHEM 1952|Minimum Grade of C-|May be taken concurrently)
AND (CHEM 1034|Minimum Grade of C-|May be taken concurrently
OR CHEM 1044|Minimum Grade of C-|May be taken concurrently
OR CHEM 1954|Minimum Grade of C-|May be taken concurrently).

EES 2096. Climate Change: Oceans To Atmosphere. 4 Credit Hours.
This course is typically offered in Spring.<p> The major topics in Oceanography will be covered in addition to introducing students to meteorology through the study of the Atmospheric circulation system. These topics will give students a better understanding of climate change and forecasting. The course includes a significant writing project.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Environmental Science, Earth & Space Sci with Teachin, Geology, Sec Ed-Science Ed
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
EES 2001|Minimum Grade of C-|May not be taken concurrently.

EES 2097. Process Geomorphology. 4 Credit Hours.
This course is typically offered in Fall of even years.<p> The course will examine key Earth surface processes and landforms, including the role of tectonic, climatic, and biological agents in landscape evolution and quantitative analysis of morphological elements produced by glaciers, rivers, wind, and mass-movement processes.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
EES 2001|Minimum Grade of C-|May not be taken concurrently.
EES 3011. Remote Sensing and GIS. 4 Credit Hours.  
This course is typically offered in Spring of odd years. The focus of this class is on remote sensing technologies and geographic information systems. Remote sensing is a dynamic field; new, high-resolution satellites are coming online almost daily, and there has been an exponential growth in applications of remote sensing data during the past decade, including: mineral exploration, precision agriculture, watershed management, land use classification, military intelligence, and climate monitoring. The demand for college graduates with experience in this field is growing exponentially as well. By the end of this class you won't be a remote sensing expert, but you will have a fundamental understanding of the uses and limitations of remote sensing data for geologic and environmental applications, as well as fundamental geographic information systems skills. NOTE: Prior to Spring 2009, this course was titled “Use of Microcomputers in Geology.”


Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits

Repeatability: This course may not be repeated for additional credits.

EES 3021. Introduction to Hydrology. 4 Credit Hours.  This course provides an introduction to the science of hydrogeology. Topics include how geology influences groundwater flow and geochemistry, how groundwater and surface water interact, and contamination and remediation issues. Student understanding of groundwater and contaminant movement is developed though a series of take-home problem sets that require basic algebra skills.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:  
(EES 2001| Minimum Grade of C| May not be taken concurrently)  
AND (MATH 1021| Minimum Grade of C| May not be taken concurrently)  
OR MATH 1022 to 4999| Required Courses: 1| Minimum Grade of C| May be taken concurrently)  
OR MC5 Y| May not be taken concurrently)  
OR MC6 Y| May not be taken concurrently)  
OR STAT 1001| Minimum Grade of C| May not be taken concurrently)  
OR STAT 1102| Minimum Grade of C| May not be taken concurrently)  
OR STAT 1902| Minimum Grade of C| May not be taken concurrently).

EES 3025. Physical Hydrology. 4 Credit Hours.  This course examines the physical principles governing the flow of water on and beneath the Earth's surface and the relationship of hydrological processes to other disciplines such as geology, ecology, and atmospheric sciences.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:  
(EES 2001| Minimum Grade of C| May not be taken concurrently)  
AND (MATH 1022| Minimum Grade of C| May not be taken concurrently)  
OR MATH 1038 to 4999| Required Courses: 1| Minimum Grade of C| May be taken concurrently)  
OR MC6 Y| May not be taken concurrently)  
OR MA04 Y| May not be taken concurrently).

EES 3042. Coastal Processes and Geomorphology. 4 Credit Hours.  This course is typically offered in Spring. The course will apply a process geomorphological approach to understanding coastal behavior. Subjects will include the global distribution of coasts, wave and tidal hydraulics, barrier morphodynamics, nearshore and aeolian sediment transport, and morphological signatures of extreme events.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:  
(EES 2021| Minimum Grade of C| May not be taken concurrently)  
OR EES 2042| Minimum Grade of C| May not be taken concurrently)  
OR EES 2097| Minimum Grade of C| May not be taken concurrently).
EES 3091. Research Methods. 3 Credit Hours.
This course is typically offered in Spring. Research Methods is required for all of the TUteach with Teaching majors. It is one of several content courses specially designed to meet the needs of future teachers. Sections meet two hours per week for non-traditional, interactive lectures and two hours per week for lab. The course is cross-listed in Biology, Chemistry, Earth and Environmental Science, and Physics. The goals of the course are (1) to provide students with the tools that scientists use to solve scientific problems; (2) to give students the opportunity to use these tools in a laboratory setting; (3) to make students aware of how scientists communicate with each other through peer-reviewed scientific literature; and (4) to enable students to understand how scientists develop new knowledge and insights, the most important of which are eventually presented in textbooks and taught in conventional science classes. Students design and carry out four independent inquiries, which they write up and present in the manner that is common in the scientific community. The inquiries incorporate mathematics and the various science disciplines, thus the team of instructors teaching this course have expertise in different disciplines and are available to supervise all students as they work on their inquiries in the lab. The combination of Research Methods and the TUteach course "Perspectives on Science and Mathematics" (Philosophy 2196) provides prospective science and mathematics teachers with an in-depth understanding of how the scientific enterprise works. NOTE: EES 3091 is only available for major credit in the Earth and Space Science with Teaching BS program.

College Restrictions: Must be enrolled in one of the following Colleges: Science & Technology

Repeatability: This course may be repeated for additional credit.

Pre-requisites:
SCTC 1289|Minimum Grade of C-|May not be taken concurrently.

EES 3096. Igneous and Metamorphic Petrology. 4 Credit Hours.
This course is typically offered in Spring. Understanding of the chemistry, physical properties, global distribution, origin, and identification of igneous and metamorphic rocks. Laboratory work will emphasize mineral and rock identification in both hand sample and using microscopes. Thin section production techniques will be introduced. Term paper and oral presentation required.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
EES 2011|Minimum Grade of C-|May not be taken concurrently.

EES 4082. Individual Study Program. 1 to 3 Credit Hour.
This course is typically offered in Fall, Spring, and Summer I. Individual independent study and research under supervision of a member of the Earth & Environmental Science Faculty. A final written report will be submitted to the faculty member. For further information and details, see the undergraduate advisor. NOTE: Student must have a GPA of 3.25 at the end of the first semester of their junior year.

Repeatability: This course may be repeated for additional credit.

EES 4101. Structural Geology. 4 Credit Hours.
This course is typically offered in Spring. The purpose of this course is to train students in the concepts and techniques of structural geology. Students will learn how to collect, analyze, and interpret geologic data drawn from a variety of disciplines pertinent to structural geology and present a cohesive argument. Results are presented as maps, reports, and computer models. NOTE: Geology B.S. Capstone.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(EES 2011|Minimum Grade of C-|May not be taken concurrently)
AND (EES 2021|Minimum Grade of C-|May not be taken concurrently)
AND (PHYS 1061|Minimum Grade of C-|May not be taken concurrently)
OR PHYS 2021|Minimum Grade of C-|May not be taken concurrently)
OR PHYS 2921|Minimum Grade of C-|May not be taken concurrently).

EES 4200. Topics in Geoscience. 3 Credit Hours.
This course is not offered every year. This seminar will allow students to study current problems in geology and environmental science. NOTE: Elective for Earth and Environmental Science majors (Geology and Environmental Science). May be taken multiple times (on different topics) with permission of instructor.

Repeatability: This course may be repeated for additional credit.

EES 4210. Topics in Geoscience with Lab. 4 Credit Hours.
This course is not offered every year. This seminar will allow students to study current problems in geology and environmental science. NOTE: Elective for Earth and Environmental Science majors (Geology and Environmental Science). May be taken multiple times (on different topics) with permission of instructor.

Repeatability: This course may be repeated for additional credit.
EES 4589. Field Geology. 6 Credit Hours.
This course is typically offered in Summer.<p>The purpose of this course is to train students in the techniques and methodologies of field geology. Students will learn how to collect, analyze, and interpret field data across a variety of geologic disciplines. Results are presented as maps, reports, measured sections, and computer models. NOTE: Students take this course through other institutions. The selection of the camp must be approved by the Geology undergraduate advisor.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits

Repeatability: This course may be repeated for additional credit.

Pre-requisites:
(EES 2001|Minimum Grade of C-|May not be taken concurrently)
AND (EES 2011|Minimum Grade of C-|May not be taken concurrently)
AND (EES 2021|Minimum Grade of C-|May not be taken concurrently)
AND (EES 4096|Minimum Grade of C-|May not be taken concurrently
OR EES 4101|Minimum Grade of C-|May not be taken concurrently).

EES 4696. Vertebrate Paleontology and Taphonomy. 3 Credit Hours.
This course is typically offered in Fall of odd years.<p>This course examines vertebrate fossils and their importance for interpreting and reconstructing terrestrial ecosystems. Students will learn the basics of vertebrate skeletal anatomy, interpret transport and depositional histories of skeletal elements and assemblages, and combine this information with geologic data to reconstruct paleoenvironmental settings and paleocommunity associations. Several class sessions will meet off-campus at local museums; one weekend field trip is required.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
EES 2022|Minimum Grade of C-|May not be taken concurrently.

EES 4811. Planetary Geology. 4 Credit Hours.
This course is typically offered in Fall of even years.<p>This course explores the modern and ancient geologic processes on other planets and discusses how studies of other planets can aid us in a better understanding of our Earth. The course will also cover topics such as planetary exploration and astrobiology. Includes a lab.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(EES 2061|Minimum Grade of C-|May not be taken concurrently
OR EES 3096|Minimum Grade of C-|May not be taken concurrently
AND (MATH 1041|Minimum Grade of C-|May not be taken concurrently
AND (MATH 1941|Minimum Grade of C-|May not be taken concurrently
OR MATH 1038|Minimum Grade of C-|May not be taken concurrently
AND (MATH 1042|Minimum Grade of C-|May be taken concurrently
OR MATH 1421|Minimum Grade of C-|May be taken concurrently
OR MATH 1951|Minimum Grade of C-|May be taken concurrently
OR MATH 2043 to 3080| Required Courses:1|Minimum Grade of D|May be taken concurrently).

Economics (ECON)

Courses

ECON 0858. The American Economy. 3 Credit Hours.
Should the federal government more forcefully engage health care issues, or are its current obligations a hidden time bomb facing the federal budget? Should we be concerned about the outsourcing of U.S. jobs? Is the minimum wage too low, or will increases in the minimum simply lead to greater unemployment? Students will engage these and other pressing issues, write position papers advocating specific actions that governments or firms should take, and debate these recommendations. While economic theory is not the centerpiece of this course, students will learn enough economic theory to be able to discuss policy in an informed manner. They will also be introduced to important sources of “economic” information, from government web sites to major publications. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for ECON 0858 if they have successfully completed SOC 0858.

Course Attributes: GU

Repeatability: This course may not be repeated for additional credits.
ECON 1001. Introduction to the Economy. 3 Credit Hours.
Discussion of what economics is all about. Provides an overview of how a market economy operates, what it does well, what it may not do so well, and what could be done instead. The concepts of economic analysis are developed and applied to discussing some of the current economic problems the world is facing. NOTE: (1) This course is designated for students who are not business or economics majors. Students planning to take 2000, 3000 or 4000 level economics courses may have to take Economics 1101 or 1102 in addition to Economics 1001. Look at prerequisites for a particular course to see if 1101 or 1102 is specified. (2) This course can be used to satisfy the university Core Individual and Society (IN) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: IN
Repeatability: This course may not be repeated for additional credits.

ECON 1004. Economic Principles for Education Majors. 3 Credit Hours.
A one-semester introductory course in both macro- and microeconomics for education majors. Topics include: scarcity, the market system, supply and demand, competition, business cycles, inflation, unemployment, international economics, and government policy. Methods for teaching economics to primary and secondary students will also be covered. NOTE: Not to be taken for credit by Fox School of Business and Management students.

College Restrictions: Must be enrolled in one of the following Colleges: Education
Repeatability: This course may not be repeated for additional credits.

ECON 1101. Macroeconomic Principles. 3 Credit Hours.
An introductory course in macroeconomics. Topics include business cycles, inflation, unemployment, banking, monetary and fiscal policy, international economics, and economic growth. NOTE: (1) Economics 1101 and 1102 may be taken in any order. (2) This course can be used to satisfy the university Core Individual and Society (IN) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: IN
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 0701|Minimum Grade of C-|May not be taken concurrently
OR MATH 0702|Minimum Grade of C-|May not be taken concurrently
OR MC3 Y|May not be taken concurrently
OR MC4 Y|May not be taken concurrently
OR MC5 Y|May not be taken concurrently
OR MC6 Y|May not be taken concurrently
OR STA1 Y|May not be taken concurrently
OR STA2 Y|May not be taken concurrently.

ECON 1102. Microeconomic Principles. 3 Credit Hours.
An introductory course in microeconomics. Topics include the market system, supply and demand, cost, competition, monopoly, oligopoly, factor markets, and public goods. NOTE: (1) Economics 1101 and 1102 may be taken in any order. (2) This course can be used to satisfy the university Core Individual and Society (IN) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: IN
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 0701|Minimum Grade of C-|May not be taken concurrently
OR MATH 0702|Minimum Grade of C-|May not be taken concurrently
OR MC3 Y|May not be taken concurrently
OR MC4 Y|May not be taken concurrently
OR MC5 Y|May not be taken concurrently
OR MC6 Y|May not be taken concurrently
OR STA1 Y|May not be taken concurrently
OR STA2 Y|May not be taken concurrently.

ECON 1103. Global Economics Issues. 3 Credit Hours.
Examines the global context in which the United States economy functions. Basic economic concepts are used to study economic growth, persistence of underdevelopment, differing economic systems, and the interdependence of nations in the world economy. Special topics that may be investigated include the debt crisis, protectionism, the role of multinational corporations, and the gap between rich and poor nations. NOTE: (1) May not be taken by FSBM students as a substitute for Economics 1101, 1102, 1901, or 1902. (2) This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: IS
Repeatability: This course may not be repeated for additional credits.
ECON 1901. Honors Macroeconomic Principles. 3 Credit Hours.
An introductory course in macroeconomics. Topics include business cycles, inflation, unemployment, banking, monetary and fiscal policy, international economics, and economic growth. NOTE: (1) 1901 is the honors course. It usually requires additional reading and writing assignments. (2) This course can be used to satisfy the university Core Individual and Society (IN) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO, IN
Repeatability: This course may not be repeated for additional credits.

ECON 1902. Honors Microeconomic Principles. 3 Credit Hours.
An introductory course in microeconomics. Topics include the market system, supply and demand, cost, competition, monopoly, oligopoly, factor markets, and public goods. NOTE: (1) 1902 is the honors course. It usually requires additional reading and writing assignments. (2) This course can be used to satisfy the university Core Individual and Society (IN) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO, IN
Repeatability: This course may not be repeated for additional credits.

ECON 2514. Social and Economic Transformation in Russia. 3 Credit Hours.
Students will study the transformation of Russian society and the Russian economy, focusing on the 20th and 21st centuries. We will closely examine Russian economic transitions from a market to a planned economy (in the 1920s and 1930s) and from a planned economy back to a market economy (after 1991), as well as analyses of the Russian economy and society in periods of great stress (civil war, collectivization, famine, terror, war and occupation, arms race). We will also read memoirs and works of prose fiction and watch films in order to learn about the consequences of economic decisions on the lives of actual Russian citizens. The course will culminate with interviews with Russian businessmen visiting the United States.
Repeatability: This course may not be repeated for additional credits.

ECON 3408. Economics for Life. 3 Credit Hours.
Increasingly, people are expected to make their own personal financial choices. Economics, which is often defined as the study of choice, provides a structure for making these decisions. This course is designed to help a student, regardless of his or her major, to understand what options are available with respect to a given financial choice and how to go about deciding which one is best in terms of that student’s preferences. Among the financial choices that may be discussed are: whether to rent or buy a house or apartment, whether to accept a current job offer or wait for a better one, and when and how much to begin setting aside for retirement.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: ECON 1102|Minimum Grade of C-|May not be taken concurrently
OR ECON 1902|Minimum Grade of C-|May not be taken concurrently.

ECON 3501. Intermediate Microeconomic Analysis. 3 Credit Hours.
An intermediate treatment of microeconomic theory and applications. Topics include consumer behavior, production, costs, perfect competition, imperfect competition, factor markets, public goods, and market failure. NOTE: This theory course is designed for economics, finance, and actuarial science majors with analytic skills. It is required for all Economics majors. It is not recommended for non-majors who earned less than B- in Economics 1101 or 1102.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: (ECON 1101|Minimum Grade of C-|May not be taken concurrently
OR ECON 1901|Minimum Grade of C-|May not be taken concurrently
OR MATH 1042|Minimum Grade of C-|May not be taken concurrently
OR MATH 1942|Minimum Grade of C-|May not be taken concurrently
OR MATH 1951|Minimum Grade of C-|May not be taken concurrently
OR MATH 2043 to 3080| Required Courses:1|Minimum Grade of C-|May be taken concurrently)
AND (ECON 1102|Minimum Grade of C-|May not be taken concurrently
OR ECON 1902|Minimum Grade of C-|May not be taken concurrently).
ECON 3502. Intermediate Macroeconomic Analysis. 3 Credit Hours.
An intermediate treatment of macroeconomic theory and policy. Following a discussion of the important macroeconomic sectors, static and dynamic macroeconomic models are developed. Unemployment, inflation, business cycles, monetary and fiscal policy, economic growth, and the balance of payments are then analyzed using these models. NOTE: This theory course is designed for economics, finance, and actuarial science majors with analytic skills. It is required for all Economics majors. Not recommended for non-majors who earned less than B- in Economics 1101 or 1102.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(ECON 1101|Minimum Grade of C-|May not be taken concurrently
OR ECON 1901|Minimum Grade of C-|May not be taken concurrently
OR MATH 1042|Minimum Grade of C-|May not be taken concurrently
OR MATH 1942|Minimum Grade of C-|May not be taken concurrently
OR MATH 1951|Minimum Grade of C-|May not be taken concurrently
OR MATH 2043 to 3080| Required Courses:1|Minimum Grade of C-|May be taken concurrently)
AND (ECON 1102|Minimum Grade of C-|May not be taken concurrently
OR ECON 1902|Minimum Grade of C-|May not be taken concurrently

ECON 3503. Introduction to Econometrics. 3 Credit Hours.
Introduction to the theory and practice of econometrics. Topics include a review of basic statistics, simple regression, multiple regression, dummy variables, autocorrelation, heteroscedasticity, and model specification. Applications in economics are stressed. Problem sets, computer estimation of economic relationships, and a data analysis paper are required. This course is strongly recommended for Economics majors. NOTE: Not recommended for non-majors who earned less than B- in Economics 1101 or 1102.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(ECON 1101|Minimum Grade of C-|May not be taken concurrently
OR ECON 1901|Minimum Grade of C-|May not be taken concurrently
OR MATH 1042|Minimum Grade of C-|May not be taken concurrently
OR MATH 1942|Minimum Grade of C-|May not be taken concurrently
OR MATH 1951|Minimum Grade of C-|May not be taken concurrently
OR MATH 2043 to 3080| Required Courses:1|Minimum Grade of C-|May be taken concurrently)
AND (ECON 1102|Minimum Grade of C-|May not be taken concurrently
OR ECON 1902|Minimum Grade of C-|May not be taken concurrently
AND (STAT 2103|Minimum Grade of C-|May not be taken concurrently
OR STAT 2903|Minimum Grade of C-|May not be taken concurrently
OR MATH 3031|Minimum Grade of C-|May not be taken concurrently).

ECON 3504. Mathematical Economics. 3 Credit Hours.
Elements of set theory, calculus, and matrix algebra are presented and used to analyze mathematical models from economic theory, econometrics, management science, and statistics. This course is strongly recommended for Economics majors.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(ECON 1101|Minimum Grade of C-|May not be taken concurrently
OR ECON 1901|Minimum Grade of C-|May not be taken concurrently
OR MATH 1042|Minimum Grade of C-|May not be taken concurrently
OR MATH 1942|Minimum Grade of C-|May not be taken concurrently
OR MATH 1951|Minimum Grade of C-|May not be taken concurrently
OR MATH 2043 to 3080| Required Courses:1|Minimum Grade of C-|May be taken concurrently)
AND (ECON 1102|Minimum Grade of C-|May not be taken concurrently
OR ECON 1902|Minimum Grade of C-|May not be taken concurrently
AND (MATH 1031|Minimum Grade of C-|May not be taken concurrently
OR MATH 1031|Minimum Grade of C-|May not be taken concurrently
OR MATH 1038|Minimum Grade of C-|May not be taken concurrently
OR STAT 1102|Minimum Grade of C-|May not be taken concurrently
OR STAT 1902|Minimum Grade of C-|May not be taken concurrently).
ECON 3506. Energy, Ecology, and Economy. 3 Credit Hours.
After surveying the elements of energy and ecology, and reviewing the basics of economics, this course investigates the interaction of the three. Each of the major nonrenewable and renewable energy sources is examined in light of its "eco-feasibility." The potential of energy conservation is examined, and the need for energy/environmental/economic (3-E) policy is debated. Some speculations about future 3-E scenarios are offered, as the U.S. and the rest of the world face their energy, ecological, and economic problems.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(ECON 1101|Minimum Grade of C-|May not be taken concurrently
OR ECON 1901|Minimum Grade of C-|May not be taken concurrently
OR MATH 1042|Minimum Grade of C-|May not be taken concurrently
OR MATH 1942|Minimum Grade of C-|May not be taken concurrently
OR MATH 1951|Minimum Grade of C-|May not be taken concurrently
OR MATH 2043 to 3080| Required Courses:1|Minimum Grade of C-|May be taken concurrently)
AND (ECON 1102|Minimum Grade of C-|May not be taken concurrently
OR ECON 1902|Minimum Grade of C-|May not be taken concurrently).

ECON 3507. Health Economics. 3 Credit Hours.
Problems of efficient production and the equitable distribution of health-related services. Policy-oriented material with comprehensive review of standard microeconomic theory in the context of supplier-dependent consumer decisions, third-party payers, and not-for-profit producers.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ECON 1102|Minimum Grade of C-|May not be taken concurrently
OR ECON 1902|Minimum Grade of C-|May not be taken concurrently.

ECON 3511. The Economics and Management of Privatization. 3 Credit Hours.
This course introduces students to the new trend of shifting delivery of services and responsibilities from governments and non-profit organizations to the private sector. It includes North American and international experiences. This course provides public economics theoretical models, as well as description and evaluation of experiences in the fields of justice, transportation, education, health, and welfare. The course will further suggest models of the privatization process.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ECON 1102|Minimum Grade of C-|May not be taken concurrently
OR ECON 1902|Minimum Grade of C-|May not be taken concurrently.

ECON 3512. Public Finance. 3 Credit Hours.
An overview of the economics of the public sector. Topics include the theories of public goods and optimal (efficient and equitable) taxation, public expenditures, revenues, and tax incidence.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ECON 1101|Minimum Grade of C-|May not be taken concurrently
OR ECON 1901|Minimum Grade of C-|May not be taken concurrently
OR MATH 1042|Minimum Grade of C-|May not be taken concurrently
OR MATH 1942|Minimum Grade of C-|May not be taken concurrently
OR MATH 1951|Minimum Grade of C-|May not be taken concurrently
OR MATH 2043 to 3080| Required Courses:1|Minimum Grade of C-|May be taken concurrently)
AND (ECON 1102|Minimum Grade of C-|May not be taken concurrently
OR ECON 1902|Minimum Grade of C-|May not be taken concurrently).

ECON 3513. Economics of State and Local Governments. 3 Credit Hours.
Economic problems confronting state and local governments. Topics include intergovernmental relationships, the response of state and local governments to problems of urbanization, and the impact of state and local taxes and expenditures.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ECON 1101|Minimum Grade of C-|May not be taken concurrently
OR ECON 1901|Minimum Grade of C-|May not be taken concurrently
OR MATH 1042|Minimum Grade of C-|May not be taken concurrently
OR MATH 1942|Minimum Grade of C-|May not be taken concurrently
OR MATH 1951|Minimum Grade of C-|May not be taken concurrently
OR MATH 2043 to 3080| Required Courses:1|Minimum Grade of C-|May be taken concurrently)
AND (ECON 1102|Minimum Grade of C-|May not be taken concurrently
OR ECON 1902|Minimum Grade of C-|May not be taken concurrently).
ECON 3521. Economics of Risk and Uncertainty. 3 Credit Hours.
This course introduces students to the issues of risk and uncertainty that have become a standard part of microeconomic analysis and applied economics: expected utility theory and its criticism, applications of expected utility theory and economic and game-theoretic equilibrium analysis to insurance economics, incentives (moral hazard and adverse selection), and economic organization (theory of contracts).
Repeatability: This course may not be repeated for additional credits.
Pre-requisites:
(ECON 1102|Minimum Grade of C-|May not be taken concurrently)
OR ECON 1902|Minimum Grade of C-|May not be taken concurrently)
AND (STAT 1001|Minimum Grade of C-|May not be taken concurrently)
OR STT2 Y|May not be taken concurrently
OR MATH 1022|Minimum Grade of C-|May not be taken concurrently
OR MATH 1041|Minimum Grade of C-|May be taken concurrently
OR MATH 1941|Minimum Grade of C-|May be taken concurrently
OR MATH 1038|Minimum Grade of C-|May not be taken concurrently
OR MATH 1042|Minimum Grade of C-|May be taken concurrently
OR MATH 1942|Minimum Grade of C-|May be taken concurrently
OR MATH 1951|Minimum Grade of C-|May be taken concurrently
OR MATH 2043 to 3080| Required Courses:1|Minimum Grade of C-|May be taken concurrently)
AND (STAT 2102|Minimum Grade of C-|May not be taken concurrently
OR STAT 2103|Minimum Grade of C-|May not be taken concurrently
OR STAT 2903|Minimum Grade of C-|May not be taken concurrently
OR MATH 3031|Minimum Grade of C-|May not be taken concurrently).

ECON 3522. Economic Theory of Networks. 3 Credit Hours.
This course presents an overview of networks with emphasis on social networks, online and offline. The student will learn the basic mathematical techniques for representing networks as well as techniques from game theory and economics for the analysis of network structure and evolution.
Repeatability: This course may not be repeated for additional credits.
Pre-requisites:
ECON 1102|Minimum Grade of C-|May not be taken concurrently
OR ECON 1902|Minimum Grade of C-|May not be taken concurrently.

ECON 3531. History of Economic Theory. 3 Credit Hours.
The development of economic analysis from the pre-classical period to the neo-classical tradition that dominates contemporary mainstream economic thinking; emphasis on the work of Adam Smith, Malthus, Ricardo, the Marginalists, Marx, and Marshall.
Repeatability: This course may not be repeated for additional credits.
Pre-requisites:
(ECON 1101|Minimum Grade of C-|May not be taken concurrently)
OR ECON 1901|Minimum Grade of C-|May not be taken concurrently
OR MATH 1042|Minimum Grade of C-|May not be taken concurrently
OR MATH 1942|Minimum Grade of C-|May not be taken concurrently
OR MATH 1951|Minimum Grade of C-|May not be taken concurrently
OR MATH 2043 to 3080| Required Courses:1|Minimum Grade of C-|May be taken concurrently)
AND (ECON 1102|Minimum Grade of C-|May not be taken concurrently
OR ECON 1902|Minimum Grade of C-|May not be taken concurrently.

ECON 3532. Economic History of the United States. 3 Credit Hours.
An overview of the forces that influence economic development and growth. Topics include alternative theories of development, empirical studies of the development process, and the role of non-economic factors in helping or hindering economic progress. NOTE: Course taught in Temple University Japan.
Repeatability: This course may not be repeated for additional credits.
Pre-requisites:
(ECON 1101|Minimum Grade of C-|May not be taken concurrently)
OR ECON 1901|Minimum Grade of C-|May not be taken concurrently
OR MATH 1042|Minimum Grade of C-|May not be taken concurrently
OR MATH 1942|Minimum Grade of C-|May not be taken concurrently
OR MATH 1951|Minimum Grade of C-|May not be taken concurrently
OR MATH 2043 to 3080| Required Courses:1|Minimum Grade of C-|May be taken concurrently)
AND (ECON 1102|Minimum Grade of C-|May not be taken concurrently
OR ECON 1902|Minimum Grade of C-|May not be taken concurrently
OR ECON 1902|Minimum Grade of C-|May not be taken concurrently.


ECON 3535. Public Control of Business: Antitrust. 3 Credit Hours.
An overview of U.S. antitrust policy as applied to monopoly, mergers, price discrimination, tying agreements, and patents. Includes analysis of antitrust issues in law, medicine, and professional sports. The relative merits of government ownership, regulation, and antitrust policy are examined.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(ECON 1101|Minimum Grade of C-|May not be taken concurrently
OR ECON 1901|Minimum Grade of C-|May not be taken concurrently
OR MATH 1042|Minimum Grade of C-|May not be taken concurrently
OR MATH 1942|Minimum Grade of C-|May not be taken concurrently
OR MATH 1951|Minimum Grade of C-|May not be taken concurrently
OR MATH 2043 to 3080| Required Courses:1|Minimum Grade of C-|May be taken concurrently)
AND (ECON 1102|Minimum Grade of C-|May not be taken concurrently
OR ECON 1902|Minimum Grade of C-|May not be taken concurrently).

ECON 3536. Economics of American Industry. 3 Credit Hours.
Examines the competitive and monopolistic features of American industry and their effect on product prices and quality, the distribution of income, the rate of technological progress, and, among others, the efficient utilization of scarce resources, and economic rationale for the antitrust laws.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(ECON 1101|Minimum Grade of C-|May not be taken concurrently
OR ECON 1901|Minimum Grade of C-|May not be taken concurrently
OR MATH 1042|Minimum Grade of C-|May not be taken concurrently
OR MATH 1942|Minimum Grade of C-|May not be taken concurrently
OR MATH 1951|Minimum Grade of C-|May not be taken concurrently
OR MATH 2043 to 3080| Required Courses:1|Minimum Grade of C-|May be taken concurrently)
AND (ECON 1102|Minimum Grade of C-|May not be taken concurrently
OR ECON 1902|Minimum Grade of C-|May not be taken concurrently).

ECON 3537. Comparative Economic Systems. 3 Credit Hours.
The course highlights how two economic models - market and government control - are combined and applied in different societies. Specifics are studied for the following cases: (1) the U.S., with traditionally lowest government involvement in economic activity; (2) West European countries, with both market and socialist oriented institutions; (3) the former Soviet Union and Central European countries, which rejected complete government control and are being transformed into market economies; and (4) China, where the government keeps control of big business and allows economic freedom for small business and agriculture. An important consideration is how various systems promote economic growth and withstand crises.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(ECON 1101|Minimum Grade of C-|May not be taken concurrently
OR ECON 1901|Minimum Grade of C-|May not be taken concurrently
OR MATH 1042|Minimum Grade of C-|May not be taken concurrently
OR MATH 1942|Minimum Grade of C-|May not be taken concurrently
OR MATH 1951|Minimum Grade of C-|May not be taken concurrently
OR MATH 2043 to 3080| Required Courses:1|Minimum Grade of C-|May be taken concurrently)
AND (ECON 1102|Minimum Grade of C-|May not be taken concurrently
OR ECON 1103|Minimum Grade of C-|May not be taken concurrently
OR ECON 1902|Minimum Grade of C-|May not be taken concurrently).

ECON 3538. Managerial Economics. 3 Credit Hours.
The application of microeconomic principles to business planning and decision-making. Topics include demand estimation, cost analysis, and production planning.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(ECON 1101|Minimum Grade of C-|May not be taken concurrently
OR ECON 1901|Minimum Grade of C-|May not be taken concurrently
OR MATH 1042|Minimum Grade of C-|May not be taken concurrently
OR MATH 1942|Minimum Grade of C-|May not be taken concurrently
OR MATH 1951|Minimum Grade of C-|May not be taken concurrently
OR MATH 2043 to 3080| Required Courses:1|Minimum Grade of C-|May be taken concurrently)
AND (ECON 1102|Minimum Grade of C-|May not be taken concurrently
OR ECON 1902|Minimum Grade of C-|May not be taken concurrently).
ECON 3539. Economics of Socialist Countries. 3 Credit Hours.
The analysis of failures of a government-controlled economic model and transition to a market economy, with major attention paid to the creation of new economic institutions in a relatively short time under immense pressure. Topics include transition policies, theory of privatization and the ugly forms of implementation, capital formation, the new enterprise, institutional change, markets and corruption, property rights and the rule of law, varying attitudes towards democracy, and the social safety net.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ECON 1101|Minimum Grade of C-|May not be taken concurrently
OR ECON 1901|Minimum Grade of C-|May not be taken concurrently
OR MATH 1042|Minimum Grade of C-|May not be taken concurrently
OR MATH 1942|Minimum Grade of C-|May not be taken concurrently
OR MATH 1951|Minimum Grade of C-|May not be taken concurrently
OR MATH 2043 to 3080|Required Courses:1|Minimum Grade of C-|May be taken concurrently.

ECON 3541. The Economics of Sports. 3 Credit Hours.
This course introduces students to a variety of economic disciplines through the prism of professional and amateur sports. Students confront industrial organization and anti-trust issues involving sports leagues, public finance issues involving the relationship between cities and franchises, and labor issues involving reward systems, unions and discrimination. The course concludes with an analysis of collegiate sports and the NCAA.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(ECON 1101|Minimum Grade of C-|May not be taken concurrently
OR ECON 1901|Minimum Grade of C-|May not be taken concurrently
OR MATH 1042|Minimum Grade of C-|May not be taken concurrently
OR MATH 1942|Minimum Grade of C-|May not be taken concurrently
OR MATH 1951|Minimum Grade of C-|May not be taken concurrently
OR MATH 2043 to 3080|Required Courses:1|Minimum Grade of C-|May be taken concurrently)
AND (ECON 1102|Minimum Grade of C-|May not be taken concurrently
OR ECON 1902|Minimum Grade of C-|May not be taken concurrently).

ECON 3542. Economics of the Arts and Culture. 3 Credit Hours.
This course provides an overview of the microeconomic issues faced by the cultural sector of society. The fine arts, performing arts, book publishing, and film industries receive specific attention. At the end of the course, the successful student will have acquired a sense of how art and culture fit in the economy, what are the basic economic issues faced by artists, and how the perceived value of art and culture affects public support for the arts.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ECON 1102|Minimum Grade of C-|May not be taken concurrently
OR ECON 1902|Minimum Grade of C-|May not be taken concurrently.

ECON 3543. Law and Economics. 3 Credit Hours.
This course provides an introduction to the economic analysis of law. The course employs microeconomics to develop a behavioral model of response to legal rules. Topics covered include the common laws of property, contract, and tort as well as an extended discussion of intellectual property.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ECON 1102|Minimum Grade of C-|May not be taken concurrently
OR ECON 1902|Minimum Grade of C-|May not be taken concurrently.
ECON 3544. Computer-Based Modeling. 3 Credit Hours.

Students access a variety of economic models established on the University computing system. The models are used in problem-solving to reinforce economic concepts and to gain experience in the conduct of applied economics. Evaluating the consequences of government policies using cost/benefit analysis is emphasized. NOTE: No prior experience with computers or computer programming is required. **Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**

(ECON 1101|Minimum Grade of C-|May not be taken concurrently
OR ECON 1901|Minimum Grade of C-|May not be taken concurrently
OR MATH 1042|Minimum Grade of C-|May not be taken concurrently
OR MATH 1942|Minimum Grade of C-|May not be taken concurrently
OR MATH 1951|Minimum Grade of C-|May not be taken concurrently
OR MATH 2043 to 3080| Required Courses:1|Minimum Grade of C-|May be taken concurrently)
AND (ECON 1102|Minimum Grade of C-|May not be taken concurrently
OR ECON 1902|Minimum Grade of C-|May not be taken concurrently)
AND (MATH 1031|Minimum Grade of C-|May not be taken concurrently
OR MATH 1041|Minimum Grade of C-|May not be taken concurrently
OR MATH 1941|Minimum Grade of C-|May not be taken concurrently
OR MATH 1038|Minimum Grade of C-|May not be taken concurrently
OR STAT 1102|Minimum Grade of C-|May not be taken concurrently
OR STAT 1902|Minimum Grade of C-|May not be taken concurrently).

ECON 3545. Economics of Labor Markets. 3 Credit Hours.

Examines the nature of labor market equilibrium. Topics include fertility and migration, the allocation of time and occupational choice, human capital, and discrimination. **Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**

(ECON 1101|Minimum Grade of C-|May not be taken concurrently
OR ECON 1901|Minimum Grade of C-|May not be taken concurrently
OR MATH 1042|Minimum Grade of C-|May not be taken concurrently
OR MATH 1942|Minimum Grade of C-|May not be taken concurrently
OR MATH 1951|Minimum Grade of C-|May not be taken concurrently
OR MATH 2043 to 3080| Required Courses:1|Minimum Grade of C-|May be taken concurrently)
AND (ECON 1102|Minimum Grade of C-|May not be taken concurrently
OR ECON 1902|Minimum Grade of C-|May not be taken concurrently).

ECON 3546. Women in the Economy. 3 Credit Hours.

A course in labor economics with specific application to women in paid and unpaid employment. The course explores alternative economic theories of the labor market and economic approaches to discrimination as well as historic changes in the nature of unpaid and paid work. These theories are then applied to the economic situation of women in the U.S. and other societies. **Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**

(ECON 1101|Minimum Grade of C-|May not be taken concurrently
OR ECON 1901|Minimum Grade of C-|May not be taken concurrently
OR MATH 1042|Minimum Grade of C-|May not be taken concurrently
OR MATH 1942|Minimum Grade of C-|May not be taken concurrently
OR MATH 1951|Minimum Grade of C-|May not be taken concurrently
OR MATH 2043 to 3080| Required Courses:1|Minimum Grade of C-|May be taken concurrently)
AND (ECON 1102|Minimum Grade of C-|May not be taken concurrently
OR ECON 1902|Minimum Grade of C-|May not be taken concurrently).
ECON 3547. Economics of Development and Growth. 3 Credit Hours.
The course concentrates on issues of growth and development for a variety of world economies. The issues covered include topics such as scarcity of resources, interaction between market and government control, role of technology and human capital, and inequality and poverty. Specific tools include the measurement of economic growth and standards of living, conduct of macroeconomic policy, models of international trade, and instruments of global capital markets.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(ECON 1101|Minimum Grade of C-|May not be taken concurrently
OR ECON 1901|Minimum Grade of C-|May not be taken concurrently
OR MATH 1042|Minimum Grade of C-|May not be taken concurrently
OR MATH 1942|Minimum Grade of C-|May not be taken concurrently
OR MATH 1951|Minimum Grade of C-|May not be taken concurrently
OR MATH 2043 to 3080| Required Courses:1|Minimum Grade of C-|May be taken concurrently)
AND (ECON 1102|Minimum Grade of C-|May not be taken concurrently
OR ECON 1902|Minimum Grade of C-|May not be taken concurrently).

ECON 3548. Behavioral Economics. 3 Credit Hours.
This upper-level course, provides a solid foundation for understanding the new field of Behavioral Economics. It takes rational choice theory as a point of departure and then presents the findings of Behavioral Economics, explaining how these findings either support or call for a revision to the rational expectations model. The course uses multidisciplinary findings from psychology, experimental economics, neuroscience and evolutionary psychology to enhance our understanding of how humans make economics decisions and how incentives influence those decisions. Not only CLA economic majors, but also other CLA and FSBM students should be interested in this course, as it deals with the basis of all human decision-making. Students who have earned credit in ECON 3696 will not receive additional credits.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(ECON 1101|Minimum Grade of C-|May not be taken concurrently
OR ECON 1901|Minimum Grade of C-|May not be taken concurrently
OR MATH 1042|Minimum Grade of C-|May not be taken concurrently
OR MATH 1942|Minimum Grade of C-|May not be taken concurrently
OR MATH 1951|Minimum Grade of C-|May not be taken concurrently
OR MATH 2043 to 3080| Required Courses:1|Minimum Grade of C-|May be taken concurrently)
AND (ECON 1102|Minimum Grade of C-|May not be taken concurrently
OR ECON 1902|Minimum Grade of C-|May not be taken concurrently).

ECON 3563. International Trade. 3 Credit Hours.
An examination of the basic theories of international trade, commercial policy, and factor movements. Topics may include the relation between trade and economic growth, global aspects of U.S. trade policy, international trade agreements, and protectionism. NOTE: Not recommended for non-majors who earned less than B- in Economics 1101 or 1102.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(ECON 1101|Minimum Grade of C-|May not be taken concurrently
OR ECON 1901|Minimum Grade of C-|May not be taken concurrently
OR MATH 1042|Minimum Grade of C-|May not be taken concurrently
OR MATH 1942|Minimum Grade of C-|May not be taken concurrently
OR MATH 1951|Minimum Grade of C-|May not be taken concurrently
OR MATH 2043 to 3080| Required Courses:1|Minimum Grade of C-|May be taken concurrently)
AND (ECON 1102|Minimum Grade of C-|May not be taken concurrently
OR ECON 1902|Minimum Grade of C-|May not be taken concurrently).

ECON 3564. International Monetary Economics. 3 Credit Hours.
The analysis of the balance of payments and foreign currency markets. Topics include the international payments system, foreign investment and debt, and exchange rate regimes. NOTE: Not recommended for non-majors who earned less than B- in Economics 1101 or 1102.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(ECON 1101|Minimum Grade of C-|May not be taken concurrently
OR ECON 1901|Minimum Grade of C-|May not be taken concurrently
OR MATH 1042|Minimum Grade of C-|May not be taken concurrently
OR MATH 1942|Minimum Grade of C-|May not be taken concurrently
OR MATH 1951|Minimum Grade of C-|May not be taken concurrently
OR MATH 2043 to 3080| Required Courses:1|Minimum Grade of C-|May be taken concurrently)
AND (ECON 1102|Minimum Grade of C-|May not be taken concurrently
OR ECON 1902|Minimum Grade of C-|May not be taken concurrently).
ECON 3571. Money and Banking. 3 Credit Hours.
This course explores the role of the banking and monetary institutions within a modern developed economy, with an emphasis on the United States. (1) We will analyze financial intermediation and the role of banks in the economic system, place them in historical context, and discuss the economic rationale behind banking regulation. (2) We will study the role of money and the Federal Reserve in the U.S. economic and financial system. (3) We will discuss the instruments and goals of monetary policy.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: (ECON 1101|Minimum Grade of C-|May not be taken concurrently
OR ECON 1901|Minimum Grade of C-|May not be taken concurrently
OR MATH 1042|Minimum Grade of C-|May not be taken concurrently
OR MATH 1942|Minimum Grade of C-|May not be taken concurrently
OR MATH 1951|Minimum Grade of C-|May not be taken concurrently
OR MATH 2043 to 3080| Required Courses:1|Minimum Grade of C-|May be taken concurrently)
AND (ECON 1102|Minimum Grade of C-|May not be taken concurrently
OR ECON 1902|Minimum Grade of C-|May not be taken concurrently).

ECON 3572. Owl Fund Seminar I. 3 Credit Hours.
This course provides select students with the in-depth training required to manage the William C. Dunkelberg Owl Fund.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: FIN 3504|Minimum Grade of C|May not be taken concurrently
OR FIN 3507|Minimum Grade of C|May not be taken concurrently.

ECON 3580. Special Topics. 3 Credit Hours.
Special topics in current developments in the field of economics.
Repeatability: This course may be repeated for additional credit.
Pre-requisites: (ECON 1101|Minimum Grade of C-|May not be taken concurrently
OR ECON 1901|Minimum Grade of C-|May not be taken concurrently
OR MATH 1042|Minimum Grade of C-|May not be taken concurrently
OR MATH 1942|Minimum Grade of C-|May not be taken concurrently
OR MATH 1951|Minimum Grade of C-|May not be taken concurrently
OR MATH 2043 to 3080| Required Courses:1|Minimum Grade of C-|May be taken concurrently)
AND (ECON 1102|Minimum Grade of C-|May not be taken concurrently
OR ECON 1902|Minimum Grade of C-|May not be taken concurrently).

ECON 3581. Co-op Experience in Economics. 3 Credit Hours.
Students undertake a research project that integrates their current work experience with their classroom experience at Temple University. The results are reported in a 10 to 20-page paper prepared under the supervision of a faculty member. NOTE: Fox students should contact the Center for Student Professional Development (CSPD; www.sbm.temple.edu/cspd/; 215-204-2371) for permission to enroll in this course. All other students should contact the Economics Department Coordinator (Ritter Annex 873; 215-204-8880).
Repeatability: This course may be repeated for additional credit.
Pre-requisites: (ECON 1101|Minimum Grade of C-|May not be taken concurrently
OR ECON 1901|Minimum Grade of C-|May not be taken concurrently
OR MATH 1042|Minimum Grade of C-|May not be taken concurrently
OR MATH 1942|Minimum Grade of C-|May not be taken concurrently
OR MATH 1951|Minimum Grade of C-|May not be taken concurrently
OR MATH 2043 to 3080| Required Courses:1|Minimum Grade of C-|May be taken concurrently)
AND (ECON 1102|Minimum Grade of C-|May not be taken concurrently
OR ECON 1902|Minimum Grade of C-|May not be taken concurrently).

ECON 3582. Independent Study. 1 to 6 Credit Hour.
Directed reading and/or writing assignments under supervision of a faculty member.
Repeatability: This course may be repeated for additional credit.
ECON 3596. Energy, Ecology, and Economy. 3 Credit Hours.
After surveying the elements of energy and ecology, and reviewing the basics of economics, this course investigates the interaction of the three. Each of the major nonrenewable and renewable energy sources is examined in light of its "eco-feasibility." The potential of energy conservation is examined, and the need for energy/environmental/economic (3-E) policy is debated. Some speculations about future 3-E scenarios are offered, as the U.S. and the rest of the world face their energy, ecological, and economic problems.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(ECON 1101|Minimum Grade of C-|May not be taken concurrently
OR ECON 1901|Minimum Grade of C-|May not be taken concurrently
OR MATH 1042|Minimum Grade of C-|May not be taken concurrently
OR MATH 1942|Minimum Grade of C-|May not be taken concurrently
OR MATH 1951|Minimum Grade of C-|May not be taken concurrently
OR MATH 2043 to 3080|Required Courses: 1|Minimum Grade of C-|May be taken concurrently
AND (ECON 1102|Minimum Grade of C-|May not be taken concurrently
OR ECON 1902|Minimum Grade of C-|May not be taken concurrently
ECON 3597. Health Economics. 3 Credit Hours.
Problems of efficient production and the equitable distribution of health-related services. Policy-oriented material with comprehensive review of standard microeconomic theory in the context of supplier-dependent consumer decisions, third-party payers, and not-for-profit producers.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ECON 1102|Minimum Grade of C-|May not be taken concurrently
OR ECON 1902|Minimum Grade of C-|May not be taken concurrently.
ECON 3598. Economics Writing Seminar. 3 Credit Hours.
This course fulfills the advanced writing requirement for economics majors in the College of Liberal Arts and the Fox School of Business and Management. Students are expected to demonstrate through a series of writing assignments that they can use the economic techniques learned in previous courses to analyze current economic policy issues.
Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(ECON 3501|Minimum Grade of C-|May not be taken concurrently
AND ECON 3502|Minimum Grade of C-|May not be taken concurrently).
ECON 3672. Owl Fund Seminar II. 3 Credit Hours.
This course is a continuation of Economics 3572 that will focus on improving the students' skills in value investing and applied portfolio analysis. Students may register for this class only with the permission of the instructor.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(FIN 3504|Minimum Grade of C|May not be taken concurrently
OR FIN 3507|Minimum Grade of C|May not be taken concurrently
AND (FIN 3571|Minimum Grade of C|May not be taken concurrently
OR ECON 3572|Minimum Grade of C|May not be taken concurrently).
ECON 3682. Independent Study. 1 to 6 Credit Hour.
Directed reading and/or writing assignments under supervision of a faculty member.
Repeatability: This course may be repeated for additional credit.
ECON 3696. Behavioral Economics. 3 Credit Hours.
This upper-level course, provides a solid foundation for understanding the new field of Behavioral Economics. It takes rational choice theory as a point of departure and then presents the findings of Behavioral Economics, explaining how these findings either support or call for a revision to the rational expectations model. The course uses multidisciplinary findings from psychology, experimental economics, neuroscience and evolutionary psychology to enhance our understanding of how humans make economics decisions and how incentives influence those decisions. Not only CLA economic majors, but also other CLA and FSBM students should be interested in this course, as it deals with the basis of all human decision-making.

Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(ECON 1101|Minimum Grade of C-|May not be taken concurrently
OR ECON 1901|Minimum Grade of C-|May not be taken concurrently
OR MATH 1042|Minimum Grade of C-|May not be taken concurrently
OR MATH 1942|Minimum Grade of C-|May not be taken concurrently
OR MATH 1951|Minimum Grade of C-|May not be taken concurrently
OR MATH 2043 to 3080| Required Courses:1|Minimum Grade of C-|May be taken concurrently)
AND (ECON 1102|Minimum Grade of C-|May not be taken concurrently
OR ECON 1902|Minimum Grade of C-|May not be taken concurrently).

ECON 3697. The Economics of Sports. 3 Credit Hours.
This course introduces students to a variety of economic disciplines through the prism of professional and amateur sports. Students confront industrial organization and anti-trust issues involving sports leagues, public finance issues involving the relationship between cities and franchises, and labor issues involving reward systems, unions and discrimination. The course concludes with an analysis of collegiate sports and the NCAA. Students who have earned credit in ECON 3541 will not receive additional credits.

Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(ECON 1101|Minimum Grade of C-|May not be taken concurrently
OR ECON 1901|Minimum Grade of C-|May not be taken concurrently
OR MATH 1042|Minimum Grade of C-|May not be taken concurrently
OR MATH 1942|Minimum Grade of C-|May not be taken concurrently
OR MATH 1951|Minimum Grade of C-|May not be taken concurrently
OR MATH 2043 to 3080| Required Courses:1|Minimum Grade of C-|May be taken concurrently)
AND (ECON 1102|Minimum Grade of C-|May not be taken concurrently
OR ECON 1902|Minimum Grade of C-|May not be taken concurrently).

ECON 3900. Honors Topics in Economics. 3 Credit Hours.
Treatment of a particular topic in economics at the Honors level. NOTE: Topic varies from semester to semester. Honors courses usually require extra reading and a paper.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(ECON 1101|Minimum Grade of C-|May not be taken concurrently
OR ECON 1901|Minimum Grade of C-|May not be taken concurrently
OR MATH 1042|Minimum Grade of C-|May not be taken concurrently
OR MATH 1942|Minimum Grade of C-|May not be taken concurrently
OR MATH 1951|Minimum Grade of C-|May not be taken concurrently
OR MATH 2043 to 3080| Required Courses:1|Minimum Grade of C-|May be taken concurrently)
AND (ECON 1102|Minimum Grade of C-|May not be taken concurrently
OR ECON 1902|Minimum Grade of C-|May not be taken concurrently).
ECON 3999. Honors Thesis I. 1 to 6 Credit Hour.
Students work in an independent study situation to develop an original research project. Permission of the Department Chairperson required for registration.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(ECON 1101|Minimum Grade of C-|May not be taken concurrently
OR ECON 1901|Minimum Grade of C-|May not be taken concurrently
OR MATH 1042|Minimum Grade of C-|May not be taken concurrently
OR MATH 1942|Minimum Grade of C-|May not be taken concurrently
OR MATH 1951|Minimum Grade of C-|May not be taken concurrently
OR MATH 2043 to 3080| Required Courses:1|Minimum Grade of C-|May be taken concurrently
AND (ECON 1102|Minimum Grade of C-|May not be taken concurrently
OR ECON 1902|Minimum Grade of C-|May not be taken concurrently).

ECON 4071. Monetary Theory and Policy. 3 Credit Hours.
This course discusses advanced topics in Monetary Economics and Banking. We will first cover an essential list of theories and techniques in monetary economics. We will then explore topics such as the choice of monetary policy rules versus discretion, the liquidity effect of open market operations and the role of the credit channel of monetary policy. All these theories and techniques emphasize the interactions between macroeconomic phenomena and individuals' decisions. Students who have earned credit in ECON 3505 will not earn additional credit for this course.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(ECON 3501|Minimum Grade of C-|May not be taken concurrently
AND ECON 3571|Minimum Grade of C-|May not be taken concurrently).

ECON 4999. Honors Thesis II. 1 to 6 Credit Hour.
Students continue working on the original original research project developed in ECON 3999. Permission of the Department Chairperson required for registration.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(ECON 1101|Minimum Grade of C-|May not be taken concurrently
OR ECON 1901|Minimum Grade of C-|May not be taken concurrently
AND (ECON 1102|Minimum Grade of C-|May not be taken concurrently
OR ECON 1902|Minimum Grade of C-|May not be taken concurrently).

Education (EDUC)

Courses
EDUC 0815. Language in Society. 3 Credit Hours.
How did language come about? How many languages are there in the world? How do people co-exist in countries where there are two or more languages? How do babies develop language? Should all immigrants take a language test when applying for citizenship? Should English become an official language of the United States? In this course we will address these and many other questions, taking linguistic facts as a point of departure and considering their implications for our society. Through discussions and hands-on projects, students will learn how to collect, analyze, and interpret language data and how to make informed decisions about language and education policies as voters and community members. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and the Individual & Society (IN) requirement for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: ANTH 0815/0915, Asian Studies 0815, Chinese 0815, CSCD 0815, EDUC 0915, English 0815, Italian 0815, PSY 0815, Russian 0815, or Spanish 0815.

Course Attributes: GB

Repeatability: This course may not be repeated for additional credits.
EDUC 0817. Youth Cultures. 3 Credit Hours.

Do you listen to hip hop, spend all your time in Second Life, dress up like a cartoon character and go to anime fairs, or go skateboarding every day with your friends? Then you're part of the phenomenon called youth culture. Often related to gender, race, class and socio-economic circumstances, youth cultures enable young people to try on identities as they work their way to a clearer sense of self. Empowered by new technology tools and with the luxury of infinite virtual space, young people today can explore identities in ways not available to previous generations. Students in this class will investigate several youth cultures, looking closely at what it means to belong. They will also come to appreciate how the media and marketing construct youth identities and define youth cultures around the world. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and the Individual & Society (IN) requirement for students under Core. Students cannot receive credit for this course if they have successfully completed ANTH 0817, Education 0917 or SOC 0817.

Course Attributes: GB
Repeatability: This course may not be repeated for additional credits.

EDUC 0819. Tweens and Teens. 3 Credit Hours.

Exuberance, excitement, social expansion, risk-taking, experimentation, breaking away, testing limits. Anxiety, peer pressure, competition, parental pressure, work and school, drugs and alcohol, test scores. These are some of the challenges that make adolescence one of the most intriguing and disturbing stages of life. But adolescence is only one stage on a continuum of human development that begins in infancy and extends into old age. At each stage, we have hurdles to climb over, tasks to complete, experiences to absorb, lessons to learn. Yet in contemporary society the extended period between childhood and adulthood seems to capture all the attention. Why? This class on human development takes a close look at one of the most confusing, exciting, and critical phases of development, the pre-teen and teen years. Using literature, TV and film, as well as articles and books from the field of human development, the course will explore how children grow into teenagers, how they survive the challenges of adolescence, and how they become productive adults. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and the Individual & Society (IN) requirement for students under Core. Students cannot receive credit for this course if they have successfully completed Education 0919.

Course Attributes: GB
Repeatability: This course may not be repeated for additional credits.

EDUC 0823. Kids, Community and Controversy. 3 Credit Hours.

Why does Philadelphia have a dropout rate of roughly 50%? Why have students brought weapons to school and plotted to kill their classmates? Why, despite decades of progress in race relations, do schools remain largely segregated institutions? These questions are derived from three pressing social problems in American society that play out in our schools: high school dropouts, school violence, and segregation. Using these questions and the larger issues to which they are related, students in this course will explore the multiple and often competing explanations for these and other social problems in American society. They will also learn about the search for creative solutions at the individual level as well as within our social structure. Guest speakers, observations within the Philadelphia school system, and analysis of films depicting these issues will enrich the course experience. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and the Individual & Society (IN) requirement for students under Core.

Course Attributes: GB
Repeatability: This course may not be repeated for additional credits.

EDUC 0815. Honors Language in Society. 3 Credit Hours.

How did language come about? How many languages are there in the world? How do people co-exist in countries where there are two or more languages? How do babies develop language? Should all immigrants take a language test when applying for citizenship? Should English become an official language of the United States? In this course we will address these and many other questions, taking linguistic facts as a point of departure and considering their implications for our society. Through discussions and hands-on projects, students will learn how to collect, analyze, and interpret language data and how to make informed decisions about language and education policies as voters and community members. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: ANTH 0815/0915, Asian Studies 0815, Chinese 0815, CSCD 0815, EDUC 0815, English 0815, Italian 0815, PSY 0815, Russian 0815, or Spanish 0815.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GB, HO
Repeatability: This course may not be repeated for additional credits.

EDUC 0917. Honors Youth Cultures. 3 Credit Hours.

Some young people dye their hair red and go to punk concerts, listen to hip hop, spend all their time in Second Life, dress up like cartoon characters and go to anime fairs, or go skateboarding every day. They're part of the phenomenon called youth culture. Often related to gender, race, class and socio-economic circumstances, youth cultures enable young people to find new communities and try on different identities as they work their way to a clearer sense of self. Students in this class will investigate several youth cultures, looking closely at why people join and what it means to belong. They will also conduct independent, original research on a youth culture of their choice and draw their own conclusions about how youth cultures interact with mainstream society. (This is an Honors course.) NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and the Individual & Society (IN) requirement for students under Core. Students cannot receive credit for this course if they have successfully completed ANTH 0817, ASST 0817, Education 0817 or SOC 0817.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GB, HO
Repeatability: This course may not be repeated for additional credits.
EDUC 0919. Honors Tweens and Teens. 3 Credit Hours.
Exuberance, risk-taking, experimentation, breaking away, testing limits. Anxiety, peer pressure, competition, parental pressure, work and school, drugs and alcohol. These are some of the challenges that make adolescence one of the most intriguing and disturbing stages of life. But adolescence is only one stage on a continuum of human development that begins in infancy and extends into old age. At each stage, we have hurdles to climb over, tasks to complete, experiences to absorb, lessons to learn. This honors class on human development takes a close look at one of the most confusing, exciting, and critical phases of development, the pre-teen and teen years. Working individually and collaboratively, students will learn theoretical frameworks for interpreting their own experience and that of their peers. They will view media representations of adolescence and draw conclusions about how the media influence adolescents. Students will conduct original research on teen phenomenon and draw their own conclusions about whether identity is innate or a product of our environments. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and the Individual & Society (IN) requirement for students under Core. Students cannot receive credit for this course if they have successfully completed Education 0819.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GB, HO
Repeatability: This course may not be repeated for additional credits.

EDUC 1017. Algebra and Algebraic Thinking for Educators. 4 Credit Hours.
This course will focus on key algebraic concepts, including polynomial, rational, and algebraic expressions, equations, and inequalities. Students engage in problem solving to build conceptual understandings of algebraic thinking, variables, and functions. Emphasis on transitions from arithmetic to algebra and links between data analysis and algebra.
Repeatability: This course may not be repeated for additional credits.

EDUC 1087. Pract International Educ. 1 to 12 Credit Hour.
Repeatability: This course may be repeated for additional credit.

EDUC 1176. Ed Sch & Indiv in US Soc. 3 Credit Hours.
Course Attributes: AC
Repeatability: This course may not be repeated for additional credits.

EDUC 1196. Education and Schooling in America. 3 Credit Hours.
The purpose of this writing intensive educational foundations course is to examine selected historical, philosophical and social issues that impact education in the United States. This course will examine the trends in educational studies as well as the political forces at work in the schools. The social and academic goals of education, the current conditions of the American educational systems, and the teaching profession will be addressed. This course presents an interdisciplinary analysis of education and schooling in the United States, examining how education policy has been shaped in the U.S., what important roles certain individuals, institutions and social groups have played in this process, how education policies have had differential impact on various groups. Enables students to study and critically evaluate schools as a significant social institution within the framework of American values and institutions. NOTE: This course can be used to satisfy a university Core American Culture (AC) and Writing Intensive (WI) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: AC, WI
Repeatability: This course may not be repeated for additional credits.

EDUC 1255. Inclusive Education for a Diverse Society. 3 Credit Hours.
In Inclusive Education for a Diverse Society, students explore the role of culture in education in the United States. They learn about different definitions of culture and how culture is influenced by social, economic and political factors. Culture is viewed as dynamic and evolving and a major influence on the curriculum, policies and practices of schools. In addition, students learn about the close relationship between culture and learning and how teachers and education professionals are seeking to create positive learning environments for all students. Real situations are debated and discussed, and students are encouraged to contribute their own experiences and individual interpretations of events and strategies to the discussion.
Repeatability: This course may not be repeated for additional credits.

EDUC 1322. The Developing Individual across the Life Span. 3 Credit Hours.
This course provides an overview of the factors that have an impact on physical, cognitive and psychosocial development. Students study developmental theories and concepts and how they relate to patterns of change over the lifespan. Both typical and atypical development will be considered. Course work emphasizes the impact on educational practice.
Repeatability: This course may not be repeated for additional credits.

EDUC 2082. Undergraduate Independent Study. 1 to 3 Credit Hour.
Students will have an opportunity to pursue special topics in their content area or to develop an in-depth project designed to meet personal and program objectives.
Repeatability: This course may be repeated for additional credit.
EDUC 2103. Socio-cultural Foundations of Education in the United States. 3 Credit Hours.
This course will help students place their work with students in a broader social, political and economic context. It will introduce students to the history of education in the United States and to many of the issues that shape our schools and the ways children, parents, and teachers experience them. The course will focus particularly on the role of schooling in a democracy and the many demands Americans have placed - historically and currently - on the schools. It will also help students understand how issues of class, race, and gender are manifest in classrooms. Finally, it will provide students with an overview of the challenges facing urban schools and contemporary issues in school reform. Teachers will leave this course with a more robust understanding of the state of American education today, and how they as individuals and members of a profession can most effectively and ethically make a difference.
Repeatability: This course may not be repeated for additional credits.

EDUC 2109. Adolescent Development for Educators. 3 Credit Hours.
This course is designed to present information that would help prospective and practicing educators understand the minds and behaviors of middle and high school students. Emerging abilities in adolescents present both wonderful opportunities and challenges for teachers and parents. To understand how to connect with, manage and instruct adolescents, educators need to understand how adolescents think, what motivates them, and what they are capable of understanding. This course should prepare educators to correctly anticipate the likely consequences of their actions directed toward adolescents. NOTE: Background clearances required.

College Restrictions: Must be enrolled in one of the following Colleges: Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Repeatability: This course may not be repeated for additional credits.

EDUC 2179. Knowing and Learning in Mathematics and Science. 3 Credit Hours.
This course focuses on issues of what it means to learn and know science and mathematics. What are the standards for knowing we will use? How are knowing and learning structured and how does what we know change and develop? For the science and mathematics educator, what are the tensions between general, cross-disciplinary characterizations of knowing (e.g. intelligence) and the specifics of coming to understand powerful ideas in mathematics and science? What are the links between knowing and developing in learning theory, and the content and evolution of scientific ideas? Also, current issues and tensions in education will be discussed, especially as it relates to mathematics and science instruction.
Repeatability: This course may not be repeated for additional credits

Pre-requisites:
SCTC 1289|Minimum Grade of C-|May be taken concurrently
OR SCTC 1389|Minimum Grade of C-|May be taken concurrently

EDUC 2205. Curriculum Instruction and Technology in Education. 3 Credit Hours.
"Curriculum, Instruction and Technology in Education" is one of the first in a series of courses designed to enable future teachers to develop skills of effective practice by engaging in and responding to authentic educational experiences. Students will observe authentic interactions among people in school environments. Students will develop learning objectives, and plan, deliver, and evaluate instruction in a simulated teaching/learning environment. The recording of simulated teaching and learning experiences is a primary component of the course. The recordings serve the dual purpose of allowing students to reflect and self-evaluate and providing the basis for peer-evaluation and instructor-student conferences. The development of several teaching skills, self-evaluation and reflection will create the opportunity for a lifetime of professional growth.

Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Repeatability: This course may not be repeated for additional credits.

EDUC 2211. English for Foreign Students. 3 Credit Hours.
The focus of this course is on English skills needed for instructional purposes. The course offers students opportunities to develop communicative skills necessary for successful teaching and information about teaching in U.S. institutions of higher education (e.g., syllabi, instructional formats, and legal issues, such as sexual harassment and plagiarism). NOTE: This course is for ITA students.
Repeatability: This course may not be repeated for additional credits.

EDUC 2212. English for Academic Purposes. 2 Credit Hours.
The purpose of this course is to improve graduate students' academic English and intercultural competence, necessary for successful participation in an academic environment. Students will work on developing their academic English skills through individual presentations and group discussions. NOTE: This course serves as the graduate school requirement for new international graduate students.
Repeatability: This course may not be repeated for additional credits.

EDUC 2214. Curriculum and Supervised Teaching K-12. 3 Credit Hours.
The primary intent of the course is to provide prospective teachers with an opportunity to study teaching practice in an urban public school context by working directly with experienced teachers. The course is organized as a series of seminars and in-school experiences in which students, through inquiry and critical reflection, construct their own understanding of teaching. Specific experiences enable students to develop personal perspectives about how teaching professionals think in action and use professional knowledge in situations of practice. NOTE: A field-based course generally taken in the senior year.
Repeatability: This course may not be repeated for additional credits

Pre-requisites:
EDUC 2287|Minimum Grade of C-|May be taken concurrently.
EDUC 2224. Service Learning. 2 to 3 Credit Hours.
A course that helps students investigate what it means to be a community member and a teacher in a diverse, democratic society. The course combines reading, discussion, action in the community, and reflection in the context of addressing real community needs. In addition, students will begin to develop skills needed as a teacher to use service learning with his or her own students. In this course you will engage in literacy and numeracy activities with very young children in local head-start programs, while learning about the communities in which these program exist. NOTE: Students will work in community organizations or after school programs. Students should not register for a class immediately following EDUC 2224 (0224). Students should not sign up for EDUC 2289 (0225) at the same time as EDUC 2224 (0224).

Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education,

Repeatability: This course may not be repeated for additional credits.

EDUC 2255. Effective Use of Instructional Technology in Classrooms. 3 Credit Hours.
This course focuses on using technology to develop N-12 classroom applications to ensure effective teaching. Students are expected to begin to integrate technology into their teaching strategies. Students will develop technology competencies using modern technology to achieve this goal. Additional technology tools and software will be examined and reviewed for possible use in the N-12 classroom. Extensive internet work will be required.

Repeatability: This course may not be repeated for additional credits.

EDUC 2272. Instructional Practices in Middle Level Classrooms. 3 Credit Hours.
An in-depth exploration of most effective research-based diagnosis and instrumental practices for the contemporary middle level classrooms. Emphasis is upon a curriculum which recognizes the unique qualities of middle level learners.

Repeatability: This course may not be repeated for additional credits.

EDUC 2287. Practicum. 3 Credit Hours.
A first hand opportunity to explore teaching as a profession. Organized visits to elementary, middle, and high schools are combined with assigned readings and seminars. Critical inquiry and reflection will allow for one's essential personal commitment for success in teaching.

Repeatability: This course may be repeated for additional credit.

EDUC 2289. Field Experience: Managing the Contemporary Classroom. 3 Credit Hours.
Education 2289 introduces students to best practices in managing instruction and behavior in contemporary classrooms and to the principles that underlie those practices. Overall, the goal of the course is to ensure that students can identify and articulate the rationale for classroom routines and practices upon which effective instruction depends. This course requires students to spend two hours each week observing classes in an area school.

NOTE: Students who are seeking certification in Special Education should enroll in EDUC 2489 (0226).

Repeatability: This course may be repeated for additional credit.

EDUC 2296. Effective Teaching: Theory and Practice. 3 Credit Hours.
EDUC 2296 introduces students to a selection of strategies - some theoretical, some practical - for improving student performance. Course assignments and activities derive from two assumptions - namely, that good planning contributes to good instruction and good instruction contributes to student learning.

Course Attributes: WI,

Repeatability: This course may not be repeated for additional credits.

EDUC 2306. Assessment and Evaluation. 3 Credit Hours.
Students will learn how to develop and use a variety of evaluation methods to monitor student academic achievement and teaching effectiveness. Special emphasis will be placed on relating evaluations to curriculum and instruction. Students will learn about standardized tests and other diagnostic tools frequently encountered and/or used by classroom teachers. Particular attention will be given to adapting assessments to meet the needs of all students. Students will plan, construct, administer, and analyze data for a diagnostic evaluation of achievement for a content unit. Contemporary issues related to testing, grading, evaluation, and accountability will be addressed.

College Restrictions: Must be enrolled in one of the following Colleges: Education,

Repeatability: This course may not be repeated for additional credits.

EDUC 2489. Field Experience: Special Education. 3 Credit Hours.
This course is designed to teach basic techniques for managing your classroom. While emphasis is placed on applied behavior analysis, other approaches will also be discussed. In addition, there will be a section on autistic spectrum disorders.

Repeatability: This course may be repeated for additional credit.

EDUC 2903. Honors Socio-Cultural Foundations of Education in the United States. 3 Credit Hours.
This course will help students place their work with students in a broader social, political and economic context. It will introduce students to the history of education in the United States and to many of the issues that shape our schools and the ways children, parents, and teachers experience them. The course will focus particularly on the role of schooling in a democracy and the many demands Americans have placed—historically and currently—on the schools. It will also help students understand how issues of class, race, and gender are manifest in classrooms. Finally, it will provide students with an overview of the challenges facing urban schools and contemporary issues in school reform. Teachers will leave this course with a more robust understanding of the state of American education today, and how they as individuals and members of a profession can most effectively and ethically make a difference.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR

Course Attributes: HO,

Repeatability: This course may not be repeated for additional credits.
EDUC 3332. Professional Seminar in Human Development and Community Engagement I. 1 Credit Hour.
Many students want to make a difference in children's lives in other ways besides being a teacher. There are several hundred charitable and educational foundations and agencies in the greater metro Philadelphia area alone. State, federal, and local governments also often have child-focused initiatives. The programs, policies, and practices of these agencies and governments could benefit from employees who understand the factors that impede or facilitate the cognitive, social, and physical development of children, particularly in urban communities. This course provides an orientation to the HDCE major and exposure to a variety of career options and organizations that are relevant to HDCE. It aims to help students develop a sense of their future career path and understand their role within a collective impact framework.
Repeatability: This course may not be repeated for additional credits.

EDUC 3333. Professional Seminar in Human Development and Community Engagement II. 1 Credit Hour.
Many students want to make a difference in children's lives in other ways besides being a teacher. There are several hundred charitable and educational foundations and agencies in the greater metro Philadelphia area alone. State, federal, and local governments also often have child-focused initiatives. The programs, policies, and practices of these agencies and governments could benefit from employees who understand the factors that impede or facilitate the cognitive, social, and physical development of children, particularly in urban communities. This course provides an orientation to the HDCE major and exposure to a variety of career options and organizations that are relevant to HDCE. It aims to help students develop a sense of their future career path and understand both the needs and resources in the North Philadelphia area.
Repeatability: This course may not be repeated for additional credits.

EDUC 4038. Assessment of Curr & Instr. 3 Credit Hours.
Repeatability: This course may not be repeated for additional credits.

EDUC 4111. Classroom and Conflict Management in Grades 4 through 12. 3 Credit Hours.
One of the National Education Goals is the creation of safe and constructive learning environments. Educators are increasingly aware of the need to build community in classrooms and schools in order to help students have such environments. A key component of that is conflict resolution education. This course introduces students to the broad field of conflict resolution education (including classroom management, social and emotional learning, anti-bullying programs, peer mediation, negotiation processes, expressive arts, restorative justice programs, and bias/diversity/cultural awareness programs). AOD 2115 provides students with examples of programs, gives them an opportunity to interact with experts in the field, and encourages them to consider how they can support and utilize these programs as teachers and administrators. Particular emphasis will be placed on understanding how to design and implement conflict resolution and social emotional learning programs that address the developmental needs of adolescents and the middle school environment.
College Restrictions: Must be enrolled in one of the following Colleges: Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Repeatability: This course may not be repeated for additional credits.

EDUC 4185. Community Internship and Seminar. 1 to 12 Credit Hour.
This internship in applied development provides a learning experience that unites prior coursework with professional organizational settings and the community as a whole, while also guiding students as they transition into their own professional lives. Students will have dual responsibility: to provide the best service possible to your agency/school/company (you will be, in some sense, an ambassador for Temple and for the program), and to participate in the internship seminar. Students will continue at the site they completed their practicum course. Having developed relationships and acquainting themselves with the organization, students can seamlessly transition into an internship at the same site.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Human Develop Commnty Engagemn
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
EDUC 4187|Minimum Grade of C|May not be taken concurrently.

EDUC 4187. Practicum in Applied Development. 3 Credit Hours.
This course will give undergraduate students the opportunity to integrate and apply theory and coursework within a community organization working with children or other vulnerable populations. Students will be required to demonstrate increased knowledge and skills in practice, research, and evaluation across multi-level systems. Students will experience a practicum placement under the immediate supervision of a professional who functions as the student's Site Supervisor, and the overall supervision of the Practicum Instructor. The practicum will involve activities such as observing the members within the organization and conducting background research about the organization. Additionally, practicum students will meet five times during the course of the semester to share observations and experiences gained from the practicum placement.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Human Develop Commnty Engagemn
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(EDUC 3332|Minimum Grade of C|May not be taken concurrently)
AND (EDUC 3333|Minimum Grade of C|May not be taken concurrently).
EDUC 4288. Student Teaching in Elementary/Special Education. 9 to 11 Credit Hours.
Practicum for full-time students and education majors who have completed all other program requirements. NOTE: There is a $50 fee associated with all sections and numbers of student/supervised teaching. Student Teaching Applications are now online at www.temple.edu/education/studentteaching/index.html. Obtain your advisor's signature and return the completed application to the CITE Department advisor, 359 Ritter Hall.

College Restrictions: Must be enrolled in one of the following Colleges: Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY
Co-requisites: EDUC 4801
Repeatability: This course may be repeated for additional credit.

EDUC 4333. Effectiveness of Interventions for Children (Zero through 8th Grade). 3 Credit Hours.

This course is designed to describe and promote critical thinking about interventions that have been created to address various societal problems faced by children such as racial gaps in academic achievement, drug use among adolescents, and childhood diseases. Students taking this course will already have taken the following courses: (a) child development (that explain age trends in outcomes such as achievement and the factors that cause these outcomes), (b) research methods (that explain the differences between studies that provide interpretable data and studies that do not), and (c) statistics for decision-making. Students will use information from these prior courses to help evaluate specific interventions such as Head Start. Hopefully, students will not only develop a certain amount of expertise about existing interventions, but will also develop a good sense of how to create new interventions that might be effective, and how to use a framework to evaluate other interventions that were not examined in this course. This knowledge will prove valuable during the required internship in the HDCE major where a major paper focuses on the effectiveness of the agency or program in which the internship takes place.

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(EPSY 2325|Minimum Grade of C|May be taken concurrently)
AND (AOD 2201|Minimum Grade of C|May not be taken concurrently)
AND (ECED 2101|Minimum Grade of C|May not be taken concurrently).

EDUC 4388. TUteach Apprentice Teaching. 6 Credit Hours.
The purpose of Apprentice Teaching is to offer TUteach students a culminating experience that provides them with the tools needed for their first teaching jobs. Apprentice teachers maintain their role as teacher for the equivalent of two six-week grading periods. Apprentice Teaching students are required to teach two sections of a science, math, or computer science class in a public middle or high school. They remain on the school campus a minimum of four hours per day. Students are evaluated throughout Apprentice Teaching, including two evaluations (formative and summative) on the PA Department of Education (PDE) 430 Form. To pass this assessment, students must receive a satisfactory rating in each of the 4 categories resulting in a minimum total of at least 4 points on the final summative rating. Apprentice Teaching reinforces and augments teaching strategies that students have developed through their coursework and field experiences. The program also attempts to fill in any gaps in students' professional development. In particular, Apprentice Teaching focuses on classroom management and time management strategies, parent/teacher communication strategies, school culture and school dynamics that make up an effective middle school and high school system, legal and logistical issues in teaching, the final portfolio, and state certification requirements. TUteach apprentice teachers explore professional development opportunities beyond the classroom, including attending conferences, subscribing to education journals, joining professional organizations, and conducting presentations in educational settings. The goal of Apprentice Teaching is to provide the experiences, information, and coaching that will enable students to be successful teachers who are leaders in their schools and communities.

Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: TUteach
Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY
Co-requisites: EDUC 4802
Repeatability: This course may be repeated for additional credit.

EDUC 4389. Field Experience. 1 to 6 Credit Hour.
The goal of the field experience course is to allow students to apply what they have learned in Secondary Education courses in a school. Students will observe, assist, tutor, and/or instruct in schools or an education-related setting.

College Restrictions: Must be enrolled in one of the following Colleges: Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY
Repeatability: This course may be repeated for additional credit.

EDUC 4441. Discourse Practices in Diverse Communities. 3 Credit Hours.
From private businesses to public service, the institutions of today's society are composed of diverse groups of participants whose communication practices reflect their varied backgrounds, traditions, and practices of social relations. Combining discourse analytic and sociolinguistic perspectives, this course will advance students' understandings of the ways people from different cultural backgrounds think, communicate, and behave based on the value systems, worldviews, and narratives that ground them. Students will be asked to read challenging texts, engage in class discussions and exercises, reflect on a variety of media clips, and critically contemplate multiple perspectives on communication. The concepts that we will cover include: the nature of signs; linguistic relativity and the relationship between language and thought; multilingualism; the difference between linguistic and communicative competence; standard language and dialects such as African American Vernacular English; and the connections between language and power, race, class, and gender.

Repeatability: This course may not be repeated for additional credits.
EDUC 4488. Student Teaching in Elementary/Special Education/Early Childhood Education. 9 to 11 Credit Hours.
Students are admitted to student teaching only after their records and potential for success have been reviewed by the program faculty. Students will work under the guidance of cooperating teachers and Temple supervisors. NOTE: There is a $50 fee associated with all sections and numbers of student/supervised teaching. Student Teaching Applications are now online at www.temple.edu/education/studentteaching/index.html. Obtain your advisor's signature and return the completed application to the CITE Department advisor, 359 Ritter Hall.
College Restrictions: Must be enrolled in one of the following Colleges: Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY
Co-requisites: EDUC 4801
Repeatability: This course may be repeated for additional credit.

EDUC 4588. Student Teaching in Elementary Education/Early Childhood Education. 9 to 11 Credit Hours.
Involves a school placement where students demonstrate their knowledge of and competence in early childhood teaching, birth through 3rd grade (N-3). Students work with a certified cooperating teacher and are supervised by a Temple University faculty member. NOTE: All coursework must be completed before taking this course. There is a $50 fee associated with all sections and numbers of student/supervised teaching. Student Teaching Applications are now online at www.temple.edu/education/studentteaching/index.html. Obtain your advisor's signature and return the completed application to the CITE Department advisor, 359 Ritter Hall.
College Restrictions: Must be enrolled in one of the following Colleges: Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY
Co-requisites: EDUC 4801
Repeatability: This course may be repeated for additional credit.

EDUC 4688. Student Teaching in Secondary Education. 9 to 11 Credit Hours.
Students are admitted only after they give evidence of appropriate professional maturity and the potential for success. NOTE: All coursework must be completed before taking this course. There is a $50 fee associated with all sections and numbers of student/supervised teaching. Student Teaching Applications are now online at www.temple.edu/education/studentteaching/index.html. Obtain your advisor's signature and return the completed application to the CITE Department advisor, 359 Ritter Hall.
College Restrictions: Must be enrolled in one of the following Colleges: Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY
Co-requisites: EDUC 4801
Repeatability: This course may be repeated for additional credit.

EDUC 4788. Student Teaching in Secondary Education/Career Technical Education. 3 to 9 Credit Hours.
Involves a full-time school placement where students demonstrate their knowledge of and competence in teaching discipline-specific subject matter to students in grades 7-12, and in some cases, K-12. Students work with a certified cooperating teacher and are supervised by a Temple University faculty member. NOTE: All coursework must be completed before taking this course. Student Teaching Applications are now online at www.temple.edu/education/studentteaching/index.html. Obtain your advisor's signature and return the completed application to the CITE Department advisor, 359 Ritter Hall.
College Restrictions: Must be enrolled in one of the following Colleges: Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY
Co-requisites: EDUC 4801
Repeatability: This course may be repeated for additional credit.

EDUC 4801. Senior Seminar and Performance Assessment. 3 Credit Hours.
Students will be involved in experiences that prepare them for making the transition from college to the practice setting, and engage in activities that foster professionalism in school and community settings. The senior performance assessment, which is a requirement for teacher certification students, is also a part of the course. NOTE: This is a required course for all teacher certification candidates, which is taken during the student teaching semester.
College Restrictions: Must be enrolled in one of the following Colleges: Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY
Co-requisites: EDUC 4801
Repeatability: This course may not be repeated for additional credits.

EDUC 4802. TTeach Apprentice Teaching Seminar. 1 Credit Hour.
Students will be involved in experiences that prepare them for making the transition from college to the practice setting, and engage in activities that foster professionalism in school and community settings. The senior performance assessment (SPA), which is a requirement for teacher certification students, is also a part of the course. NOTE: This is a required course for all teacher certification candidates, which is taken during the apprentice teaching semester.
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: TTeach
Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY
Co-requisites: EDUC 4388
Repeatability: This course may not be repeated for additional credits.
EDUC 4941. Honors Discourse Practices in Diverse Communities. 3 Credit Hours.
Even when we speak the same language, we often miscommunicate with friends, co-workers, family members, and neighbors. Add to that scenario a group of people who speak different languages or language varies, and the challenge of communicating effectively becomes more acute. But that's the reality of America today. Simply put, intercultural awareness and communication skills are now a necessary part of life for most people in most aspects of their lives. This course is designed to help students identify how to become better communicators in a wide range of cross-cultural situations. Through readings, discussion, hands-on activities, and ‘real world’ projects, students will: increase understanding of their own cultural backgrounds and communication style(s); explore different world views, ideologies, and behaviors; acquire knowledge, skills and attitudes that increase intercultural competence; and learn creative ways to address (and possibly avoid) miscommunication in cross-cultural contexts.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.

Educational Administration (EDAD)

Courses

EDAD 0855. Higher Education and American Life: Mirror to a Nation. 3 Credit Hours.
You have decided to go to college. But why? What role will college and in particular Temple University play in your life? Reflect on this important question by looking at the relationship between higher education and American society. What do colleges and universities contribute to our lives? They are, of course, places for teaching and learning. They are also research centers, sports and entertainment venues, sources of community pride and profit, major employers, settings for coming-of-age rituals (parties, wild times, courtship, etc.), and institutions that create lifetime identities and loyalties. Learn how higher education is shaped by the larger society and how, in turn, it has shaped that society. Become better prepared for the world in which you have chosen to live for the next few years. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed American Studies 0855 or English 0855.

Course Attributes: GU
Repeatability: This course may not be repeated for additional credits.

EDAD 0955. Honors Higher Education and American Life: Mirror to a Nation. 3 Credit Hours.
You have decided to go to college. But why? What role will college and in particular Temple University play in your life? Reflect on this important question by looking at the relationship between higher education and American society. What do colleges and universities contribute to our lives? They are, of course, places for teaching and learning. They are also research centers, sports and entertainment venues, sources of community pride and profit, major employers, settings for coming-of-age rituals (parties, wild times, courtship, etc.) and institutions that create lifetime identities and loyalties. Learn how higher education is shaped by the larger society and how, in turn, it has shaped that society. Become better prepared for the world in which you have chosen to live for the next few years. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed American Studies 0855, English 0855 or EDAD 0855.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GU, HO
Repeatability: This course may not be repeated for additional credits.

EDAD 3027. Research-Based Practices. 3 Credit Hours.
This course is a comprehensive examination of middle schools and the middle school movement. Topics to be studied are: the history, philosophy, and curriculum of middle schools; characteristics of effective middle schools; team organizations; recent influences (debates of effective vs. cognitive); advisories; transition programs; flexible/block scheduling; and the essential characteristics of middle level teachers.

Repeatability: This course may not be repeated for additional credits.

Electrical Engineering (ECE)
Courses

ECE 0822. Investing for the Future. 4 Credit Hours.
This class will teach you about seemingly complicated financial topics in a very comprehensible manner that will help you make informed financial decisions to ensure a secure financial future. We begin with identification of common financial problems among the "young, fabulous and broke" and how to avoid them. After thinking about life and financial priorities, we address why thinking about retirement now must be at the top of your list. We examine how to compute your retirement needs and how to get there, primarily with a focus on investing in common stock. You will learn how to think smart about big ticket purchases such as cars, housing, and graduate/professional education. Finally we will make sure you understand how to create a safety net to protect your future. NOTE: This course fulfills the Quantitative Literacy (GQ) requirement for students under GenEd and a Quantitative Reasoning (QA or QB) requirement for students under Core. Students cannot receive credit for this course if they have successfully completed FIN 0822, FIN 0922 or RMI 0822.

Course Attributes: GQ
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 0701 to 4999| Required Courses:1|Minimum Grade of C-|May not be taken concurrently
OR MC3 Y|May not be taken concurrently
OR MC4 Y|May not be taken concurrently
OR MC5 Y|May not be taken concurrently
OR MC6 Y|May not be taken concurrently
OR STA1 Y|May not be taken concurrently
OR STA2 Y|May not be taken concurrently
OR STT3 Y|May not be taken concurrently.

ECE 0832. Digital World 2020. 3 Credit Hours.
This course covers the fundamental principles of digital information capture, compression, storage, transmission, and management. The course intends to provide an overall view of the information infrastructure both at the implementation hardware and application software level suitable for non-engineering majors.

Department restrictions: May not be enrolled in one of the following: CST:Computer & Info Sci, Engineering:Elec Engineering
Field of Study Restrictions: May not be enrolled in one of the following Majors: Computer & Information Science, Electrical Engineering

Course Attributes: GS
Repeatability: This course may not be repeated for additional credits.

ECE 1012. Introduction to Electrical Engineering. 2 to 3 Credit Hours.
This course introduces basic concepts in Electrical and Computer Engineering, and demonstrates them in the context of real applications. Course topics include basics of DC and AC circuits, transistor, diode and operational amplifier circuits, digital logic gates and power supply operation. Students assemble and test a robot car or mouse as part of the class project.

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 1022 to 4999| Required Courses:1|Minimum Grade of C-|May not be taken concurrently
OR MC6 Y|May not be taken concurrently.

ECE 1014. Evolution of Modern Electronic Systems. 3 Credit Hours.
Introduction to modern electronic systems such as telephone networks, television, radio, radar, and computers. Key discoveries such as the vacuum tube, transistor, and laser are covered. The fundamental operating principles are presented in a non-mathematical and historic context. The evolution of these technologies is presented in terms of the need for communication systems and their impact on society. NOTE: This course can be used to satisfy the university Core Science & Technology Second Level (SB) requirement.

Course Attributes: SB
Repeatability: This course may not be repeated for additional credits.

ECE 1022. Technology and You. 3 Credit Hours.
The practitioners of science are scientists. However, we never refer to the practitioners of technology as technologists; rather, they are always referred to as engineers. Therefore understanding the process of engineering is to understand the process of technological development. The engineer of today is either making an old technology better or developing a new technology. As will be illustrated in the readings, engineering is a human endeavor that has existed since the dawn of human kind. To understand engineering and its roots is to understand and appreciate one of humanity's greatest assets. NOTE: This course can be used to satisfy the university Core Science & Technology Second Level (SB) requirement.

Course Attributes: SB
Repeatability: This course may not be repeated for additional credits.
ECE 1112. Electrical Applications. 2 Credit Hours.
This course introduces basic concepts in Electrical and Computer Engineering, and demonstrates them in the context of real applications. Course topics include basics of DC and AC circuits, transistor, diode and operational amplifier circuits, digital logic gates and power supply operation.

Co-requisites: ECE 1113
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 1022 to 4999| Required Courses:1| Minimum Grade of C-| May not be taken concurrently
OR M6 Y| May not be taken concurrently.

ECE 1113. Electrical Applications Laboratory. 1 Credit Hour.
Laboratory for ECE 1112 (0007): Electrical Applications. This is a hands-on lab based on the material covered in ECE 1112.

Co-requisites: ECE 1112
Repeatability: This course may not be repeated for additional credits.

ECE 2112. Electrical Devices & Systems I. 3 Credit Hours.
The purpose of this course is to teach non-Electrical Engineering major students the basics of Electrical circuits and systems, such as: voltage and current, electrical elements (resistors, inductors, capacitors), Kirchoff current and voltage Laws, parallel and series connections, time domain vs. frequency domain analysis, AC power, three phase systems, electrical machines, operational amplifiers, semiconductor diodes and transistors.

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(PHYS 1062| Minimum Grade of C-| May not be taken concurrently
OR PHYS 1022| Minimum Grade of C-| May not be taken concurrently)
AND (MATH 1042| Minimum Grade of C-| May not be taken concurrently
OR MATH 1942| Minimum Grade of C-| May not be taken concurrently).

ECE 2113. Electrical Devices & Systems I Lab. 1 Credit Hour.
The purpose of this course is to teach non-Electrical Engineering major students the basics of Electrical circuits and systems in a laboratory environment and to reinforce the theoretical concepts of ECE 2112 by using experimentation.

Repeatability: This course may not be repeated for additional credits

ECE 2122. Electrical Devices and Systems II. 4 Credit Hours.
Students will study circuit analysis using frequency domain techniques, Laplace Transforms, Operational amplifiers, elements of semiconductor devices, electronic circuits, and logic circuits. Students will work on practical applications relating primarily to the mechanical engineering discipline. The laboratory portion of this course allows students to undertake practical applications of the principles discussed in the lecture. NOTE: This course is for Mechanical Engineering majors only.

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(ECE 2112| Minimum Grade of D-| May not be taken concurrently)
AND (MATH 1042| Minimum Grade of C-| May not be taken concurrently
OR MATH 1942| Minimum Grade of C-| May not be taken concurrently).

ECE 2312. Electrical Engineering Science I. 3 Credit Hours.
Electric circuit fundamentals including DC and transient circuit analysis are covered in the course. Topics include independent and dependent sources, circuit elements such as resistors, inductors, capacitors and operational amplifiers, linearity, source transformation, Thevenin and Norton equivalent circuits, as well as the analysis and design of first and second order circuits.

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(MATH 1042| Minimum Grade of C-| May be taken concurrently
OR MATH 1942| Minimum Grade of C-| May be taken concurrently
OR MATH 1951| Minimum Grade of C-| May be taken concurrently
OR MATH 2043 to 3080| Required Courses:1| Minimum Grade of C-| May be taken concurrently
OR MA07 Y| May not be taken concurrently)
AND (PHYS 1062| Minimum Grade of C-| May be taken concurrently
AND (ECE 2313| Minimum Grade of C-| May be taken concurrently).

ECE 2313. Electrical Engineering Science I Lab. 1 Credit Hour.
This laboratory is concerned with the analysis and design of first and second order circuits with direct current (DC) power sources. This laboratory complements ECE 2312: Electrical Engineering Science I. Topics include independent and dependent sources, circuit elements such as resistors, inductors, capacitors, and operational amplifiers. We also investigate the concept of linearity and source transformation, Thevenin equivalent circuits, and Norton Equivalent circuits.

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ECE 2312| Minimum Grade of C-| May be taken concurrently.
ECE 2322. Electrical Engineering Science II. 3 Credit Hours.
This course is concerned with the analysis of alternate current (AC) circuits. Sinusoidal steady-state analysis, AC power analysis, magnetically coupled circuits, and frequency responses are covered. Laplace transforms are introduced and are used to solve first, second and higher order differential equations. The use of Laplace transforms for circuit analysis is studied and applied.
**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
(ECE 2312|Minimum Grade of C-|May not be taken concurrently)
AND (ECE 2323|Minimum Grade of C-|May be taken concurrently)
AND (MATH 1042|Minimum Grade of C|May be taken concurrently).

ECE 2323. Electrical Engineering Science II Lab. 1 Credit Hour.
This course provides hands-on experience of the principles discussed in ECE 2322. Specifically students will gain practical experience on the use of various electrical equipment and their applications for measuring alternating current quantities.
**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
ECE 2322|Minimum Grade of C-|May be taken concurrently.

ECE 2332. Principles of Electric Circuits. 4 Credit Hours.
Electric circuit fundamentals including DC and AC circuit analysis are covered in the course. Topics include circuit elements such as resistors, inductors, capacitors, voltage and current sources, and operational amplifiers; methods of circuit analysis, such as superposition theorem, Thevenin and Norton equivalent circuits, as well as the analysis of first and second order circuits. Sinusoidal steady-state analysis, AC power analysis, magnetically coupled circuits, and frequency responses are covered. Laplace transforms are introduced and are used to solve first, second and higher order differential equations.
**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
(MATH 1041|Minimum Grade of C-|May not be taken concurrently
OR MATH 1941|Minimum Grade of C-|May not be taken concurrently
OR MATH 1038|Minimum Grade of C-|May not be taken concurrently)
AND (MATH 1042|Minimum Grade of C-|May be taken concurrently
OR MATH 1942|Minimum Grade of C-|May be taken concurrently).

ECE 2333. Principles of Electric Circuits Lab. 1 Credit Hour.
This is a hands-on laboratory course for electric circuit fundamentals including DC and AC circuits. Experiments for this laboratory course will be based on the course material covered in ECE 2332. Topics include series and parallel circuits in DC and AC, frequency response, transient response, and AC sinusoidal response.
**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
ECE 2332|Minimum Grade of C-|May be taken concurrently.

ECE 2612. Digital Circuit Design. 3 Credit Hours.
This course considers binary number systems, codes, truth tables and the fundamental operation of digital logic circuits. The implementation of combination and sequential digital logic is by a hardware description language in Verilog behavioral synthesis. Complex digital logic and state machine analysis and design are implemented in simulation and programmable gate array hardware.
**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
(ECE 2312|Minimum Grade of C-|May not be taken concurrently
OR ECE 2332|Minimum Grade of C-|May not be taken concurrently)
AND (ECE 2613|Minimum Grade of C-|May be taken concurrently)
AND (PHYS 1062|Minimum Grade of C-|May not be taken concurrently)
AND (CIS 1057|Minimum Grade of C-|May not be taken concurrently).

ECE 2613. Digital Circuit Design Laboratory. 1 Credit Hour.
Laboratory for ECE 2612: Digital Circuit Design. This course provides hands-on experience in digital circuits, gates, flip-flops etc.
**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
ECE 2612|Minimum Grade of C-|May be taken concurrently.
ECE 2922. Honors Electrical Engineering Science II. 3 Credit Hours.
Topics in this course include: sinusoidal analysis, power measurements, three-phase circuits, complex frequency and network functions, resonance, scaling, frequency response, two-port networks, Fourier series and transforms. This Honors course will be challenging and held to a high standard.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits
Pre-requisites: (ECE 2312|Minimum Grade of C|May not be taken concurrently)
AND (ECE 2923|Minimum Grade of C|May be taken concurrently)
AND (MATH 1942|Minimum Grade of C|May not be taken concurrently).

ECE 2923. Honors Electrical Engineering Science II Lab. 1 Credit Hour.
Topics in this course include: sinusoidal analysis, power measurements, three-phase circuits, complex frequency and network functions, resonance, scaling, frequency response, two-port networks, Fourier series and transforms. This Honors course will be challenging and held to a high standard.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits
Pre-requisites: ECE 2922|Minimum Grade of C-|May be taken concurrently.

ECE 3082. Independent Study in Electrical Engineering. 1 to 3 Credit Hour.
With the department chair's approval, students may complete a regular course during semesters the course is not offered in order to meet prerequisite or graduation requirements. An instructor supervises the student.
Repeatability: This course may be repeated for additional credit.

ECE 3091. Independent Research in Electrical Engineering. 1 to 3 Credit Hour.
Project assigned with the approval of the department chair and conducted under the supervision of a faculty sponsor.
Repeatability: This course may be repeated for additional credit.

ECE 3312. Microelectronics I. 3 Credit Hours.
Students study ideal and non ideal operational amplifier circuits, diodes in nonlinear circuit applications, bipolar junction transistors, field-effect transistors (JFETs), metal oxide semiconductor field effect transistors (MOSFETs), biasing techniques, gain and bandwidth, the design of amplifiers, and transistors as loads.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: (ECE 2322|Minimum Grade of C-|May not be taken concurrently
OR ECE 2332|Minimum Grade of C|May not be taken concurrently)
AND (ECE 3313|Minimum Grade of D-|May be taken concurrently).

ECE 3313. Microelectronics I Laboratory. 1 Credit Hour.
Electrical devices and circuits laboratory to be taken concurrently with Electrical Engineering 3312.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: ECE 3312|Minimum Grade of D-|May be taken concurrently.

ECE 3412. Classical Control Systems. 3 Credit Hours.
Students will learn the basic theory of analog (classical) control systems. The concept of what constitutes a system is learned as well as how to analyze a system by using input-output pairs. The importance of a transfer function and how it characterizes the behavior of a linear time invariant system will be studied. What a feedback system is and how it may change the behavior of a system is learned. Finally, students will learn how to analyze and design linear time invariant control systems using both time domain and frequency domain techniques.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: (ECE 3512|Minimum Grade of C-|May not be taken concurrently)
AND (ECE 3413|Minimum Grade of D-|May be taken concurrently)
AND (MATH 3041|Minimum Grade of D-|May not be taken concurrently).

ECE 3413. Classical Control Laboratory. 1 Credit Hour.
Experimentation on selected topics in ECE 3412: Classical Control Systems.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: ECE 3412|Minimum Grade of D-|May be taken concurrently.
ECE 3512. Signals: Continuous and Discrete. 4 Credit Hours.
This course covers continuous time signal models, convolution, and superposition integral and impulse response. Students also study Fourier series and periodic signals, Parseval's theorem, energy spectral density, Fourier transform and filters, discrete time signals, difference equations, discrete Fourier transform, and discrete convolution.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ECE 2322|Minimum Grade of C-|May not be taken concurrently
OR ECE 2332|Minimum Grade of C-|May not be taken concurrently.

ECE 3522. Stochastic Processes in Signals and Systems. 3 Credit Hours.
To provide the student with an understanding about probability, random variables and random processes and their applications to linear systems. Therefore, the student will learn about the various aspects of probability such as distribution and density functions, conditional probability and various types of random processes such as stationary and nonstationary, ergodic and random processes, the autocorrelation and crosscorrelation, power spectral density, white noise and frequency domain analysis of random signals and their evaluation in linear systems analysis.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ECE 3512|Minimum Grade of C-|May not be taken concurrently.

ECE 3612. Processor Systems. 3 Credit Hours.
The course considers the Atmel 8-bit processor hardware/software architecture through both assembly language programming and C and its hardware system implementation focused on using the Atmel 169P microcontroller. Emphasis will be on both C and assembly languages and how they interact with I/O ports and memory. Additional topics include memory addressing modes, stack operations, arithmetic computations, logic operations, subroutine calls, input/output (I/O) interfacing, interrupts, timers, pulse width modulation and A/D conversion. The lecture material is supplemented by coordinated homework and in class assignments in microcontroller simulations using Atmel Studio 6.1 and the AVR 169P Butterfly board.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(ECE 2612|Minimum Grade of C-|May not be taken concurrently)
AND (ECE 2613|Minimum Grade of D-|May not be taken concurrently)
AND (ECE 3613|Minimum Grade of D-|May be taken concurrently).

ECE 3613. Processor Systems Laboratory. 1 Credit Hour.
This Junior ECE course is the corresponding laboratory for ECE 3612 Processor Systems. The laboratory assignments utilize Atmel AVR microcontroller simulations using Atmel Studio 6.1 and hardware experiments with the Atmel 169P Butterfly microcontroller. Labs will cover reading and writing to memory, stack operations, LED's on I/O ports, PWM for servo motor control, timers and counters.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ECE 3612|Minimum Grade of D-|May be taken concurrently.

ECE 3622. Embedded System Design. 3 Credit Hours.
This course and co-requisite laboratory considers embedded systems in digital process control and digital signal processing using the Verilog hardware description language and behavioral synthesis using the programmable gate array. Topics include: the controller-datapath construct, nested modules, soft core processing elements, fixed and floating point arithmetic calculations in programmable hardware, interfacing to hard core peripherals and soft core microprocessors.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(ECE 3612|Minimum Grade of D-|May not be taken concurrently)
AND (ECE 3613|Minimum Grade of D-|May not be taken concurrently)
AND (ECE 3623|Minimum Grade of D-|May be taken concurrently).

ECE 3623. Embedded System Design Laboratory. 1 Credit Hour.
Laboratory for ECE 3622 (0245): Embedded System Design.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ECE 3622|Minimum Grade of D-|May be taken concurrently.

ECE 3712. Introduction to Electromagnetic Fields and Waves. 3 Credit Hours.
Engineering applications of electromagnetic field theory including Coulomb's Law, Gauss' Law and Faraday's Law and applications of Poisson's equations with boundary values, Magnetic flux and the use of Gauss' and Ampere's Laws. The course will also consider transmission lines, the development of Maxwell's equations and the transmission of plane waves in free space and uniform, homogenous, isotropic media.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(PHYS 1062|Minimum Grade of C-|May not be taken concurrently)
AND (ECE 2322|Minimum Grade of C-|May not be taken concurrently)
AND (ENGR 2011|Minimum Grade of C-|May not be taken concurrently).
ECE 3722. Electromagnetic Wave Propagation. 3 Credit Hours.
This course considers the application of the time-harmonic Maxwell’s equations to electromagnetic wave propagation, transmission lines, wave guides, antenna, and methods for numerical analysis. Matlab and computer aided design software is used for simulation of electromagnetic wave propagation in engineering applications.
Co-requisites: ECE 3723
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ECE 3712|Minimum Grade of D-|May not be taken concurrently.

ECE 3723. Electromagnetic Wave Propagation Laboratory. 1 Credit Hour.
Laboratory for ECE 3722 (0222): Electromagnetic Wave Propagation.
Co-requisites: ECE 3722
Repeatability: This course may not be repeated for additional credits.

ECE 3732. Electromechanical Energy Systems. 3 Credit Hours.
Fundamentals of electromechanical energy conversion, electromechanical devices, and systems. Energy state functions, force-energy relationships, basic transducers, and introduction to AC and DC machines. DC motors and generators, synchronous motors and generators, induction motors, and transformers.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(ECE 2322|Minimum Grade of C-|May not be taken concurrently
AND ECE 3712|Minimum Grade of D-|May not be taken concurrently).

ECE 3733. Electromechanical Energy Systems Laboratory. 1 Credit Hour.
This course provides hands-on experience on various types of electrical machines, such as DC and AC motors and generators, and transformers. Experiments include operation of transformers, motors and generators, control of motor speed, and loading of generators. Computer data acquisition system is utilized for interface.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(ECE 3732|Minimum Grade of D-|May be taken concurrently)
AND (ECE 2322|Minimum Grade of C-|May not be taken concurrently
OR ECE 2332|Minimum Grade of C-|May not be taken concurrently).

ECE 3822. Software Tools for Engineers. 3 Credit Hours.
The primary goal for this course is to teach engineers how to solve problems of scale using a variety of computer tools. The three main goals of this course are: (1) introduce students to the hierarchy of software tools (e.g., scripting languages, interpreted languages, compiled languages) used to solve engineering problems; (2) introduce the basics of Python, a scripting language that is a dominant tool in engineering; and (3) introduce Java, object-oriented design, and a number of Java-related software tools that automate testing, documentation and cross-compilation into web applications. A common thread throughout these topics is the decomposition of large-scale problems into smaller problems that can be solved using reusable modules. Good software engineering practices will be stressed throughout the course. The latter part of the course will involve developing a significant computer simulation of a real-world engineering system that involves real data and utilizes both Python and Java.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(CIS 1057|Minimum Grade of C-|May not be taken concurrently)
AND (ENGR 2011|Minimum Grade of C-|May not be taken concurrently).

ECE 3912. Honors Signals: Continuous and Discrete. 4 Credit Hours.
This course covers continuous time signal models, convolution, and superposition integral and impulse response. Students also study Fourier series and periodic signals, Parseval’s theorem, energy spectral density, Fourier transform and filters, discrete time signals, difference equations, Z transforms, and discrete convolucion. This honors course will be very challenging.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ECE 2322|Minimum Grade of C-|May not be taken concurrently.
ECE 3914. Honors Microprocessor Systems. 3 Credit Hours.
Students study finite-state machines in process control, assembly language programming of the Intel i186EX 16-bit microprocessor and its hardware system implementation. Additional topics include: dynamic RAM read/write and DMA access, hardware interrupts, I/O port addressing, peripheral interface design, microprocessor addressing modes, op codes, and arithmetic computation. A stimulating and challenging Honors course.

**Cohort Restrictions:** Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR

**Course Attributes:** HO

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
- (ECE 2612|Minimum Grade of C-|May not be taken concurrently)
- AND (ECE 2613|Minimum Grade of D-|May not be taken concurrently)
- AND (ECE 2922|Minimum Grade of C-|May not be taken concurrently)
- AND (ECE 3915|Minimum Grade of D-|May be taken concurrently).

ECE 3915. Honors Microprocessor Systems Lab. 1 Credit Hour.
This course is the hardware and software laboratory in microprocessor systems.

**Cohort Restrictions:** Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR

**Course Attributes:** HO

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
- ECE 3914|Minimum Grade of D-|May be taken concurrently.

ECE 4110. Special Topics. 1 to 4 Credit Hour.
Topics vary by semester. See the course schedule for the specific topic each semester.

**Field of Study Restrictions:** Must be enrolled in one of the following Majors: Civil Engineering, Electrical Engineering, Engineering, Mechanical Engineering

**Repeatability:** This course may be repeated for additional credit.

ECE 4312. Microelectronics II. 3 Credit Hours.
This course emphasizes solving software design problems as well as advanced study of electronic devices and their application to linear, non-linear, and digital circuits. Further topics include: transistors, FET’s, filters, oscillators, amplifiers, A/D, D/A, some integrated circuits, and VLSI systems.

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
- ECE 3312|Minimum Grade of D-|May not be taken concurrently.

ECE 4322. VLSI Systems Design. 3 Credit Hours.
This course introduces the hierarchical design methodology of VLSI and the study of basic logic elements and design methods in MOS and CMOS, as well as the physics of MOS devices and the fabrication process. Design rules and computation of circuit parameters from layout, and system level design are further topics.

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
- ECE 4312|Minimum Grade of D-|May not be taken concurrently.

ECE 4412. Modern Control Theory. 3 Credit Hours.
Analysis and design of control systems using state variable techniques, including discrete and continuous state variable analysis, linear vector spaces, eigenvalues, eigenvectors, controllability, observability, stability, state feedback design, and observer design.

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
- ECE 4312|Minimum Grade of D-|May not be taken concurrently.

ECE 4422. Digital Control Systems. 3 Credit Hours.
Subjects for this course include: discrete data and digital control systems, signal conversions and processing, the Z transform and state variable techniques applied to digital control system, time and frequency domain analysis techniques, stability of digital control systems, etc. The students are required to design and implement a digital control system in groups and are assigned with different tasks.

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
- ECE 4312|Minimum Grade of D-|May not be taken concurrently.

ECE 4512. Digital Communication Systems. 3 Credit Hours.
This course and co-requisite laboratory considers techniques of digital signaling and data communication with amplitude, frequency and phase modulation and demodulation in the presence of noise using MATLAB/Simulink simulation. Topics include: the optimum correlation receiver in baseband and bandpass systems, binary and multiple level signaling, time and frequency division multiplexing, error detection and correction, analog-to-digital conversion and traditional analog amplitude and frequency modulation.

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
- (ECE 3522|Minimum Grade of D-|May not be taken concurrently)
- AND (ECE 4513|Minimum Grade of D-|May be taken concurrently).
ECE 4513. Digital Communication Systems Laboratory. 1 Credit Hour.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ECE 4512|Minimum Grade of D-|May be taken concurrently.

ECE 4522. Digital Signal Processing. 3 Credit Hours.
Course topics include: Discrete-time signals and systems, Random signals, Sampling process, Digital processing of analog signals, Discrete-time Fourier Transforms (DTFT), Filter types and characteristics, Filter design, Finite Impulse Response (FIR) systems, linear phase FIR filters, Infinite Impulse Response (IIR) systems, Discrete Fourier Transforms (DFT), Fast Fourier Transform (FFT), Circular convolution, Transfer functions, and Applications of digital signal processing.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ECE 3522|Minimum Grade of D-|May not be taken concurrently.

ECE 4532. Data and Computer Communication. 3 Credit Hours.
This course considers wired and wireless data transmission, communication networks and protocols, error detection and correction coding, spread spectrum modulation and demodulation. Topics include protocol architectures, flow and error control, multiplexing, code division multiple access 4G LTE cellular systems and embedded Ethernet.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(ECE 3522|Minimum Grade of D-|May not be taken concurrently)
AND (CIS 1057|Minimum Grade of C-|May not be taken concurrently).

ECE 4542. Telecommunications Engineering. 3 Credit Hours.
This course considers digital data communication with complex modulation and error detection and correction in the presence of noise using MATLAB/ Simulink simulation. Topics include: quadrature amplitude and continuous phase modulation, frequency hopping and spread spectrum modulation, linear, block, cyclic, convolutional and CRC codes, fading and multipath interference, Doppler shift in mobile environments and the performance of cellular and wireless communication systems.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ECE 4512|Minimum Grade of D-|May not be taken concurrently.

ECE 4612. Advanced Processor Systems. 3 Credit Hours.
This course focuses on Verilog hardware description language and its applications to digital hardware system design including CPU and memory, as well as synchronous and asynchronous events and multitasking in the design of computational and data communication processors. The course will also consider computer-aided-design software and simulators, and hardware description language compilers.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(ECE 3612|Minimum Grade of D-|May not be taken concurrently)
AND (ECE 3613|Minimum Grade of D-|May not be taken concurrently).

ECE 4712. Modern Power Engineering and Electronics. 3 Credit Hours.
This course introduces the modern power systems and its changing landscape. Topics include the basics of power generation and transformers, AC transmission and distribution, power flow, economic dispatch, transient and stability analysis, short circuit analysis, and HVDC systems.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ECE 2322|Minimum Grade of C-|May not be taken concurrently
OR ECE 2332|Minimum Grade of C-|May not be taken concurrently.

Electrical Engineering Tech (EET)

Courses

EET 2104. Introduction to Electrical Circuits. 4 Credit Hours.
This course considers electrical and physical characteristics of resistance, inductance, and capacitance, analysis of DC and AC circuits, operational amplifiers, elements of semiconductor devices, electronic circuits, and logic circuits. Students will also study electrical measurements. A laboratory is included.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
PHYS 1022|Minimum Grade of C-|May not be taken concurrently.
EET 2112. Elements of Electrical Engineering Technology I (DC Circuits). 4 Credit Hours.
A non-calculus approach to DC circuits, node and mesh analysis, superposition and Thevenin's Theorem, as well as power, electromechanical systems and transient analysis. The laboratory portion of this course allows students to undertake practical applications of the principles discussed in the lecture. NOTE: Offered at Lehigh Carbon County College campus only.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
PHYS 1022|Minimum Grade of C-|May not be taken concurrently.

EET 2122. Elements of Electrical Engineering Technology II (AC Circuits). 4 Credit Hours.
Circuit analysis of alternating current circuits. Examine RC, RL, and RLC circuits as well as resonance and time response of reactive circuits and transformers. The laboratory portion of this course requires students to build basic circuits and check circuit operation with oscilloscopes. Further checks on circuit performance are done with computer software simulations of circuits covered in the lecture. NOTE: Offered at Lehigh Carbon County College campus only.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
EET 2112|Minimum Grade of D-|May not be taken concurrently.

EET 3276. Digital Logic Circuits. 4 Credit Hours.
This course covers: number systems, codes, and truth tables; logical hardware devices such as gates, inverters, tristate logic, flip-flops, and latches; digital circuits such as arithmetic units, comparators, code converters, ripple and ring counters, and shift registers; and design of combinational and sequential digital circuits. XILINX will be used. A laboratory is included.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
EET 2112|Minimum Grade of D-|May not be taken concurrently.

EET 3277. Microcomputer Systems. 4 Credit Hours.
Topics in this course include: finite-state machines in process control; assembly language programming of the WDC 65816 16 bit microprocessor and its hardware system implementation; dynamic RAM read/write and DMA access; hardware interrupts; I/O port addressing and peripheral interface design; microprocessor addressing modes; op codes; and arithmetic computation. A laboratory is included.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
EET 3276|Minimum Grade of D-|May not be taken concurrently.

EET 3278. Digital Logic Circuits & Microprocessors. 4 Credit Hours.
This course is the study of basic circuits common to digital logic circuits such as gates, flip-flops, counters, and arithmetic circuits. Also included are mathematical concepts such as Boolean algebra. Students also study finite-state machines in process control, assembly language programming of the WDC 65816 16 bit microprocessor and its hardware system implementation. Additional topics include: dynamic RAM read/write and DMA access, hardware interrupts, I/O port addressing, peripheral interface design, microprocessor addressing modes, op codes, and arithmetic computation. The lab runs concurrently with the lecture and provides students an opportunity to learn and prove digital and microprocessor concepts by experimentation. NOTE: Offered at Lehigh Carbon County College campus only.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
EET 2112|Minimum Grade of D-|May not be taken concurrently.

Elementary Education (ELED)

Courses
ELED 3287. Practicum: Teaching Elementary Children N-6. 2 to 3 Credit Hours.
Practicum experience supervised by college personnel at educational centers designed to provide students with experience in working with elementary school children and other school personnel. NOTE: Students must not register for any other classes before 1 p.m. on Tuesdays.
College Restrictions: Must be enrolled in one of the following Colleges: Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY
Co-requisites: ENEE 3297
Repeatability: This course may be repeated for additional credit.
ELED 3387. Practicum: Teaching Math/Science to Elementary Children N-6. 2 to 3 Credit Hours.
Practicum experience supervised by university personnel at educational centers designed to provide students with experience in working with elementary school children and other school personnel; focuses on math/science. NOTE: Students must not register for any other classes before 1 p.m. on Tuesdays.

College Restrictions: Must be enrolled in one of the following Colleges: Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY
Co-requisites: MAEE 3141, SCEE 3151
Repeatability: This course may be repeated for additional credit.

Engineering (ENGR)

Courses

ENGR 1101. Introduction to Engineering & Engineering Technology. 3 Credit Hours.
Provides an understanding of the study and practice associated with bioengineering, civil, electrical, mechanical engineering and technology disciplines. Understand the importance of good communications and teamwork skills in a successful engineering and technology career. Understand the basics of problem solving and design. Discipline-specific labs.

College Restrictions: Must be enrolled in one of the following Colleges: Engineering
Repeatability: This course may not be repeated for additional credits.

ENGR 1102. Introduction to Engineering. 3 Credit Hours.
This course is designed to introduce students to the field of Engineering. An objective will be to integrate teamwork, problem solving, and verbal communication skills into design projects and homework assignments within the course in such a way that these skills become the foundation of a successful career. Early understanding of these skills will assist students throughout their undergraduate experience and beyond. Field trips to local companies will provide insight into engineering careers. The primary objective is to enhance your success as a student and as a person.

Repeatability: This course may not be repeated for additional credits.

ENGR 1103. Introduction to Mathematical Modeling for Engineers. 4 Credit Hours.
This course will provide an overview of the salient math topics most heavily used in the core sophomore-level engineering courses. These include algebraic manipulation of engineering equations, trigonometry, vectors and complex numbers, sinusoids and harmonic signals, systems of equations and matrices, differentiation, integration and differential equations. All math topics will be presented within the context of an engineering application, and reinforced through extensive examples of their use in the core engineering courses.

College Restrictions: Must be enrolled in one of the following Colleges: Engineering
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 1021 Minimum Grade of C May not be taken concurrently
OR MC5 Y May not be taken concurrently
OR MC6 Y May not be taken concurrently.

ENGR 1117. Engineering Graphics. 2 Credit Hours.
Computer-aided geometrical construction, solids modeling, charts, orthographic and isometric drawings, dimensioning, auxiliary views, sectioning, geometric tolerancing, and elementary drafting problems.

College Restrictions: Must be enrolled in one of the following Colleges: Engineering
Repeatability: This course may not be repeated for additional credits.

ENGR 1185. Internship Experience I. 1 to 4 Credit Hour.
Work experience in industry, governmental agencies, or educational institutions is arranged through the Director of Career Services in the College of Engineering. The course is for one semester of work experience. Letter from supervisor and report by student are required.

Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
Repeatability: This course may be repeated for additional credit.

ENGR 1901. Honors Introduction to Engineering. 3 Credit Hours.
Provides a high level understanding of the study and practice associated with bioengineering, civil, electrical, mechanical engineering and technology disciplines. Understand the importance of good communication and teamwork skills in a very successful engineering and technology career. Understand the fundamentals of problem solving and design. Discipline-specific labs.

College Restrictions: Must be enrolled in one of the following Colleges: Engineering
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.
ENGR 2011. Engineering Analysis & Applications. 3 Credit Hours.
This course introduces engineering applications of mathematical concepts through the programming environment of Matlab. Topics covered include vectors and matrices, linear matrix equations with engineering applications, eigenvalue problem, interpolation, differentiation and integration, and optimization. Engineering applications of various concepts are emphasized.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 1042|Minimum Grade of C|May not be taken concurrently.

ENGR 2181. Co-Op Work Experience I. 3 Credit Hours.
Each is a prerequisite to the course that follows. Full time work experience in industry, governmental agencies, or educational institutions is arranged through the co-op coordinator of the College of Engineering (15 weeks, 40 hours/week). Students are considered as academically full-time during work periods.
Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
Repeatability: This course may be repeated for additional credit.

ENGR 2185. Internship Experience II. 1 to 4 Credit Hour.
Work experience in industry, governmental agencies, or educational institutions is arranged through the Director of Career Services in the College of Engineering. The course is for one semester of work experience. Letter from supervisor and report by student are required.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
ENGR 1185|Minimum Grade of D-|May not be taken concurrently.

ENGR 2196. Technical Communication. 3 Credit Hours.
This course for civil, electrical, and mechanical engineering students emphasizes major principles and methods of research-based technical writing, along with related MS Office techniques for word processing and report graphics. Writing assignments provide guided individual and team practice in meeting the needs of diverse technical and nontechnical audiences while complying with complex format specifications. Many of the techniques studied will be directly applicable to the writing requirements of the Senior Design course.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(MATH 1042|Minimum Grade of C-|May be taken concurrently
OR MATH 1942|Minimum Grade of C-|May be taken concurrently)
AND (PHYS 1061|Minimum Grade of C-|May be taken concurrently
OR PHYS 2021|Minimum Grade of C-|May be taken concurrently
OR PHYS 2921|Minimum Grade of C-|May be taken concurrently).

ENGR 2331. Engineering Statics. 3 Credit Hours.
Vector mechanics of force and moment systems in two and three dimensions, freebody diagrams and the static equilibrium of structures, centroids, moments of inertia, frictional systems, shearing force, and bending moment diagrams.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(MATH 1042|Minimum Grade of C-|May be taken concurrently
OR MATH 1942|Minimum Grade of C-|May be taken concurrently
OR MATH 1031|Minimum Grade of C-|May not be taken concurrently)
AND (PHYS 1061|Minimum Grade of C-|May not be taken concurrently
OR PHYS 2021|Minimum Grade of C-|May not be taken concurrently
OR PHYS 2921|Minimum Grade of C-|May not be taken concurrently
OR PHYS 1021|Minimum Grade of C-|May not be taken concurrently).

ENGR 2332. Engineering Dynamics. 3 Credit Hours.
A vector approach to the study of the rectilinear and curvilinear motion of particles and rigid bodies as described by rectangular, polar, and path coordinates and the study of the forces that produce such motion as described through the application of Newton’s second law of motion, work-energy relationships, and impulse and momentum principles, including rigid body rotation and relative motion.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ENGR 2331|Minimum Grade of C-|May not be taken concurrently
OR ENGR 2931|Minimum Grade of C-|May not be taken concurrently.

ENGR 2333. Mechanics of Solids. 3 Credit Hours.
Classical approach to axial stress and strain, torsion, bending, combined stress, biaxial stress, deflection of beams and frames, elastic strain energy, pressure vessels, column stability, and buckling.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ENGR 2331|Minimum Grade of C-|May not be taken concurrently
OR ENGR 2931|Minimum Grade of C-|May not be taken concurrently.
ENGR 2334. Engineering Statics/Dynamics. 3 Credit Hours.
Vector mechanics of force and moment systems in two and three dimensions, free body diagrams and the static equilibrium of structures, centroids, area and mass of the rectilinear and curvilinear motion of particles as described by rectangular, polar and path coordinates and the study of the forces that produce such motion using Newton's second law of motion, work-energy relationships, and impulse-momentum techniques. An overview of rigid body rotation is presented.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(MATH 1041|Minimum Grade of C-|May not be taken concurrently
OR MATH 1941|Minimum Grade of C-|May not be taken concurrently
OR MATH 1038|Minimum Grade of C-|May not be taken concurrently)
AND (PHYS 1021|Minimum Grade of C-|May not be taken concurrently).

ENGR 2335. Mechanics I. 3 Credit Hours.
A vector mechanics study of STATICS: free body diagrams, equilibrium, resultant force/couple systems, reaction forces and couples on 2-D and 3-D systems, member forces in trusses; and DYNAMICS: kinematics and kinetics of particles.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(MATH 1042|Minimum Grade of C-|May be taken concurrently
OR MATH 1942|Minimum Grade of C|May be taken concurrently
OR MATH 1951|Minimum Grade of C|May be taken concurrently
OR MATH 2043 to 3080| Minimum Grade of C-|May be taken concurrently
OR MA07 Y|May not be taken concurrently)
AND (PHYS 1061|Minimum Grade of C-|May be taken concurrently
OR PHYS 2021|Minimum Grade of C-|May be taken concurrently
OR PHYS 2921|Minimum Grade of C-|May be taken concurrently
OR PHYS 1062|Minimum Grade of C-|May be taken concurrently
OR PHYS 2022|Minimum Grade of C-|May be taken concurrently
OR PHYS 2922|Minimum Grade of C-|May be taken concurrently
OR PHYS 2101 to 2701| Minimum Grade of C-|May be taken concurrently
OR PHYS 4101 to 4796| Minimum Grade of C-|May be taken concurrently
OR PHYS 3101 to 3701| Minimum Grade of C-|May be taken concurrently
OR PHYS 4101 to 4796| Minimum Grade of C-|May be taken concurrently).

ENGR 2336. Mechanics II. 3 Credit Hours.
A vector mechanics study of STATICS: centroids, moments of inertia, shearing force and bending moment diagrams, frictional systems; and DYNAMICS: the rectilinear and curvilinear motion, rigid bodies as described by rectangular, polar and path coordinates and the study of the forces that produce such motion as described through the application of Newton's second law of motion, work-energy relationships, and impulse and momentum principles, including rigid body rotation and relative motion.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ENGR 2335|Minimum Grade of D-|May not be taken concurrently.

ENGR 2931. Honors Engineering Statics. 3 Credit Hours.
Vector mechanics of force and moment systems in two and three dimensions, freebody diagrams and the static equilibrium of structures, centroids, moments of inertia, frictional systems, shearing force, and bending moment diagrams. This honors class will be held to high standards.
College Restrictions: Must be enrolled in one of the following Colleges: Engineering
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(MATH 1041|Minimum Grade of C-|May not be taken concurrently
OR MATH 1941|Minimum Grade of C-|May not be taken concurrently
OR MATH 1038|Minimum Grade of C-|May not be taken concurrently)
AND (PHYS 1061|Minimum Grade of C-|May not be taken concurrently
OR PHYS 2021|Minimum Grade of C-|May not be taken concurrently
OR PHYS 2921|Minimum Grade of C-|May not be taken concurrently).
ENGR 2933. Honors Mechanics of Solids. 3 Credit Hours.
Classical approach to axial stress and strain, torsion, bending, combined stress, biaxial stress, deflections of beams and frames, elastic strain energy, pressure vessels, column stability, and buckling. Very challenging honors course.
College Restrictions: Must be enrolled in one of the following Colleges: Engineering
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits
Pre requisites:
ENGR 2931|Minimum Grade of C-|May not be taken concurrently.

ENGR 2996. Honors Technical Communication by Design. 3 Credit Hours.
This course focuses on technical writing for engineers, and prepares engineering students to author and/or co-author design documents. The course emphasizes principles and methods of technical writing, careful use of authoritative research sources, compliance with document specifications, and responsible attentiveness to ethical, environmental, and societal issues. This course is appropriate only for writers who are fluent in English and who can manage a semester-long writing project with minimal supervision.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO, WI
Repeatability: This course may not be repeated for additional credits
Pre requisites:
(MATH 1042|Minimum Grade of C-|May be taken concurrently
OR MATH 1942|Minimum Grade of C-|May be taken concurrently)
AND (PHYS 1061|Minimum Grade of C-|May be taken concurrently
OR PHYS 2021|Minimum Grade of C-|May be taken concurrently
OR PHYS 2921|Minimum Grade of C-|May be taken concurrently).

ENGR 3001. Engineering Economics. 3 Credit Hours.
The objectives of the course are to learn about economic analysis tools for engineers. The economics component places an emphasis on engineering problems and projects, where measures of merit such as present worth, rate of return, and benefit/cost ratio are used in problem solving.
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
College Restrictions: Must be enrolled in one of the following Colleges: Engineering
Repeatability: This course may not be repeated for additional credits.

ENGR 3033. Entrepreneurial Engineering. 3 Credit Hours.
The course is specifically designed to introduce students to the ideas and concepts of entrepreneurship; to help students recognize the entrepreneurial potential within themselves and others in their environment; link the entrepreneur's spirit with the engineer's mind and discipline; give the students the understanding of the opportunities and challenges facing any entrepreneur from the start up through running and growing a business; and create an understanding of the role of technology in developing the students' understanding of all the different opportunity paths that are available in today's economic and global environment. Students will develop an awareness of how to detect, understand, and develop product and/or service opportunities; understand and master the different business, legal, regulatory and human challenges that confront any business every day; understand the basic accounting, marketing, sales, negotiating, communication, intellectual property and analytical tools of business and how to apply them; understand how to decipher and learn from case studies; and learn the importance of and the creation of a business plan and how to use it to raise money and/or support for their business venture.
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
College Restrictions: Must be enrolled in one of the following Colleges: Engineering
Repeatability: This course may not be repeated for additional credits.

ENGR 3117. Computer-Aided Design (CAD). 3 Credit Hours.
Introduction to Computer Aided Design (CAD) using the state of the art ANSYS finite element program. The focus is to train students to perform advanced two- and three- dimensional solid modeling/stress analysis using ANSYS finite element software for solving and designing complex mechanical structures. It is expected that before taking this course, students have fundamental understanding of statics, dynamics, and solid mechanics concepts. Design projects will be given where students will have to design, analyze, and manufacture structural designs.
Repeatability: This course may not be repeated for additional credits
Pre requisites:
(ENGR 1117|Minimum Grade of D-|May not be taken concurrently
AND (ENGR 2332|Minimum Grade of C-|May not be taken concurrently
OR BIOE 2312|Minimum Grade of C-|May not be taken concurrently)
AND (ENGR 2333|Minimum Grade of C-|May not be taken concurrently
OR ENGR 2933|Minimum Grade of C-|May not be taken concurrently
OR BIOE 3312|Minimum Grade of C-|May not be taken concurrently)
AND (MATH 2101|Minimum Grade of C-|May not be taken concurrently
OR MEE 2011|Minimum Grade of C-|May not be taken concurrently
OR ENGR 2011|Minimum Grade of C-|May not be taken concurrently
AND (MATH 3041|Minimum Grade of C-|May not be taken concurrently).
ENGR 3181. Co-Op Work Experience II. 3 Credit Hours.
Each is a prerequisite to the course that follows. Full time work experience in industry, governmental agencies, or educational institutions is arranged through the co-op coordinator of the College of Engineering (15 weeks, 40 hours/week). Students are considered as academically full-time during work periods.
Repeatability: This course may be repeated for additional credit.
Pre-requisites: ENGR 2181|Minimum Grade of D-|May not be taken concurrently.

ENGR 3185. Internship Experience III. 1 to 4 Credit Hour.
Work experience in industry, governmental agencies, or educational institutions is arranged through the Director of Career Services in the College of Engineering. The course is for one semester of work experience. Letter from supervisor and report by student are required.
Repeatability: This course may be repeated for additional credit.
Pre-requisites: ENGR 2185|Minimum Grade of D-|May not be taken concurrently.

ENGR 3201. Material Science for Engineers. 3 Credit Hours.
Atomic and molecular structures, bonding and interatomic forces, thermodynamics and kinetics of solid reactions, mechanical, electronic, and magnetic properties of solids.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: (PHYS 1062|Minimum Grade of C-|May not be taken concurrently)
OR (PHYS 2022|Minimum Grade of C-|May not be taken concurrently)
OR (PHYS 2922|Minimum Grade of C-|May not be taken concurrently)
AND (CHEM 1031|Minimum Grade of C-|May not be taken concurrently)
OR (CHEM 1035|Minimum Grade of C-|May not be taken concurrently)
OR (CHEM 1951|Minimum Grade of C-|May not be taken concurrently)
AND (ENGR 2333|Minimum Grade of C-|May be taken concurrently)
OR (ENGR 2933|Minimum Grade of C-|May be taken concurrently).

ENGR 3281. Co-op Experience I. 3 Credit Hours.
Students will research Co-op opportunities, receive the Director's approval for the specific Co-op, set up interviews, and obtain a position and work a minimum thirty-five hours a week during the 14-week term for the three credit hours in a professional environment related to the careers they might have an interest. Students are responsible for preparing themselves for the professional experience in consultation with the Director of the Co-op program. There will be a number of sources to choose from, including approved opportunities maintained on file in the Director's office, student generated or discovered opportunities for which student must receive prior approval and opportunities with established commercial, engineering and professional organizations approved by the Director. Students may take Co-op experiences with different entities but are encouraged to repeat professional experiences with the same organization.
Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
Repeatability: This course may be repeated for additional credit.

ENGR 3334. Mechanical Systems. 3 Credit Hours.
This course considers the fundamentals of mechanics including statics, dynamics, materials, thermodynamics and fluid mechanics and their application to systems of beams, pulleys, gear trains, levers exhibiting vibration, heat conduction, convection and expansion and fluid flow.
Department restrictions: Must be enrolled in one of the following Departments: Engineering:Elec Engineering
Repeatability: This course may not be repeated for additional credits
Pre-requisites: (PHYS 1062|Minimum Grade of C-|May not be taken concurrently)
AND (MATH 2043|Minimum Grade of C-|May not be taken concurrently).

ENGR 3381. Co-op Experience II. 3 Credit Hours.
Students will research Co-op opportunities, receive the Director's approval for the specific Co-op, set up interviews, and obtain a position and work a minimum thirty-five hours a week during the 14-week term for the three credit hours in a professional environment related to the careers they might have an interest. Students are responsible for preparing themselves for the professional experience in consultation with the Director of the Co-op program. There will be a number of sources to choose from, including approved opportunities maintained on file in the Director's office, student generated or discovered opportunities for which student must receive prior approval and opportunities with established commercial, engineering and professional organizations approved by the Director. Students may take Co-op experiences with different entities but are encouraged to repeat professional experiences with the same organization.
Repeatability: This course may be repeated for additional credit.
Pre-requisites: ENGR 3281|Minimum Grade of D-|May not be taken concurrently.
ENGR 3553. Mechanics of Fluids. 3 Credit Hours.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(ENGR 2332|Minimum Grade of C-|May not be taken concurrently
OR BIOE 2312|Minimum Grade of C-|May not be taken concurrently)
AND (ENGR 2333|Minimum Grade of C-|May not be taken concurrently
OR ENGR 2933|Minimum Grade of C-|May not be taken concurrently
OR BIOE 3312|Minimum Grade of C-|May not be taken concurrently)
AND (MATH 3041|Minimum Grade of C-|May not be taken concurrently).

ENGR 3571. Classical and Statistical Thermodynamics. 3 Credit Hours.
The study of the concepts, theory, and application of energy and entropy from a classical and statistical viewpoint. NOTE: Special Authorization for Non-Majors. Open to all engineering majors.
College Restrictions: Must be enrolled in one of the following Colleges: Engineering
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(PHYS 1062|Minimum Grade of C-|May not be taken concurrently
OR PHYS 2022|Minimum Grade of C-|May not be taken concurrently
OR PHYS 2922|Minimum Grade of C-|May not be taken concurrently)
AND (MATH 1042|Minimum Grade of C-|May not be taken concurrently
OR MATH 1942|Minimum Grade of C-|May not be taken concurrently).

ENGR 3593. Honors Mechanics of Fluids. 3 Credit Hours.
College Restrictions: Must be enrolled in one of the following Colleges: Engineering
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(MATH 3041|Minimum Grade of C-|May not be taken concurrently)
AND (ENGR 2332|Minimum Grade of C-|May not be taken concurrently)
AND (ENGR 2933|Minimum Grade of C-|May not be taken concurrently).

ENGR 3982. Honors Independent Study. 1 to 4 Credit Hour.
A challenging opportunity to either 1) study an honors course which is not offered during the semester, or 2) study specialized topics not covered in currently available honors courses. High standards are expected of the student by an honors faculty who will supervise.
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
College Restrictions: Must be enrolled in one of the following Colleges: Engineering
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.

ENGR 4040. Special Topics. 1 to 4 Credit Hour.
A course designed to present new and emerging areas of engineering. The course may also be used to present areas not normally taught in the College. Course requirements vary with the topic and instructor. Offered as needed or as appropriate.
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
College Restrictions: Must be enrolled in one of the following Colleges: Engineering
Repeatability: This course may be repeated for additional credit.

ENGR 4101. Fundamentals of Engineering (FE) Examination Review. 1 Credit Hour.
This course will give students the practical and theoretical knowledge to help pass the FE examination. The course provides a comprehensive review of basic science and engineering, theories and applications, advanced topics in civil and mechanical engineering. Problem solving and test taking strategies will be an integral part of the course. The course will provide additional assessment for ABET.
Repeatability: This course may not be repeated for additional credits.
ENGR 4116. Spacecraft Systems Engineering. 3 Credit Hours.
This course will introduce the systems engineering concept through satellite applications. The goals of this course are to introduce: a) systems engineering concepts, b) satellite subsystems, c) astrodynamics, and d) intellectual property. Topics covered will include space environment, dynamics of spacecraft, celestial mechanics, mission analysis, attitude control, systems engineering, and patents.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 3041|Minimum Grade of D-|May not be taken concurrently.

ENGR 4169. Engineering Seminar. 1 Credit Hour.
Preparation for entering the professional world of engineering. Includes job placement, professional registration, ethics, professional societies, case studies, and guest speakers.
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
College Restrictions: Must be enrolled in one of the following Colleges: Engineering
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ENGR 2196|Minimum Grade of C-|May not be taken concurrently.

ENGR 4181. Co-Op Work Experience III. 1 Credit Hour.
Each is a prerequisite to the course that follows. Full time work experience in industry, governmental agencies, or educational institutions is arranged through the co-op coordinator of the College of Engineering (15 weeks, 40 hours/week). Students are considered as academically full-time during work periods.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
ENGR 3181|Minimum Grade of D-|May not be taken concurrently.

ENGR 4182. Independent Study in Engineering. 1 to 5 Credit Hour.
Arranged each semester, please consult with the instructor.
Repeatability: This course may be repeated for additional credit.

ENGR 4185. Internship Experience IV. 1 to 4 Credit Hour.
Work experience in industry, governmental agencies, or educational institutions is arranged through the Director of Career Services in the College of Engineering. The course is for one semester of work experience. Letter from supervisor and report by student are required.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
ENGR 3185|Minimum Grade of D-|May not be taken concurrently.

ENGR 4196. Senior Design Project I. 1 Credit Hour.
Team-oriented engineering system design problems of various types. Topics proposed and orally presented by students in the initial stage of the course sequence. At completion, the project is demonstrated during an oral presentation and a final written report.
Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
College Restrictions: Must be enrolled in one of the following Colleges: Engineering
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ENGR 4169|Minimum Grade of D-|May not be taken concurrently.

ENGR 4281. Co-Op Work Experience IV. 1 Credit Hour.
Full time work experience in industry, governmental agencies, or educational institutions is arranged through the co-op coordinator of the College of Engineering (15 weeks, 40 hours/week). Students are considered as academically full-time during work periods.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
ENGR 4181|Minimum Grade of D-|May not be taken concurrently.

ENGR 4296. Senior Design Project II. 3 Credit Hours.
Team-oriented engineering system design problems of various types. Topics proposed and orally presented by students in the initial stage of the course sequence. At completion, the project is demonstrated during an oral presentation and a final written report.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ENGR 4196|Minimum Grade of D-|May not be taken concurrently.
ENGR 4314. Continuum Mechanics. 3 Credit Hours.
Tensors, Kinematics of Continuum, Stress, Integral Formulations, the Elastic Solid, and the Newtonian Fluid.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(MATH 3041|Minimum Grade of D-|May not be taken concurrently)
AND (ENGR 2333|Minimum Grade of C-|May not be taken concurrently)
OR ENGR 2933|Minimum Grade of C-|May not be taken concurrently).

ENGR 4334. Advanced Dynamical Systems. 3 Credit Hours.
The objective of this course is to establish the theoretical basis for the description of regular and chaotic dynamical systems. To understand the basic ideas of dynamical systems and the nature of chaotic behavior, and to be able to apply these ideas to particular systems. To learn how to choose the appropriate modeling techniques and hypothesis to establish a mathematical model of a qualitatively described phenomenon. The discussed applications will include examples from fluid mechanics, physics and biology.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
MATH 3041|Minimum Grade of C-|May not be taken concurrently.

ENGR 4576. Computational Fluid Dynamics. 3 Credit Hours.
The students will learn to analyze and computationally solve problems in Heat Transfer and Fluid Dynamics. They will learn to program fundamental problems on simple geometric entities using MATLAB as well as the use of commercially available CFD programs to tackle complex three-dimensional geometry. Additionally, students will also be introduced to various discretization techniques for solving the governing differential equations, and iterative schemes for solving algebraic equations.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
ENGR 3553|Minimum Grade of C-|May not be taken concurrently
OR ENGR 3953|Minimum Grade of C-|May not be taken concurrently.

ENGR 4577. Nanotechnology Solutions for a Sustainable Urban Environment. 3 Credit Hours.
The course will introduce students to the revolutionary field of nanotechnology, where emphasis will be placed on using nanomaterials to the betterment of a sustainable urban environment. Students will be introduced to the remarkable transformation that the mechanical, optical, electrical, and thermal material properties undergo as their dimensions are reduced to the nanoscale. They will also understand the major nanomaterial fabrication techniques such as nanoscale lithography and self-assembly. In addition, students will be introduced to techniques which characterize materials on the nanoscale. The second half of the course will be devoted to applications and potential applications of nanotechnology which will advance urban sustainability. Applications in water purification, transportation, energy and biomedicine will be presented to the students through series of expert lectureships offered by Temple University faculty utilizing nanomaterials in their research laboratories. Students will also carry out laboratory modules devoted to the use of nanomaterials for these applications.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits

College Restrictions: Must be enrolled in one of the following Colleges: Engineering

Repeatability: This course may not be repeated for additional credits.

ENGR 4996. Honors Senior Design Project II. 3 Credit Hours.
Continuation of Senior Design Project I for honors teams. Students will complete a team project with an Honors Faculty mentor. Assignments will include a design review, monthly progress reports, a poster, an oral presentation and a final report. This course is writing intensive. For those on the Honors Scholar track, the final report produced in this course may be submitted as the Honors Scholar Project.

College Restrictions: Must be enrolled in one of the following Colleges: Engineering

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR

Course Attributes: HO, WI

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
ENGR 4196|Minimum Grade of D-|May not be taken concurrently.

Engineering (General) (ENGG)

Courses

ENGG 3385. Diamond Peer Teachers - Internship I. 1 Credit Hour.
The Diamond Peer Teachers Program provides students with a mentored university-level teaching experience in their major. Course requirements include participation in the three-day pre-semester Teaching Institute and regular participation in the Peer Teachers support group throughout the semester. Peer Teachers provide supplemental instruction in first- and second-year courses, promote student engagement, and model successful study habits and academic preparedness for students with whom they work. For Diamond Peer Teachers only.

Repeatability: This course may be repeated for additional credit.
ENGG 3386. Diamond Peer Teachers - Internship II. 1 Credit Hour.
The Diamond Peer Teachers Program provides students with a mentored university-level teaching experience in their major. Course requirements include participation in the three-day pre-semester Teaching Institute and regular participation in the Peer Teachers support group throughout the semester. Peer Teachers provide supplemental instruction in first- and second-year courses, promote student engagement, and model successful study habits and academic preparedness for students with whom they work. For Diamond Peer Teachers only. 
Repeatability: This course may be repeated for additional credit.

Engineering Technology (ENGT)

Courses

ENGT 2322. Strength of Materials. 3 Credit Hours.
Investigation of the elastic behavior of materials through the study of normal stress, strain, shear, and deformation under centric loading, flexural stress, shear, and deformation under transverse and eccentric loading, torsional stress, combined stress, stress concentration, and the stability of columns.

Repeatability: This course may not be repeated for additional credits
Pre-requisites: ENGR 2331|Minimum Grade of C-|May not be taken concurrently.

ENGT 2521. Applied Fluid Mechanics. 3 Credit Hours.
Fluid properties, fluid statics, fluid flow concepts, dynamic similitude, fluid resistance, ideal flow, compressible flow, pneumatic and hydraulic applications.

Repeatability: This course may not be repeated for additional credits
Pre-requisites: ENGR 2331|Minimum Grade of C-|May not be taken concurrently.

ENGT 3182. Independent Study in Engineering Technology. 1 to 5 Credit Hour.
Students may complete a regular course during semesters in which the course is not offered to meet prerequisite or graduation requirements. An instructor is assigned to supervise the student.

Repeatability: This course may be repeated for additional credit.

ENGT 3323. Dynamics. 3 Credit Hours.
A non-vector approach to the kinematics and kinetics of a particle employing the methods of force-mass acceleration, work-energy, and impulse momentum. Kinematics of rigid bodies in general plane motion using methods of force-mass acceleration and work-energy.

Repeatability: This course may not be repeated for additional credits
Pre-requisites: 
(ENGR 2331|Minimum Grade of C-|May not be taken concurrently)
AND (MATH 1041|Minimum Grade of C-|May not be taken concurrently
OR MATH 1941|Minimum Grade of C-|May not be taken concurrently
OR MATH 1038|Minimum Grade of C-|May not be taken concurrently)
AND (PHYS 1021|Minimum Grade of C-|May not be taken concurrently).

ENGT 3396. Materials Technology. 3 Credit Hours.
Atomic and molecular structures, bonding and interatomic forces, thermodynamics and kinetics of solid state reactions, mechanical and electronic properties. Design projects and written reports.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits
Pre-requisites: 
(CHEM 1031|Minimum Grade of C-|May not be taken concurrently
AND ENGR 2333|Minimum Grade of C-|May not be taken concurrently
AND PHYS 1022|Minimum Grade of C-|May not be taken concurrently)
OR ENGT 2322|Minimum Grade of D-|May not be taken concurrently.

ENGT 3532. Thermodynamics. 3 Credit Hours.
Properties of a substance, work and heat interaction, first law of thermodynamics, cannot cycle, entropy, ideal gases, irreversibility, and efficiency.
NOTE: Special Authorization for Non-Technology Majors. Approved for ENGT, MET, CMT, ENVT.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Civil & Construction Eng Tech, Construction Mgt Tech, Engineering Technology

Repeatability: This course may not be repeated for additional credits
Pre-requisites: 
(MATH 1031|Minimum Grade of C-|May not be taken concurrently
AND PHYS 1022|Minimum Grade of C-|May not be taken concurrently)
OR MATH 1042|Minimum Grade of C-|May not be taken concurrently.
ENGT 3651. Manufacturing Control Systems. 3 Credit Hours.
A survey course covering pneumatic and hydraulic controls, programmable controllers, digital circuits, electro-mechanical servos and industrial instrumentation, and transducers. Laboratory.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: ENGT 3652|Minimum Grade of D-|May not be taken concurrently.

ENGT 3652. CAD/CAM/CNC. 3 Credit Hours.
Solids modeling, geometric tolerancing, welds, treads, dimensions, numerical control simulation, and post processing. Basic components of NC systems, coordinate systems, motion control, programming languages, CNC and DNC, laboratory and demonstrations.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: ENGR 1117|Minimum Grade of D-|May not be taken concurrently.

ENGT 4040. Special Topics. 1 to 5 Credit Hour.
A course designed to present new and emerging areas of engineering technology. The course may also be used to present areas not normally taught in the college. Course requirements vary with the topic and instructor. Offered as needed or as appropriate.
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
College Restrictions: Must be enrolled in one of the following Colleges: Engineering
Repeatability: This course may be repeated for additional credit.

ENGT 4119. Professional Seminar. 1 Credit Hour.
Preparation for entering the working and professional worlds of engineering and the job market. Includes preparation of résumés, interviewing techniques, securing and holding a job, advancement, professional registration, ethics, and professional societies.
Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may not be repeated for additional credits.

ENGT 4129. Professional and Industrial Seminar. 3 Credit Hours.
Preparation for entering the working and professional worlds of engineering and the job market. Includes preparation of résumés, interviewing techniques, professional registration, and ethics. There will also be presentations by engineers from the local business community on technical topics of current interest in engineering.
Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may not be repeated for additional credits.

ENGT 4196. Capstone Project. 3 Credit Hours.
Team-oriented engineering technology capstone projects of various types. Topics proposed and presented by students in the initial stage of the semester. At completion, the project is demonstrated during an oral presentation. Project results are submitted in a final report. Offered Fall, Spring, and Summer.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Engineering Technology
Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites: ENGT 4119|Minimum Grade of D-|May not be taken concurrently.

ENGT 4261. Engineering Technology Project II. 3 Credit Hours.
Team-oriented engineering system design problems of various types. Topics proposed and orally presented by students in the initial stage of the course sequence. At completion, the project is demonstrated during an oral presentation and a final written report.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: ENGT 4161|Minimum Grade of D-|May not be taken concurrently
OR ENGT 4196|Minimum Grade of D-|May not be taken concurrently.

ENGT 4278. Cardiac Devices. 3 Credit Hours.
Intended for electrical engineering, biology, and bioengineering students. No course prerequisites. This course will cover cardiac anatomy and physiology, the hearts electrical system in health and disease, cardiac eeg rhythm interpretation, design and function of eeg monitoring devices, pacemakers and external and implanted defibrillators, and arrhythmia detection algorithms. The course will include observation of pacemaker implants, and troubleshooting in a pacemaker follow-up clinic. The course will prepare students to take the Heart Rhythm Society Allied Professional Pacemaker Certification examination. It is intended to put students in a competitive advantage for getting jobs in the expanding pacemaker and other medical electronics device industries.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: (MATH 1022 to 4999| Required Courses:1|Minimum Grade of C-|May not be taken concurrently
AND PHYS 1021 to 4999| Required Courses:1|Minimum Grade of C-|May not be taken concurrently)
OR MC6 Y|May not be taken concurrently.
ENGT 4342. Machine Elements. 3 Credit Hours.
Survey of the design and application fundamentals underlying the sound selection and use of common machine elements such as shafts, bearings, clutches, brakes, gears, chain and belt drives, etc. Term design project. 
Repeatability: This course may not be repeated for additional credits
Pre-requisites: 
((ENGR 1117|Minimum Grade of D-|May not be taken concurrently
AND ENGT 2322|Minimum Grade of D-|May not be taken concurrently)
OR ENGR 2333|Minimum Grade of C-|May not be taken concurrently)
AND (ENGT 3323|Minimum Grade of D-|May not be taken concurrently
OR ENGT 3332|Minimum Grade of C-|May not be taken concurrently).

ENGT 4532. Heating, Ventilating, and Air Conditioning. 3 Credit Hours.
Establishment of design requirements for environmental comfort conditioning. Heating, heat pumps, humidity control, cooling, ventilation, integrated systems, controls and instrumentation, computer-aided design. Design project. 
Repeatability: This course may not be repeated for additional credits
Pre-requisites: 
(ENGT 2521|Minimum Grade of D-|May not be taken concurrently
AND ENGT 3532|Minimum Grade of D-|May not be taken concurrently).

ENGT 4641. Production Tooling. 3 Credit Hours.
Fundamentals of the design of work-holders and of tooling for inspection and gauging, welding and joining processes, and punch presses. A weekly practicum covers applications of fundamentals to typical tool design problems. 
Repeatability: This course may not be repeated for additional credits
Pre-requisites: 
(ENGR 1117|Minimum Grade of D-|May not be taken concurrently
AND ENGR 2333|Minimum Grade of C-|May not be taken concurrently
AND ENGT 3652|Minimum Grade of D-|May not be taken concurrently).

ENGT 4642. Quality Control. 3 Credit Hours.
Fundamental engineering methods for product and process quality assurance and control. Standard statistical tools are used for quality control methods used in industry. Acceptance sampling, statistical process control, quality measurement, and quality management topics are covered. NOTE: Only offered at LCCC campus. 
Repeatability: This course may not be repeated for additional credits
Pre-requisites: 
STAT 2101|Minimum Grade of D-|May not be taken concurrently.

ENGT 4643. Fundamentals of Manufacturing. 3 Credit Hours.
A course designed to present new and emerging areas of engineering technology. This course covers fundamental manufacturing processes under the classification of processing operations and the assembly operations, and the basic parameters involved in these processes. This course combines lectures and intensive lab activities with a design project component. 
Repeatability: This course may not be repeated for additional credits
Pre-requisites: 
ENGT 4342|Minimum Grade of D-|May not be taken concurrently.

English (ENG)

Courses

ENG 0701. Introduction to Academic Discourse. 4 Credit Hours.
English 0701 focuses on writing within a single theme, working on ungraded multiple drafts for assignments, developing skills in summary and textual support presented in appropriate context. Students create a portfolio of their work, including at least four sequenced assignments that culminate in a final project that pulls together critical and literary texts. Multiple individual conferences with the instructor. NOTE: Students placed in English 0701 must earn a final grade of C- or higher in order to be eligible to enroll in English 0802 or English 0812. Students cannot receive credit for this course if they have successfully completed any of the following courses: English 0711, 1001, 1002, 1011, 1012, 0040, 0041, C050, C051, or R050. 
Repeatability: This course may not be repeated for additional credits.

ENG 0711. Introduction to Academic Discourse ESL. 4 Credit Hours.
The guidelines for English 0701 are followed in this course, but in the ESL writing classroom there are cross-cultural implications both of what it means to do academic work and also what it means to share historical and cultural knowledge. Oral participation is encouraged as a way of developing fluency and enhancing comfort with participation in American academic settings. Classes are smaller than in English 0701, and teachers spend extended time in tutorial conferences with students. NOTE: English 0711 is designed to accommodate the needs of the ESL learner. Students placed in English 0711 must earn a final grade of C- or higher in order to be eligible to enroll in English 0802 or English 0812. Students cannot receive credit for this course if they have successfully completed any of the following courses: English 0701, 1001, 1002, 1011, 1012, 0040, 0041, C050, C051, or R050. 
Repeatability: This course may not be repeated for additional credits.
ENG 0802. Analytical Reading and Writing. 4 Credit Hours.
Duplicate Courses: This course may not be taken for credit by students who have successfully completed English 0812, 0902, 1002, 1012, 1022, 1977, 1978, C050, C051, H090, or R050. English 0802 takes a broader perspective than 0701 (formerly 0040), requiring students to explore a single theme from the point of multiple disciplines. Early in the semester, English 0802 students work on research and the evaluation of sources, moving through a sequence of papers that develop argumentation and the synthesis of materials. Library research is required, and sessions with librarians are part of the course. Individual and small group conferences will be held during the semester. Evaluation is predicated on a passing final portfolio of at least four assignments that are developed through multiple revisions. NOTE: English 0802 is a prerequisite for IH 0851/0852 (formerly Intellectual Heritage 1196 and 1297), any writing intensive courses, and any course in the College of Liberal Arts numbered 2000-4999.
Course Attributes: GW
Repeatability: This course may not be repeated for additional credits.

ENG 0812. Analytical Reading and Writing: ESL. 4 Credit Hours.
Duplicate Courses: English 0812 may not be taken for credit by students who have successfully completed English 0802, 0902, 1002, 1012, 1022, 1977, 1978, C050, C051, H090, or R050. English 0812 is designed to accommodate the needs of the ESL learner. The guidelines for English 0802 are followed in this course, but in the ESL writing classroom there are cross-cultural implications both of what it means to do academic work and also what it means to share historical and cultural knowledge. Oral participation is encouraged as a way of developing fluency and enhancing comfort with participation in American academic settings. NOTE: English 0812 is a prerequisite for IH 0851/0852 (formerly Intellectual Heritage 1196 and 1297), any writing intensive courses and any courses in the College of Liberal Arts numbered 2000-4999. Classes are smaller than in English 0802, and teachers spend extended time in tutorial conferences with students.
Course Attributes: GW
Repeatability: This course may not be repeated for additional credits.

ENG 0815. Language in Society. 3 Credit Hours.
How did language come about? How many languages are there in the world? How do people co-exist in countries where there are two or more languages? How do babies develop language? Should all immigrants take a language test when applying for citizenship? Should English become an official language of the United States? In this course we will address these and many other questions, taking linguistic facts as a point of departure and considering their implications for our society. Through discussions and hands-on projects, students will learn how to collect, analyze, and interpret language data and how to make informed decisions about language and education policies as voters and community members. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: ANTH 0815/0915, Asian Studies 0815, Chinese 0815, CSCD 0815, EDUC 0815/0915, Italian 0815, PSY 0815, Russian 0815, or Spanish 0815.
Course Attributes: GB
Repeatability: This course may not be repeated for additional credits.

ENG 0822. Shakespeare in the Movies. 3 Credit Hours.
Love and political ambition and violence and evil and laughter and wit and racial antagonism and the battle between the sexes and the joy and misery of being human - Shakespeare's plays are about all of that. Discover how they work in film and video. Learn to read films and understand what actors, directors, composers, set designers, cinematographers, etc. do to bring the bard's plays to life. We will view Merchant of Venice, Richard III, Othello, Much Ado about Nothing, and Romeo and Juliet and study how these plays got from the page to the screen. We will look at actors of the present day - Pacino, McKellen, Hopkins, Hoskins, Fishburne, Branagh, Thompson, DiCaprio, Danes, etc. and also at giants of the past, like Laurence Olivier, to see how actors create their roles. This course includes group work in reviewing film techniques, innovative writing instruction, and an introduction to research. You will have access to whole plays and to selected clips streamed to your computer. NOTE: This course fulfills the Arts (GA) requirement for students under GenEd and Arts (AR) for students under Core. Students cannot receive credit for this course if they have successfully completed English 0922.
Course Attributes: GA
Repeatability: This course may not be repeated for additional credits.

ENG 0824. The Quest for Utopia. 3 Credit Hours.
The extreme version of “the grass is always greener on the other side” has been a vision of a mythical place where all is peace, balance, perfection and happiness. The concept of utopia - somewhere better than this - has been with us for centuries, but what drives it? And why, when the quest is for betterment and maximum benefit for all, do utopias so often go bad? This course will examine what visions of utopia and dystopia have existed in literature from around the world. We will look at it alongside writing from a variety of disciplines to try to understand why utopia resists our reach, and the kind of behavior, for better and for worse, that the quest for utopia brings about. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed English 0824.
Course Attributes: GB
Repeatability: This course may not be repeated for additional credits.

ENG 0826. Creative Acts. 4 Credit Hours.
This course focuses on the art of writing, finding one's voice, and writing for different genres. In a small classroom setting, you will work with the faculty member and other students to improve your writing through work-shopping. Other readings will allow you to develop your craft. By the end of the semester, you will produce a portfolio of your work. NOTE: This course fulfills the Arts (GA) requirement for students under GenEd and Arts (AR) for students under Core. Students cannot receive credit for this course if they have successfully completed English 0926.
Course Attributes: GA
Repeatability: This course may not be repeated for additional credits.
ENG 0834. Representing Race. 3 Credit Hours.
From classical Greeks and Romans, who saw themselves under siege by the "barbarian hordes," to contemporary America and its war on "Islamic extremism," from "The Birth of a Nation" to "Alien Nation," Western societies have repeatedly represented some group of people as threats to civilization. This course will examine a wide range of representations of non-Western people and cultures in film, literature, scientific and legal writings, popular culture and artistic expression. What is behind this impulse to divide the world into "us" and "them"? How is it bound up with our understanding of race and racial difference? And what happens when the "barbarian hordes" talk back? NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they have successfully completed AAS 0834, Anthropology 0834/0934, Asian Studies 0834, English 0934, or History 0834.

Course Attributes: GD
Repeatability: This course may not be repeated for additional credits.

ENG 0837. Eating Cultures. 3 Credit Hours.
You are what you eat, they say, but what, precisely, determines our eating habits and what, exactly, do they say about us? How do these habits influence our relations with others in our communities and beyond? Eating is an activity common to all human beings, but how do the particularities and meanings attributed to this activity vary across different times and places? Using literature, visual media, cookbooks, food-based art, and advertisements as our starting point, we will examine how food perception, production, preparation, consumption, exchange, and representation structure individual and communal identities, as well as relations among individuals and communities around the globe. Our focus on this most basic of needs will allow us to analyze how food conveys and limits self-expression and creates relationships as well as delimits boundaries between individuals and groups. Materials will be drawn from a wide range of disciplines including, but not limited to, literary and gender studies, psychology, anthropology, history, sociology, and economics. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed Spanish 0837 or Spanish 0937.

Course Attributes: GB
Repeatability: This course may not be repeated for additional credits.

ENG 0849. Dissent in America. 3 Credit Hours.
Throughout American history individuals and groups of people, have marched to the beat of a different drummer, and raised their voices in strident protest. Study the story and development of dissent in America. How has dissent shaped American society? In addition to studying the historical antecedents of dissent students will have first-hand experience visiting and studying a present-day dissent organization in the Philadelphia area to investigate connections between the history of dissent and the process of making dissenting opinion heard today. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for English 0849/0949 if they have successfully completed History 0849/0949 or SOC 0849.

Course Attributes: GU
Repeatability: This course may not be repeated for additional credits.

ENG 0855. Higher Education and American Life: Mirror to a Nation. 3 Credit Hours.
You have decided to go to college. But why? What role will college and in particular Temple University play in your life? Reflect on this important question by looking at the relationship between higher education and American society. What do colleges and universities contribute to our lives? They are, of course, places for teaching and learning. They are also research centers, sports and entertainment venues, sources of community pride and profit, major employers, settings for coming-of-age rituals (parties, wild times, courtship, etc.), and institutions that create lifetime identities and loyalties. Learn how higher education is shaped by the larger society and how, in turn, it has shaped that society. Become better prepared for the world in which you have chosen to live for the next few years. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed AMST 0855 or EDAD 0855.

Course Attributes: GU
Repeatability: This course may not be repeated for additional credits.

ENG 0857. The Detective Novel. 3 Credit Hours.
The detective novel remains the most popular of literary forms since its American origins in Edgar Allan Poe. The form has spread to virtually every part of the world, taking on different perspectives in the different societies where it has prospered. Our course analyzes the global travels of this prolific literary genre, paying particular attention to the manner in which its formula of crime-detection-resolution has evolved from its classic phase in the Sherlock Holmes mysteries, to its hard-boiled phase in the 1940's US, to the transformation of the private detective working outside the formal apparatus of the law into the police detective working within the law in places as different as Sweden, Holland, Nigeria, and India. We will read bestselling detective novels by figures such as Emile Gaboriau, Poe, Arthur Conan Doyle, Wilkie Collins, Agatha Christie, Raymond Chandler, Jorge Borges (Argentina), Vikram Chandra (India), Henning Mankell (Sweden), Janwillem van de Wetering (Holland), Kole Omotosho (Nigeria), and Soji Shimada (Japan). We will pay special attention to the conventions of the form and analyze its evolution as it travels the world. In exploring its global travels, we will attend to a number of issues, including: the changing definition of crime; the evolving representation of the criminal; the changing methods for "solving" the crime; the ideology of justice; the conflicts between community and individuality; and the varying social and national anxieties that the form reveals. DUPLICATE CREDIT WARNING: Students who have received credit for Critical Languages 0857 will not receive additional credits for this course.

Course Attributes: GG
Repeatability: This course may not be repeated for additional credits.
ENG 0868. World Society in Literature & Film. 3 Credit Hours.
Learn about a particular national culture - Russian, Indian, French, Japanese, Italian, for example, each focused upon in separate sections of this course - by taking a guided tour of its literature and film. You don't need to speak Russian, Hindu, French or Japanese to take one of these exciting courses, and you will gain the fresh, subtle understanding that comes from integrating across different forms of human expression. Some of the issues that will be illuminated by looking at culture through the lens of literature and film: Family structures and how they are changing, national self-perceptions, pivotal moments in history, economic issues, social change and diversity. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: Arabic 0868/0968, Asian Studies 0868, Chinese 0868/0968, English 0968, French 0868/0968, German 0868/0968, Hebrew 0868, Italian 0868/0968, Japanese 0868/0968, Jewish Studies 0868, Korean 0868, LAS 0868/0968, Political Science 0868/0968, Russian 0868/0968, or Spanish 0868/0968.

Course Attributes: GG
Repeatability: This course may not be repeated for additional credits.

ENG 0902. Honors Literature/Reading/Writing. 4 Credit Hours.
Duplicate Courses: Duplicate Courses: This course may not be taken for credit by students who have successfully completed English 0802, 0812, 1002, 1012, 1022, 1977, 1978, C050, C051, H090, or R050. An introduction to various forms of literature, this course has a theme that is developed through critical reading and writing assignments. Research and multiple drafts of papers are required. This course follows the principles of Analytical Reading and Writing, and focuses on the same critical competencies. NOTE: English 0902 is a prerequisite for IH 0851/0951 and 0852/0952 (formerly Intellectual Heritage 1196/1996 and 1297/1997), any writing intensive courses, and any courses in the College of Liberal Arts numbered between 2000 and 4999.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GW, HO
Repeatability: This course may not be repeated for additional credits.

ENG 0922. Honors Shakespeare in the Movies. 3 Credit Hours.
Love and political ambition and violence and evil and laughter and wit and racial antagonism and the battle between the sexes and the joy and misery of being human - Shakespeare's plays are about all of that. Discover how they work in film and video. Learn to read films and understand what actors, directors, composers, set designers, cinematographers, etc. do to bring the bard's plays to life. We will view Merchant of Venice, Richard III, Othello, Much Ado about Nothing, and Romeo and Juliet and study how these plays got from the page to the screen. We will look at actors of the present day - Pacino, McKellen, Hopkins, Hoskins, Fishburne, Branagh, Thompson, DiCaprio, Danes, etc. and also at giants of the past, like Laurence Olivier, to see how actors create their roles. This course includes group work in reviewing film techniques, innovative writing instruction, and an introduction to research. You will have access to whole plays and to selected clips streamed to your computer. NOTE: This course fulfills the Arts (GA) requirement for students under GenEd and Arts (AR) for students under Core. Students cannot receive credit for this course if they have successfully completed English 0822.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GA, HO
Repeatability: This course may not be repeated for additional credits.

ENG 0924. Honors: The Quest for Utopia. 3 Credit Hours.
The extreme version of "the grass is always greener on the other side" has been a vision of a mythical place where all is peace, balance, perfection and happiness. The concept of utopia - somewhere better than this - has been with us for centuries, but what drives it? And why, when the quest is for betterment and maximum benefit for all, do utopias so often go bad? This course will examine what visions of utopia and dystopia have existed in literature from around the world. We will look at it alongside writing from a variety of disciplines to try to understand why utopia resists our reach, and the kind of behavior, for better and for worse, that the quest for utopia brings about. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed English 0824.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GB, HO
Repeatability: This course may not be repeated for additional credits.

ENG 0926. Honors Creative Acts. 4 Credit Hours.
This course focuses on the art of writing, finding one's voice, and writing for different genres. In a small classroom setting, you will work with the faculty member and other students to improve your writing through work-shopping. Other readings will allow you to develop your craft. By the end of the semester, you will produce a portfolio of your work. NOTE: This course fulfills the Arts (GA) requirement for students under GenEd and Arts (AR) for students under Core. Students cannot receive credit for this course if they have successfully completed English 0826.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GA, HO
Repeatability: This course may not be repeated for additional credits.
ENG 0934. Honors Representing Race. 3 Credit Hours.
From classical Greeks and Romans, who saw themselves under siege by the “barbarian hordes,” to contemporary America and its war on “Islamic extremism,” from “The Birth of a Nation” to “Alien Nation,” Western societies have repeatedly represented some group of people as threats to civilization. This course will examine a wide range of representations of non-Western people and cultures in film, literature, scientific and legal writings, popular culture and artistic expression. What is behind this impulse to divide the world into “us” and “them”? How is it bound up with our understanding of race and racial difference? And what happens when the “barbarian hordes” talk back? (This is an Honors course.) NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they have successfully completed AAS 0834, Anthropology 0834/0934, Asian Studies 0834, English 0834, or History 0834.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GD, HO
Repeatability: This course may not be repeated for additional credits.

ENG 0949. Honors Dissent in America. 3 Credit Hours.
Throughout American history individuals and groups of people, have marched to the beat of a different drummer, and raised their voices in strident protest. Study the story and development of dissent in America. How has dissent shaped American society? In addition to studying the historical antecedents of dissent students will have first-hand experience visiting and studying a present-day dissent organization in the Philadelphia area to investigate connections between the history of dissent and the process of making dissenting opinion heard today. (This is an Honors course.) NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for English 0849/0949 if they have successfully completed History 0849/0949 or SOC 0849.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GU, HO
Repeatability: This course may not be repeated for additional credits.

ENG 0968. Honors World Society in Literature & Film. 3 Credit Hours.
Learn about a particular national culture - Russian, Indian, French, Japanese, Italian, for example, each focused upon in separate sections of this course - by taking a guided tour of its literature and film. You don't need to speak Russian, Hindi, French or Japanese to take one of these exciting courses, and you will gain the fresh, subtle understanding that comes from integrating across different forms of human expression. Some of the issues that will be illuminated by looking at culture through the lens of literature and film: Family structures and how they are changing, national self-perceptions, pivotal moments in history, economic issues, social change and diversity. (This is an Honors course.) NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: Arabic 0868/0968, Asian Studies 0868, Chinese 0868/0968, English 0868, French 0868/0968, German 0868/0968, Hebrew 0868, Italian 0868/0968, Japanese 0868/0968, Japanese Studies 0868, Korean 0868, LAS 0868/0968, Political Science 0868/0968, Russian 0868/0968, or Spanish 0868/0968.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GG, HO
Repeatability: This course may not be repeated for additional credits.

ENG 0973. Honors Women in Modern Bengali Film. 3 Credit Hours.
We will discuss the work of contemporary Bengali film directors, as also that of a few non-Bengali directors of parallel and diasporic cinema, with a particular focus on culturally constructed roles for women in the Indian social context. The several films that we view in class, to analyze women’s movements out of such prescribed spaces into more liberating ones, will focus on assault; incest as taboo; the predicaments of the subaltern, the prostitute, and the widow; and the more recent issue of immigration. How do questions we raise in our course intersect with current international discussions of the treatment of women and class in film? Is the work done by women's activist groups changing entrenched perceptions of gender worldwide and, thus, representations of women in film? What is the impact of significant events in Indian colonial and postcolonial history on women? How do key concepts addressed by major Western thinkers such as Karl Marx and Sigmund Freud affect depictions of women in cinema? You will look up websites on cinema and do group oral presentations to engage directly with these questions. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GG, HO
Repeatability: This course may not be repeated for additional credits.

ENG 0975. Honors Transnational Cinema. 3 Credit Hours.
As he recently commented on the sad state of globalized affairs in which “the cosmopolitanism of international filmmaking is matched by the parochialism of American film culture,” New York Times film critic A.O. Scott asked, “The whole world is watching, why aren't Americans?” This course will use Scott's question as a point of departure to investigate the ostensible reasons why Americans, or in our case, Philadelphians, aren't watching “transnational cinema” - international films that gain distribution outside of their country of production, and that depict transnational movements of people, capital, and social values. Are transnational films playing at a theatre near you? Perhaps they are, but if not, why not? Which "foreign films" will use Scott's question as a point of departure to investigate the ostensible reasons why Americans, or in our case, Philadelphians, aren't watching "transnational cinema" - international films that gain distribution outside of their country of production, and that depict transnational movements of people, capital, and social values. Are transnational films playing at a theatre near you? Perhaps they are, but if not, why not? Which "foreign films"?
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GA, HO
Repeatability: This course may not be repeated for additional credits.
ENG 1009. Discovering English. 1 Credit Hour.
Designed for freshmen, sophomores, new transfer students, and those who have not declared a major, this course is an introduction to the English major at Temple. It offers an overview of the field of English Studies and the various options, resources, and opportunities available to majors, with an emphasis on academic and professional planning.
Repeatability: This course may not be repeated for additional credits.

ENG 1022. College Composition (Race). 3 Credit Hours.
Duplicate Courses: English 1022 (R050) may not be taken for credit by students who have successfully completed English 1977 (H090). English 1022 (R050) is the same as 1002 (C050) except that the readings focus on the study of race. NOTE: English 1002 (C050)/1012 (C051) or 1022 (R050) is a prerequisite for Intellectual Heritage 1196 (X051) and 1297 (X052) and any upper-level courses in the College of Liberal Arts. It meets the Core Studies in Race requirement as well as the Core Composition requirement.
Course Attributes: RC
Repeatability: This course may not be repeated for additional credits.

ENG 1111. Introduction to Poetry. 3 Credit Hours.
How to read and enjoy poetry. Students read various kinds of poems written in English such as the sonnet, elegy, dramatic monologue, and narrative, rather than survey the history of English and American poetry chronologically.
Repeatability: This course may not be repeated for additional credits.

ENG 1121. Introduction to Fiction. 3 Credit Hours.
An introduction to various forms of fiction: tales, fables, stories, and novels. Focuses on close reading and analysis to develop an appreciation of creative works of fiction and skills in critical reading. Students who have earned credit for English 1198 will not earn additional credits for this course.
Repeatability: This course may not be repeated for additional credits.

ENG 1131. Introduction to Drama. 3 Credit Hours.
How to read plays and enjoy them in the theater, how to recognize their cultural and human values and how to use principles of dramatic criticism.
Readings from Sophocles through the moderns. NOTE: This course can be used to satisfy the university Core Arts (AR) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: AR
Repeatability: This course may not be repeated for additional credits.

ENG 1141. Introduction to Literature. 3 Credit Hours.
A general introduction to the main types of literature (fiction, poetry, drama) with the goal of teaching the critical enjoyment of a variety of reading.
Discussion of some major ways of addressing works of literature. Students who have earned credit in English 1197 will not earn additional credits for this course. This course is a Core Arts course.
Course Attributes: AR
Repeatability: This course may not be repeated for additional credits.

ENG 1301. American Literature. 3 Credit Hours.
Study of the complex variety of experience in America and how American literature is structured by issues: Native, black, and white; frontier and town; female and male; the individual self and the democratic life; private and public; traditional and radical. How literary works reflect historical, social, political, psychological, and cultural settings as well as specific periods and regional concerns. NOTE: This course can be used to satisfy the university Core American Culture (AC) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: AC
Repeatability: This course may not be repeated for additional credits.

ENG 1800. Topics in English. 2 Credit Hours.
Topics vary each semester. See English advisor for more information. Note: This course is a “free elective”; it does not count toward the major in English or toward the English major with a Concentration in Creative Writing or the Writing Certificate.
Repeatability: This course may be repeated for additional credit.

ENG 1801. Career Seminar. 1 Credit Hour.
This course is designed to provide students with the resources and support to help them make informed decisions about career development. The course aims to provide its members the opportunity to meet faculty members representing the diversity of the major, professionals from the city who were English majors, and recent graduates who can talk about what the major has done for them and how they use it. Thus, one of the primary goals of this course is for English majors to learn how to become professionals and to assess a range of career opportunities.
Repeatability: This course may not be repeated for additional credits.

ENG 1802. Philadelphia Poetry and Fiction Scene. 2 Credit Hours.
In this course, students will read and discuss the writings of visiting writers to Temple's own creative writing program and to other venues including Kelly Writers House, The Painted Bride, and the Free Library of Philadelphia. Attending these readings is a required part of the class. Students will be expected to attend the readings, pose questions when appropriate at the readings, keep a journal, and be prepared for discussion in class. Note: This course is a “free elective”; it does not count toward the major in English or toward the English major with a Concentration in Creative Writing or the Writing Certificate.
Repeatability: This course may not be repeated for additional credits.
ENG 1902. Honors Introduction to Literature. 3 Credit Hours.
A general introduction to the main types of literature (fiction, poetry, drama) with the goal of teaching the critical enjoyment of a variety of reading. Discussion of some major ways of addressing works of literature. NOTE: This course can be used to satisfy the university Core Arts (AR) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: AR, HO
Repeatability: This course may not be repeated for additional credits.

ENG 1903. Honors Introduction to Drama. 3 Credit Hours.
How to read plays and enjoy them in the theater, how to recognize their cultural and human values and how to use principles of dramatic criticism. Readings from Sophocles through the moderns. NOTE: This course can be used to satisfy the university Core Arts (AR) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: AR, HO
Repeatability: This course may not be repeated for additional credits.

ENG 1904. Honors American Literature. 3 Credit Hours.
Study of the complex variety of experience in America and how American literature is structured by issues: Native, black, and white; frontier and town; female and male; the individual self and the democratic life; private and public; traditional and radical. How literary works reflect historical, social, political, psychological, and cultural settings as well as specific periods and regional concerns. NOTE: This course can be used to satisfy the university Core American Culture (AC) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: AC, HO
Repeatability: This course may not be repeated for additional credits.

ENG 1977. Honors Introduction to Literature and Composition. 3 Credit Hours.
An introduction to various forms of literature and to the rhetorical principles in composition. A combination of reading and writing assignments (5000 words minimum). NOTE: Taken together with Intellectual Heritage 1996 (X091) and 1997 (X092) in sequence, this course fulfills the College Composition requirement.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: CO, HO
Repeatability: This course may not be repeated for additional credits.

ENG 1978. Honors Introduction to Literature & Composition - Race Version. 3 Credit Hours.
An introduction to various forms of literature and to the rhetorical principles in composition. A combination of reading and writing assignments (5000 words minimum) that investigate race.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO, RC
Repeatability: This course may not be repeated for additional credits.

ENG 2000. Special Topics. 3 Credit Hours.
Each section of this course explores a carefully defined theme, topic, or type of literature or writing, such as Asian-American literature, editing and publishing a literary magazine, etc. NOTE: Variable content; consult the Undergraduate English Office or English web page for details.

Repeatability: This course may be repeated for additional credit.

ENG 2003. Creative Writing: Poetry. 3 Credit Hours.
Workshop in which students read and discuss one another's material and develop skills as both writers and readers. Students may read selected contemporary American poets, but the main texts will be those produced by members of the class. <p>Note: This course may be taken a maximum of two times for credit, and all attempts will be factored into a student's cumulative GPA. <p>Note: This course is not designated writing intensive.

Repeatability: This course may be repeated for a total of 6 credit.

ENG 2004. Creative Writing: Fiction. 3 Credit Hours.
Workshop in which students read and discuss one another's material and develop skills as both writers and readers. Students may read selected contemporary American works of fiction, but the main texts will be those produced by members of the class. Beginning writers welcome, but thorough grounding in the conventions of grammar, spelling, and punctuation is essential. <p>Note: This course may be taken a maximum of two times for credit, and all attempts will be factored into a student's cumulative GPA. <p>Note: This course is not designated writing intensive.

Repeatability: This course may be repeated for a total of 6 credit.
ENG 2005. Creative Writing: Plays. 3 Credit Hours.
Workshop in which students read and discuss one another's material and develop skills as both writers and readers. Students may consider dramatic and stylistic problems in selected contemporary American plays, but the main texts will be those produced by members of the class. <p>Note: This course may be taken a maximum of two times for credit, and all attempts will be factored into a student's cumulative GPA. <p>Note: This course is not designated writing intensive.
Repeatability: This course may be repeated for a total of 6 credit.

ENG 2006. Introduction to Non-Fiction. 3 Credit Hours.
This course introduces students to the demands of writing articles and stories drawn from observation, reflection, and analysis for a public audience. Genres highlighted in the course may include travel writing, character portraits, public argument, and memoir. Students who have earned credit for English 2496 will not receive credit for this course.
Repeatability: This course may not be repeated for additional credits.

ENG 2007. Writing for Business and Industry. 3 Credit Hours.
Meets the writing needs of people in business and industry and students who plan professional careers. Extensive practice in various forms of writing appropriate to all levels of management, including reports, proposals, memoranda, and letters. Instruction in research techniques and the writing of a formal researched report on a business topic. Job applications, letters of inquiry, and resumés. Students who have earned credit for English 2596 will not earn additional credit for this course.
Repeatability: This course may not be repeated for additional credits.

ENG 2008. Technical Writing. 3 Credit Hours.
For students in engineering and related fields. Covers style, organization, and mechanics of technical papers, with emphasis on special problems that face the technical writer: analyses and descriptions of objects and processes, reports, proposals, business correspondence, and research papers. Students write a number of short reports and one long research paper. By the end of the course, professional standards of accuracy in mechanics and presentation are expected. Some impromptu writing exercises. Note: Students who have earned credit in ENG 2696 will not earn additional credit for this course.
Repeatability: This course may not be repeated for additional credits.

ENG 2009. Writing the Research Essay. 3 Credit Hours.
Designed to improve writing skills in general and teach students to use library and online resources, conduct research, and organize and present the acquired information effectively. Readings may be assigned, but class and conference time are devoted principally to analysis and discussion of research and writing problems. Students write a total of approximately 5000 words in essays and exercises related to a research project. Students who have earned credit for English 2796 will not earn additional credit for English 2009.
Repeatability: This course may not be repeated for additional credits.

ENG 2012. Literature and Criticism. 3 Credit Hours.
An introduction to criticism; some of the main approaches and theories used to interpret texts, with emphasis on modern schools. Such approaches as new criticism, psychoanalysis, social criticism, feminism, poststructuralism, cultural criticism, and new historicism. Readings in theory, with some literary texts as illustration.
Repeatability: This course may not be repeated for additional credits.

ENG 2013. Intellectual Contexts of Literary Study. 3 Credit Hours.
An introduction for majors and prospective majors to the intellectual climate which has shaped and influenced Anglo-American literary studies. Readings may include Nietzsche, Freud, DuBois, Dewey, Eliot, Trilling, deBeauvoir, Arendt, Fanon, Said.
Repeatability: This course may not be repeated for additional credits.

ENG 2014. Myth and Symbol. 3 Credit Hours.
A study of certain literary ideas and patterns that have persisted from ancient times to the present in varying forms. Readings may begin with classical texts in translation, and will include selected works of English and American literature from various periods.
Repeatability: This course may not be repeated for additional credits.

ENG 20097. Introduction to English Studies. 3 Credit Hours.
This course is designed to introduce students to foundational skills needed for English studies and to foster habits of mind needed to analyze and write about the complex texts typically assigned throughout the English major. These skills include: 1) development of close reading skills; 2) knowledge of the methods of literary interpretation; 3) ability to understand and discuss the contradictions, complexities, and ambiguities of linguistically dense texts; 4) ability to discuss the relationship between form and meaning; 5) development of writing skills needed to succeed as an English major, including the ability to generate paper topics independently, the ability to revise substantively, and the ability to sustain a critical argument over 8 to 10 pages. NOTE: Required of new English majors beginning in Fall 2002, to be taken in the first or second semester after declaring the major; strongly recommended for other English majors as well.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

ENG 2111. The Short Story. 3 Credit Hours.
A reading of works by major short story writers, European and American, classic, modernist, and experimental, considering their form and language, and the way in which they refract experience rather differently from other literary kinds.
Repeatability: This course may not be repeated for additional credits.
ENG 2110. Children's Literature and Folklore. 3 Credit Hours.
A study of the literature - the folk, fairy, court, and religious tales, the poetry and drama - either adapted to or written for children. How this literature, more influential than the Bible, forms and conveys cultural and aesthetic values, language, manners, political, social, and spiritual ideals. Emphasis on the genre as it emerged in the 18th century through the Victorian period in Europe and America.
Repeatability: This course may not be repeated for additional credits.

ENG 2112. Popular Fiction. 3 Credit Hours.
Readings in recent popular fiction: approximately one novel a week or the equivalent. Focus may be on one or more genres, such as science fiction, detective novels, and the like. NOTE: Variable content; consult the Undergraduate English Office or English web page for details.
Repeatability: This course may not be repeated for additional credits.

ENG 2114. Social Issues in Literature. 3 Credit Hours.
Specific social, cultural, and/or historical issues as represented in imaginative literature. Such topics as the racial interface of American fiction, social class in British and American literature, and the like. Note: Variable content; consult the Undergraduate English Office or English web page for details.
Repeatability: This course may be taken a maximum of two times for credit, and all attempts will be factored into a student's cumulative GPA.

ENG 2115. Young Adult Literature. 3 Credit Hours.
There has been a lot of debate recently about whether adults should be embarrassed to read books written for teenagers. But when S.E. Hinton published The Outsiders in 1967—by some accounts the first young-adult novel—the "teenager" was still a relatively new invention. Television, film, and advertising had a defined culture, and the literary market followed suit: young adult literature, in other words, helped create its own audience. This course will therefore consider the complex role that young adult literature has played over the past fifty years in shaping what we now know as "youth culture." Readings will include novels by S.E. Hinton, Walter Dean Myers, Robert Cormier, Robert Lipsyte, Chris Crutcher, K.L. Going, and John Green, alongside essays by theorists who work on teen culture and subcultures.
Repeatability: This course may not be repeated for additional credits.

ENG 2116. Disability and Literature. 3 Credit Hours.
From ancient Greek drama to contemporary superhero comics, from fiction to poetry to memoir to TV scripts, disability is everywhere in literature. But how does literature use disability and how do disabled people use literature? This course brings a Disability Studies perspective to a wide range of literature and considers how disability and its representations intersect with other social identities such as race, gender, nation, and class.
Repeatability: This course may not be repeated for additional credits.

ENG 2160. Topics in Women's Literature. 3 Credit Hours.
Variable content course which examines the representation of women and the literature created by English, American, or other countries' women writers. This course has been offered with many specific topics combining biography and literary texts; neglected masterpieces of American literature by black and white women; woman as hero/heroine; the questions of love, marriage, and vocation for women from 1850 to 1940 and other thematic motifs of 20th and 21st century women's literature. Note: Formerly known as Women in Literature WMST 2197 and ENG 2197. Students may earn up to 6 credits of coursework taken from the following courses: ENG 2160, ENG 2197, WMST 2160, WMST 2197.
Repeatability: This course may be repeated for a total of 6 credit.

ENG 2201. Survey of English Literature: Beginnings to 1660. 3 Credit Hours.
Study of major texts, authors, and genres of British literature from the Middle Ages and the Renaissance in their historical and social settings. Emphasizes close textual analysis along with broad literary and cultural themes. Readings may include Beowulf, Chaucer, and Sir Gawain; Sidney, Jonson, Lady Mary Wroth, the Metaphysical Poets (Donne, Marvell, and others), and Katherine Philips, as well as Shakespeare and Milton. NOTE: Required for all English majors. Should be taken before most upper-level courses.
Repeatability: This course may not be repeated for additional credits.

ENG 2202. Survey of English Literature: 1660-1900. 3 Credit Hours.
A continuation of English 2201 (0114). A study of major texts, authors, and genres of British literature from the Restoration through the 18th century, romantic, and Victorian periods in their historical and social settings. Emphasizes close textual analysis along with broad literary and cultural themes. Readings may include Dryden, Behn, Pope, Johnson, Blake, Wordsworth, Keats, Hemans, E. B. Browning, R. Browning, Dickens, Arnold, and Wilde. NOTE: Required for all English majors. Should be taken before most upper-level courses.
Repeatability: This course may not be repeated for additional credits.

ENG 2206. The City in Literature. 3 Credit Hours.
How have cities been represented in texts over time? How do the conventions of literary genres shape our understanding of these texts? How do these mappings of the city differ from our conventional pictures of it? These are some of the questions we'll address by reading, talking about, and writing about these versions of textual map-making. The class may include community-based learning; by teaching and learning from fellow Philadelphians, we will discover the gaps and forge links between our academic work and our roles as citizens.
Repeatability: This course may not be repeated for additional credits.

ENG 2211. Arthurian Literature. 3 Credit Hours.
An exploration of the mythological and historical aspects of the legends surrounding King Arthur and the Round Table, concentrating on the chief British and continental works involving such subjects as Arthur, Merlin, and the Lady of the Lake, Lancelot and Guenevere, Tristan and Isolde, Gawain, Perceval, and the Grail.
Repeatability: This course may not be repeated for additional credits.
ENG 2221. Shakespeare. 3 Credit Hours.
A study of major plays of Shakespeare, usually chosen from among the comedies, tragedies, and histories. Teaches appropriate principles of literary analysis, with some attention to social and intellectual background and Elizabethan stage techniques. May focus primarily on the plays as literature, or may study them as performed texts. Note: Formerly known as Shakespeare (Writing Intensive) ENG 2297. Students may receive credit for only one of the following courses: ENG 2297 or ENG 2221.
Repeatability: This course may not be repeated for additional credits.

ENG 2301. Survey of American Literature I. 3 Credit Hours.
A survey of American literature from the colonial and federalist periods and the New England renaissance of the mid-19th century in its historical and social settings. Emphasizes close textual analysis along with broad literary and cultural themes. Literary forms include diaries, letters, sermons, poetry, fiction, travel narratives, and historical chronicles. Authors such as Bradstreet, Taylor, Edwards, Franklin, Paine, Jefferson, Wheatley, Freneau, Irving, Bryant, Hawthorne, Melville, Poe, Emerson, Thoreau, and Emily Dickinson. NOTE: Required for all English majors. Should be taken before most upper-level courses.
Repeatability: This course may not be repeated for additional credits.

ENG 2302. Survey of American Literature II. 3 Credit Hours.
A survey of American literature from the late 19th century to the present in its historical and social settings. Emphasizes close textual analysis along with broad literary and cultural themes. Broad literary movements, such as Realism, Naturalism, Modernism, and Postmodernism; historical and cultural contexts, e.g., the Harlem Renaissance, the Great Depression, the Vietnam War; issues of gender construction, racial and ethnic consciousness, the growth of cities, and technology. Authors may include: Chopin, Wharton, James, Twain, Norris; Du Bois, Dunbar, Hughes, Hurston; Frost, Hemingway, Fitzgerald, Pound, Eliot, Millay, Loy; Ginsberg, Baraka, Sanchez; Roth, Mukherjee, Alexie. NOTE: Required for all English majors. Should be taken before most upper-level courses.
Repeatability: This course may not be repeated for additional credits.

ENG 2341. American Playwrights. 3 Credit Hours.
A study of American playwrights from O'Neill to the present. Principles of dramatic analysis, the distinctively American qualities of the plays and their debt to modern European drama. Writers may include Williams, Miller, Hellman, Hanksberry, Baraka, Fuller, Wilson, Mamet, Rabe, Fornes, Shepard.
Repeatability: This course may not be repeated for additional credits.

ENG 2401. African-American Literature I. 3 Credit Hours.
A survey of African-American literature from its beginnings to the early 20th century--poetry, prose, slave narratives, and fiction--including the works of authors such as Phyllis Wheatley, Frederick Douglass, W. W. Brown, Harriet Wilson, Frances E. W. Harper, Charles Chesnutt, B.T. Washington, J.W. Johnson, and W.E.B. DuBois. An examination of racial consciousness as a theme rooted in social and historical developments, with special emphasis on national, cultural, and racial identity, color, caste, oppression, resistance, and other concepts related to race and racism emerging in key texts of the period. NOTE: This course can be used to satisfy the university Core Studies in Race (RS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: RS
Repeatability: This course may not be repeated for additional credits.

ENG 2402. African-American Literature II. 3 Credit Hours.
A survey of African-American literature from 1915 to the present, including poetry, prose, fiction, and drama. Analysis of developments in racial consciousness, from "race pride" to the Black Aesthetic and the influences on literature brought about by interracial conflicts, social and historical concepts such as assimilation and integration, and changing notions of culture. Authors such as Toomer, Hughes, McKay, Hurston, Brown, Larsen, Wright, Baldwin, Hanksberry, Ellison, Baraka, Morrison, and others. NOTE: This course can be used to satisfy the university Core Studies in Race (RS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: RS
Repeatability: This course may not be repeated for additional credits.

ENG 2511. Modern Poetry. 3 Credit Hours.
An introduction to 20th century poetry which views Modernist poetry in light of postmodern perspectives. Topics may include innovation, formalism, contemporary alternatives to Modernism, new directions in post-War and postmodern poetry.
Repeatability: This course may not be repeated for additional credits.

ENG 2512. The Modern Novel. 3 Credit Hours.
An introduction to Modernism in the work of several major novelists, such as James, Conrad, Lawrence, Joyce, Faulkner, Proust, Mann, and Kafka. Emphasis on social and intellectual background, literary methods, and psychological, philosophical and political implications of Modernism.
Repeatability: This course may not be repeated for additional credits.

ENG 2513. Modern Drama. 3 Credit Hours.
A study of major works of representative late 19th century and early 20th century playwrights, such as Ibsen, Strindberg, Chekhov, Pirandello, O'Neill, Shaw. Emphasis on social and intellectual background, dramatic art, and the role of theater in social controversy.
Repeatability: This course may not be repeated for additional credits.
ENG 2521. Contemporary Literature. 3 Credit Hours.
An examination of important trends through selected literary works of the late 20th century. Emphasis on American fiction, with a sampling of works from other countries and genres. Authors may include Bellow, Coover, Pynchon, DeLillo, Morrison, Hughes, Calvino, Garcia Marquez.
Repeatability: This course may not be repeated for additional credits.

ENG 2601. Introduction to Postcolonial Literatures. 3 Credit Hours.
An introduction to modern world literatures in English (or in translation) within the context of colonialism, anti-colonial resistance, and postcolonial movements. Content and geographical focus vary each semester: a sample of authors to be studied might include Clarice Lispector, Gabriel Garcia Marquez, Assia Djebar, Ama Ata Aidoo, Maryse Conde, Zoe Valdes, Derek Walcott, Chinua Achebe, Anita Desai, Salman Rushdie, Michael Ondaatje, among others. The course can be repeated for credit with different topics. Students should consult the department's "Announcement of Classes" for current offerings before registering in the class.
Repeatability: This course may not be repeated for additional credits.

ENG 2696. Technical Writing. 3 Credit Hours.
For students in engineering and related fields. Covers style, organization, and mechanics of technical papers, with emphasis on special problems that face the technical writer: analyses and descriptions of objects and processes, reports, proposals, business correspondence, and research papers. Students write a number of short reports and one long research paper. By the end of the course, professional standards of accuracy in mechanics and presentation are expected. Some impromptu writing exercises.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

ENG 2702. Film History I: 1890-1945. 3 Credit Hours.
This course introduces students to the major periods and technological developments in film history from its origins in various 19th century technologies and amusements to the end of World War II. The course will address some of the fundamental phases and international movements in cinema history, focusing on film as a technology, institution, and art form. A range of genres and national cinemas representative of the aesthetic and economic contexts of global media cultures will be examined. The course will be framed by a variety of critical issues in film historiography.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: ENG 2097|Minimum Grade of C-|May not be taken concurrently.

ENG 2703. Film History II: 1946-Present. 3 Credit Hours.
This course introduces students to the major periods and technological developments in film history from the end of World War II to the present. The course will address some of the fundamental phases and international movements in cinema history, focusing on film as a technology, institution, and art form. A range of genres and national cinemas representative of the aesthetic and economic contexts of global media cultures will be examined. The course will be framed by a variety of critical issues in film historiography.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: ENG 2097|Minimum Grade of C-|May not be taken concurrently.

ENG 2710. Special Topics in Film Studies I. 4 Credit Hours.
Topics alternate from semester to semester.
Repeatability: This course may be repeated for additional credit.

ENG 2711. Introduction to Cinema Studies. 3 Credit Hours.
This course introduces students to the fundamentals of film analysis. Students will learn about the construction of film narrative, as well as about formal elements of film, including principles of editing, mise-en-scene, and sound. The course also provides an introduction to issues in film studies including the meaning of film genre, the role of the film star, and authorship in the cinema. The course will focus on narrative feature films from the Classical Hollywood cinema, but will include attention to nonfiction practice as well as avant-garde European and Soviet alternatives to Hollywood. Films discussed include works by Hitchcock, Porter, Griffith, Vertov, Lang, Renoir, Hawks, Deren, and Welles. NOTE: In conjunction with English 2297 (W133), may be offered as Shakespeare in Film.
Repeatability: This course may not be repeated for additional credits.

ENG 2712. International Film. 3 Credit Hours.
An examination, through masterpieces of world cinema, of international film cultures and national cinemas, with emphasis on the cultural, sociopolitical, and theoretical contexts. Offers a global context for film and other arts. NOTE: Variable content; may be given as post-World War II European film, French film, Third World film; consult the Undergraduate English Office or English web page for details.
Repeatability: This course may not be repeated for additional credits.

ENG 2713. Art of the Film. 3 Credit Hours.
An exploration of the black presence in American films from the racist portrayals in "The Birth of a Nation," the Stepin Fetchit films, and "Gone with the Wind," through the blaxploitation films like "Shaft" and "Superfly," culminating in recent black cinema from directors such as Melvin Van Peebles, Spike Lee and John Singleton. NOTE: This course can be used to satisfy the university Core Studies in Race (RS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: RS
Repeatability: This course may not be repeated for additional credits.
ENG 2720. Special Topics in Film Studies II. 4 Credit Hours.
Topics alternate from semester to semester.
Repeatability: This course may be repeated for additional credit.

ENG 2821. Introduction to Linguistics. 3 Credit Hours.
The nature and structure of human language; the universal properties of language, how languages resemble each other, how children learn languages, how sound and meaning are related to each other, how the mind processes language, and how geographic and social factors affect language. Attention to the scientific methods linguists use to test hypotheses. NOTE: Not recommended for students who have had Anthropology 2507 (0127) and Communication Sciences 1108 (0108), or the equivalent.
Repeatability: This course may not be repeated for additional credits.

ENG 2822. Language and Race. 3 Credit Hours.
An investigation of language and race in order to evaluate accurately and objectively many common beliefs about the connections between the two. How all languages systematically organize sounds, grammar, and meanings, with a special emphasis on the structure of African American English; how particular ways of speaking may or may not affect one's thought patterns or social identity; public policy issues involving language and race. NOTE: This course can be used to satisfy the university Core Studies in Race (RS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: RS
Repeatability: This course may not be repeated for additional credits.

ENG 2831. Literacy and Society. 3 Credit Hours.
An exploration of the social context for reading and writing: how concepts of literacy can reinforce, elaborate, or threaten established social orders. Experiential study of how the written word is used; self-observation of our own writing practices and observation of others engaged in puzzling out the world through books, letters, pamphlets, flyers, newspapers, textbooks, billboards, signs, and labels. The purpose is to see literacy in action, see written documents shaping lives and see lives shaping written language. Reading about literacy, and a service or experiential component. Students who earned credit for English 2897 will not earn additional credits for this course.
Repeatability: This course may not be repeated for additional credits.

ENG 2832. Texts/Cultures of Science. 3 Credit Hours.
How scientists write, and how their writing is read. Students with interests in the natural and social sciences are welcome, but no special background knowledge or expertise is required. Class work will include readings of scientific texts, including popularizations and science fiction; analysis of new forms such as scientific web sites; and possibly visits to science museums and workshops. The aim is to learn something about scientific literacy, and why so few people think they have it. Students who have earned credit for English 2898 will not earn additional credit for this course.
Repeatability: This course may not be repeated for additional credits.

ENG 2900. Honors Special Topics. 3 Credit Hours.
Continuity in Community: Poetry and Art Since 1950. This course is a hybrid: a study of the arts and community as well as a poetry writing workshop. As such, the class is intended for students interested in creative writing, art, and music. Baseline readings will most likely include Daniel Kane's All Poets Welcome: the Lower East Side Poetry Scene in the 1960's, which will be used to survey a sampling of arts groups/movements since 1950 such as Black Mountain, the San Francisco Renaissance, the New York School, and the Black Arts Movement. The poetry workshop will entail in-class creative and critical writing exercises. Student work will also be presented to the class for commentary and critique.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.

ENG 2901. Intermediate Honors: Developing Advanced Literacy in College. 3 Credit Hours.
Although a variable content course, it often serves to prepare students to be peer tutors for first-year students in Temple's basic composition courses. As part of the course requirements, students are required to keep journals, deliver reports, and write research papers. NOTE: Variable content; consult the Undergraduate English Office or English web page for details.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.

ENG 2903. Honors Creative Writing: Plays. 3 Credit Hours.
Workshop in which students read and discuss one another's material and develop skills as both writers and readers. Students may consider dramatic and stylistic problems in selected contemporary American plays, but the main texts will be those produced by members of the class.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.
ENG 3001. History of Criticism. 3 Credit Hours.
A survey of literary criticism from Plato to the mid-20th century. Key questions in literary theory: What is literature compared to other forms of discourse? Does literature mimic or create? Does literary value adhere to or challenge standards of philosophical or empirical truth? What is the source of literary creation? How does literary value shape social change? These and other questions are addressed through readings in literary and theoretical texts.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ENG 2097|Minimum Grade of C-|Must not be taken concurrently.

ENG 3002. Contemporary Criticism. 3 Credit Hours.
Comparative study of literary theories from the 1960s to the present. Survey of several contemporary critical schools, including deconstructionist, neo-psychological, neo-Marxist, new historical, feminist, sociological, and aesthetic criticism.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ENG 2097|Minimum Grade of C-|Must not be taken concurrently.

ENG 3003. Advanced Creative Writing: Poetry. 3 Credit Hours.
Workshop intended to help advanced writers produce, revise, and critique poetry. The premise is that in order to learn to make poems, one needs to learn to read like a poet; in addition to producing original work, therefore, students may read and discuss work by certain contemporary poets. <p>Note: This course may be taken a maximum of two times for credit, and all attempts will be factored into a student's cumulative GPA. <p>Note: This course is not designated writing intensive.
Repeatability: This course may be repeated for a total of 6 credit
Pre-requisites:
ENG 2003|Minimum Grade of C-|Must not be taken concurrently.

ENG 3004. Advanced Creative Writing: Fiction. 3 Credit Hours.
Workshop intended to help advanced writers produce, revise and critique fiction. In addition to producing original work, students may read and discuss certain contemporary writers and theories of fiction. <p>Note: This course may be taken a maximum of two times for credit, and all attempts will be factored into a student's cumulative GPA. <p>Note: This course is not designated writing intensive.
Repeatability: This course may be repeated for a total of 6 credit
Pre-requisites:
ENG 2004|Minimum Grade of C-|Must not be taken concurrently.

ENG 3005. Advanced Creative Writing: Plays. 3 Credit Hours.
Workshop intended to help advanced writers produce, revise, and critique plays. In addition to writing original work, students may read and discuss work by certain contemporary playwrights. <p>Note: This course may be taken a maximum of two times for credit, and all attempts will be factored into a student's cumulative GPA. <p>Note: This course is not designated writing intensive.
Repeatability: This course may be repeated for a total of 6 credit
Pre-requisites:
ENG 2005|Minimum Grade of C-|Must not be taken concurrently.

ENG 3010. Special Topics I. 3 Credit Hours.
Advanced study in a specific area, usually concentrating on pre-1900 works. NOTE: Variable content; consult undergraduate office or English web page for details.
Repeatability: This course may be repeated for additional credit
Pre-requisites:
ENG 2097|Minimum Grade of C-|Must not be taken concurrently.

ENG 3020. Special Topics II. 3 Credit Hours.
Advanced study in a specific area, usually concentrating on post-1900 works. NOTE: Variable content; consult Undergraduate Office or English web page for details.
Repeatability: This course may be repeated for additional credit
Pre-requisites:
ENG 2097|Minimum Grade of C-|Must not be taken concurrently.

ENG 3082. Independent Study. 1 to 3 Credit Hour.
Allows students in their junior and senior year to pursue serious independent research in a subject too specialized or too advanced to appear as a regular course offering.
Repeatability: This course may be repeated for additional credit
Pre-requisites:
ENG 2097|Minimum Grade of C-|Must not be taken concurrently.
ENG 3085. Career Internship. 1 to 12 Credit Hour.
On-the-job training in positions in business, publishing, communications, or cultural institutions for juniors and seniors. NOTE: One semester may be counted toward the English major. For additional information consult Prof. P. Robison, 215E, TUCC, prob@temple.edu.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
ENG 2097|Minimum Grade of C-|May not be taken concurrently.

ENG 3097. Feminist Theory. 3 Credit Hours.
Readings in contemporary theorists who describe how the values of a culture are encoded in its language and who analyze the difficulty of escaping the prison house of language. How gender roles are created in and enforced by our symbol systems; how specific discourses change, how those changes can be facilitated, and how a new discourse is then read. Along with theoretical readings, some consideration of feminist applications of these strategies in politics, literature, music, and film.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ENG 2097|Minimum Grade of C-|May not be taken concurrently.

ENG 3101. Themes and Genres in Women's Literature. 3 Credit Hours.
In-depth study of ideas, languages, and cultural stances in literature written by women. Students who have earned credit for English 3197 will not earn additional credit for this course. NOTE: Variable content; consult Undergraduate English Office or English web page for details.
Repeatability: This course may not be repeated for additional credits.

ENG 3111. Italian Renaissance. 3 Credit Hours.
This course covers major writers and works of the Italian Middle Ages and Renaissance: Dante, Petrarch, Boccaccio, Machiavelli, and Ariosto. Focus is placed on the rebirth of classical values and ideas, and their new forms of expression, which shall be known as the Renaissance. Due attention is given to such themes as the new concept of art and the new image of the artist through the study of Michelangelo's poetry and Cellini's Autobiography, as well as the concept of a united Italy, idealized from Dante through Machiavelli, but never historically achieved.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ENG 2097|Minimum Grade of C-|May not be taken concurrently.

ENG 3112. Masterpieces of European Drama. 3 Credit Hours.
A reading and analysis of a wide range of continental European drama. Representative works from such great ages of drama as classical Greek and Roman, French neoclassic, and modern. Readings may include plays by Aeschylus, Euripides, Terence, Calderon, Racine, Moliere, Goethe, Ibsen, Chekhov, Brecht, and Beckett.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ENG 2097|Minimum Grade of C-|May not be taken concurrently.

ENG 3211. Old English. 3 Credit Hours.
An introduction to the language, literature, and culture of Anglo-Saxon England. Short poems, excerpts from sermons, Bede, the Bible, and Beowulf. All works read in the original Old English. NOTE: No previous knowledge of Old English necessary.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ENG 2097|Minimum Grade of C-|May not be taken concurrently.

ENG 3212. Literature of the Medieval Period. 3 Credit Hours.
Literature of the Middle English period, as well as the relation of the literature to the traditions of medieval literature throughout Western Europe. Works may include The Owl and the Nightingale, Pearl, Piers Plowman, Sir Gawain and the Green Knight, and selections from the mystery and morality plays, all usually read in the original in well-annotated texts. NOTE: No previous knowledge of Middle English necessary.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ENG 2097|Minimum Grade of C-|May not be taken concurrently.

ENG 3213. Chaucer. 3 Credit Hours.
This study of the first major poet of the English tradition will focus on the theoretical as well as practical problems he poses for the modern reader. Readings include early dream visions and the Canterbury Tales and selections from Chaucer's sources and contemporaries to help students understand literary and social contexts. NOTE: No previous experience with Middle English required.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ENG 2097|Minimum Grade of C-|May not be taken concurrently.
ENG 3221. Advanced Shakespeare I. 3 Credit Hours.
In-depth readings of selected major plays, usually including histories, comedies, and tragedies. Close textual analysis, social context, and philosophical background. NOTE: Assumes completion of at least one 2000-level literature course.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ENG 2097|Minimum Grade of C-|May not be taken concurrently.

ENG 3222. Advanced Shakespeare II. 3 Credit Hours.
Readings in a small number of plays by Shakespeare which have presented special critical problems to scholars, general readers, and performers alike. How such problems define critical perspectives on the plays, and how some current critical modes of reading Shakespeare address these texts. Reading may include such plays as Troilus and Cressida, Measure for Measure, King Lear, Antony and Cleopatra, The Tempest, Cymbeline.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ENG 2097|Minimum Grade of C-|May not be taken concurrently.

ENG 3223. Elizabethan and Jacobean Drama. 3 Credit Hours.
Study of the extraordinarily talented and productive group of playwrights of the late 16th and early 17th centuries; such dramatists as Kyd, Marlowe, Jonson, Middleton, Webster, Ford, Dekker. Some attention to the plays as performances, and some consideration of social and intellectual contexts of the plays.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ENG 2097|Minimum Grade of C-|May not be taken concurrently.

ENG 3224. Renaissance Writers. 3 Credit Hours.
Studies in Tudor and Stuart literature. May focus on a single author or group of authors or be organized generically or thematically. Possible topics include Spenser, Elizabethan courtly literature, lyric, pastoral, and prose fiction. NOTE: Variable content; see the Undergraduate English Office or English web page for details.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ENG 2097|Minimum Grade of C-|May not be taken concurrently.

ENG 3225. Milton. 3 Credit Hours.
A study of John Milton's poetry and prose in its cultural and historical context. The course will begin with shorter poems, such as "Lycidas," and spend the majority of the semester on "Paradise Lost." Selected prose will highlight Milton's views on religion, divorce, and censorship.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ENG 2097|Minimum Grade of C-|May not be taken concurrently.

ENG 3231. Restoration and 18th Century Literature. 3 Credit Hours.
Readings in the major texts, authors, genres, and cultural institutions of the period, 1660-1800. Classes may focus on more specialized time periods (like The Restoration) or topics (colonialism and literature) or genres (forms of comedy) or range more widely. Authors may include: Behn, Milton, Dryden, Rochester, Defoe, Swift, Finch, Pope, Addison, Steele, Montagu, Fielding, Richardson, Johnson, Boswell, Collins, Gray, and Burns.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ENG 2097|Minimum Grade of C-|May not be taken concurrently.

ENG 3232. English Novel to 1832. 3 Credit Hours.
A study of the complex emergence of the novel as a genre in English. Begins in the latter part of the 17th century and early 18th century with authors such as Bunyan and Behn and Defoe and then considers various foundational and revisionary texts, by authors including Richardson, Fielding, Lennox, Burney, and Sterne. Concludes with figures key to the Gothic, the novel of manners, and the historical novel, such as Radcliffe, Austen, and Scott. Key topics may include the relationship of the novel to changing understandings of fact and fiction, to shifting ideas of gender roles, to colonial expansion, and contests over national identity major novelists of the 18th century, beginning with authors Defoe, extending through Richardson, Fielding, Burney, and Sterne, and ending with Mary Shelley, Walter Scott, and Jane Austen. Emphasis on the social and cultural contexts, narrative form and style, and factors leading to the emergence of the novel as a genre in English.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ENG 2097|Minimum Grade of C-|May not be taken concurrently.

ENG 3234. English Romanticism. 3 Credit Hours.
First and second generation romantics, especially Blake, Wordsworth, Coleridge, Byron, Shelley, and Keats; their literary, historical, social, and cultural milieu; and the ideas and issues that contributed to shaping their imaginations and their work.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ENG 2097|Minimum Grade of C-|May not be taken concurrently.
ENG 3251. Victorian Literature. 3 Credit Hours.
An introduction to the range of Victorian literature, including writers such as Alfred Tennyson, Robert Browning, Elizabeth Barrett Browning, Thomas Carlyle, the Brontës, Charles Dickens, George Eliot, Matthew Arnold, Christina Rossetti, Walter Pater, Oscar Wilde, and Thomas Hardy.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ENG 2097|Minimum Grade of C-|May not be taken concurrently.

ENG 3252. Victorian Novel. 3 Credit Hours.
A study of works by Bronte, Dickens, Thackeray, Trollope, Eliot, Meredith, and Hardy, among others. These writers wrote novels intended to entertain and instruct, and were not above appealing to laughter and tears or causing their readers to share their moral fervor or indignation. The goal is an understanding of the social and artistic significance of these works in light of the world in which they emerged.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ENG 2097|Minimum Grade of C-|May not be taken concurrently.

ENG 3261. Modern British Fiction. 3 Credit Hours.
A reading of great novels from the first quarter of the 20th century, the high point of English modernism. May include Conrad's Lord Jim, Woolf's To The Lighthouse, and Joyce's Ulysses. A reevaluation of the achievement of modernism from the perspective of the postmodern age, with the focus on kinds of modernism, kinds of irony, the reinvention of narrative form, and the works' social and moral implications.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ENG 2097|Minimum Grade of C-|May not be taken concurrently.

ENG 3262. Irish Literature. 3 Credit Hours.
A study of selected modern Irish writers, emphasizing close reading, psychological concepts, and cultural history. Writers may include Wilde, Shaw, Yeats, Joyce, Beckett, Kinsella, and Heaney.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ENG 2097|Minimum Grade of C-|May not be taken concurrently.

ENG 3321. American Romanticism. 3 Credit Hours.
A study of the development of a distinctively American character in American literature from 1830 to 1865. Traces the literary expression of America's growing consciousness of its own identity; the literary romanticism of Poe and Emerson, the darker pessimism of Hawthorne and Melville, the affirmative optimism of Thoreau and Whitman; technical innovations in poetry, including that of Emily Dickinson.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ENG 2097|Minimum Grade of C-|May not be taken concurrently.

ENG 3322. American Realism and Naturalism. 3 Credit Hours.
A study of the diverse styles, subject matters, and theories of prose fiction in the late 19th century in terms of their challenge to and/or incorporation of earlier prose styles. Included will be the early realists (Chesnutt, Davis, Cahan, Sedgwick), later realists (James, Jewett, Howells, Garland, Chopin, Cable), and the naturalists (Crane, Norris, Wharton, Frederic, Dreiser).
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ENG 2097|Minimum Grade of C-|May not be taken concurrently.

ENG 3323. 19th Century American Fiction. 3 Credit Hours.
A study of the development of American fiction from the antebellum period through the end of the century: Hawthorne, Melville, James, and others.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ENG 2097|Minimum Grade of C-|May not be taken concurrently.

ENG 3331. Modern American Fiction. 3 Credit Hours.
Technique and subject -- the how and the what -- of a group of American novels from the first half of the 20th century, by such writers as Stein, Anderson, Hemingway, Fitzgerald, Faulkner, Hurston, West, and H. Roth.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ENG 2097|Minimum Grade of C-|May not be taken concurrently.

ENG 3332. Contemporary American Fiction. 3 Credit Hours.
A reading and analysis of representative works of late 20th century fiction, some realistic, some experimental, some mid-way between, leading to a sense of the options available to a writer now. Texts may include Bellow, Updike, Barth, Vonnegut, and such recent writers as Morrison, Auster, Mukherjee, Cisneros, Alexie.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ENG 2097|Minimum Grade of C-|May not be taken concurrently.
ENG 3341. American Literature and Society. 3 Credit Hours.
A study of social issues as explored in U.S. literature and the social context in which literature is produced. May be offered as The Arts in America, Literature of Slavery, etc. Note: Variable content; consult the English Department's web page for details. <p>Note: This course may be taken a maximum of two times for credit, and all attempts will be factored into a student's cumulative GPA.
Repeatability: This course may be repeated for a total of 6 credit.
Pre-requisites:
ENG 2097|Minimum Grade of C-|May not be taken concurrently.

ENG 3401. Intermediate Writing: Non-Fiction. 3 Credit Hours.
A further exploration of creative and observational non-fiction for a non-academic audience. Classroom discussions will focus on published pieces as well as workshop considerations of student writing.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ENG 2097|Minimum Grade of C-|May not be taken concurrently.

ENG 3411. Studies in African-American Literary Genre. 3 Credit Hours.
This variable content course will explore traditions, themes, or periods in African-American literature by foregrounding issues of genre. The focus may be on a single genre or set of generic conventions, such as drama, the protest novel, biography and letters, or the slave narrative, or on such topics as the influence of oral culture or the figure of testimony in diverse literary genres.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ENG 2097|Minimum Grade of C-|May not be taken concurrently.

ENG 3412. The Harlem Renaissance. 3 Credit Hours.
The Harlem Renaissance represents the first period in Black productivity in all of the arts. The purpose of this course is to explore the themes, genres, and authors that define the literary arena of the Harlem Renaissance. This course will include the ideas and works of such figures as W.E.B. DuBois, Jean Toomer, Langston Hughes, Claude McKay and Zora Neale Hurston.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ENG 2097|Minimum Grade of C-|May not be taken concurrently.

ENG 3413. African-American Literary Criticism. 3 Credit Hours.
This course is designed to give students a basic background in the foundation of African-American literary criticism. While the late 1970s mark the beginning of an exodus of Black academicians trained as literary critics, most of the critics of African-American literature before the 1970s were creative writers, such as W.E.B. DuBois, Alain Locke and Langston Hughes. This course will begin by exploring the fiction, poetry and critical essays by these and other writers. This work will function as a background for an examination of the works of poets from the Black Arts Movement. We shall also give attention to Black feminist scholarship, and the course will end with an analysis of African-American post-structuralist literary theorists such as Henry Lois Gates, Jr.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ENG 2097|Minimum Grade of C-|May not be taken concurrently.

ENG 3414. Blacks/Literature/Drama/Media. 3 Credit Hours.
An exploration of representations of racial difference in the fiction and drama of African-American and European-American authors. Primary texts will be read in conjunction with screenings of films, to examine the role of visual media in shaping perceptions. How image-making in theater, film, and television has influenced the way racial difference is characterized in literature, with an emphasis on the relationship between criticism and creative process. NOTE: This course can be used to satisfy the university Core Studies in Race (RS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: RS
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ENG 2097|Minimum Grade of C-|May not be taken concurrently.

ENG 3511. Modern British and American Poetry. 3 Credit Hours.
A study of the major works and writers of the first half of the 20th century. Such poets as Yeats, Eliot, Stein, Williams, Pound, examined in their social and political contexts, and with reference to their contributions to the development of Modernism.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ENG 2097|Minimum Grade of C-|May not be taken concurrently.
ENG 3512. Issues in Modern Literature. 3 Credit Hours.
A study of selected literary, cultural, and political issues as they affect recent writing in diverse cultures and nations; offered variously as Postcolonial Literature, Resistance Literature, Literature of Exile, and the like. Note: Consult the Undergraduate English Office or English web page for details.

Repeatability: This course may be taken a maximum of two times for credit, and all attempts will be factored into a student's cumulative GPA.

Pre-requisites:
ENG 2097|Minimum Grade of C-|May not be taken concurrently.

ENG 3513. Modern World Fiction. 3 Credit Hours.
A study of significant literary works and developments in fiction in the modern period. Such writers as Flaubert, Joyce, Mann, Proust, and Kafka; or, in the last half of the 20th century, Garcia Marquez, Borges, Saramago, Walcott, Mahfouz, Soyinka, and Grass.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
ENG 2097|Minimum Grade of C-|May not be taken concurrently.

ENG 3521. Contemporary Poetry. 3 Credit Hours.
Exploration of the major issues in world poetry of the late 20th century. Theories and practice of postmodernism; the relation of poetry to other arts; the cultural contexts in which poetry is produced.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
ENG 2097|Minimum Grade of C-|May not be taken concurrently.

ENG 3522. Contemporary World Fiction in English. 3 Credit Hours.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
ENG 2097|Minimum Grade of C-|May not be taken concurrently.

ENG 3523. Contemporary Drama. 3 Credit Hours.
A study of European and American drama in the latter part of the 20th century, with equal attention to dramatic and theatrical values. May include Wilder, Miller, Williams, Ionesco, Genet, Pinter, Brecht, Duerrenmatt, Shepard, and Mamet.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
ENG 2097|Minimum Grade of C-|May not be taken concurrently.

ENG 3524. Advanced Contemporary Literature. 3 Credit Hours.
An examination of important developments in late 20th century literature. May be offered as Post-Modernist literature (such figures as Barth, Pynchon, Borges, Robbe-Grillet, Butor, Duras, Gombrowicz, Kundera, Garcia Marquez, Cooper, Winterson) or as Magic Realism (Garcia Marquez, Calvino, Okri, Rushdie). Note: Variable content; consult the Undergraduate English Office or English web page for details.

Repeatability: This course may be taken a maximum of two times for credit, and all attempts will be factored into a student's cumulative GPA.

Pre-requisites:
ENG 2097|Minimum Grade of C-|May not be taken concurrently.

ENG 3610. Topics in Postcolonial Literature. 3 Credit Hours.
This junior-level seminar takes a focused approach to the literature and cultural production of one or two regions of the formerly colonized world: Africa, the Caribbean, Asia, the Middle East, Latin America, Australia, and the Pacific. Specific concentrations may center around the emergence and future of the postcolonial literature in question, or on the evolution of a genre (novel, Bildungsroman, poetry, or theater) in light of a selected topic (gender, hybridity, exile, nationalism, or globalization, among others). Please consult individual course listings for specific topics.

Repeatability: This course may be repeated for a total of 6 credit.

Pre-requisites:
ENG 2097|Minimum Grade of C-|May not be taken concurrently.

ENG 3611. Postcolonial Theory. 3 Credit Hours.
This is a research intensive junior-level class that examines postcolonial theory with a particular focus on the methods and approaches that postcolonial theory has made available to literary studies. The theoretical and historical readings will be drawn from a number of foundational texts in the field and are likely to include the work of Edward Said, Frantz Fanon, Aime Cesaire, Ngugi wa Thiong'o, Gayatri Spivak, Homi Bhabha, Eric Hobsbawm, Mary Louise Pratt, Ashis Nandy, among others. Topics of study vary by instructor and might include the politics of culture; the psychology of colonialism; imperialism and popular representation; refusing and resisting empire; narrating territories; aestheticizing empire; inventing the Other; imagining nationalism.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
ENG 2097|Minimum Grade of C-|May not be taken concurrently.
ENG 3710. Special Topics in Film. 4 Credit Hours.
Topics vary. Please consult the English Department or instructor for more information.
Repeatability: This course may be repeated for additional credit.

ENG 3711. Intermediate Film. 3 Credit Hours.
In-depth study of particular issues and questions related to cinema history, culture, and theory. Focus may be on a specific period in film history (such as German Expressionist Cinema), an interdisciplinary topic (such as Women and Film), a film genre (such as American Documentary Film), or a textual problem (such as The Development of Film Narrative). Note: Consult the Undergraduate English Office or English web page for details. <p>Note: This course may be taken a maximum of two times for credit, and all attempts will be factored into a student's cumulative GPA.
Repeatability: This course may be repeated for a total of 6 credit.

Pre-requisites:
ENG 2097|Minimum Grade of C-|May not be taken concurrently.

ENG 3811. Theories of Language and Literacy. 3 Credit Hours.
An examination of theories related to language use, both written and oral. This course introduces students to the field of rhetoric and composition. Will include projects that apply theories to classroom and non-academic literacy settings.
Repeatability: This course may not be repeated for additional credits

Pre-requisites:
ENG 2097|Minimum Grade of C-|May not be taken concurrently.

ENG 3812. Language Variation: Research in Language and Literacy. 3 Credit Hours.
An examination of differences in language practices that reflect the linguistic register in which one is operating or the community to which one belongs. Study of a variety of informal and formal settings, including one-of-a-kind sites; such variations as regional, social, cultural, and gender-related differences, including the English of ESL, African-American, Hispanic-American, and working-class students.
Repeatability: This course may not be repeated for additional credits

Pre-requisites:
ENG 2097|Minimum Grade of C-|May not be taken concurrently.

ENG 3813. Writers at Work. 3 Credit Hours.
An examination of problems and issues associated with particular kinds of writing - e.g., biography, memoir, political essays. May include reading in contemporary works, but the intention is for students to bridge the gap between theory and practice by producing texts of their own. NOTE: Variable content; consult the Undergraduate English Office or English web page for details.
Repeatability: This course may not be repeated for additional credits

Pre-requisites:
ENG 2097|Minimum Grade of C-|May not be taken concurrently.

ENG 3821. Linguistics and Grammar. 3 Credit Hours.
A review of traditional grammar parts of speech, subordination, pronoun case, parallelism, modifier placement, punctuation, etc., using the theories and techniques of modern theoretical linguistics. Students perfect their own grammatical knowledge by writing and by exploring linguistic analyses of common writing errors and how to correct them. The linguistic properties of effective prose also discussed.
Repeatability: This course may not be repeated for additional credits

Pre-requisites:
ENG 2097|Minimum Grade of C-|May not be taken concurrently.

ENG 3822. Semantics. 3 Credit Hours.
"You can't cook eggplant too long." Nobody who speaks English has any trouble understanding that sentence. However, it can mean both one thing (perhaps that eggplant is best eaten rare) and its opposite (eggplant can be cooked indefinitely long with no bad effects). This course on meaning in language will investigate meaning that arises from the structure of sentences and their use, as well as the meanings of words and phrases.
Repeatability: This course may not be repeated for additional credits

Pre-requisites:
ENG 2097|Minimum Grade of C-|May not be taken concurrently.

ENG 3823. History of the English Language. 3 Credit Hours.
How and why did the language of Beowulf become, successively, the language of Chaucer, of Shakespeare, of Swift, James, and Hemingway? In surveying the historical development of English language and style, this course will focus where possible on literary texts, and seek to demonstrate how useful a historical grasp of language can be to the appreciation of literature.
Repeatability: This course may not be repeated for additional credits

Pre-requisites:
ENG 2097|Minimum Grade of C-|May not be taken concurrently.
ENG 3900. Honors Special Topics I. 3 Credit Hours.
In this course, we will explore the social context for reading and writing. We want to ask questions that will lead us to see how concepts of literacy can reinforce, elaborate, or threaten established social orders. We want to peek at ourselves in the act of using the written word, and we want to listen in while others are puzzling out the world through books, letters, pamphlets, flyers, newspapers, textbooks, billboards, signs and labels. We will read about the history and anthropology of literacy, and consider closely at least two ethnographic studies that highlight the acquisition of literacy. In short, we will try to see that which is usually invisible: the transparent assumptions and associations that twine through literacy acts.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.

ENG 4096. Studies in Creative Writing. 3 Credit Hours.
This course is meant to serve as a capstone for students who have taken one beginning-level creative writing workshop and one intermediate-level creative writing workshop. The amount of work is equivalent to that required by a senior seminar, including both critical and literary readings in the field, as well as both critical and creative writing responses. The course will culminate in a final project that has both creative and critical components. The organizing theme of the course will change from year to year.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(ENG 2097|Minimum Grade of C-|May not be taken concurrently)
AND
(ENG 2003|Minimum Grade of C-|May not be taken concurrently)
OR
(ENG 2004|Minimum Grade of C-|May not be taken concurrently)
OR
(ENG 2005|Minimum Grade of C-|May not be taken concurrently)
OR
(ENG 2903|Minimum Grade of C-|May not be taken concurrently)
AND
(ENG 3003|Minimum Grade of C-|May not be taken concurrently)
OR
(ENG 3004|Minimum Grade of C-|May not be taken concurrently)
OR
(ENG 3005|Minimum Grade of C-|May not be taken concurrently).

ENG 4097. Studies in Criticism. 3 Credit Hours.
All 4000-level courses are senior capstone courses designed for advanced English majors. These courses make a close study of a defined body of literary work, using current critical and research methods. Students will be engaged in independent research, reading and critical thought and may be required to write research papers. NOTE: Required for all English majors. Should be taken during the senior year. Variable content; consult the Undergraduate English Office or English web page for details.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

ENG 4098. Studies in Modern British Literature. 3 Credit Hours.
All 4000-level courses are senior capstone courses designed for advanced English majors. These courses make a close study of a defined body of literary work, using current critical and research methods. Students will be engaged in independent research, reading and critical thought and may be required to write research papers. NOTE: Required for all English majors. Should be taken during the senior year. Variable content; consult the Undergraduate English Office or English web page for details.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

ENG 4196. Studies in Language and Literacy. 3 Credit Hours.
This senior seminar is the culminating course for a concentration or focus on composition and rhetoric. Students will develop a research project based on theoretical approaches to language use and present their findings orally in class and in an extended essay in the style of a journal in the field. NOTE: Required for all English majors. Should be taken during the senior year. Variable content; consult the Undergraduate English Office or English web page for details.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

ENG 4197. Studies in Poetry. 3 Credit Hours.
All 4000-level courses are senior capstone courses designed for advanced English majors. These courses make a close study of a defined body of literary work, using current critical and research methods. Students will be engaged in independent research, reading and critical thought and may be required to write research papers. NOTE: Required for all English majors. Should be taken during the senior year. Variable content; consult the Undergraduate English Office or English web page for details.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.
ENG 4198. Studies in Irish Literature. 3 Credit Hours.
All 4000-level courses are senior capstone courses designed for advanced English majors. These courses make a close study of a defined body of literary work, using current critical and research methods. Students will be engaged in independent research, reading and critical thought and may be required to write research papers. NOTE: Required for all English majors. Should be taken during the senior year. Variable content; consult the Undergraduate English Office or English web page for details.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

ENG 4297. Studies in Drama. 3 Credit Hours.
All 4000-level courses are senior capstone courses designed for advanced English majors. These courses make a close study of a defined body of literary work, using current critical and research methods. Students will be engaged in independent research, reading and critical thought and may be required to write research papers. NOTE: Required for all English majors. Should be taken during the senior year. Variable content; consult the Undergraduate English Office or English web page for details.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

ENG 4298. Studies in Early American Literature. 3 Credit Hours.
All 4000-level courses are senior capstone courses designed for advanced English majors. These courses make a close study of a defined body of literary work, using current critical and research methods. Students will be engaged in independent research, reading and critical thought and may be required to write research papers. NOTE: Required for all English majors. Should be taken during the senior year. Variable content; consult the Undergraduate English Office or English web page for details.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

ENG 4397. Studies in Medieval Language and Literature. 3 Credit Hours.
All 4000-level courses are senior capstone courses designed for advanced English majors. These courses make a close study of a defined body of literary work, using current critical and research methods. Students will be engaged in independent research, reading and critical thought and may be required to write research papers. NOTE: Required for all English majors. Should be taken during the senior year. Variable content; consult the Undergraduate English Office or English web page for details.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

ENG 4398. Studies in 19th Century American Literature. 3 Credit Hours.
All 4000-level courses are senior capstone courses designed for advanced English majors. These courses make a close study of a defined body of literary work, using current critical and research methods. Students will be engaged in independent research, reading and critical thought and may be required to write research papers. NOTE: Required for all English majors. Should be taken during the senior year. Variable content; consult the Undergraduate English Office or English web page for details.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

ENG 4497. Studies in Shakespeare. 3 Credit Hours.
All 4000-level courses are senior capstone courses designed for advanced English majors. These courses make a close study of a defined body of literary work, using current critical and research methods. Students will be engaged in independent research, reading and critical thought and may be required to write research papers. NOTE: Required for all English majors. Should be taken during the senior year. Variable content; consult the Undergraduate English Office or English web page for details.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

ENG 4498. Studies in Modern American Literature. 3 Credit Hours.
All 4000-level courses are senior capstone courses designed for advanced English majors. These courses make a close study of a defined body of literary work, using current critical and research methods. Students will be engaged in independent research, reading and critical thought and may be required to write research papers. NOTE: Required for all English majors. Should be taken during the senior year. Variable content; consult the Undergraduate English Office or English web page for details.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

ENG 4597. Studies in Renaissance Literature. 3 Credit Hours.
All 4000-level courses are senior capstone courses designed for advanced English majors. These courses make a close study of a defined body of literary work, using current critical and research methods. Students will be engaged in independent research, reading and critical thought and may be required to write research papers. NOTE: Required for all English majors. Should be taken during the senior year. Variable content; consult the Undergraduate English Office or English web page for details.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.
ENG 4598. Studies in African-American Literature. 3 Credit Hours.
All 4000-level courses are senior capstone courses designed for advanced English majors. These courses make a close study of a defined body of literary work, using current critical and research methods. Students will be engaged in independent research, reading and critical thought and may be required to write research papers. NOTE: Required for all English majors. Should be taken during the senior year. Variable content; consult the Undergraduate English Office or English web page for details.

Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

ENG 4697. Studies in Restoration and 18th Century Literature. 3 Credit Hours.
All 4000-level courses are senior capstone courses designed for advanced English majors. These courses make a close study of a defined body of literary work, using current critical and research methods. Students will be engaged in independent research, reading and critical thought and may be required to write research papers. NOTE: Required for all English majors. Should be taken during the senior year. Variable content; consult the Undergraduate English Office or English web page for details.

Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

ENG 4698. Studies in World Literature. 3 Credit Hours.
All 4000-level courses are senior capstone courses designed for advanced English majors. These courses make a close study of a defined body of literary work, using current critical and research methods. Students will be engaged in independent research, reading and critical thought and may be required to write research papers. NOTE: Required for all English majors. Should be taken during the senior year. Variable content; consult the Undergraduate English Office or English web page for details.

Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

ENG 4797. Studies in Romanticism. 3 Credit Hours.
All 4000-level courses are senior capstone courses designed for advanced English majors. These courses make a close study of a defined body of literary work, using current critical and research methods. Students will be engaged in independent research, reading and critical thought and may be required to write research papers. NOTE: Required for all English majors. Should be taken during the senior year. Variable content; consult the Undergraduate English Office or English web page for details.

Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

ENG 4798. Advanced Topics in Postcolonial Studies. 3 Credit Hours.
A senior seminar, this course re-visits the foundational texts of postcolonial studies addressing such issues as representation, resistance, nationalism, feminism, education, immigration, and globalization. Theoretical texts will be studied in conjunction with colonial and postcolonial literary works and film that exemplify a particular trend or theme. These may include the development of alternate cinemas, re-adaptations of classic literary works, the question of history, the art of revolution, and transnational feminisms. Students will be guided through the completion of a 15-20 pp research paper. Please consult individual course listings for specific topics.

Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

ENG 4897. Studies in the Victorian Age. 3 Credit Hours.
All 4000-level courses are senior capstone courses designed for advanced English majors. These courses make a close study of a defined body of literary work, using current critical and research methods. Students will be engaged in independent research, reading and critical thought and may be required to write research papers. NOTE: Required for all English majors. Should be taken during the senior year. Variable content; consult the Undergraduate English Office or English web page for details.

Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

ENG 4898. Studies in Film. 3 Credit Hours.
All 4000-level courses are senior capstone courses designed for advanced English majors. These courses make a close study of a defined body of literary work, using current critical and research methods. Students will be engaged in independent research, reading and critical thought and may be required to write research papers. NOTE: Required for all English majors. Should be taken during the senior year. Variable content; consult the Undergraduate English Office or English web page for details.

Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

English Education (Elementary) (ENEE)

Courses

ENEE 3296. Tch Lang Arts N:6. 3 Credit Hours.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.
ENNE 3297. Teaching Integrated Language, Reading and Writing. 6 Credit Hours.
An in-depth acquaintanceship and exploration of current theories and programmatic application of sound classroom practices for quality balanced literacy programs. Emphasis will be upon becoming familiar with the separate facets of the language arts/communication skills/literacy skill areas with a strong focus upon the diagnosis and effective teaching of high quality reading and writing programs.
College Restrictions: Must be enrolled in one of the following Colleges: Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY
Co-requisites: ELED 3287
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

ENEE 3341. Second Language Development across the Curriculum. 3 Credit Hours.
This course begins with an overview of the basic components of English syntax, phonology, morphology, the lexicon, and pragmatics. Subsequently, the course examines the processes of first and second language acquisition and of bilingual & biliterate development. Students will apply this knowledge as they examine English language learners’ language and literacy development through academic content areas. The course also offers an overview of multiple assessment models, which will allow students to document English language learners’ progress and address their needs with particular instructional methods and strategies. To this end, each student in the course will be required to make and analyze several audio-recordings of the oral speech of one learner and to collect their written work in order to assess their progress both in spoken and written English. Students will be asked to assess the learners’ strengths and weaknesses and to develop instructional adaptations/modifications to assist their learner. This field experience will allow students to deepen their theoretical understanding of the structure of English, to apply their knowledge of assessment of language and literacy development and verbal and non-verbal communication, and to learn how to select resources and instructional approaches to address instructional needs of particular English language learners.
Repeatability: This course may not be repeated for additional credits.

English Education (Secondary) (ENES)

Courses

ENES 3338. Foundations of Language Teaching: Teaching English Language Learners in Grades 4 to 12. 3 Credit Hours.
This course offers students an introduction to theory, research and practice in teaching English language learners in the middle grades. The course begins with an overview of sociocultural characteristics of ELLs, legal responsibilities, and educational and language policies in the United States. Students will also learn the basic theories and principles associated with second language acquisition. Students will explore the philosophies of bilingual and ESL education as well as different program models that address the education of linguistically diverse students. Students will be introduced to an array of contemporary, research-based instructional approaches, including content-based instruction, task-based language teaching, and sheltered English instruction. As a result, they will gain an understanding of how to adapt standards-based lessons for English language learners. Through a practicum component, students will learn to design lessons and assessments for small-group instruction. Students will also develop cross-cultural competence through interactions with ELLs, teachers and school staff in the middle grades. NOTE: Background clearances required.
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY
Repeatability: This course may not be repeated for additional credits.

ENES 4366. Teaching Literature and Reading 7-12. 3 Credit Hours.
An investigation of what texts ought to be taught in secondary schools, of how to teach them most effectively, and of the extent to which different student populations require different approaches. NOTE: As part of the course, students spend 2-3 hours each week assisting in a language arts classroom.
College Restrictions: Must be enrolled in one of the following Colleges: Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY
Co-requisites: EDUC 4389
Repeatability: This course may not be repeated for additional credits.

ENES 4371. Teaching Oral and Written Communication: 7-12. 3 Credit Hours.
An examination of the knowledge that writers employ when they compose different kinds of texts, of the instructional contexts that are most effective in helping secondary students develop that knowledge, and of the extent to which different student populations require different approaches. NOTE: As part of the course, students spend 2-3 hours each week assisting in a language arts classroom.
College Restrictions: Must be enrolled in one of the following Colleges: Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY
Co-requisites: EDUC 4389
Repeatability: This course may not be repeated for additional credits.

Environmental Engineering Tech (ENVT)
Courses

ENVT 0845. The Environment. 3 Credit Hours.
You can extend your longevity and improve your health by identifying and avoiding the top 10 environmental toxins that enter and persistently stay in your body. Develop connections between the environment and everyday life. Enhance your awareness of current environmental issues by taking part in discussion and debate: Is Global Warming for real? Should the U.S. sign the Kyoto protocol? Are we running out of oil? Learn as you go on campus field trips, try hands-on experiments and hear presentations from experts on the energy crisis, global climate change, acid rain, ozone depletion, resource sustainability, biodiversity and the environmental impact of natural phenomenon. Sharpen your strategies and leave a better environment for future generations. NOTE: This course fulfills a Science & Technology (GS) requirement for students under GenEd and Science & Technology Second Level (SB) for students under Core. Students cannot receive credit for this course if they have successfully completed CEE 0845, CEE 0945, CEE 1051, ENVT 0945, or ENVT 1051.

Course Attributes: GS
Repeatability: This course may not be repeated for additional credits.

ENVT 0945. Honors: The Environment. 3 Credit Hours.
You can extend your longevity and improve your health by identifying and avoiding the top 10 environmental toxins that enter and persistently stay in your body. Develop connections between the environment and everyday life. Enhance your awareness of current environmental issues by taking part in discussion and debate: Is Global Warming for real? Should the U.S. sign the Kyoto protocol? Are we running out of oil? Learn as you go on campus field trips, try hands-on experiments and hear presentations from experts on the energy crisis, global climate change, acid rain, ozone depletion, resource sustainability, biodiversity and the environmental impact of natural phenomenon. Sharpen your strategies and leave a better environment for future generations. NOTE: This course fulfills a Science & Technology (GS) requirement for students under GenEd and Science & Technology Second Level (SB) for students under Core. Students cannot receive credit for this course if they have successfully completed CEE 0845, CEE 0945, CEE 1051, ENVT 0845, or ENVT 1051.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GS, HO
Repeatability: This course may not be repeated for additional credits.

ENVT 1051. Introduction to the Environment. 3 Credit Hours.
Basic environmental issues, systems and change; biogeochemical cycles; human population; ecosystems and their management and restoration; biological diversity, productivity and energy flow; biogeography; environmental health, pollution and toxicology; energy; and global warming. Hands on laboratory exercises are an integral part of the course. The lab exercises are conducted within the class schedule at each campus. NOTE: This course can be used to satisfy the university Core Science & Technology Second Level (SB) requirement. Students cannot receive credit for this course if they have successfully completed CEE 0845, CEE 0945, CEE 1051, ENVT 0845 or ENVT 0945.

Course Attributes: SB
Repeatability: This course may not be repeated for additional credits.

ENVT 1117. Sanitary Chemistry and Microbiology. 3 Credit Hours.
Wet chemical analysis of environmental importance, sampling, data handling, standard tests, microbiology.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
CHEM 1031|Minimum Grade of C-|May not be taken concurrently
AND CHEM 1033|Minimum Grade of C-|May not be taken concurrently.

ENVT 2124. Environmental Instrumentation. 3 Credit Hours.
Optical, electrochemical, and instrumental methods of analysis, environmental applications.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
ENVT 1117|Minimum Grade of C-|May not be taken concurrently.

ENVT 2133. Environmental Field Operations. 4 Credit Hours.
Field aspects of environmental engineering, air and water sampling, stack sampling, bioassay, and environmental aspects of planning.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
ENVT 2124|Minimum Grade of C-|May not be taken concurrently.

ENVT 4711. Air Pollution Control Systems. 3 Credit Hours.
Principles of design and operation of the major categories of air pollution control equipment. Theory and principles are presented to reinforce extensive application and design components.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
ENGT 2521|Minimum Grade of C-|May not be taken concurrently
AND PHYS 1062|Minimum Grade of C-|May not be taken concurrently.
ENVT 4721. Water and Wastewater. 3 Credit Hours.
Water treatment theory and design including sedimentation, coagulation, softening, iron removal, and chlorination, wastewater treatment theory and
design, including grit chambers, activated sludge, trickling filter, and anaerobic digester.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: ENGT 2521|Minimum Grade of D-|May not be taken concurrently.

ENVT 4731. Hazardous Waste Management. 3 Credit Hours.
Collection and disposal: incineration, landfill, composting, recycling, special wastes, permitting.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: ENVT 1117|Minimum Grade of C-|May not be taken concurrently.

ENVT 4741. Environmental Modeling. 3 Credit Hours.
Theory and modeling of pollutant transport and diffusion with particular emphasis on air. Applicable principles of boundary layer meteorology, plume
rise, air pollution climatology, data selection, and modeling for design. Survey of available models. Demonstrations and student projects with computer
applications.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: (MATH 1042|Minimum Grade of C-|May not be taken concurrently)
AND (PHYS 1062|Minimum Grade of C-|May not be taken concurrently)
AND (ENGT 2521|Minimum Grade of D-|May not be taken concurrently).

ENVT 4761. Environmental Regulations. 3 Credit Hours.
Environmental regulations at the federal, state, and local levels. Emphasis on procedures for compliance with surveillance and permit requirements.
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may not be repeated for additional credits.

ENVT 4796. Pollution Control Processes. 3 Credit Hours.
This is a capstone course for environmental engineering technology. Major environmental problems are provided and students will write a paper on
each, prepare a plan to solve the problem, and present their findings to the class.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites: (ENVT 1117|Minimum Grade of C-|May not be taken concurrently
AND ENVT 2124|Minimum Grade of D-|May not be taken concurrently
AND ENVT 2133|Minimum Grade of D-|May not be taken concurrently).

ENVT 4982. Honors Independent Study in Environmental Engineering Technology. 2 to 4 Credit Hours.
Student may complete a regular course during a semester in which the course is not offered to meet prerequisite or graduation requirements. An
instructor is assigned to supervise the student.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.

ENVT 4983. Honors Directed Study in Environmental Engineering Technology. 1 to 4 Credit Hour.
An opportunity to study specialized topics not covered in currently available courses and providing significant progress towards the technical/
professional objectives of the program. An instructor is assigned to define the scope and direct, supervise, and evaluate student progress.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.

ENVT 4991. Honors Independent Research in Environmental Engineering Technology. 2 to 4 Credit Hours.
A project conducted under the supervision of a faculty sponsor.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.

Environmental Science (CST) (ENVS)
Courses

ENVS 3000. Special Topics in Environmental Science. 3 to 4 Credit Hours.
This course is not offered every year. Variable offerings on special topics that are not part of the standard roster of courses. Check with the Earth & Environmental Science office and/or web site (www.temple.edu/cst/env-sci) for details on Special Topics courses.

Repeatability: This course may be repeated for additional credit.

Pre-requisites:
(EES 2001|Minimum Grade of C-|May not be taken concurrently
OR BIOL 1111|Minimum Grade of C-|May not be taken concurrently
OR BIOL 1911|Minimum Grade of C-|May not be taken concurrently
OR CHEM 1032|Minimum Grade of C-|May not be taken concurrently
OR CHEM 1042|Minimum Grade of C-|May not be taken concurrently
OR CHEM 1952|Minimum Grade of C-|May not be taken concurrently
AND (GUS 1051|Minimum Grade of C-|May not be taken concurrently
OR BIOL 1111|Minimum Grade of C-|May not be taken concurrently
OR BIOL 1911|Minimum Grade of C-|May not be taken concurrently
OR CHEM 1032|Minimum Grade of C-|May not be taken concurrently
OR CHEM 1042|Minimum Grade of C-|May not be taken concurrently
OR CHEM 1952|Minimum Grade of C-|May not be taken concurrently
AND (EES 2021|Minimum Grade of C-|May not be taken concurrently
OR BIOL 1111|Minimum Grade of C-|May not be taken concurrently
OR BIOL 1911|Minimum Grade of C-|May not be taken concurrently
OR CHEM 1032|Minimum Grade of C-|May not be taken concurrently
OR CHEM 1042|Minimum Grade of C-|May not be taken concurrently
OR CHEM 1952|Minimum Grade of C-|May not be taken concurrently)

ENVS 4082. Independent Study: Environmental Science. 1 to 3 Credit Hour.
This course is typically offered in Fall, Spring, Summer I and Summer II.

Duplicate Course: This course can only be counted one time for Environmental Science elective credit. Directed reading and research on a specific topic in Environmental Science agreed to by student and faculty member.

Repeatability: This course may be repeated for additional credit.

ENVS 4085. Internship: Environmental Science. 3 Credit Hours.
This course is typically offered in Fall, Spring, Summer I and Summer II.

Duplicate Course: This course can only be counted one time for Environmental Science elective credit. Student gains practical experience by working in a government agency, private industry, or non-governmental organization. NOTE: The student's advisor and a faculty sponsor in a related field arrange internship placement and evaluation.

Repeatability: This course may be repeated for additional credit.
ENVS 4198. Environmental Science Senior Seminar. 3 Credit Hours.
This course is typically offered in Spring. This is the capstone class for the Environmental Sciences major. In this class students will move beyond textbooks and delve into the primary literature by reading, analyzing, and discussing a series of papers that have significantly influenced our understanding of environmental science. These papers will also serve as models for the major assignment of the semester: the preparation of a scientific review paper on a topic chosen by the student. NOTE: For B.S. students only.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(BIOL 2227|Minimum Grade of C-|May be taken concurrently)
AND (EES 3021|Minimum Grade of C-|May not be taken concurrently)
OR EES 3025|Minimum Grade of C-|May not be taken concurrently)
AND (BIOL 2233|Minimum Grade of C-|May not be taken concurrently)
OR BIOL 2238|Minimum Grade of C-|May not be taken concurrently)
OR BIOL 2241|Minimum Grade of C-|May not be taken concurrently)
OR BIOL 3196|Minimum Grade of C-|May not be taken concurrently)
OR BIOL 3225|Minimum Grade of C-|May not be taken concurrently)
OR BIOL 3245|Minimum Grade of C-|May not be taken concurrently)
OR BIOL 3254|Minimum Grade of C-|May not be taken concurrently)
OR BIOL 3307|Minimum Grade of C-|May not be taken concurrently)
OR BIOL 3311|Minimum Grade of C-|May not be taken concurrently)
OR BIOL 3316|Minimum Grade of C-|May not be taken concurrently)
OR BIOL 3321|Minimum Grade of C-|May not be taken concurrently)
OR BIOL 3336|Minimum Grade of C-|May not be taken concurrently)
OR BIOL 4327|Minimum Grade of C-|May not be taken concurrently)
OR BOT 1112|Minimum Grade of C-|May not be taken concurrently)
OR EES 2021|Minimum Grade of C-|May not be taken concurrently)
OR EES 2061|Minimum Grade of C-|May not be taken concurrently)
OR EES 2096|Minimum Grade of C-|May not be taken concurrently)
OR EES 3042|Minimum Grade of C-|May not be taken concurrently)
OR HORT 2114|Minimum Grade of C-|May not be taken concurrently)
OR LARC 2758|Minimum Grade of C-|May not be taken concurrently)
AND (BIOL 2233|Minimum Grade of C-|May be taken concurrently)
OR BIOL 2241|Minimum Grade of C-|May be taken concurrently)
OR BIOL 3196|Minimum Grade of C-|May be taken concurrently)
OR BIOL 3225|Minimum Grade of C-|May be taken concurrently)
OR BIOL 3245|Minimum Grade of C-|May be taken concurrently)
OR BIOL 3254|Minimum Grade of C-|May be taken concurrently)
OR BIOL 3307|Minimum Grade of C-|May be taken concurrently)
OR BIOL 3311|Minimum Grade of C-|May be taken concurrently)
OR BIOL 3316|Minimum Grade of C-|May be taken concurrently)
OR BIOL 3321|Minimum Grade of C-|May be taken concurrently)
OR BIOL 3336|Minimum Grade of C-|May be taken concurrently)
OR BIOL 4327|Minimum Grade of C-|May be taken concurrently)
OR BOT 1112|Minimum Grade of C-|May be taken concurrently)
OR EES 2021|Minimum Grade of C-|May be taken concurrently)
OR EES 2061|Minimum Grade of C-|May be taken concurrently)
OR EES 2096|Minimum Grade of C-|May be taken concurrently)
OR EES 3042|Minimum Grade of C-|May be taken concurrently)
OR HORT 2114|Minimum Grade of C-|May be taken concurrently)
OR LARC 2758|Minimum Grade of C-|May be taken concurrently).

Environmental Studies (CLA) (ENST)
Courses

ENST 0842. Sustainable Environments. 3 Credit Hours.
Americans account for over a quarter of all fossil fuel consumption, own more cars than there are licensed drivers, and build new homes 40 percent larger than they did in 1975, despite shrinking household size. We feel for the pandas and polar bears, while contributing mightily to global climate change, resource inequity, and ecosystem destruction. How do we reckon with environmental crises at multiple scales, from the neighborhood to the atmosphere and oceans? "Think globally, act locally" environmentalists admonish us! Direct our vast human ingenuity and collective spirit toward technologies and behaviors that bring peace with the planet. Course mission: enhance your capability to make informed choices, based on a sound understanding of the ecological, technological, economic, political, and ethical dimensions of environmental sustainability. NOTE: This course fulfills a Science & Technology (GS) requirement for students under GenEd and Science & Technology Second Level (SB) for students under Core. Students cannot receive credit for this course if they have successfully completed EES/Geology 0842 or GUS 0842.

Course Attributes: GS
Repeatability: This course may not be repeated for additional credits.

ENST 1052. Introduction to the Physical Environment. 4 Credit Hours.
An environmental approach to the study of earth as a globe, earth-sun relations, weather, climate, vegetation, soils, and the hydrosphere. Abundantly illustrated by slides and films, this course brings to life the causal connections among climate, vegetation, and soils. Natural and human-induced climate change, groundwater and surface water management, and soil erosion are among the environmental problems covered. The laboratories provide hands-on experience on most topics. NOTE: This course can be used to satisfy the university Core Science & Technology Second Level (SB) requirement.

Course Attributes: SB
Repeatability: This course may not be repeated for additional credits.

ENST 2001. Environment and Society. 3 Credit Hours.
This course emphasizes the human dimensions of the relationship between societies and their natural environments. Students will be introduced to those ecological principles that are necessary to understand cultural, social, political, and economic questions at a variety of geographic scales.

Repeatability: This course may not be repeated for additional credits.

ENST 2002. Physical Geography. 4 Credit Hours.
Physical Geography is a foundational course for Geography and Environmental Studies, providing a basic introduction to physical phenomena and processes. It is about the earth’s spheres: the atmosphere, hydrosphere, biosphere, and lithosphere. We will spend about two-thirds of our time on the basics of earth-sun relations, the earth’s atmosphere and oceans, climate and weather, and water resources. The other third of the course is principally about tectonic processes and geomorphology, as well as a culminating section on the earth’s biomes (major geographic regions defined mainly by climate and characterized by distinct communities of flora and fauna). The main objectives are to broaden and deepen your understanding of our physical environment. Moreover, you should be able to apply what you’ve learned to critical analysis of various timely and important issues—such as climate change, vulnerability to environmental hazards, and approaches to mitigating and adapting to environmental change. Though this course focuses on the physical environment, the geographic approach is very much about the relationships between humans and their environments, between nature and society. We will not view the physical environment in isolation from human dimensions and interactions.

Repeatability: This course may not be repeated for additional credits.

ENST 2051. The Urban Environment. 3 Credit Hours.
This course examines the interactions between theory, policy, and the urban environment. Students have the opportunity to study the urban environment not only as a physical landscape or natural ecosystem, but also as a constructed landscape shaped by local, regional and global social, economic and political processes. The course addresses issues that continue to challenge urban society, including environmental injustice and racism, degradation of local environmental quality, the impact of local-global relationships on community-scale environments and the commodification of nature.

Repeatability: This course may not be repeated for additional credits.

ENST 2097. Research Design in Environmental Studies. 3 Credit Hours.
This course is an introductory survey of research design in Environmental Studies. It is designed to allow students to explore what it means to conduct social science research, particularly around issues of sustainability. Students have the opportunity to learn how to research using scholarly articles, write a literature review, and collect and analyze primary and secondary data. Methods covered include case study research, interview design and technique, analysis of census data, and tools commonly used in community and participatory action research. Individual assignments will focus on researching sustainability. This is a writing intensive course and will require extensive writing and revision of your assignments in a semester long assignment sequence.

Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

ENST 2157. Environmental Ethics. 3 Credit Hours.
A study of the ethical dimensions of several contemporary environmental controversies. The course examines the major theoretical approaches to environmental ethics, including human-centered (anthropocentric), animal-centered (zoocentric), and nature-centered (biocentric and ecocentric) value systems, as well as the most important critiques of these ethical approaches. The course will also address specific issues such as biodiversity and wilderness preservation; human use of animals as food, entertainment, and research subjects; environmental racism and toxic dumping; sustainable development, population and consumption.

Repeatability: This course may not be repeated for additional credits.
ENST 2596. Philosophical Perspectives on the Environment. 3 Credit Hours.
Just as the question of the relationship of the individual to society is a perpetual concern, so is the question of the relationship of the individual (and society) to the natural environment. This course addresses this latter question. Issues of environmental ethics will constantly be lurking behind the scenes even when not directly at issue. A dominant theme will be the concept of nature itself. It has undergone some amazing changes during its remarkable history, and these will be explored especially from the point of view of recent feminist thinking.

Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

ENST 3000. Special Topics in Environmental Studies. 3 Credit Hours.
Variable offerings on special topics that are not part of the standard roster of courses. Check with the Environmental Studies office and/or web site (www.temple.edu/cla/es) for details on Special Topics courses.
Repeatability: This course may be repeated for additional credit.

ENST 3001. Earth Ethics. 3 Credit Hours.
What ethical relationship do human beings have to the natural world? What cultural and religious values, conceptions, and assumptions have shaped human interactions with the environment? Through also examining practical issues such as sustainability, technology, and urban living, students will assess individual life-styles and alternative visions of the good life on planet Earth.
Repeatability: This course may not be repeated for additional credits.

ENST 3004. Geography of Natural Resources. 3 Credit Hours.
The material goods you use on a daily basis (e.g. food, phones, furniture) are linked to the production of natural resources. This course helps us to understand how our everyday consumption patterns are connected to resource production and distribution on a global scale and what the social, environmental, and economic impacts of natural resource production are. To explore the complicated intersection of resource management, economics, and development, we examine the literature on natural resource development, allocation, management, and geopolitics as they relate to economic systems and "development." We draw on case studies that include production for the global market, as well as local subsistence systems. Through these cases, we examine the geography of resource flows, from the sites of extraction to the sites of consumption. We consider the role of technology and capital investment in the production of resources, property institutions and regulatory regimes, commodity chains, and sustainability concerns associated with resource production. The production of and competition for the key natural resources, by corporations, societies, and states, are critical processes in constructing the global economy. These processes materially transform the conditions of societies, as well as, contribute to the shaping of those societies, politically and economically.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: (ENST 2001|Minimum Grade of C-|May not be taken concurrently) AND (ENST 2002|Minimum Grade of C-|May not be taken concurrently).

ENST 3025. Environmental Law and Regulation. 3 Credit Hours.
This course analyzes how our society protects (or fails to protect) the environment through law and regulation. Students will examine and compare several U.S. environmental laws that are designed to redress environmental damage and to protect the environment. In doing so, they will analyze the relative costs and benefits of various forms of environmental regulation within the context of the American political, administrative, and legal systems. The course focuses on U.S. environmental law, but will also consider the increasingly important field of international environmental law and agreements.
Repeatability: This course may not be repeated for additional credits.

ENST 3051. Environmental Policy Issues. 3 Credit Hours.
How are environmental policies formulated and implemented in the U.S.? Topics include the role of citizen participation in decision-making, the place of environmental impact assessment, environmental justice and equity, intergovernmental relations, and environmental obligations of the U.S. toward less developed countries.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: ENST 1051|Minimum Grade of C-|May not be taken concurrently OR ENST 1951|Minimum Grade of C-|May not be taken concurrently.

ENST 3052. Environmental Problems in Asia. 3 Credit Hours.
Japan is used as an introduction and model for examining environmental issues in several East and Southeast Asian countries. Emphasis is on deforestation, river basin development, urban planning, ecotourism, and the role of non-governmental organizations.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: ENST 1051|Minimum Grade of C-|May not be taken concurrently OR ENST 1951|Minimum Grade of C-|May not be taken concurrently.

ENST 3053. Climatology. 3 Credit Hours.
In this course, we study global climate patterns and the underlying processes that shape them. Among the specific topics we examine are: global distribution of individual climate elements, upper-atmospheric waves and jet streams, use of web-based maps and data, construction of climate models, U.S. climate regions, and major global climatic regions. In the course's final weeks, we consider historic climates, climate change mechanisms, and forecasted future climates.
Repeatability: This course may not be repeated for additional credits.
ENST 3054. Energy, Resources, and Conservation. 3 Credit Hours.
Vital nonrenewable resources are identified and their global and North American distribution, character, and utilization studied. Special attention to energy sources now in short supply and to benign renewable sources for future needs.
Repeatability: This course may not be repeated for additional credits.
Pre-requisites:
ENST 1051|Minimum Grade of C-|May not be taken concurrently
OR ENST 1951|Minimum Grade of C-|May not be taken concurrently.

ENST 3061. Fundamentals of Cartography. 3 Credit Hours.
This course is designed to introduce students to cartography and computer mapping. Through hands-on exercises, students will manipulate data, compare map projections, design, execute, and reproduce small-scale thematic maps suitable for publication using computer software. A final project involves the production of maps in color. NOTE: No prior computer knowledge is necessary.
Repeatability: This course may not be repeated for additional credits.

ENST 3062. Fundamentals of Geographic Information Systems. 3 Credit Hours.
This course teaches the theory and practical use of Geographic Information Systems (GIS). Major components of the course include vector and raster spatial data models and operations, including vector overlay and raster map algebra. At the end of the course students are expected to have an understanding of elementary GIS theory, working knowledge of a GIS software package, and the ability to develop GIS-based solutions to geographic modeling and analysis tasks.
Repeatability: This course may not be repeated for additional credits.

ENST 3063. Environmental Remote Sensing. 3 Credit Hours.
This course will teach the basic principles of environmental remote sensing using aerial photography and satellite imagery. Topics covered include the mechanics of aerial photography and satellite remote sensing systems, photointerpretation, image rectification, and image processing and classification. Emphasis will be on urban and environmental applications.
Repeatability: This course may not be repeated for additional credits.

ENST 3064. Qualitative Methods. 3 Credit Hours.
This class is designed to expose students to the purpose, scope and procedures of qualitative research, applied in different disciplines but especially in environmental studies, geography, and urban planning. It provides an opportunity for students to create qualitative research design schemes, and critically analyze research using these methods.
Repeatability: This course may not be repeated for additional credits.
Pre-requisites:
GUS 2097|Minimum Grade of C-|May not be taken concurrently.

ENST 3065. Environmental Impact Assessment. 3 Credit Hours.
This course addresses the methods of environmental impact assessment (EIA). During the course of your environmental careers, most of you will be expected to conduct, reference, evaluate, or otherwise incorporate EIA into your work. Most EIA’s incorporate a diverse set of research methods—and an understanding of a wide-ranging set of research methodologies, and when and how to deploy them—is a central objective for this course.
Repeatability: This course may not be repeated for additional credits.
Pre-requisites:
GUS 3062|Minimum Grade of C-|May not be taken concurrently
OR ENST 3062|Minimum Grade of C-|May not be taken concurrently.

ENST 3068. GIS for Health Data Analysis. 3 Credit Hours.
Geographic Information Systems (GIS) has emerged as an essential tool for health researchers and practitioners. This course provides an introduction to the most common geographic methods utilized in health research and spatial epidemiology for mapping and analyzing health disparities, disease risk factors, health services and geographic variation in health outcomes and disease. Through lecture and laboratory exercises students will learn how to create and edit spatial data, create disease maps, develop neighborhood-based measures, conduct geographic cluster detection and point pattern analysis, map geographic health disparities, measure access to health services, and critically assess potential study bias introduced from missing geographic data or positional accuracy. Selected case studies will be presented in order to highlight methods and techniques and hands-on experience will be gained through laboratory exercises and real-world applications. Guest speakers will be invited to share their real-world examples of GIS in health research and practice.
Repeatability: This course may not be repeated for additional credits.
Pre-requisites:
GUS 3161|Minimum Grade of C-|May not be taken concurrently
OR ENST 3161|Minimum Grade of C-|May not be taken concurrently
OR SOC 3201|Minimum Grade of C-|May not be taken concurrently
OR STAT 2103|Minimum Grade of C-|May not be taken concurrently
OR PBHL 2219|Minimum Grade of C-|May not be taken concurrently
OR CJ 2602|Minimum Grade of C-|May not be taken concurrently
OR ANTH 3771|Minimum Grade of C-|May not be taken concurrently.
ENST 3097. Environment and Development. 3 Credit Hours.
This course looks at the interaction between human and ecological systems and economic development. We begin with a historical overview of the impact of human communities on the environment. We then shift attention to the environmental impacts of European expansion from the 1600s to the present. In the final section of the course we examine specific cases that highlight the ideas discussed previously. The cases focus on settlement systems, environmental factors and conflict, sustainable systems, vulnerability, water issues, etc. This course requires active participation.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
ENST 1051|Minimum Grade of C-|May not be taken concurrently
OR ENST 1951|Minimum Grade of C-|May not be taken concurrently.

ENST 3152. U.S. Environmental Policy. 3 Credit Hours.
An analytical examination of the development and execution of governmental policies in such areas as air and water pollution control, control of atomic energy, and planning of space exploration program.

Repeatability: This course may not be repeated for additional credits.

ENST 3161. Spatial Statistics. 3 Credit Hours.
This course provides an introduction to statistical analysis with an emphasis on urban applications. The course covers basic statistical principles of sampling, probability, and tests of significance, measures of association; ordinary least squares regression; factor, principal component and cluster analysis and an introduction to spatial applications of these tools. The course is focused on the practical application of these techniques through exposure to the rationale and principles underpinning them. Students will attend lectures and complete problem sets that provide practical experience in the application of the theoretical concepts and methodologies.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
MATH 0701|Minimum Grade of C-|May not be taken concurrently
OR MATH 0702|Minimum Grade of C-|May not be taken concurrently
OR MC3 Y|May not be taken concurrently.

ENST 3170. Methods in Archaeology. 3 Credit Hours.
A series of practical, topical courses which deal with aspects of archaeological fieldwork and laboratory analysis. The topic or focus of the course varies by semester and includes: field methods; ceramic analysis; lithic analysis; soils and stratigraphy.

Repeatability: This course may be repeated for additional credit.

ENST 3175. Heritage Management in Archaeology. 3 Credit Hours.
The United States and other governments of the world have legal mandates to manage cultural resources on behalf of the public. This course focuses on the archaeological component of cultural resources management in the United States and its linkage with environmental and developmental planning. Participants are given a working knowledge of how the system works, and how to work within it as a professional through a series of readings, classroom discussions, and hands-on exercises. Topic coverage includes: relevant legislation; the phased approach to archaeological and historical research; state and federal review procedures; proposal writing; interacting with clients, native peoples, and the public; professional ethics and standards. The nature of heritage management in other countries is considered for comparative purposes and as a way of illuminating the historical, socio-economic, and legal factors that have shaped the practice in the United States. NOTE: This course helps to satisfy topical requirements in the Anthropology major and the Environmental Studies major.

Repeatability: This course may not be repeated for additional credits.

ENST 3189. Field Session in Archaeology. 3 Credit Hours.
Techniques and concepts of field archaeology. Students will be expected to spend the greatest part of the session in the field during the excavation of prehistoric and historic sites.

Repeatability: This course may be repeated for additional credit.

ENST 3214. North American Environmental History. 3 Credit Hours.
This course examines the interactions between human societies and the natural world in North America. That relationship is complex: the environment both reflects people's influences and affects human history. Through lectures, readings, and discussion, participants in this course will examine this reciprocal relationship. Issues to be discussed in the course include Native American management of the environment; the effects of the European ecological invasion; resource exploitation in the industrial era; the foundations of the preservationist and conservationist movements at the beginning of the 20th century; the evolution of 20th century environmentalism; and the historical context of current environmental problems.

Repeatability: This course may not be repeated for additional credits.

ENST 3265. International Environmental Policy. 3 Credit Hours.
International negotiations and agreements on environmental problems, and comparisons of domestic environmental policymaking among selected countries. Special attention to negotiations on atmospheric and oceanic policies, international regulation of nuclear materials, and environmental aspects of international trade agreements.

Repeatability: This course may not be repeated for additional credits.
ENST 3307. Transportation and Culture. 3 Credit Hours.
Students will learn to approach the modern geography of transportative possibility from a critical standpoint. Rather than accepting this contemporary geography as being the outcome of supposedly "superior" transport technologies' rendering marginalized technologies obsolete, students will examine how processes of cultural, political, and environmental struggle have shaped, opened up, and in some cases limited the modern array of possibilities for human mobility. Waterborne, animal-based, and human-powered modes of transportation will receive special attention, as will ongoing debates and struggles over automobile planning and mass transit. The history of transportation will be presented as necessarily entangled with parallel histories of public protest, working-class knowledge, emergency logistics, human-animal relations, guerilla warfare, unrealized technologies, and political oppression. The course readings will look at many parts of the world: the United States, Canada, Southeast Asia, North Africa, the Middle East, China, Western Europe, the Caribbean, and Polynesia.

Repeatability: This course may not be repeated for additional credits.

ENST 3314. Food Studies: A Geographical Perspective. 3 Credit Hours.
This course introduces students to key issues in food studies from a geographical and environmental perspective. The course includes an overview of the agricultural transitions, and examines issues of food security, access and control, ultimately focusing attention on the question of how to produce more just food systems. A major goal of this course is to give students a basic foundation from which to understand and interpret food systems as well as to familiarize students with today's major issues in research on food.

Repeatability: This course may not be repeated for additional credits.

ENST 3511. Sociology of the Environment. 3 Credit Hours.
In the first half of the course, we will focus on the interaction among four components: population size, social organization, environmental conditions and available technology. We will consider issues such as the relationships among the technology of farming, the volume of agricultural production and the availability of labor for economic development. We will also learn about "input-output" models focusing on the intensity of resource use as well as problems of waste management. In the second half of the course, we will concentrate on issues of social organization. What kinds of political arrangements do we see for the management of waste? How does the transfer of natural resources from resource-rich but economically underdeveloped countries to the United States and other industrial societies affect the social, economic and political arrangements of both groups of countries? Finally, we will address the question of whether the social will can be organized in such a way as to reduce the pressure on the environment and remaining natural resources.

Repeatability: This course may not be repeated for additional credits.

ENST 3596. Energy, Ecology, and Economy. 3 Credit Hours.
After surveying the elements of energy and ecology, and reviewing the basics of economics, this course investigates the interaction of the three. Each of the major nonrenewable and renewable energy sources is examined in light of its "eco-feasibility." The potential of energy conservation is examined, and the need for energy/environment/economic (3-E) policy is debated. Some speculations about future 3-E scenarios are offered, as the U.S. and the rest of the world face their energy, ecological, and economic problems.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites:
(ECON 1101) [Minimum Grade of C-] [May not be taken concurrently]
OR ECON 1901 [Minimum Grade of C-] [May not be taken concurrently]
AND (ECON 1102) [Minimum Grade of C-] [May not be taken concurrently]
OR ECON 1902 [Minimum Grade of C-] [May not be taken concurrently]

ENST 3900. Honors Special Topics. 3 Credit Hours.
Variable Honors offerings on special topics that are not part of the standard roster of courses. Check with the Environmental Studies office and/or web site (www.temple.edu/cla/es) for details on Special Topics courses.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

ENST 3904. Honors Earth Ethics. 3 Credit Hours.
What is, or should be, our relation to the natural world? Especially since we are presently living in a modern urban environment, have we perhaps outgrown nature? Is it something we have mastered? Is it primarily a luxury of sorts that we can go to for periodic enjoyment or relaxation? On the other hand, why do we seem to be in a burgeoning environmental crisis? Is it just greed? Too many people? Insufficient technology? How did we get to where we are? Or more immediately--and perhaps deeply--what fundamental beliefs, attitudes, and values shape our everyday actions, how we perceive and use (or misuse) the earth? What creative alternatives can we find, and how can we apply them? In addressing these kinds of questions we will explore both Western and Asian ways of conceiving and interacting with the natural world, past and present. Our approach will also be interdisciplinary, including materials from art, film and literature, as well as a range of academic disciplines. NOTE: This is an University Honors course.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

ENST 4000. Special Topics in Environmental Studies. 3 Credit Hours.
Seminars on special topics vary according to the instructor. Check the course schedule for specific seminar topics.

Repeatability: This course may be repeated for additional credit.
ENST 4015. The Geographic Basis of Land Use Planning. 3 Credit Hours.
An examination of the forces that influence land use planning in and around American metropolitan regions. Considers economic perspectives (land values), public interest perspectives (zoning subdivision, housing and building codes, redevelopment and renewal programs, etc.), and social perspectives of land use. Also examines separately housing, commercial locations, and industrial development.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits

Repeatability: This course may not be repeated for additional credits.

ENST 4051. Geography of Hazards. 3 Credit Hours.
This course provides a synthesis of the social and natural dimensions of disasters. Students become familiar with the concept that disasters emerge when the specific characteristics of hazards (e.g. volcanoes, droughts, floods, tsunamis) intersect with social vulnerability (e.g. class, race, gender). Case studies from around the world are used to elaborate and explore this concept.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
ENST 1051|Minimum Grade of C-|May not be taken concurrently
OR ENST 1951|Minimum Grade of C-|May not be taken concurrently.

ENST 4056. Political Ecology. 3 Credit Hours.
This course addresses the broad themes of political ecology as an academic discipline as well as a set of theoretical and methodological tools. Historically political ecology has focused on the rural developing world, but more recent work has branched out into environmental justice and resource use in industrialized societies. The course covers the concepts that have distinguished political ecology from other types of analysis like cultural and human ecology. It also introduces students to the construction of theory including a consideration of space, scale, justice, feminism, property, and nature. Finally, the course presents students with diverse case studies that may include topics like resource use, mining, bio-prospecting, forestry, conservation, fisheries, “sustainable” development, and eco-tourism.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
ENST 1051|Minimum Grade of C-|May not be taken concurrently
OR ENST 1951|Minimum Grade of C-|May not be taken concurrently.

ENST 4061. Cartographic Production. 3 Credit Hours.
A course concerned with aspects of storage, retrieval, and display of information within geographic information systems. Emphasis will be placed on computer mapping. NOTE: This course is cross-listed with GUS 4061; students will only receive credit for one course from GUS 4061 and ENST 4061.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
ENST 3061|Minimum Grade of C-|May not be taken concurrently
OR GUS 3061|Minimum Grade of C-|May not be taken concurrently.

ENST 4065. Urban Geographic Information Systems. 3 Credit Hours.
The purpose of this course is to build on the basic principles of the introductory GIS course to demonstrate how GIS may be applied to the analysis of physical and human systems. Topics of the course include vector and raster data integration; address matching, geocoding, and network analysis; terrain and hydrological analysis; and interpolation of environmental and population data. At the end of the course the student is expected to grasp advanced GIS analysis and modeling concepts.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
GUS 3062|Minimum Grade of C-|May not be taken concurrently
OR ENST 3062|Minimum Grade of C-|May not be taken concurrently.

ENST 4066. Environmental GIS. 3 Credit Hours.
Geographic Information Systems are widely used to investigate environmental processes and to develop solutions to environmental issues. This course will build upon concepts introduced in Fundamentals of GIS to investigate how the techniques, data, and interpretations from GIS analysis are applied across a variety of environmental fields. Topics to be covered include natural hazard vulnerabilities, global climate change, renewable energy potential, environmental health, and conservation.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
GUS 3062|Minimum Grade of C-|May not be taken concurrently
OR ENST 3062|Minimum Grade of C-|May not be taken concurrently.
ENST 4071. Medical Geography. 3 Credit Hours.
Medical geography applies concepts and methods from the discipline of geography to study medical and health related events and topics. Medical geography has a close disciplinary tie with epidemiology, biostatistics, medical ecology and medical anthropology, but it is differentiated by its focus on the spatial distributions of health/medical related events. By focusing on geographic scale and the location of health events we can more accurately account for data variability and provide a more accurate representation of a population’s health. Throughout the course, we will examine numerous examples of how geographic scale and measurement can influence study results or how health resources or events appear to be distributed. The class will provide a broad introduction to medical geography touching on the topics of disease ecology, geographical information systems for public health, disparities in health and healthcare, and various methods and data sources for analyzing health/medical data.
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits Repeatability: This course may not be repeated for additional credits.

ENST 4082. Independent Study: Environmental Studies. 1 to 3 Credit Hour.
Duplicate Course: This course can only be counted one time for Environmental Studies elective credit. Directed reading and research on a specific topic in Environmental Studies agreed to by student and faculty member.
Repeatability: This course may be repeated for additional credit.

ENST 4085. Internship: Environmental Studies. 3 Credit Hours.
This course is offered both fall and spring semesters to accompany on-the-job training with local consulting firms, planning agencies, private companies, non-profits, and various state, local and federal agencies of government, mostly but not exclusively in the Philadelphia metro area. Students will apply the knowledge and skills they have acquired in array of both natural and social science courses to address some the major environmental challenges on local, regional, and international scales. Students need to arrange their own positions, usually after consulting with the department’s internship coordinator. The search for a placement should start several months in advance of the semester or summer session when the internship will take place. The course is available to GUS/ES majors only. Duplicate Course: This course can only be taken once for credit. NOTE: The student’s advisor and/or Environmental Studies Internship Coordinator arrange internship placement and evaluation.
Repeatability: This course may be repeated for additional credit.

ENST 4096. Problems of Environmental Quality. 3 Credit Hours.
Specific environmental problems, especially in the Philadelphia area. Students acting as research teams seek better understanding of such problems and practical solutions to them.
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

ENST 4117. Seminar in Environmental Archaeology. 3 Credit Hours.
This course introduces the student to the techniques and disciplines used in conjunction with archaeology to understand the environmental context and paleo-ecology of prehistoric cultures, as well as the nature of the archaeological record itself. Included in this survey are geology, soil and sediment analysis, geomorphology, palynology, ethnobotany and general floral analysis, phytolith analysis, zooarchaeology, and the analysis of blood and other residues found on artifacts. The range of contributions possible from interdisciplinary research will be explored in addition to how to design such research, how to communicate with specialists in other fields, and how to use existing sources of data to solve archaeological problems.
Repeatability: This course may not be repeated for additional credits.

ENST 4198. Senior Research Seminar. 3 Credit Hours.
Students engage in research projects, either as individuals or part of a team. Seminar meetings are devoted to analysis of a small set of readings, common discussion of research issues, and preparation for life beyond the baccalaureate. NOTE: Open only to Environmental Studies students.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

ENST 4297. Social History of American Medicine. 3 Credit Hours.
This course in the history of public health examines the shifting boundaries between public and private medicine, professional authority and personal responsibility, and prevention and therapy from the colonial period into the 20th century. Specific topics include epidemics, environmental concerns, occupational hazards, immigration, and ethnicity.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

ENST 4796. Biocultural Adaptations in Human Populations. 3 Credit Hours.
An evaluation of adaptation, selection, and ecological concepts as the bases for models integrating human biology and culture, and for explaining change.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.
ENST 4896. Environmental Physiology. 3 Credit Hours.
A survey of physiological and biochemical variability in human populations examined as a function of environmental adaptation. Emphasis on the responses of different populations to discernible environmental stresses.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ANTH 2705|Minimum Grade of C-|May not be taken concurrently.

Film and Media Arts (FMA)

Courses

FMA 0843. Race & Ethnicity in American Cinema. 3 Credit Hours.
Movies have played a central role in how we understand race, racial categories, and ethnic cultural identities. We will study Hollywood's evolving portrayal of African-Americans, Asian-Americans and ethnic groups like Latinos and Italian-Americans. From Edison's early films, through "Birth of a Nation," and to the present, commercial cinema has denigrated Americans of color and stereotyped its ethnic groups. How are stereotypes built up on century-old cinematic traditions and how do they function today? What self-images have minority filmmakers presented as an alternative to mainstream views? In addition to looking at the critiques, we look at more positive aspects of ethnic and racial images and examine the ways that these images speak to the history of the nation as a whole. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they have successfully completed FMA 0943.
Course Attributes: GD
Repeatability: This course may not be repeated for additional credits.

FMA 0869. Imaginary Cities. 3 Credit Hours.
This course takes students to cities around the world, and across time, examining how national cinemas have richly depicted and interpreted urban life during the last hundred years. We will study both screen images as well as the business structure that produces them and the audiences that view them. The urban focus of the course is international, including Tokyo, London and Rome, but the "home" setting is Philadelphia itself. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed FMA 0969.
Course Attributes: GG
Repeatability: This course may not be repeated for additional credits.

FMA 0943. Honors Race & Ethnicity in American Cinema. 3 Credit Hours.
Movies have played a central role in how we understand race, racial categories, and ethnic cultural identities. We will study Hollywood's evolving portrayal of African-Americans, Asian-Americans and ethnic groups like Latinos and Italian-Americans. From Edison's early films, through "Birth of a Nation," and to the present, commercial cinema has denigrated Americans of color and stereotyped its ethnic groups. How are stereotypes built up on century-old cinematic traditions and how do they function today? What self-images have minority filmmakers presented as an alternative to mainstream views? In addition to looking at the critiques, we look at more positive aspects of ethnic and racial images and examine the ways that these images speak to the history of the nation as a whole. (This is an Honors course.) NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they have successfully completed FMA 0843.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GD, HO
Repeatability: This course may not be repeated for additional credits.

FMA 0969. Honors Imaginary Cities. 3 Credit Hours.
This course takes students to cities around the world, and across time, examining how national cinemas have richly depicted and interpreted urban life during the last hundred years. We will study both screen images as well as the business structure that produces them and the audiences that view them. The urban focus of the course is international, including Tokyo, London and Rome, but the "home" setting is Philadelphia itself. (This is an Honors course.) NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed FMA 0869.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GG, HO
Repeatability: This course may not be repeated for additional credits.

FMA 1141. Media Arts I. 4 Credit Hours.
An introductory course in media arts which examines the history, theory and practice of image making, sound production, and new technologies. Students will explore both hands-on production processes and theoretical foundations of film, video, and audio in a range of technologies including digital video and photographic formats, studio, and computerized digital settings. Coursework will emphasize individual students' rigorous exploration of creative, personal visions, along with mainstream applications. NOTE: This course is for majors only. Permission of the FMA Chair required for non-majors.
Repeatability: This course may not be repeated for additional credits.
FMA 1142. Media Arts II. 4 Credit Hours.
A continuation of media arts theory and practice with an increased emphasis on aesthetics, genres, writing, and project design. Assigned production projects and readings include documentary, fictional, and experimental formats. NOTE: This course is for majors only. Permission of the FMA Chair required for non-majors.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
FMA 1141|Minimum Grade of C|May not be taken concurrently.

FMA 1143. Media Arts Combined. 4 Credit Hours.
An accelerated introductory course in media arts production and theory, which examines image making, sound, and new technology for those students who already have a production background. The course will further develop hands-on production processes, while relating them to the theoretical and expressive foundations of media arts. Course work will include production projects, readings and written assignments. NOTE: This course is for Honors candidates or FMA transfer students only. FMA 1143 (0110) counts in place of FMA 1141 (0100) and FMA 1142 (0101).
Repeatability: This course may not be repeated for additional credits.

FMA 1144. Media Arts for Non-Production Majors. 4 Credit Hours.
This course introduces basic media arts production to non-production majors. The focus will be on developing technical and conceptual skills in a manner that will enhance the student's understanding of the medium firsthand. This practical experience will provide a deeper understanding of the close relationship between media theory and media practice. This course will explore the aesthetics and mechanics of shooting digital video, the importance of sound and how to record and mix it, and how to develop a project from concept to final cut. Course work will include classical theoretical readings and written assignments, which will address a range of narrative, documentary and experimental approaches to moving the image. The class will also offer an historical and theoretical context in which to think about technique and form, and general media literacy. The projects will cover the basic stages of short video production, diverse visual strategies, and how to apply them in several camera and sound exercises, short production exercises, and one final project that grows out of one or more theoretical and formal approaches we explored during the semester. A fundamental premise of the course is that we are exploring the moving image as an art form: an intellectual process with creative choices.
Repeatability: This course may not be repeated for additional credits.

FMA 1171. Media & Culture. 3 Credit Hours.
An overview of cultural production, distribution, and reception explored through lectures, readings, and screenings. Equally oriented towards practical concerns such as the economics of the arts and the mass media, and theoretical debates on the social, political, economic and aesthetic forces that shape culture.
Repeatability: This course may not be repeated for additional credits.

FMA 1172. Introduction to Film and Video Analysis. 3 Credit Hours.
This course will provide students with a conceptual and theoretical tools to analyze film, television, and video. Screenings, lectures, and readings will emphasize critical analysis, form, and content.
Repeatability: This course may not be repeated for additional credits.

FMA 1451. Survey of New Media. 3 Credit Hours.
An introduction to the history, theory and aesthetics of digital and networked media arts. This course explores critical perspectives on how new technologies have shaped our world, as well as aesthetic and interactional strategies for alternative ways of seeing, understanding and reconfiguring our world via digital media. The course includes theoretical and creative readings, screenings and interactive exercises, as well as written responses through blogging and a paper. NOTE: This course is open to all students in the School of Communications & Theater, and to other students by permission of the instructor.
Repeatability: This course may not be repeated for additional credits.

FMA 2241. Filmmaking. 4 Credit Hours.
Intensive instruction and practice with the tools and concepts of recording and structuring motion pictures in 16mm film and digital media. Coursework will consist of individual and collaborative film exercises and projects. NOTE: This course is for majors only. Permission of the FMA Chair required for non-majors.
Department restrictions: Must be enrolled in one of the following Departments: CA:Film & Media Arts
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Film and Media Arts
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
((FMA 1171|Minimum Grade of C|May not be taken concurrently)
AND FMA 1172|Minimum Grade of C|May not be taken concurrently))
AND (FMA 1142|Minimum Grade of C|May not be taken concurrently)
OR FMA 1143|Minimum Grade of C|May not be taken concurrently).
FMA 2242. Videography. 4 Credit Hours.
Intensive instruction and practice with the tools of recording and structuring video. Coursework will consist of individual and group exercises and projects conducted in the studio and in the field. NOTE: This course is for majors only. Permission of the FMA chair required for non-majors.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: 
((FMA 1171|Minimum Grade of C|May not be taken concurrently
AND FMA 1172|Minimum Grade of C|May not be taken concurrently))
AND (FMA 1142|Minimum Grade of C|May not be taken concurrently
OR FMA 1143|Minimum Grade of C|May not be taken concurrently).

FMA 2243. Audio: Production and Aesthetics. 4 Credit Hours.
An introduction to audio production and audio as a form of aesthetic expression. Students will explore theoretical concepts as they use digital audio recording and editing systems to complete projects. Coursework will consist of lectures, hands on instruction, and discussion.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: 
((FMA 1171|Minimum Grade of C|May not be taken concurrently
AND FMA 1172|Minimum Grade of C|May not be taken concurrently))
AND (FMA 1142|Minimum Grade of C|May not be taken concurrently
OR FMA 1143|Minimum Grade of C|May not be taken concurrently).

FMA 2244. Still Photography for Filmmakers. 4 Credit Hours.
Using a single lens reflex camera, the student will learn technical and aesthetic considerations regarding natural and artificial light, exposure, shutter speeds, f/stops, framing, composition, lens selection and how these factors affect perspective and depth of field. The course will relate concepts in still photography to parallel practices in motion pictures.
Repeatability: This course may not be repeated for additional credits.

FMA 2396. Screenwriting I. 4 Credit Hours.
Seminar and workshop exploring various approaches to fiction and nonfiction media writing. NOTE: This course is for majors only. Permission of the FMA chair required for non-majors. Prior to Spring 2009, the course title was "Writing for Media."
Field of Study Restrictions: Must be enrolled in one of the following Majors: Film and Media Arts
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites: 
((FMA 1171|Minimum Grade of C|May not be taken concurrently
AND FMA 1172|Minimum Grade of C|May not be taken concurrently))
AND (FMA 1142|Minimum Grade of C|May not be taken concurrently
OR FMA 1143|Minimum Grade of C|May not be taken concurrently).

FMA 2451. Experimental Video and Multi-Media. 4 Credit Hours.
Intensive laboratory and field experience exploring personal, aesthetic, and social applications of video utilizing digital camcorders, editing, and multimedia facilities. This course includes regularly scheduled screenings of significant experimental video and multimedia projects.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: 
((FMA 1171|Minimum Grade of C|May not be taken concurrently
AND FMA 1172|Minimum Grade of C|May not be taken concurrently))
AND (FMA 1142|Minimum Grade of C|May not be taken concurrently
OR FMA 1143|Minimum Grade of C|May not be taken concurrently).

FMA 2452. Web Art & Design. 4 Credit Hours.
In this production course, students learn how to conceptualize and produce digital media works on the web, using both Web 2.0 applications and more nuts & bolts technical means. The course will explore new aesthetic forms of web-based narrative, imaging and interaction. Through screenings, talks, readings and guest lectures, the course will consider issues of design, mixed reality media works, social media, locative media, virtual world-building. Students will receive a solid grounding in website construction and content development for the web.
Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
Repeatability: This course may not be repeated for additional credits
Pre-requisites: 
((FMA 1171|Minimum Grade of C|May not be taken concurrently
AND FMA 1172|Minimum Grade of C|May not be taken concurrently))
AND (FMA 1142|Minimum Grade of C|May not be taken concurrently
OR FMA 1143|Minimum Grade of C|May not be taken concurrently).
FMA 2471. New Media Colloquium. 1 Credit Hour.
A seminar for New Media students, which will host guests from the New Media professions and arts. The course will critique student and professional work and focus on a topic related to this discipline. Class will seek to integrate student’s work across the New Media concentration.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
((FMA 1141|Minimum Grade of C|May not be taken concurrently
AND FMA 1142|Minimum Grade of C|May not be taken concurrently)
OR FMA 1143|Minimum Grade of C|May not be taken concurrently)
AND ((FMA 1171|Minimum Grade of C|May not be taken concurrently
AND FMA 1172|Minimum Grade of C|May not be taken concurrently)).

FMA 2551. Editing Film and Video. 4 Credit Hours.
Techniques, practices, equipment, procedures, and theories involved in achieving structure in film and video.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
((FMA 1171|Minimum Grade of C|May not be taken concurrently
AND FMA 1172|Minimum Grade of C|May not be taken concurrently)
AND (FMA 1142|Minimum Grade of C|May not be taken concurrently
OR FMA 1143|Minimum Grade of C|May not be taken concurrently).

FMA 2670. Topics in Film Study. 4 Credit Hours.
An intermediate exploratory seminar in film study. Topics may include: the creative process, film and politics, directors, genres, and periods. NOTE: Open to FMA majors and non-majors.
Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
Repeatability: This course may be repeated for additional credit.

FMA 2671. Film Noir. 3 Credit Hours.
This course examines the concept of “Film Noir” in its cultural context using a body of films (literature, photography, art, music) to analyze predominant themes and the history of the concept in film scholarship. Directors, producers and writers of Noir; the industrial process by which these films were produced, marketed and exhibited; and a variety of cultural/historical issues (e.g. race, gender, class, urban development, national morale) will be examined. The first part of the class will focus on "Classic" Noir (1940-60), while the second will concentrate on the evolution of Noir, scrutinizing 1960-contemporary films that have appropriated Film Noir characteristics, paying particular attention to international examples. NOTE: Open to FMA majors and non-majors.
Repeatability: This course may not be repeated for additional credits.

FMA 2672. Film Comedy. 3 Credit Hours.
This course will examine American Comedy, with a particular focus on several significant directors/producers: Harold Lloyd, Preston Sturges, Frank Tashlin, Woody Allen. We will approach this class in equal parts as a directors study, a genre study, an American culture study. Some of the questions we’ll address are: How does comedy function/work? What personal styles emerge from the genre? Are these films and their critical concerns reflective of larger patterns and tendencies in American life? NOTE: Open to FMA majors and non-majors.
Repeatability: This course may not be repeated for additional credits.

FMA 2673. Independent Film/Video. 4 Credit Hours.
Lectures, screenings and critical assignments will survey and analyze significant narrative, documentary and experimental works that challenge the assumptions and practices of mainstream media.
Repeatability: This course may not be repeated for additional credits.

FMA 2674. History of Photography. 4 Credit Hours.
An examination of the history and aesthetics of fine art, documentary and commercial photography within their cultural contexts. The course will cover the works of major photographers and will relate historical and contemporary concepts in still photography to parallel practices in motion pictures.
Repeatability: This course may not be repeated for additional credits.

FMA 2675. Film History I (1895-1950). 4 Credit Hours.
This screening-intensive course surveys the broad trends in the development of cinema as an art and as an industry. Spanning from the beginning of cinema to the immediate post-World War II years, it will ask how a popular art arose and how cinema finds its expression either with or against its commercial nature. Topics to include the Hollywood studio system, European national and international cinema traditions, the avant-garde, the role of documentary and propaganda, and the role of women in the film industry.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
FMA 1172|Minimum Grade of C|May not be taken concurrently
OR ENG 2711|Minimum Grade of C|May not be taken concurrently.
FMA 2676. Film History II (1950-Present). 3 Credit Hours.
This screening-intensive course surveys the broad trends in the development of cinema as an art and as an industry. Spanning from 1950 to the present, it will particularly examine how notions of film art and social protest defined national cinemas, including American film, against the traditional Hollywood studio film. Topics to include the decline of the studio system, the international art film, the New Hollywood, oppositional countercinema, independent cinema, and transnational and global exchange of cinematic style and language. **Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
FMA 1172|Minimum Grade of C|May not be taken concurrently
OR ENG 2711|Minimum Grade of C-|May not be taken concurrently.

FMA 2678. History of Experimental Film and Video Art. 4 Credit Hours.
This course surveys major movements, artists, and works made outside the traditions of fiction and documentary filmmaking. It will chart experimental film's relation to the avant-garde art movements and cultural upheavals of the mid-20th century. In addition to experimental film, the course will provide an introduction to video art history and aesthetics and will examine installation based work, "expanded cinema," the gallery film, and recent work in digital media. **Repeatability:** This course may not be repeated for additional credits.

FMA 2771. Producing. 4 Credit Hours.
Producing presents an overview of the processes of developing, line producing and distributing a documentary, fiction, or experimental media production. Emphasis is on projects produced independently, outside the commercial mainstream. Students will produce a comprehensive proposal for a viable film or media project.

**Department restrictions:** Must be enrolled in one of the following Departments: CA:Film & Media Arts

**Field of Study Restrictions:** Must be enrolled in one of the following Fields of study: Film and Media Arts

**Level Registration Restrictions:** Must be enrolled in one of the following Levels: Undergraduate

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
(FMA 1171|Minimum Grade of C|May not be taken concurrently)
AND (FMA 1172|Minimum Grade of C|May not be taken concurrently)
AND (FMA 1141|Minimum Grade of C|May not be taken concurrently)
AND FMA 1142|Minimum Grade of C|May not be taken concurrently)
OR FMA 1143|Minimum Grade of C|May not be taken concurrently).

FMA 3085. Internship. 1 to 4 Credit Hour.
Students selected on the basis of special qualifications are assigned as interns on an unpaid basis with organizations professionally engaged in broadcasting and film. NOTE: Enrollment subject to availability of openings. Contact FMA's internship director.

**Class Restrictions:** Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits

**Repeatability:** This course may be repeated for additional credit.

FMA 3241. BFA Junior Directing Projects. 4 Credit Hours.
BFA Junior Directing Projects is a required course for BFA Directing majors. Integrating and building upon what they have previously learned, it will take students through all the elements of the production process at a smaller scale than they will face in their senior BFA Directing projects. The course will include both fiction and non-fiction production. Topics will include developing scripts or documentary proposals, organizing and managing productions, narrative coverage and non-fiction camera work, directing actors and social actors, directing the camera, interview techniques and fieldwork and post-production. Course will culminate in each student producing a 3-7 minute short film.

**Department restrictions:** Must be enrolled in one of the following Departments: CA:Film & Media Arts

**Field of Study Restrictions:** Must be enrolled in one of the following Concentrations: Directing

**Class Restrictions:** Must be enrolled in one of the following Classes: Sophomore 30 to 59 Credits, Junior 60 to 89 Credits

**Degree Restrictions:** Must be enrolled in one of the following Degrees: Bachelor of Fine Arts

**Repeatability:** This course may not be repeated for additional credits.

FMA 3242. Experimental Media Workshop. 4 Credit Hours.
An advanced workshop to develop projects in experimental, documentary, or narrative forms using portable video, TV studio, and editing facilities. **NOTE:** This course is repeatable for credit. Prior to fall 2009, this course was called "Experimental TV."

**Repeatability:** This course may be repeated for additional credit.

**Pre-requisites:**
FMA 2241|Minimum Grade of C|May not be taken concurrently
OR FMA 2242|Minimum Grade of C|May not be taken concurrently
OR FMA 2451|Minimum Grade of C|May not be taken concurrently.
FMA 3244. Lighting for Film and Video. 4 Credit Hours.
This workshop will explore the technical, aesthetic, and compositional aspects of lighting for cinematic, photographic, and electronic media for all students, as well as advanced issues of cinematography and synchronous sound for those students who wish to continue study of filmmaking. The course will analyze the evolution of lighting styles (such as classical Hollywood, neorealist, film noir, and expressionism) in fiction and non-fiction moviemaking. Each student will complete an individual and/or group portfolio of different lighting exercises. Students with an advanced interest in filmmaking will substitute camera and synchronous sound exercises for some of the lighting exercises.
Repeatable: This course may not be repeated for additional credits
Pre-requisites:
FMA 2242|Minimum Grade of C|May not be taken concurrently
OR FMA 2241|Minimum Grade of C|May not be taken concurrently
OR THTR 2511|Minimum Grade of C|May not be taken concurrently
OR FMA 2244|Minimum Grade of C|May not be taken concurrently.

FMA 3246. Making Documentaries. 4 Credit Hours.
An advanced workshop in the theory, practice, and ethics of documentary production. The workshop will feature exercises in oral history and interview techniques, camerawork, field-sound recording, and music research, specialized editing assignments, and a final project. These skills will be integrated with documentary screenings along with readings and discussion.
Repeatable: This course may not be repeated for additional credits
Pre-requisites:
((FMA 2241|Minimum Grade of C|May not be taken concurrently
AND FMA 2396|Minimum Grade of C|May not be taken concurrently)
AND (FMA 2242|Minimum Grade of C|May not be taken concurrently
OR FMA 2451|Minimum Grade of C|May not be taken concurrently).

FMA 3341. Scene Analysis for Writers and Directors. 4 Credit Hours.
Analysis and exercises dealing with the conventional language of mainstream narrative film, including how this language, traditionally presented as the only way to organize narrative films, actually serves to circumscribe the kind of stories that may be told.
Repeatable: This course may not be repeated for additional credits
Pre-requisites:
(FMA 2396|Minimum Grade of C|May not be taken concurrently
AND FMA 2241|Minimum Grade of C|May not be taken concurrently
OR FMA 2242|Minimum Grade of C|May not be taken concurrently
OR FMA 2451|Minimum Grade of C|May not be taken concurrently.

FMA 3342. Serial Writing. 4 Credit Hours.
This is a writing workshop focusing on dramatic serial writing in which students learn to work in close collaboration with other class members. In preparation for the class, students will be required to read or view several dramatic serials as well as read several pilot scripts. The class itself will hear “pitches” for a serial, select one story, and then begin to develop it. The course is limited to BFA students with a concentration in Screenwriting.
Department restrictions: Must be enrolled in one of the following Departments: CA:Film & Media Arts
Field of Study Restrictions: Must be enrolled in one of the following Concentrations: Screenwriting
Class Restrictions: Must be enrolled in one of the following Classes: Sophomore 30 to 59 Credits, Junior 60 to 89 Credits
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
Repeatable: This course may not be repeated for additional credits.

FMA 3343. Screenwriting II. 4 Credit Hours.
An advanced course concentrating on the preparation of a complete television, motion picture, or non-fiction script.
Department restrictions: Must be enrolled in one of the following Departments: CA:Film & Media Arts
Repeatable: This course may not be repeated for additional credits
Pre-requisites:
FMA 2396|Minimum Grade of C|May not be taken concurrently.

FMA 3361. Screen Performance. 3 Credit Hours.
This course is designed to develop performance skills before the camera. Actors are given experience in texts for commercials, soap operas, sit-coms, and film scenes, so that they are prepared for auditions in these areas. Individual and ensemble exercises may be on location or in the studio.
Repeatable: This course may not be repeated for additional credits
Pre-requisites:
FMA 2241 to 2244| Required Courses:1|Minimum Grade of C|May not be taken concurrently
OR FMA 2396|Minimum Grade of C|May not be taken concurrently
OR FMA 2451|Minimum Grade of C|May not be taken concurrently
OR THTR 1231|Minimum Grade of C|May not be taken concurrently.
FMA 3451. Animation Workshop. 4 Credit Hours.
A workshop on the art, techniques and concepts of animation, exploring several approaches from cards and cells to computer image making.
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
((FMA 1171|Minimum Grade of C|May not be taken concurrently
AND FMA 1172|Minimum Grade of C|May not be taken concurrently))
AND (FMA 1142|Minimum Grade of C|May not be taken concurrently
OR FMA 1143|Minimum Grade of C|May not be taken concurrently).

FMA 3452. New Technologies Lab. 4 Credit Hours.
A creative laboratory for exploring new media arts and interactive technologies for producing a variety of experimental, documentary, narrative and genre blended projects. Generating from classical traditions (film, video, and performing arts) to contemporary forms of interactive media: video games, blogs & You Tube, the projects range from the production of websites to interdisciplinary multi-media installations and performances. Successful NewTechLab productions have included individual and collaborative works by students from FMA, Art, Architecture, Dance, Music, Theater, Computer & Information Sciences. NOTE: Open to all FMA majors with suggested prerequisites that include: FMA 1451 (0196), FMA 2451 (0241), FMA 2451 (0245). Permission of the instructor required for students with equivalent prerequisites in other departments.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
FMA 1451|Minimum Grade of C|May not be taken concurrently.

FMA 3453. Interdisciplinary Media Studio. 4 Credit Hours.
This production course provides the opportunity for exploring media arts in an interdisciplinary context. It is intended to introduce a broad interdisciplinary media toolbox, including developing competency in a range of technical skills, but more importantly, students are challenged to develop interdisciplinary conceptual skills. Starting with video and audio as the basis, students will follow a series of exercises that situate media in different cultural and disciplinary contexts: as installation with one or more screens (Media and Sculpture); as an element of performance (Media Projection Design for Theater and Dance); as narrative mapping (Internet-based Interactive Narrative with community partners); as location-based virtual architecture viewed through the smartphone or tablet (Virtual Public Art/Design for Civic Engagement); as engaged by an interactive sensor (Design for Physical Computing, in conjunction with Engineering).
Department restrictions: Must be enrolled in one of the following Departments: CA:Film & Media Arts
Field of Study Restrictions: Must be enrolled in one of the following Concentrations: Media Arts
Class Restrictions: Must be enrolled in one of the following Classes: Sophomore 30 to 59 Credits, Junior 60 to 89 Credits
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
Repeatability: This course may not be repeated for additional credits.

FMA 3473. Moving Camera. 4 Credit Hours.
Moving Camera is a workshop course that explores the art and practice of moving camera media production. The course covers the range of techniques including handheld, dolly, jib, virtual/motion sensors and particularly focus on Steadicam operation. Class time will be spent on group discussion/exercises, lectures/screenings, lab instruction and critiquing work. Through a series of production projects, students will work through the aesthetics of moving camera and gain the technical and physical expertise necessary for successful projects. This course will also explore the theory and history of camera movement as well as blocking & directing techniques. Locative & mobile media projects will extend the work outside the classroom.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
FMA 2241|Minimum Grade of C|May not be taken concurrently
OR FMA 2242|Minimum Grade of C|May not be taken concurrently.

FMA 3551. Advanced Editing. 4 Credit Hours.
Screenings, discussions, critiques, and individual as well as collaborative workshop exercises build upon editing techniques and aesthetic concepts introduced in FMA 2551. Through projects, lectures and screenings students will be exposed to professional editing methods, approaches and techniques while completing individual projects in picture montage, sound design and digital effects.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
FMA 2551|Minimum Grade of C|May not be taken concurrently.
FMA 3553. Color Correction. 4 Credit Hours.
Color correction is a key part of the creative filmmaking process. Color is used to tell a story, and create a mood and tone. It gives the cinematographer and director creative options that they do not have optically in the camera, and is no longer limited to high-end post-production. Today, all major film and television work - including commercials, music videos, documentaries, etc. - require some level of color correction. That is why every major video editing software program includes color-correction. This course will introduce you to the important post-production step of color correction as it pertains to the creative process. The class will begin by exploring the history of color timing, from the lab through video post to the complete digital finishing of a film project. It will discuss the need and the tools used for color correction. The class will discuss the differences between film and video as they relate to color spaces, sensitivity and texture, comparing all video formats, and film stocks. There will be hands-on exercises including several classes taught at Shooters.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
FMA 2551|Minimum Grade of C|May not be taken concurrently.

FMA 3670. Topics in Media Culture. 4 Credit Hours.
An exploratory seminar with varying special topics, which might include Gender, Theories of Subjectivity, and Marginalization and Representation.
NOTE: Course may be repeated.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
FMA 1171|Minimum Grade of C|May not be taken concurrently
OR FMA 1172|Minimum Grade of C|May not be taken concurrently
OR ENG 2711|Minimum Grade of C-|May not be taken concurrently
OR CMST 2111|Minimum Grade of C|May not be taken concurrently.

FMA 3671. Theory and Practice of Media Culture. 4 Credit Hours.
The course will describe how cultural studies have grown out of film and media studies, combining intellectual and social history with changing representational practices. Students will analyze the dynamic relationship between ideas, socio-cultural, practices and technologies. NOTE: This course is for majors only. Permission of the FMA chair required for non-majors.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(FMA 1171|Minimum Grade of C|May not be taken concurrently
AND FMA 1172|Minimum Grade of C|May not be taken concurrently
OR ENG 2711|Minimum Grade of C-|May not be taken concurrently
OR CMST 2111|Minimum Grade of C|May not be taken concurrently.

FMA 3672. Contemporary Screen Studies. 4 Credit Hours.
This course uses readings in film and media history, theory, and aesthetics to make sense of the contemporary mediascape, with an emphasis on cinema and media arts work from the most recent decade. The course will ask how new developments are challenging long-standing paradigms in film and media studies. At the same time, it will use theory and history to contextualize artistic and industrial practices from both "high" and "low" culture. Possible areas for exploration are digital cinema; "slow cinema"; the gallery film; video game aesthetics; comics and film; episodic cinema; interactive, animated, and hybrid documentary; and long-form serial television.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
FMA 1172|Minimum Grade of C-|May not be taken concurrently
OR ENG 2711|Minimum Grade of C-|May not be taken concurrently.

FMA 3677. American Film. 4 Credit Hours.
This course studies the American cinematic tradition from its inception in the 1890s to the present. We will examine the development of film as an aesthetic medium and a technical language, and we will connect the issues and ideas that films deal with to changes in American culture and society during this time period. We will be especially concerned with how films are used in the major value debates that shape America.
Repeatability: This course may not be repeated for additional credits.

FMA 3680. Foreign Studies in FMA. 3 to 6 Credit Hours.
This course is a summer seminar in one of SCT’s study abroad locations. It is only available during summers when an FMA faculty member is leading the seminar. For more information and an application, students should visit the SCT web site at www.temple.edu/sct. NOTE: FMA students may only count three credits towards the FMA major.
Repeatability: This course may be repeated for additional credit.

FMA 3696. Writing Intensive Film Study. 4 Credit Hours.
A writing intensive seminar with varying special topics which might include criticism and analysis of East European Cinema, The Auteur Theory Re-examined, and Ideology and Hollywood Cinema of the '50s. NOTE: Course may be repeated.
Course Attributes: WI
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
FMA 1172|Minimum Grade of C|May not be taken concurrently
OR ENG 2711|Minimum Grade of C-|May not be taken concurrently.
FMA 3770. Topics in Film Study. 4 Credit Hours.
Lectures and screenings on a special topic arranged each semester. Topics may include Film and the City, War and Film, Black Women and Film, Utopias and Dystopias, Documentary Fiction, Terrorism and Film, Gay and Lesbian Identity on Film, Philadelphia Cinema History, and Horror. Please consult with the instructor.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
FMA 1172|Minimum Grade of C|May not be taken concurrently
OR ENG 2711|Minimum Grade of C-|May not be taken concurrently
OR CMST 2111|Minimum Grade of C|May not be taken concurrently.

FMA 3771. Exhibition and Distribution of Independent Media. 3 Credit Hours.
The objective of this course is to expose students to methods and approaches for exhibition and distribution of independent media. Students will investigate popular media outlets such as film/video festivals, microcinemas and internet exhibition possibilities, to name only a few. The course will serve dual functions in that it will prepare students to distribute their own work while also exposing them to industry opportunities in exhibition and distribution. FMA 3771 is considered an advanced studies course.
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may not be repeated for additional credits.

FMA 3772. Fundraising for Independent Media. 3 Credit Hours.
This course is a workshop class where students must come prepared with a project around which they will create a fundraising campaign. During the course of the semester, students will be exposed to information on grant writing, non-profit and for-profit media entities and the legalities of media producing. At the conclusion of the course, students will have a full funding proposal ready for dissemination to various funding sources. FMA 3772 is considered an advanced studies course.
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may not be repeated for additional credits.

FMA 3871. Film Theory. 4 Credit Hours.
This course introduces key ideas and debates in film theory. Covering work from classical film theory through the 1970s Screen theory to contemporary approaches, the course asks how best to understand film as an art form and social document. It will interrogate the nature of cinema as a medium and the direction of film in a digital age. Key ideas to include film aesthetics, signification, textuality, ideology, narration, political modernism, and feminist and postcolonial critique. Film screenings will illuminate concepts in the readings.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(FMA 1172|Minimum Grade of C|May not be taken concurrently
OR ENG 2711|Minimum Grade of C-|May not be taken concurrently)
AND (FMA 2675|Minimum Grade of C|May not be taken concurrently
OR FMA 2676|Minimum Grade of C|May not be taken concurrently
OR FMA 2671|Minimum Grade of C|May not be taken concurrently
OR FMA 2670|Minimum Grade of C|May not be taken concurrently
OR FMA 3670|Minimum Grade of C|May not be taken concurrently
OR FMA 3671|Minimum Grade of C|May not be taken concurrently
OR FMA 3677|Minimum Grade of C|May not be taken concurrently).

FMA 3896. Advanced Film Analysis. 4 Credit Hours.
This advanced course in textual analysis course covers the range of contemporary critical approaches for analyzing film. Students will learn how to develop and write close reading of films and to develop ideas in relationship to existing film criticism. Possible areas of film criticism range from structuralism and formalism to evolutionary theory, ethical studies, and cognitive psychology.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(FMA 1172|Minimum Grade of C|May not be taken concurrently
OR ENG 2711|Minimum Grade of C-|May not be taken concurrently)
AND (FMA 2675|Minimum Grade of C|May not be taken concurrently
OR FMA 2676|Minimum Grade of C|May not be taken concurrently
OR FMA 4671|Minimum Grade of C|May not be taken concurrently
OR ENG 2702|Minimum Grade of C|May not be taken concurrently
OR ENG 2703|Minimum Grade of C|May not be taken concurrently).

FMA 4240. Topics in Production. 4 Credit Hours.
A workshop in film, video, audio, or emerging new technologies. The course will address a particular production issue (an aspect of technology or an aesthetic approach) each time it is offered, such as production design, color correction, 3-D computer imagery, special effects, audio experimentation, video verité, and film/video diary.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Film and Media Arts
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may be repeated for additional credit.
FMA 4241. Senior Project I. 4 Credit Hours.
Advanced pre-production and production of film, high definition video, or emerging technologies with specific emphasis on producing an ambitious work of artistic and social consequence, with critiques and evaluations by faculty and visiting professionals. Intensive field and laboratory work leading towards a year-long individual or collaborative final project for exhibition. NOTE: First semester of a two-semester sequence (4241-4242).
Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may not be repeated for additional credits
Pre-requisites: 
((FMA 2396|Minimum Grade of C|May not be taken concurrently
AND FMA 2551|Minimum Grade of C|May not be taken concurrently))
AND (FMA 2241|Minimum Grade of C|May not be taken concurrently
OR FMA 2242|Minimum Grade of C|May not be taken concurrently).

FMA 4242. Senior Project II. 4 Credit Hours.
Continuation of FMA 4241 (0382) with an emphasis on completing the field production and post-production phases of a year-long project in film, high definition video or an emerging new technology. NOTE: Second semester of a two-semester sequence (4241-4242).
Repeatability: This course may not be repeated for additional credits
Pre-requisites: 
FMA 4241|Minimum Grade of C|May not be taken concurrently.

FMA 4243. Film and Video Sound. 4 Credit Hours.
Theory and practice of sound as it relates to film and video production location recording techniques, wild sound pick-up, Foley and sound effects, sound sweetening, scoring for film, and sound mixing for film.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: 
FMA 2243|Minimum Grade of C|May not be taken concurrently.

FMA 4245. Cinematography Master Class I. 4 Credit Hours.
An advanced production workshop that combines theory and practice in the making of personal films and crewing each other's productions in Super 16mm or High Definition 24P digital video, along with technical and aesthetic exercises deconstructing cinematographic/vidgieographic moviemaking.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: 
FMA 3244|Minimum Grade of C|May not be taken concurrently.

FMA 4246. Cinematography Master Class II. 4 Credit Hours.
This course is a continuation of the fall semester as a practicum in completing projects in super 16mm and 24P digital advanced productions as well as introducing new exercises. This course will have professional visitors and will continue to deconstruct cinematography and various cinematic forms in the treatment of fiction/non-fiction portraiture in observational/direct cinema, avant-garde (burst and unconventional filming), and autobiographical styles of moviemaking.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: 
FMA 4245|Minimum Grade of C|May not be taken concurrently.

FMA 4248. Introduction to 3D: Modeling. 4 Credit Hours.
This course introduces the concepts and techniques of three-dimensional digital graphics, using Lightwave3D software. The first half of the semester introduces a broad palette of techniques and formal ideas, while the second half is spent on a major project of your own design. Previous experience with graphics or animation software is not required. The course offers a unique skill set and formal perspective. The course is open to juniors and seniors, including non-majors and upper-level students from other colleges, with the specific aim of fostering an interdisciplinary, collaborative workshop environment.
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may not be repeated for additional credits
Pre-requisites: 
((FMA 1171|Minimum Grade of C|May not be taken concurrently
AND FMA 1172|Minimum Grade of C|May not be taken concurrently))
AND (FMA 1142|Minimum Grade of C|May not be taken concurrently
OR FMA 1143|Minimum Grade of C|May not be taken concurrently).

FMA 4249. Introduction to 3D: Animation. 4 Credit Hours.
This course introduces the concepts and techniques of three-dimensional digital imagery and motion graphics, using Lightwave3D software. The first half of the semester introduces a broad palette of techniques and formal ideas, while the second half is spent on a major project of your own design. The course offers a unique skill set and formal perspective for upper level students. Open to juniors and seniors, including non-majors and upper-level students from other colleges, with the specific aim of fostering an interdisciplinary, collaborative workshop environment.
Repeatability: This course may not be repeated for additional credits.
FMA 4250. Topics in Production. 4 Credit Hours.
A workshop with a changeable technological or artistic topic in film or video post-production, multimedia, or 3-D computer animation.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Film and Media Arts
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may be repeated for additional credit.

FMA 4282. Special Projects. 1 to 4 Credit Hour.
Individual projects proposed by advanced students. NOTE: Candidates submit a detailed project plan on prescribed form before registration.
Repeatability: This course may be repeated for additional credit.

FMA 4341. Screen Directing. 4 Credit Hours.
Theories of directing, dramatic form, and acting are examined through lectures, demonstrations, readings, and applied exercises to establish a theoretical and practical foundation in film and television directing.
Department restrictions: Must be enrolled in one of the following Departments: CA:Film & Media Arts
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Film and Media Arts
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
FMA 2241|Minimum Grade of C|May not be taken concurrently
OR FMA 2242|Minimum Grade of C|May not be taken concurrently
OR FMA 2451|Minimum Grade of C|May not be taken concurrently.

FMA 4397. Screenwriting Master Class I. 4 Credit Hours.
The first half of the senior year capstone in screenwriting. Students will integrate in practice everything they have learned about film, screenwriting and story by developing the first draft of a feature-length screenplay. The course will be structured as a workshop, present students with the opportunity to further hone their critical skills and introduce them to the discipline of the writer's life.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
FMA 3396|Minimum Grade of C|May not be taken concurrently.

FMA 4398. Screenwriting Master Class II. 4 Credit Hours.
The second half of the senior year capstone. Students will focus on rewriting as an essential part of the writing process, as they rewrite and polish the first drafts of their feature scripts developed in Screenwriting Master Class I. They will be expected to cultivate their ability to give and receive a high level of criticism.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
FMA 4397|Minimum Grade of C|May not be taken concurrently.

FMA 4440. Topics in Production. 4 Credit Hours.
A workshop in film, video, audio, or emerging new technologies. The course will address a particular production issue (an aspect of technology or an aesthetic approach) each time it is offered, such as color correction, 3-D computer animation, special effects, digital audio applications, and multimedia.
Repeatability: This course may be repeated for additional credit.

FMA 4441. Physical Computing. 4 Credit Hours.
Physical Computing is a studio class in which students build electronic interfaces for interactive media projection and exhibition. This class mingles media-making with simple engineering, developing students’ skills in designing new ways to access and experience video and audio media.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
FMA 2451|Minimum Grade of C|May not be taken concurrently
OR FMA 1451|Minimum Grade of C|May not be taken concurrently.

FMA 4451. Digital Animation, Compositing and Modeling. 4 Credit Hours.
Animation, image compositing and object modeling have facilitated the crossover between animation and photographic imaging, mingling the fictive and the realistic image in digital film and videomaking. This workshop explores the techniques and effects of processing and layering the moving image within film/video language and within non-linear structures. Primary focus is on 2D animation and compositing using Adobe AfterEffects with other software packages introduced as time permits.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
FMA 2452|Minimum Grade of C|May not be taken concurrently.
FMA 4461. Interactive Narrative. 4 Credit Hours.
A creative course within a critical frame in which students make and study interactive worlds; textual, audio, graphical and video based stories, environments and games that incorporate explicit user choice. The course will be structured around a series of weekly exercises and readings, followed by a substantial final project. Students will learn necessary software. NOTE: An emphasis on interactive environments and games.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(FMA 2241|Minimum Grade of C|May not be taken concurrently
OR FMA 2242|Minimum Grade of C|May not be taken concurrently)
AND (FMA 2396|Minimum Grade of C|May not be taken concurrently)
AND (FMA 2451|Minimum Grade of C|May not be taken concurrently
OR FMA 2452|Minimum Grade of C|May not be taken concurrently).

FMA 4462. Video Game Theory and Writing. 4 Credit Hours.
This course will look at both the critical literature that has developed around video games and other interactive environments, as well as the practice of writing video games. Student's work will combine critical essays and written game or interactive creation that explores some of the theories addressed in the course. The course will look at some of the major issues in video game studies, such as simulation, representation, play, narrative, the ergotic, cut-scenes, and interactive space and time, as well as considering how video games may engage some long-standing aesthetic and philosophic questions that predate these games themselves.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
FMA 1172|Minimum Grade of C-|May not be taken concurrently.

FMA 4670. Topics in Film Study. 4 Credit Hours.
Lectures and screenings on a special topic arranged each semester. Topics may include: Advanced Film Theory, Third Cinema, Soundtracks, Exile Cinema, The Idea of Art Cinema, Hollywood Cinematographers, Hybrid Cinema, Gender and Sexuality. Please consult with the instructor.
Repeatability: This course may be repeated for additional credit.

FMA 4671. Senior Media Culture Thesis I. 4 Credit Hours.
The planning, conceptualization, and design of a written research project that combines skills in theory, criticism, and historiography, or a producible script based on research.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
FMA 3671|Minimum Grade of C|May not be taken concurrently
OR FMA 3871|Minimum Grade of C|May not be taken concurrently.

FMA 4673. International Cinema. 4 Credit Hours.
The course will survey and examine the various cultural determinants of international film forms through screenings, lectures, and readings. It will attempt to define the differences and similarities between mainstream Hollywood cinema and the range of international film forms from Africa, Latin America, Asia, Europe, and the Middle East.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
FMA 1172|Minimum Grade of C|May not be taken concurrently
OR ENG 2711|Minimum Grade of C-|May not be taken concurrently
OR CMST 2111|Minimum Grade of C|May not be taken concurrently.

FMA 4674. Anthropological Film/Media. 3 Credit Hours.
Anthropological perspectives on media studies in terms of both cultural organization and anthropological research tools; includes anthropological and communication theory, history of ethnography, and research methods with special emphasis on visual recording modes.
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may not be repeated for additional credits.

FMA 4675. Women Film/Video Artists. 4 Credit Hours.
This seminar will examine closely the work of women filmmakers and video artists and their dialogue with theories of gender representation. Working outside or against the currents of mainstream commercial practices, these media artists have taken up alternate cinematic forms, whether the independently produced feature film to experimental film and video art. Readings, screenings, and writing assignments will explore the historical, theoretical and aesthetic concerns that inform and respond to groundbreaking work by women such as Martha Rosler, Mira Nair, Trinh T. Minh-Ha, Chantal Akerman, Julie Dash, Claire Denis, Ngozi Onworah, Sadie Benning, Samira Makhmalbaf, and Miranda July, among others.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
FMA 1172|Minimum Grade of C|May not be taken concurrently
OR ENG 2711|Minimum Grade of C-|May not be taken concurrently
OR CMST 2111|Minimum Grade of C|May not be taken concurrently.
FMA 4696. Senior Media Culture Thesis II. 4 Credit Hours.
The completion of the research project or script begun in FMA 4671 (0380).
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
FMA 4671|Minimum Grade of C|May not be taken concurrently.

FMA 4697. Advanced Film History. 4 Credit Hours.
Throughout its century-plus of existence, the cinema has been at once a popular entertainment, a major art form, a culture industry, and a basis for social and national identity. This course goes into depth into historical case studies to examine what film history means as an attempt to explain the richness of cinema's past. The emphasis will be on research and argumentation. Possible topics to include the political economy of the film industry, reception study, social history of cinema going, national cinema, and auteur or star agency in the studio system. NOTE: Prior to spring 2010, the course title was "History of Narrative Film."
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(FMA 1172|Minimum Grade of C|May not be taken concurrently
OR ENG 2711|Minimum Grade of C|May not be taken concurrently)
AND (FMA 2675|Minimum Grade of C|May not be taken concurrently
OR FMA 2676|Minimum Grade of C|May not be taken concurrently).

FMA 4698. History of Documentary. 4 Credit Hours.
An interpretive historical survey of the non-fiction film explored through lectures, readings, and screenings. Films and writings to be studied will include work by Muybridge, Marey, Flaherty, Cooper, Grierson, Jennings, Lorentz, Van Dyke, Vertov, Ruttmann, Murrow, Leacock, Wiseman, Trinh Min Ha, and others.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
FMA 1172|Minimum Grade of C|May not be taken concurrently
OR ENG 2711|Minimum Grade of C|May not be taken concurrently.

FMA 4771. Pathways to Media Careers. 2 Credit Hours.
This course is designed to assist FMA Juniors and Seniors in transitioning from the insulation of the classroom to "real world" careers in media production. It will provide insight into the diverse opportunities available in media at independent, corporate, and industry levels.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
((FMA 1171|Minimum Grade of C|May not be taken concurrently
AND FMA 1172|Minimum Grade of C|May not be taken concurrently)
AND (FMA 1142|Minimum Grade of C|May not be taken concurrently
OR FMA 1143|Minimum Grade of C|May not be taken concurrently).

FMA 4940. Honors Topics in Film. 4 Credit Hours.
An advanced seminar or workshop in film or video. Topics vary each semester. NOTE: Reserved for University Honors students.
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.

FMA 4950. Honors Topics in Media. 4 Credit Hours.
An advanced seminar or workshop in multimedia, digital media, or new technologies. Topics vary each semester. NOTE: Reserved for University Honors Students.
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.

FMA 4983. Honors Reading. 1 to 4 Credit Hour.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.

FMA 4991. Honors Research/Project. 1 to 4 Credit Hour.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.
Finance (FIN)

Courses

FIN 0822. Investing for the Future. 4 Credit Hours.
This class will teach you about seemingly complicated financial topics in a very comprehensible manner that will help you make informed financial decisions to ensure a secure financial future. We begin with identification of common financial problems among the "young, fabulous and broke" and how to avoid them. After thinking about life and financial priorities, we address why thinking about retirement now must be at the top of your list. We examine how to compute your retirement needs and how to get there, primarily with a focus on investing in common stock. You will learn how to think smart about big ticket purchases such as cars, housing, and graduate/professional education. Finally we will make sure you understand how to create a safety net to protect your future. NOTE: This course fulfills the Quantitative Literacy (GQ) requirement for students under GenEd and a Quantitative Reasoning (QA or QB) requirement for students under Core. Students cannot receive credit for this course if they have successfully completed ECE 0822, FIN 0922 or RMI 0822.

Course Attributes: GQ
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 0701 to 4999| Minimum Grade of C-| May not be taken concurrently
OR MC3 Y| May not be taken concurrently
OR MC4 Y| May not be taken concurrently
OR MC5 Y| May not be taken concurrently
OR MC6 Y| May not be taken concurrently
OR STA1 Y| May not be taken concurrently
OR STA2 Y| May not be taken concurrently
OR STT3 Y| May not be taken concurrently.

FIN 0922. Honors Investing for the Future. 4 Credit Hours.
This class will teach you about seemingly complicated financial topics in an understandable manner that will help you make well-informed "money" decisions to ensure a secure financial future. At the same time, we will use the tools learned to analyze important current events such as the constant dollar (or inflation-adjusted) minimum wage and unfunded pension liabilities. We begin with identification of common financial problems among the "young, fabulous and broke" and how to think about addressing them. After addressing life and financial priorities, you will learn why retirement savings must be at the top of your list. We examine how to compute your retirement needs and how to get there, primarily with a focus on investing in the stock market. You will learn how to think smart about big ticket purchases such as cars, housing, and graduate/professional education. Finally we will make sure you understand how to create a safety net to protect your future. NOTE: This course fulfills the Quantitative Literacy (GQ) requirement for students under GenEd and a Quantitative Reasoning (QA or QB) requirement for students under Core. Students cannot receive credit for this course if they have successfully completed ECE 0822, FIN 0922 or RMI 0822.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GQ, HO
Repeatability: This course may not be repeated for additional credits

Pre-requisites:
MATH 0701 to 4999| Minimum Grade of C-| May not be taken concurrently
OR MC3 Y| May not be taken concurrently
OR MC4 Y| May not be taken concurrently
OR MC5 Y| May not be taken concurrently
OR MC6 Y| May not be taken concurrently
OR STA1 Y| May not be taken concurrently
OR STA2 Y| May not be taken concurrently
OR STT3 Y| May not be taken concurrently.
FIN 3101. Financial Management. 3 Credit Hours.
This course provides a survey of the financial problems associated with the life cycle of a business firm. Topics include: financial analysis and planning, capital budgeting, cost of capital, and the sources and uses of business funds. While the emphasis is on decision making within a corporate environment, the tools taught in this course are just as relevant to other forms of business organization and to personal financial management.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(ECON 1101|Minimum Grade of C-|May not be taken concurrently)
OR ECON 1901|Minimum Grade of C-|May not be taken concurrently
AND (ECON 1102|Minimum Grade of C-|May not be taken concurrently)
OR ECON 1902|Minimum Grade of C-|May not be taken concurrently
AND (STAT 2102|Minimum Grade of C-|May not be taken concurrently)
OR STAT 2902|Minimum Grade of C-|May not be taken concurrently
OR STAT 2104|Minimum Grade of C-|May not be taken concurrently
OR STAT 2103|Minimum Grade of C-|May not be taken concurrently
OR STAT 2903|Minimum Grade of C-|May not be taken concurrently
AND (ACCT 2102|Minimum Grade of C-|May be taken concurrently)
OR ACCT 2902|Minimum Grade of C-|May be taken concurrently
OR ACCT 2521|Minimum Grade of C-|May be taken concurrently).

FIN 3504. Intermediate Corporate Finance. 3 Credit Hours.
This course is an Excel based course in financial management. The course covers three broad areas of study: The first area is financial statements analysis, financial statements forecasting and free cash flow valuation of the firm. The second focuses on capital budgeting decisions. The third covers the cost of capital, leverage and capital structure policy. You will demonstrate your proficiency in each of the broad areas with an exam and a case analysis using the Excel spreadsheet. This course provides an intensive introduction to corporate financial decision-making and will prepare you for subsequent courses in the finance major.
College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
FIN 3101|Minimum Grade of C|May not be taken concurrently
OR FIN 3901|Minimum Grade of C|May not be taken concurrently
OR FIN 3502|Minimum Grade of C|May not be taken concurrently.

FIN 3505. Management of Financial Institutions. 3 Credit Hours.
This course applies financial management theory and practice to the management of banks and other financial institutions. Topics include: risk-return tradeoffs, regulatory constraints, performance analysis, asset-liability management, and liquidity, interest rate and credit risk management.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
FIN 3101|Minimum Grade of C|May not be taken concurrently
OR FIN 3901|Minimum Grade of C|May not be taken concurrently
OR FIN 3503|Minimum Grade of C|May not be taken concurrently
OR FIN 3504|Minimum Grade of C|May not be taken concurrently.
FIN 3506. Derivatives and Financial Risk Management. 3 Credit Hours.
This course provides a theoretical and practical analysis of the following derivatives instruments: futures, options, options on futures, and swaps. Topics include: speculative and hedging strategies, and the financial risk management of stock portfolios.  
Repeatability: This course may not be repeated for additional credits  
Pre-requisites:  
FIN 3101|Minimum Grade of C|May not be taken concurrently  
OR FIN 3901|Minimum Grade of C|May not be taken concurrently  
OR FIN 3503|Minimum Grade of C|May not be taken concurrently  
OR FIN 3504|Minimum Grade of C|May not be taken concurrently.  

FIN 3507. Investments. 3 Credit Hours.  
This course provides a detailed analysis of the equity market. Topics include: market microstructure, the principles of portfolio theory, and the valuation of equities including the techniques of fundamental security analysis.  
Repeatability: This course may not be repeated for additional credits  
Pre-requisites:  
FIN 3101|Minimum Grade of C|May not be taken concurrently  
OR FIN 3901|Minimum Grade of C|May not be taken concurrently  
OR FIN 3503|Minimum Grade of C|May not be taken concurrently  
OR FIN 3504|Minimum Grade of C|May not be taken concurrently.  

FIN 3508. Money and Fixed Income Markets. 3 Credit Hours.  
This course provides a theoretical and practical analysis of the spot markets for money, bonds and other fixed income instruments. Topics include: money market instruments, duration and convexity of bond yields, default risk, the term structure of interest rates, interest rate volatility, financial risk management of bond portfolios, and securitization.  
Repeatability: This course may not be repeated for additional credits  
Pre-requisites:  
FIN 3101|Minimum Grade of C|May not be taken concurrently  
OR FIN 3901|Minimum Grade of C|May not be taken concurrently  
OR FIN 3503|Minimum Grade of C|May not be taken concurrently  
OR FIN 3504|Minimum Grade of C|May not be taken concurrently.  

FIN 3509. Real Estate Investment and Finance. 3 Credit Hours.  
This course provides theoretical and practical analyses of investments in real estate assets. Topics include: market and site analyses, financing alternatives and valuation techniques. NOTE: Finance 3509 is required for Real Estate majors.  
Repeatability: This course may not be repeated for additional credits  
Pre-requisites:  
FIN 3101|Minimum Grade of C|May not be taken concurrently  
OR FIN 3901|Minimum Grade of C|May not be taken concurrently  
OR FIN 3503|Minimum Grade of C|May not be taken concurrently  
OR FIN 3504|Minimum Grade of C|May not be taken concurrently.
FIN 3512. Financial Modeling. 3 Credit Hours.

Presents the theory and practice of financial management, emphasizing computer-based modeling and forecasting. Uses spreadsheets and other software products to analyze the impacts of financial decisions related to financial statement analysis, cash budgeting, and cost of capital determination, capital budgeting, and capital structure choices. The course covers a variety of techniques, such as sensitivity and scenario analysis, optimization methods, Monte Carlo simulation, and regression analysis.


Repeatability: This course may not be repeated for additional credits

Pre-requisites:
FIN 3101|Minimum Grade of C|May not be taken concurrently
OR FIN 3901|Minimum Grade of C|May not be taken concurrently
OR FIN 3503|Minimum Grade of C|May not be taken concurrently
OR FIN 3504|Minimum Grade of C|May not be taken concurrently.

FIN 3513. Financial Statement Analysis. 3 Credit Hours.

This course is about analyzing and using information from corporate financial reports for the purpose of financial analysis and valuation. The goal of this course is to learn how to use financial statement information to evaluate the firm's past and present performance and to predict likely future outcomes. We will learn to evaluate how well (or poorly) the financial statements depict the firm's economics and how we can use additional information, especially from footnote disclosures, to better understand and analyze financial statement information.


Repeatability: This course may not be repeated for additional credits

Pre-requisites:
FIN 3101|Minimum Grade of C|May not be taken concurrently
OR FIN 3901|Minimum Grade of C|May not be taken concurrently
OR FIN 3503|Minimum Grade of C|May not be taken concurrently
OR FIN 3504|Minimum Grade of C|May not be taken concurrently.

FIN 3514. Commercial Real Estate Analysis. 3 Credit Hours.

This course is designed to give students an understanding of activities and decisions that result in the man-made environment by introducing students to the complex world of commercial real estate analysis and development. Of primary interest are principles of sound development and the procedures and interactions of the analyst/developer that will be necessary to coordinate with governmental officials, community leaders, and neighbors, while meeting the needs of users of commercial real estate space. Of importance will be the integration of community preferences including environmental and sustainable development issues. An understanding of commercial real estate markets and development dynamics will require an understanding of real estate assets; complex urban dynamics; pertinent laws and regulations; the use of public and private financing; and the marketing of space within an urban context. Students should also develop the skills necessary to determine the requirements for the successful financial analysis of commercial real estate development including the forecasts of future cash flows and application of appropriate financial analysis techniques.


Repeatability: This course may not be repeated for additional credits

Pre-requisites:
FIN 3101|Minimum Grade of C|May not be taken concurrently
OR FIN 3901|Minimum Grade of C|May not be taken concurrently
OR FIN 3503|Minimum Grade of C|May not be taken concurrently
OR FIN 3504|Minimum Grade of C|May not be taken concurrently.

FIN 3515. Financial Markets and Institutions for Business. 3 Credit Hours.

This course provides finance majors with a survey of financial instruments (with a focus on fixed income and money markets), markets, and institutions with a strong current events perspective. The course will have an applied managerial perspective that focuses on both how the markets are viewed by companies who need access to funding as well as the professionals that work in the financial services industry. The course is intended not only for those interested in careers in financial markets and institutions, but also for those who wish to extend their institutional industry specific knowledge.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mgmt, Fox School

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
FIN 3101|Minimum Grade of C|May be taken concurrently
OR FIN 3901|Minimum Grade of C|May be taken concurrently.
FIN 3519. Introduction to Financial Planning. 3 Credit Hours.
This course provides an overview of the professional approach to personal financial planning. Topics include client/planner interactions; time value of money applications to retirement planning needs; personal financial statement development and assessment; cash flow and debt management; education planning; risk management and insurance; investment planning; employee benefits, tax and estate planning; ethics and practices standards; and practice management concepts.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
FIN 3101|Minimum Grade of C|May not be taken concurrently
OR FIN 3901|Minimum Grade of C|May not be taken concurrently.

FIN 3551. International Finance. 3 Credit Hours.
The course surveys the theory and practice of international finance, as it relates to both markets and firms. Topics include issues in international financial systems, currency market and risk management, and international corporate finance.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
FIN 3101|Minimum Grade of C|May not be taken concurrently
OR FIN 3901|Minimum Grade of C|May not be taken concurrently
OR FIN 3503|Minimum Grade of C|May not be taken concurrently
OR FIN 3504|Minimum Grade of C|May not be taken concurrently.

FIN 3571. Owl Fund Seminar. 3 Credit Hours.
This course provides select students with the in-depth training required to manage the William C. Dunkelberg Owl Fund.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
FIN 3101|Minimum Grade of C|May not be taken concurrently
OR FIN 3901|Minimum Grade of C|May not be taken concurrently.

FIN 3580. Special Topics. 3 Credit Hours.
Special topics in current developments in the field of Finance.
College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
FIN 3101|Minimum Grade of C|May not be taken concurrently
OR FIN 3901|Minimum Grade of C|May not be taken concurrently
OR FIN 3503|Minimum Grade of C|May not be taken concurrently
OR FIN 3504|Minimum Grade of C|May not be taken concurrently.

FIN 3581. Field Experience in Finance. 3 Credit Hours.
This course allows finance majors to apply what they have learned in the classroom coupled with any professional skills they may have acquired in the workplace. The requirements of the course include: (1) an expectation that you can demonstrate a synthesis of finance concepts through the preparation of a final paper; (2) student responsibility to arrange meetings every other week with their faculty sponsor to track progress throughout the semester; and (3) a strong work ethic including self-motivation and self-discipline as well as an ability to meet deadlines is critical.
College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(FIN 3504|Minimum Grade of C|May not be taken concurrently)
AND (FIN 3507|Minimum Grade of C|May not be taken concurrently).

FIN 3582. Independent Study. 1 to 6 Credit Hour.
Readings and/or research paper under the supervision of a faculty member.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Finance, Real Estate
College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
FIN 3101|Minimum Grade of C|May not be taken concurrently
OR FIN 3901|Minimum Grade of C|May not be taken concurrently
OR FIN 3503|Minimum Grade of C|May not be taken concurrently.
FIN 3596. Owl Fund Seminar II. 3 Credit Hours.
This course will expose you to a key genre in the asset management field: an "initiating coverage" report from a buy or sell-side broker that is distributed to key clients such as high net worth investors, institutional money managers, and institutional investors. The completion of the assignments for this class requires you to demonstrate an understanding of the macro economy, industry structure and competition, marketing strategy, financial accounting, and basic corporate finance principles. In addition, you will also be challenged to explore the balance between advocacy and professional skepticism in presenting your results. Students must earn a grade of C in this course if they are using it to fill the writing intensive course requirement for their degree.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
FIN 3571|Minimum Grade of C|May not be taken concurrently.

FIN 3671. Advanced Owl Fund Seminar. 3 Credit Hours.
This course is a continuation of Finance 3571 that will focus on improving the students' skills in value investing and applied portfolio analysis. Students may register for this class only with the permission of the instructor.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
FIN 3571|Minimum Grade of C|May not be taken concurrently.

FIN 3682. Independent Study. 1 to 6 Credit Hour.
Readings and/or research paper under the supervision of a faculty member.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Finance, Real Estate
College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
FIN 3101|Minimum Grade of C|May not be taken concurrently
OR FIN 3901|Minimum Grade of C|May not be taken concurrently
OR FIN 3503|Minimum Grade of C|May not be taken concurrently.

FIN 3901. Honors Financial Management. 3 Credit Hours.
This course provides a survey of the financial problems associated with the life cycle of a business firm. Topics include: financial analysis and planning, capital budgeting, cost of capital, and the sources and uses of business funds. While the emphasis is on decision making within a corporate environment, the tools taught in this course are just as relevant to other forms of business organization and to personal financial management. Finance 3901 is the honors section of Finance 3101 and meets the FSBM Finance 3101 requirement.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(ECON 1101|Minimum Grade of C|May not be taken concurrently
OR ECON 1901|Minimum Grade of C|May not be taken concurrently)
AND (ECON 1102|Minimum Grade of C|May not be taken concurrently
OR ECON 1902|Minimum Grade of C|May not be taken concurrently)
AND (STAT 2102|Minimum Grade of C|May not be taken concurrently
OR STAT 2902|Minimum Grade of C|May not be taken concurrently)
AND (STAT 2104|Minimum Grade of C|May not be taken concurrently
OR STAT 2103|Minimum Grade of C|May not be taken concurrently
OR STAT 2903|Minimum Grade of C|May not be taken concurrently)
AND (ACCT 2102|Minimum Grade of C|May be taken concurrently
OR ACCT 2902|Minimum Grade of C|May be taken concurrently
OR ACCT 2521|Minimum Grade of C|May be taken concurrently).
FIN 3999. Honors Thesis I. 1 to 3 Credit Hour.  
The first of a two-part sequence of courses in which independent research is conducted under the supervision of a thesis advisor from the Finance department resulting in a substantial piece of original research, roughly 30 to 50 pages in length upon completion of Finance 4999. The student must publicly present his/her findings at a Temple University Research Forum session or the equivalent during one of the two semesters during which these courses are undertaken.  
Field of Study Restrictions: Must be enrolled in one of the following Majors: Finance  
College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School  
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR  
Course Attributes: HO  
Repeatability: This course may be repeated for additional credit.

FIN 4596. Seminar in Financial Management. 3 Credit Hours.  
This course integrates the key concepts of finance around the theme of valuation. The course enables students to: prepare a complete financial analysis focusing on the firm's sources of value and economic profit; compute a firm's cost of capital using publicly available data; value a firm using the free cash flow method; and use the valuation model to assess takeover alternatives and potential capital structure changes. NOTE: Finance 4596 is the required Capstone course for Finance majors. Students must earn a grade of C in this course if they are using it to fill the writing intensive course requirement for their degree.  
Field of Study Restrictions: Must be enrolled in one of the following Majors: Finance  
College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School  
Course Attributes: WI  
Repeatability: This course may not be repeated for additional credits  
Pre-requisites:  
FIN 3503|Minimum Grade of C|May not be taken concurrently  
OR (FIN 3504|Minimum Grade of C|May not be taken concurrently  
AND FIN 3507|Minimum Grade of C|May not be taken concurrently).

FIN 4597. Seminar in Real Estate Asset Analysis. 3 Credit Hours.  
Finance 4597 is a detailed study of the financial asset and investment characteristics of commercial real estate using lecture and case analysis techniques. Some class time will be devoted to student interaction and team work development skills. A course project will develop writing and analytical skills. The course covers a variety of topics including acquisition and cash flow analysis, lease analysis, asset and property management strategies, financing strategies, disposition strategies, federal income taxation issues, risk management strategies and standard valuation techniques for commercial real estate. In addition to the course prerequisites, students should have a suitable background in the use of software for basic spreadsheet analysis and data and statistical analysis. NOTE: This is the required capstone course for real estate majors. Students must earn a grade of C in this course if they are using it to fill the writing intensive course requirement for their degree.  
Field of Study Restrictions: Must be enrolled in one of the following Majors: Real Estate  
College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School  
Course Attributes: WI  
Repeatability: This course may not be repeated for additional credits  
Pre-requisites:  
(FIN 3509|Minimum Grade of C|May not be taken concurrently)  
AND (RE 3501|Minimum Grade of C|May not be taken concurrently).

FIN 4598. Seminar in Financial Planning. 3 Credit Hours.  
Students taking this course are exposed to case analysis and integration of the six major areas of financial planning: fundamentals of financial planning, risk management, investments, income tax planning, retirement planning, and estate planning. Your primary assignment is to develop a well-constructed financial plan that analyzes a hypothetical client's situation integrating all of the knowledge you have been given in the program. Along with the written plan, you will also provide an oral presentation to a panel of CFP professionals. NOTE: FIN 4598 is the required capstone course for Financial Planning majors. A minimum grade of C is required in this course to graduate with a Financial Planning major.  
Course Attributes: WI  
Repeatability: This course may not be repeated for additional credits  
Pre-requisites:  
(FIN 3507|Minimum Grade of C|May not be taken concurrently)  
AND (FIN 3519|Minimum Grade of C|May not be taken concurrently)  
AND (LGLS 3519|Minimum Grade of C|May not be taken concurrently).
FIN 4999. Honors Senior Thesis II. 1 to 3 Credit Hour.
Independent research conducted under the supervision of a thesis advisor from the Finance Department resulting in a substantial piece of original research, roughly 30 to 50 pages in length. Student must publicly present his/her findings at a Temple University Research Forum session or the equivalent if this was not done in Finance 3999.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Finance
College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
FIN 3999|Minimum Grade of C-|May not be taken concurrently.

Foundation Program (FDPR)

Courses

FDPR 1501. Introduction to Art and Design. 1 Credit Hour.
This course, for all Tyler first year students in art, design, and architecture, investigates the context for emerging ideas and issues relevant to contemporary practice.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits.

FDPR 1502. Investigations of Art and Design. 1 Credit Hour.
This course, for Tyler BFA students, continues course 1501 and addresses the area in which undeclared students may pursue majors at Tyler School of Art.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits.

FDPR 1511. Foundation Drawing. 3 Credit Hours.
An introduction to foundation drawing course that concentrates on developing basic formal, conceptual, and technical skills. The course examines varied media in the study of the figure, geometric composition, and landscape. A discussion of technology in studio practice is part of all Foundation courses. NOTE: Enrollment is limited to students accepted for Tyler BFA programs.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits.

FDPR 1512. Foundation Drawing. 3 Credit Hours.
A continued introduction to drawing, building upon Foundation Drawing 1511 (0001), with more advanced concepts, techniques and formal issues. This course introduces color as it relates to drawing.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits.

FDPR 1521. 2D Foundation Principles. 3 Credit Hours.
This course introduces students to the fundamental principles of visual language, including formal, technical, and conceptual aspects of image making in two-dimensions. The emphasis is on acquiring a basic vocabulary for the discussion of 2D art and design across media, and projects focus on the construction of meaning through a variety of representational strategies. Projects in this course are carried out in black and white to emphasize value, contrast, and figure ground relationships. A discussion of technology in studio practice is part of all Foundation courses. NOTE: Enrollment is limited to students accepted for Tyler BFA programs.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits.

FDPR 1522. 2D Foundation Principles. 3 Credit Hours.
This course introduces students to the fundamental principles of visual language, including formal, technical, and conceptual aspects of image making in two-dimensions. The emphasis is on acquiring a basic vocabulary for the discussion of 2D art and design across media, and projects focus on the construction of meaning through a variety of representational strategies. Each 2D project provides a unique theoretical and practical context from which students are introduced to the mechanics of color. NOTE: Enrollment limited to students accepted for Tyler BFA programs.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits.
FDPR 1531. 3D Foundation Principles/W. 3 Credit Hours.
A foundation course, paired with BFA Foundation 1532, which teaches students the fundamentals of working with 3D form and space. The course emphasizes the utilization of a variety of basic materials, and an intensive introduction to the woodshop. A discussion of technology in studio practice is part of all Foundation courses. NOTE: Enrollment is limited to students accepted for Tyler BFA programs.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits.

FDPR 1532. 3D Foundation Principles/C. 3 Credit Hours.
A foundation course, paired with BFA Foundation 1531, which introduces the fundamentals of working with 3D form and space. Simple materials such as paper, cardboard, wire, plaster, and clay are used, and moldmaking is introduced. A discussion of technology in studio practice is part of all Foundation courses. NOTE: Enrollment is limited to students accepted for Tyler BFA programs.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits.

FDPR 1541. Foundation Computer. 2 Credit Hours.
This course introduces Foundation students to the fundamentals of digital imaging and research, including research on the World Wide Web, imaging software (such as Adobe Photoshop and Adobe Illustrator), and concepts inherent in the digital image.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits.

FDPR 1542. Foundation Computer Lab. 0 Credit Hours.
This course introduces Foundation students to the fundamentals of digital imaging and research, including research on the World Wide Web, imaging software (such as Adobe Photoshop and Adobe Illustrator), and concepts inherent in the digital image.
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits.

French (FREN)

Courses

FREN 0868. World Society in Literature & Film. 3 Credit Hours.
Learn about a particular national culture - Russian, Indian, French, Japanese, Italian, for example, each focused upon in separate sections of this course - by taking a guided tour of its literature and film. You don't need to speak Russian, Hindu, French or Japanese to take one of these exciting courses, and you will gain the fresh, subtle understanding that comes from integrating across different forms of human expression. Some of the issues that will be illuminated by looking at culture through the lens of literature and film: Family structures and how they are changing, national self-perceptions, pivotal moments in history, economic issues, social change and diversity. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: Arabic 0868/0968, Asian Studies 0868, Chinese 0868/0968, English 0868/0968, French 0968, German 0868/0968, Hebrew 0868, Italian 0868/0968, Japanese 0868/0968, Jewish Studies 0868, Korean 0868, LAS 0868/0968, Political Science 0868/0968, Russian 0868/0968, or Spanish 0868/0968.
Course Attributes: GG
Repeatability: This course may not be repeated for additional credits.

FREN 0968. Honors World Society in Literature & Film. 3 Credit Hours.
Learn about a particular national culture - Russian, Indian, French, Japanese, Italian, for example, each focused upon in separate sections of this course - by taking a guided tour of its literature and film. You don't need to speak Russian, Hindu, French or Japanese to take one of these exciting courses, and you will gain the fresh, subtle understanding that comes from integrating across different forms of human expression. Some of the issues that will be illuminated by looking at culture through the lens of literature and film: Family structures and how they are changing, national self-perceptions, pivotal moments in history, economic issues, social change and diversity. (This is an Honors course.) NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: Arabic 0868/0968, Asian Studies 0868, Chinese 0868/0968, English 0868/0968, French 0968, German 0868/0968, Hebrew 0868, Italian 0868/0968, Japanese 0868/0968, Jewish Studies 0868, Korean 0868, LAS 0868/0968, Political Science 0868/0968, Russian 0868/0968, or Spanish 0868/0968.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GG, HO
Repeatability: This course may not be repeated for additional credits.
FREN 1001. Introduction to French I. 4 Credit Hours.
Introduction to the basic skills of French speaking, listening comprehension, reading, and writing in authentic cultural contexts using multimedia resources. At the end of the course students should be able to converse, write and read at the Novice Low level (ACTFL Rating Scale - see the proficiency guidelines at www.actfl.org).
Course Attributes: LA
Repeatability: This course may not be repeated for additional credits.

FREN 1002. Introduction to French II. 4 Credit Hours.
A continuation of the activities of French 1001. The basics already learned are practiced, and new patterns of oral communication and writing are introduced. Additional fundamentals of grammar, graded readings, listening and viewing activities provide further insight into Francophone cultures using multimedia resources. At the end of the course students should be able to converse, write and read at the Novice Mid-level (ACTFL Rating Scale).
Course Attributes: LA
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
FREN 1001|Minimum Grade of C-|May not be taken concurrently
OR LCFR C1002|May not be taken concurrently
OR LCFR B1002|May not be taken concurrently
OR LCFR C1003|May not be taken concurrently
OR LCFR B1003|May not be taken concurrently
OR LCFR EXMPT|May not be taken concurrently.

FREN 1003. Introduction to French III. 3 Credit Hours.
Reinforces previously acquired language skills. Introduction of more subtle points of grammar, more sophisticated conversation, readings, listening and viewing activities provide deeper awareness of Francophone cultures using multimedia resources. At the end of the course students should be able to converse, write and read at the Intermediate Low level (ACTFL Rating Scale).
Course Attributes: LB
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
FREN 1002|Minimum Grade of C-|May not be taken concurrently
OR LCFR C1003|May not be taken concurrently
OR LCFR B1003|May not be taken concurrently
OR LCFR EXMPT|May not be taken concurrently.

FREN 1221. Africa, Caribbean, France. 3 Credit Hours.
An introduction to writing in French outside of continental France, limited to literatures from French speaking Black Africa and the Caribbean. The course will encompass four perspectives: viewing the Francophone world through the prism of French intellectual and cultural traditions; reacting to the French presence from the Francophone world; appraising the pitfalls in the France/Francophone encounter; and assessing the potential for creative expression within the authentic structures of the Francophone communities themselves. Course materials will include literary and cultural texts, videos, CD ROMs, and visits to World Wide Web sites. NOTE: (1) Course offered in English; no foreign language skills required. (2) This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. In addition to meeting the university Core International Studies requirement, this course meets the Non-Western/Third World IS requirement for Communication Sciences majors. Please note the recent update to the Core IS requirement at www.temple.edu/vpus/resources/coreupdates.htm#coreisupdate.
Course Attributes: IS
Repeatability: This course may not be repeated for additional credits.

FREN 1703. Cours Pratique de Langue Française - Elements. 3 Credit Hours.
This course is offered by the Sorbonne in Paris, France. See the French advisor for placement and a full description.
Repeatability: This course may not be repeated for additional credits.

FREN 1704. Cours Pratique de Langue Française - Elements. 4 Credit Hours.
Introduction to the basic structures and vocabulary of written and oral French. Emphasis is placed on the four skills - speaking, understanding, reading, and writing. Includes 10 hours of phonetics in a phonetics laboratory. Course given in France and taught by native French speakers. Placement determined by examination administered in Paris.
Repeatability: This course may not be repeated for additional credits.

FREN 1706. Cours Pratique de Langue Française - Elements. 6 Credit Hours.
Introduction to the basic structures of written and oral French. Emphasis is placed on the four skills - speaking, understanding, reading and writing. Includes 15 hours of phonetics in a phonetics laboratory. Course given in France and taught by native French professors. Placement is determined by examination administered in Paris.
Repeatability: This course may not be repeated for additional credits.
FREN 2001. Intermediate. 3 Credit Hours.
Reinforces and enhances the activities of French 1003 (C061). The student completing the course should be able to converse and write at the Intermediate Low level, and to read literary works in French at the Intermediate Mid level (ACTFL Rating Scale). NOTE: Intended as a bridge to upper-level courses.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
FREN 1003|Minimum Grade of C-|May not be taken concurrently
OR LCFR EXMPT|May not be taken concurrently.

FREN 2021. Conversation I. 3 Credit Hours.
Study of French language with intensive work in skills required for understanding and speaking. Stress on phonetics, practical vocabulary, idioms, and useful sentence structures. At the end of the course, students should be able to converse at the Intermediate Mid level (ACTFL Rating Scale - see the proficiency guidelines at www.actfl.org).
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
FREN 2001|Minimum Grade of C-|May not be taken concurrently.

FREN 2041. Reading I. 3 Credit Hours.
Intensive work on skills required for reading. Emphasis on techniques to allow understanding of French texts without translating them into English. At the end of the course, students should be able to read at the Intermediate High level (ACTFL Rating Scale).
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
FREN 2001|Minimum Grade of C-|May not be taken concurrently.

FREN 2042. Reading II: Introduction to French Literary Analysis. 3 Credit Hours.
Intensive study and practice--oral and written--of techniques of literary analysis applied to close reading and discussion of selected French texts chosen from representative genres over various literary periods. Work in the course involves writing and discussion utilizing the concepts and vocabulary associated with French literary analysis, giving special attention to the explications de texte mode.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(FREN 2041|Minimum Grade of C-|May not be taken concurrently
AND FREN 2096|Minimum Grade of C-|May not be taken concurrently).

FREN 2096. Composition I. 3 Credit Hours.
Intensive work on skills required for writing. Stress on vocabulary and sentence patterns helpful in writing French. Use of source materials (dictionaries, reference works, specialized vocabularies, etc.). At the end of the course, students should be able to write at the Intermediate Mid level (ACTFL Rating Scale).
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
FREN 2001|Minimum Grade of C-|May not be taken concurrently.

FREN 2501. French for Business I. 3 Credit Hours.
Intensive work in spoken and written French needed by business personnel and other travelers to Francophone areas. Vocabulary, idiomatic usage and special terminology for professional needs. Cultural aspects, practice in personal contact and letter writing. At the end of this course students should be able to converse, write and read at the Intermediate Mid level (ACTFL Rating Scale).
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
FREN 2001|Minimum Grade of C-|May not be taken concurrently.

FREN 2703. Cours Pratique de Langue Francaise - Intermediate Level. 3 Credit Hours.
This course is offered by the Sorbonne in Paris, France. See the French advisor for placement and a full description.
Repeatability: This course may not be repeated for additional credits.

FREN 2704. Cours Pratique de Langue Francaise - Intermediate Level. 4 Credit Hours.
This course reinforces the basic skills of speaking, understanding, reading, and writing French. Emphasis on composition, conversation and some textual analysis. Introduction to French culture and civilization. Includes 10 hours of phonetics in a phonetics laboratory. Course given in France and taught by native French professors. Placement is determined by examination administered in Paris.
Repeatability: This course may not be repeated for additional credits.

FREN 2706. Cours Pratique de Langue Francaise - Intermediate Level. 6 Credit Hours.
This course reinforces the basic skills of speaking, understanding, reading, and writing French. Emphasis on composition, conversation and some textual analysis. Introduction to French culture and civilization. Includes 15 hours of phonetics in a phonetics laboratory. Course given in France and taught by native French professors. Placement is determined by examination administered in Paris.
Repeatability: This course may not be repeated for additional credits.
FREN 3001. Advanced Grammar. 3 Credit Hours.
Review and enhancement of French grammar to ensure mastery of the structures of the written and spoken language needed for effective performance in other courses at the 3000 and 4000 levels.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(FREN 2096|Minimum Grade of C-|May not be taken concurrently)
AND (FREN 2000 to 4999| Required Courses:1|Minimum Grade of C-|May not be taken concurrently).

FREN 3021. Conversation II. 3 Credit Hours.
Enhancement of the skills developed in French 2021. At the end of this course students should be able to converse at the Intermediate High level (ACTFL Rating Scale - see the proficiency guidelines at www.actfl.org).
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
FREN 2021|Minimum Grade of C-|May not be taken concurrently.

FREN 3096. Composition II. 3 Credit Hours.
Writing-intensive Capstone Course required for all French majors. Challenging reading and writing assignments. Builds on writing skills acquired at the lower intermediate level, with emphasis on composition, register and style. Students do considerable writing of different types and expand active vocabulary appropriate to style and register. At the end of this course students should be able to write at the Intermediate High level (ACTFL Rating Scale).
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(FREN 2041|Minimum Grade of C-|May not be taken concurrently
AND FREN 2096|Minimum Grade of C-|May not be taken concurrently).

FREN 3101. Survey of French Literature I. 3 Credit Hours.
Movements, trends, and events which constitute the evolution of French literature from the Middle Ages to the Enlightenment, and an examination of the contributions of major authors in each period.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(FREN 2041|Minimum Grade of C-|May not be taken concurrently
AND FREN 2096|Minimum Grade of C-|May not be taken concurrently).

FREN 3102. Survey of French Literature II. 3 Credit Hours.
Movements, trends and events which constitute the evolution of French literature in the 19th and 20th centuries, and an examination of the contributions of major authors in each period.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(FREN 2041|Minimum Grade of C-|May not be taken concurrently
AND FREN 2096|Minimum Grade of C-|May not be taken concurrently).

FREN 3201. Culture and Civilization I. 3 Credit Hours.
Study of the historical, geographical, artistic, psychological, and social bases of contemporary France. This course is essential for students seeking teaching certification.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(FREN 2041|Minimum Grade of C-|May not be taken concurrently
AND FREN 2096|Minimum Grade of C-|May not be taken concurrently).

FREN 3241. French Culture through Film. 3 Credit Hours.
This course examines contemporary French cinema in the context of its relationship to modern France. Students will analyze the socio-political and cultural commentary found in selected films.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(FREN 2041|Minimum Grade of C-|May not be taken concurrently
AND FREN 2096|Minimum Grade of C-|May not be taken concurrently).

FREN 3703. Cours Pratique de Langue Francaise - Upper Level. 3 Credit Hours.
This course is offered by the Sorbonne in Paris, France. See the French advisor for placement and a full description.
Repeatability: This course may not be repeated for additional credits.
FREN 3704. Cours Pratique de Langue Francaise - Upper Level. 4 Credit Hours.
Repeatability: This course may not be repeated for additional credits.

FREN 3706. Cours Pratique de Langue Francaise - Upper Level. 6 Credit Hours.
Repeatability: This course may not be repeated for additional credits.

FREN 3742. Phonetics. 3 Credit Hours.
Repeatability: This course may not be repeated for additional credits.

FREN 3766. Explication de Textes. 3 Credit Hours.
Close critical reading and analysis of selected short prose passages in order to heighten the appreciation of an individual literary text, its intellectual, moral, or esthetic features. Emphasis on using critical vocabulary and on refining language skills in French. Course given in France and taught by native French professors.
Repeatability: This course may not be repeated for additional credits.

FREN 3901. Honors Seminar. 3 Credit Hours.
Advanced study for honors students.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.

FREN 4061. Composition III: Creative Writing Through Reading. 3 Credit Hours.
French 4061 is an upper-level course organized around creative writing through reading. It is designed to enhance your creative use of the language and to contribute to your understanding of literature through the study of a range of styles and genres in the French tradition. Writing assignments based on our readings will help solidify your language skills in comprehension and composition, build your vocabulary, and hone your analytical ability. We will read short stories, essays, fables, epistolary texts, poetry, journalism, novellas, and excerpts from novels, and we will replicate these genres and styles through creative writing assignments based on imitation or on the appropriation of strategies and procedures deployed in the production of these texts. We will also use the traditional French analytical format of the "explication du texte" to examine in detail the composition and nuances of several works we read.
Repeatability: This course may not be repeated for additional credits.

Pre-requisites:
(FREN 3001|Minimum Grade of C-|May not be taken concurrently)
AND (FREN 3101|Minimum Grade of C-|May not be taken concurrently)
OR FREN 3102|Minimum Grade of C-|May not be taken concurrently)

FREN 4140. Topics in French Literature. 3 Credit Hours.
Different topics in the analysis of prose, poetry and drama. These topics include: major works considered in the aesthetic, philosophical and historical context of the Renaissance, the Classical Age and the Enlightenment; the social, political and intellectual changes as revealed in the works of the Romantics, the Realists, the Naturalists and the Symbolists; major figures of contemporary French literature, representative of the various traditional genres as well as the new approaches to both genres and criticism which the modern/post-modern authors have brought to these traditions. NOTE: This course is repeatable for credit under different topics.
Repeatability: This course may be repeated for additional credit.

Pre-requisites:
((FREN 3011|Minimum Grade of C-|May not be taken concurrently
AND FREN 3102|Minimum Grade of C-|May not be taken concurrently))
AND (FREN 3096|Minimum Grade of C-|May not be taken concurrently)
OR FREN 3001|Minimum Grade of C-|May not be taken concurrently)

FREN 4161. Francophone Literatures and Cultures. 3 Credit Hours.
A course in contemporary Francophone literature designed to give students an understanding of the literary, political, and cultural issues that dominate contemporary Francophone fiction from Africa, Canada and the Caribbean. Six novels will be studied with a special focus on autobiography and the position of women in different cultures. The course will be taught in French.
Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(FREN 3096|Minimum Grade of C-|May not be taken concurrently)
AND (FREN 3101|Minimum Grade of C-|May not be taken concurrently)
OR FREN 3102|Minimum Grade of C-|May not be taken concurrently)
AND (FREN 3001|Minimum Grade of C-|May not be taken concurrently).

Note: The course may not be repeated for additional credits.
FREN 4182. Independent Study. 3 Credit Hours.
Topics in French and/or Francophone literature. Considered only for extraordinary reasons. Written petition to be submitted by student and instructor before the end of the pre-registration period. NOTE: Does not replace required courses, unless specified and approved by the French advisor and department chair.
Repeatability: This course may be repeated for additional credit.

FREN 4200. Special Topics. 3 Credit Hours.
Different topics in French culture, philosophy, art and literature. NOTE: This course is repeatable for credit under different topics. Special permission of both the instructor and the advisor is required. Exceptionally, it may be taken as a tutorial by one or several students with the provisos stated above.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
((FREN 3101|Minimum Grade of C-|May not be taken concurrently
AND FREN 3102|Minimum Grade of C-|May not be taken concurrently)
AND (FREN 3096|Minimum Grade of C-|May not be taken concurrently
OR FREN 3001|Minimum Grade of C-|May not be taken concurrently).

FREN 4282. Independent Study. 3 Credit Hours.
Topics in French and/or Francophone culture. Considered only for extraordinary reasons. Written petition to be submitted by student and instructor before the end of the pre-registration period. NOTE: Does not replace required courses, unless specified and approved by the French advisor and department chair.
Repeatability: This course may be repeated for additional credit.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: French

FREN 4401. Techniques of Translation. 3 Credit Hours.
Study of the theory and practice of translation with a focus on translating into English. Readings from the history of translation studies are combined with practical exercises and extended projects in translation.
Repeatability: This course may not be repeated for additional credits.

FREN 4703. Cours Pratique de Langue Francaise - Advanced Level. 3 Credit Hours.
This course is offered by the Sorbonne in Paris, France. See the French advisor for placement and a full description.
Repeatability: This course may not be repeated for additional credits.

FREN 4704. Cours Pratique de Langue Francaise - Advanced Level. 4 Credit Hours.
Repeatability: This course may not be repeated for additional credits.

FREN 4706. Cours Pratique de Langue Francaise - Advanced Level. 6 Credit Hours.
Repeatability: This course may not be repeated for additional credits.

Geography and Urban Studies (GUS)

Courses
GUS 0813. Disability Identity. 3 Credit Hours.
Odds are that each of us will encounter disability at some point in our lives, either directly or indirectly through family, friends, neighbors, and colleagues. What is it like to live with a disability, and how does disability intersect with other aspects of personal identity, like gender, race, and culture? Is disability socially and culturally defined? Join us as we examine historical perspectives of disability marked by fear and discrimination and fueled by media portrayals. We will then explore most recent indicators of personal, social, and environmental change that support disability identity and result in a more accommodating environment for us all. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed THRC 0813.
Course Attributes: GB
Repeatability: This course may not be repeated for additional credits.
GUS 0814. Human Ecology. 3 Credit Hours.

Human hunters may have contributed to animal extinctions as early as 10,000 years ago; civilizations in the ancient Near East developed complex irrigation networks that led to some of the area's permanent deserts. Since pre-history, humans have had an impact on the environment, but changes in technology have magnified the scale of human influence. Today, attempts at sustainable land use are often at odds with struggles for indigenous population rights, with population migration and increases in population size, or with desires to preserve areas for national parks or tourism, let alone attempts to exploit natural resources. Study the ecological principles underlying the relationship of humans with the environment and the explosion of conflicts surrounding modern environmental use. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed ANTH 0814.

Course Attributes: GB

Repeatability: This course may not be repeated for additional credits.

GUS 0821. Digital Mapping: From Mercator to Mashups. 4 Credit Hours.

From web-based applications like Google Maps, to automobile navigation systems, to satellite pictures of hurricanes, digital maps are widely used to display information about the Earth. This course unmasks the underlying technologies used for computer-based mapping, including Global Positioning Systems (GPS), satellite remote sensing, and Geographic Information Systems (GIS). We will investigate how computers store and analyze digital maps, and see how mapping technologies can be used to address a variety of societal problems, such as analyzing the environmental impacts of urban growth, tracking the spread of a deadly disease, and planning for earthquakes and other natural disasters. NOTE: This course fulfills the Quantitative Literacy (GQ) requirement for students under GenEd and a Quantitative Reasoning (QA or QB) requirement for students under Core. Students cannot receive credit for this course if they have successfully completed CRP 0821 or GUS 0921.

Course Attributes: GQ

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
MATH 0701|Minimum Grade of C-|May not be taken concurrently
OR MC3 Y|May not be taken concurrently
OR MC4 Y|May not be taken concurrently
OR MC5 Y|May not be taken concurrently
OR MC6 Y|May not be taken concurrently

GUS 0829. The History & Significance of Race in America. 3 Credit Hours.

Why were relations between Native Americans and whites violent almost from the beginning of European settlement? How could slavery thrive in a society founded on the principle that "all men are created equal"? How comparable were the experiences of Irish, Jewish, and Italian immigrants, and why did people in the early 20th century think of them as separate "races"? What were the causes and consequences of Japanese Americans' internment in military camps during World War II? Are today's Mexican immigrants unique, or do they have something in common with earlier immigrants? Using a variety of written sources and outstanding documentaries, this course examines the racial diversity of America and its enduring consequences. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Duplicate Credit Warning: Students may take only one of the following courses for credit: all other instances will be deducted from their credit totals: African American Studies 0829, Anthropology 0829, Geography and Urban Studies 0829, History 0829, Political Science 0829, Sociology 0829, 0829, 1376, 1396, R059, or X059.

Course Attributes: GD

Repeatability: This course may not be repeated for additional credits.

GUS 0831. Global Cities. 3 Credit Hours.

As globalization accelerates, the world becomes smaller and is transformed to an extended urban network. Even though there are places and people off the global grid in both rich and poor countries, we live in a single, interdependent urban world. This course seeks to understand this urban world. We ask questions like: How do changes in the global economy affect the lives of people from Cairo to Chicago? As 50 million people per year move into cities around the world how do those cities change? How will the massive rural to urban migration in China and India affect resources and the global environment? What is life like in cities for the majority of the world's poor? What types of plans and policies could improve cities in this century? Are wages in Philadelphia being influenced by what happens in Beijing and Bangalore? The answers will come from a wide range of perspectives, from geographers, urban planners, sociologists, and economists. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core.

Course Attributes: GG

Repeatability: This course may not be repeated for additional credits.

GUS 0842. Sustainable Environments. 3 Credit Hours.

Americans account for over a quarter of all fossil fuel consumption, own more cars than there are licensed drivers, and build new homes 40 percent larger than they did in 1975, despite shrinking household size. We feel for the pandas and polar bears, while contributing mightily to global climate change, resource inequity, and ecosystem destruction. How do we reckon with environmental crises at multiple scales, from the neighborhood to the atmosphere and oceans? "Think globally, act locally" environmentalists admonish us! Direct our vast human ingenuity and collective spirit toward technologies and behaviors that bring peace with the planet. Course mission: enhance your capability to make informed choices, based on a sound understanding of the ecological, technological, economic, political, and ethical dimensions of environmental sustainability. NOTE: This course fulfills a Science & Technology (GS) requirement for students under GenEd and Science & Technology Second Level (SB) for students under Core. Students cannot receive credit for this course if they have successfully completed EES/Geology 0842 or ENST 0842.

Course Attributes: GS

Repeatability: This course may not be repeated for additional credits.
GUS 0848. American Revolutions. 3 Credit Hours.
From the first encounters with Native Americans to the present, a series of pivotal moments have had an enduring influence on American society, culture, and politics. In each class, three modules will focus on three pivotal moments, such as King Philip's War, Nat Turner's Rebellion, the Scopes trial, the Civil Rights movement, the women's movement, the emergence of Elvis Presley, the sexual revolution, the rise of environmentalism, the Reagan Revolution, and 9-11. In each module, students will first place the main subject of the module in context, and then seek to understand how it changed American society. The last week of each module will be devoted to a consideration of how the subject of that module has become part of American collective memory. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: AMST 0848, ANTH 0848, History 0848, or SOC 0848.
Course Attributes: GU
Repeatability: This course may not be repeated for additional credits.

GUS 0861. Urban Dynamics: Global, Regional, and Local Connections. 3 Credit Hours.
U.S. cities in the 21st century face enormous challenges as globalization shapes flows of people, capital, information, resources, and ideas/culture in an increasingly interconnected, yet geographically dispersed world. The course asks: What is globalization? How are different people's lives in cities shaped by these flows? How do gender, age, race/ethnicity, class, and citizenship status affect people's experiences in different urban contexts? How do urban interventions - from public policy to social movements - advance social justice across groups, places, and spaces? Topics include economic and political restructuring, the globalization of ethnic/racial relations, citizenship and public space, the spatial dynamics of uneven development, and urban inequalities. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed CRP 0861 or SOC 0861.
Course Attributes: GU
Repeatability: This course may not be repeated for additional credits.

GUS 0862. Development & Globalization. 3 Credit Hours.
Use historical and case study methods to study the differences between rich and poor nations and the varied strategies available for development in a globalizing world. Examine the challenges facing developing countries in historical and contemporary context and analyze the main social, cultural, and political factors that interact with the dynamic forces of the world economy. These include imperialism/colonialism, state formation, labor migration, demographic trends, gender issues in development, religious movements and nationalism, the challenges to national sovereignty, waves of democratization, culture and mass media, struggles for human rights, environmental sustainability, the advantages and disadvantages of globalization, and movements of resistance. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: History 0862, POLS 0862/0962, or SOC 0862/0962.
Course Attributes: GG
Repeatability: This course may not be repeated for additional credits.

GUS 0866. World Affairs. 3 Credit Hours.
We live in a global age when events beyond our borders significantly affect our lives. Sharpen your understanding of international developments, including wars, economic globalization, wealth and poverty, the spread of democracy, environmental degradation, and global pandemics. This course offers an introduction to the study of world affairs that gives you the conceptual tools to deepen your understanding of how major historical and current trends in the world affect your life and that of others around the globe. Readings include historical documents, classic texts in the study of international relations, and current perspectives on the state of the world from multiple disciplinary perspectives. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed History 0866 or POLS 0866/0966.
Course Attributes: GG
Repeatability: This course may not be repeated for additional credits.

GUS 0867. World Regions and Cultures: Diversity & Interconnections. 3 Credit Hours.
How does the process of globalization impact people in different culture regions? Explore this central question through readings, discussions, mapping exercises, field trips to Philadelphia sites and special events that celebrate the international flavor of the city. Focusing on four regions, we will learn how people cope with environmental problems like desertification, population growth, rapid migration to cities, and ethnic and religious clashes. We will investigate why some areas are mired in poverty and violence while others experience a growing economy and peaceful politics. For each region we will read case studies illustrating both cultural continuity and change. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Duplicate Credit Warning: Students may take only one of the following courses for credit; all other instances will be deducted from their credit totals: Anthropology 0867, 1061, C061 Geography and Urban Studies 0867, or Sociology 0867.
Course Attributes: GG
Repeatability: This course may not be repeated for additional credits.
GUS 0921. Honors Digital Mapping: From Mercator to Mashups. 4 Credit Hours.

From web-based applications like Google Maps, to automobile navigation systems, to satellite pictures of hurricanes, digital maps are widely used to display information about the Earth. This course unmasks the underlying technologies used for computer-based mapping, including Global Positioning Systems (GPS), satellite remote sensing, and Geographic Information Systems (GIS). We will investigate how computers store and analyze digital maps, and see how mapping technologies can be used to address a variety of societal problems, such as analyzing the environmental impacts of urban growth, tracking the spread of a deadly disease, and planning for earthquakes and other natural disasters. NOTE: This course fulfills the Quantitative Reasoning (QA or QB) requirement for students under Core. Students cannot receive credit for this course if they have successfully completed CRP 0821 or GUS 0821.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR

Course Attributes: GQ, HO

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
- MATH 0701|Minimum Grade of C-|May not be taken concurrently
- OR MATH 0702 to 4999| Required Courses:1|Minimum Grade of D-|May be taken concurrently
- OR MC3 Y|May not be taken concurrently
- OR MC4 Y|May not be taken concurrently
- OR MC5 Y|May not be taken concurrently
- OR MC6 Y|May not be taken concurrently.

GUS 1021. Urban Society: Race, Class, and Community. 3 Credit Hours.

This course provides an introduction to the contemporary American city, emphasizing the major social trends and public issues that affect individuals and communities in urban settings. We emphasize a cross-disciplinary approach that includes examination of political, economic, spatial, social and historical aspects of city life. We also pay special attention to how racial, ethnic, and social class divisions shape the fabric of urban life. NOTE: This course can be used to satisfy the university Core Studies in Race and Individual & Society (RN) requirements. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: RN

Repeatability: This course may not be repeated for additional credits.

GUS 1022. Urban Society. 1 Credit Hour.

This course provides an introduction to the contemporary American city, emphasizing the major social trends and public issues that affect individuals and communities in urban settings. We emphasize a cross-disciplinary approach that includes examination of political, economic, spatial, social and historical aspects of city life.

Repeatability: This course may not be repeated for additional credits.

GUS 1025. World Urban Patterns. 3 Credit Hours.

This course provides an introduction to cities around the world. We begin by asking basic questions about the nature of cities and the different approaches to studying them. We explore factors driving urban growth and how this growth affects urban environments. We examine questions of social organization and governance and topics related to planning and the future of the city. NOTE: This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. In addition to meeting the university Core International Studies requirement, this course meets the Non-Western/Third World IS requirement for Communication Sciences majors. Please note the recent update to the Core IS requirement at www.temple.edu/vpus/resources/coreupdates.htm#coreisupdate.

Course Attributes: IS

Repeatability: This course may not be repeated for additional credits.

GUS 1031. Geography of World Affairs. 3 Credit Hours.

This course examines environmental, social, demographic and economic issues in selected world regions. The course may change from semester to semester as we select a range of current topics from each part of the world, which may include, for example, the impact of drought in Africa, tourism in the Caribbean, and rapid economic growth in East Asia. We also address geopolitical themes that reflect the interaction of culture and territory, such as the conflict between ethnically religious groups for control of places that range from Sri Lanka or the Sudan. NOTE: This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. In addition to meeting the university Core International Studies requirement, this course meets the Non-Western/Third World IS requirement for Communication Sciences majors. Please note the recent update to the Core IS requirement at www.temple.edu/vpus/resources/coreupdates.htm#coreisupdate.

Course Attributes: IS

Repeatability: This course may not be repeated for additional credits.

GUS 1052. Introduction to the Physical Environment. 4 Credit Hours.

An environmental approach to the study of earth as a globe, earth-sun relations, weather, climate, vegetation, soils, and the hydrosphere. Abundantly illustrated by slides and films, this course brings to life the causal connections among climate, vegetation, and soils. Natural and human-induced climate change, groundwater and surface water management, and soil erosion are among the environmental problems covered. The laboratories provide hands-on experience on most topics. NOTE: This course can be used to satisfy the university Core Science & Technology Second Level (SB) requirement.

Course Attributes: SB

Repeatability: This course may not be repeated for additional credits.
This course emphasizes the human dimensions of the relationship between societies and their natural environments. Students will be introduced to those ecological principles that are necessary to understand cultural, social, political, and economic questions at a variety of geographic scales. The course will consider several global, national, and local issues such as siting of noxious facilities, land use conflicts, equality of access to resources, and environmental justice.

Repeatability: This course may not be repeated for additional credits.

GUS 1651. Environment and Society. 3 Credit Hours.
This course surveys urbanization as a global phenomenon. We examine urbanization in different cultures and societies and the analysis of problems of urban areas and related to urbanization in developed and developing countries, both western and non-western. NOTE: This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: HO, IS

Repeatability: This course may not be repeated for additional credits.

GUS 1961. Honors World Urban Patterns. 3 Credit Hours.
This is an honors section of World Urban Patterns. This course surveys urbanization as a global phenomenon. We examine urbanization in different cultures and societies and the analysis of problems of urban areas and related to urbanization in developed and developing countries, both western and non-western. NOTE: This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR

Course Attributes: HO, IS

Repeatability: This course may not be repeated for additional credits.

GUS 2001. Cities. 3 Credit Hours.
This course is an interdisciplinary introduction to U.S. cities in the context of contemporary globalization. Students will be introduced to key concepts in the field of urban studies. We will explore different theoretical frameworks for analyzing urban patterns, processes, and daily life. In addition to globalization we will explore social justice.

Repeatability: This course may not be repeated for additional credits.

GUS 2002. Space and Place. 3 Credit Hours.
This course is an introduction to the fundamental principles of human geography and examines the relationships among space, place, environment, and culture in an effort to understand why events and processes occur at specific locations, as well as how those events and processes influence activities elsewhere. Human geography studies flows of people, money, information, cultures, and biophysical processes across space and time especially as these flows are becoming global. The unique convergence of flows in a certain location is what geographers call place. This course will explore some of the key drivers of geographic outcomes including human migration, citizenship, cultural identity, political participation or exclusion, urban life, various understandings of nature and environment, and the effects of global networks and capital on local practices and people.

Repeatability: This course may not be repeated for additional credits.
GUS 2012. Urban Ethnicity. 3 Credit Hours.
This course examines the diversity of ethnic enclaves in American cities, with a special emphasis on experiences from communities and neighborhoods in Philadelphia. This course examines sources of prejudice and discrimination, and the impact of the changing economic structure and social organization on the emergence of ethnic groups in the city. NOTE: Formerly known as GUS 4012, Urban Ethnicity. Students may receive credit for only one of the following courses: GUS 2012 or GUS 4012.
Repeatability: This course may not be repeated for additional credits.

GUS 2014. Urban Geography. 3 Credit Hours.
This course seeks to familiarize students with the new urban geography - emphasizing ecological (sustainable cities, urban donuts), economic (post Fordist accumulation), cultural (images of the city), and post modern perspectives (hi-tech corridors, mass produced aesthetic/architectural styles). It explores contemporary urban crises and challenges and examines how cities are responding. The course is designed to provide students with an understanding of (a) the new geographical patterns forming in cities; (b) the economic and cultural transformations currently underway in urban areas; (c) how geographers are responding to the transformations; (d) urban responses to global challenges; and (e) how economic systems impact the lives of urban residents, images of the cities, and spatial patterns.
Repeatability: This course may not be repeated for additional credits.

GUS 2021. Philadelphia Neighborhoods. 3 Credit Hours.
This course provides an introduction to Philadelphia, its history, its people, and its problems as seen in a cross-section of urban neighborhoods. It combines lectures, readings, and slides with frequent field trips to different parts of the city.
Repeatability: This course may not be repeated for additional credits.

GUS 2025. American Place. 3 Credit Hours.
This course explores several basic themes on the variety of human landscapes that characterize the United States. A representative selection of places across the country is examined in lectures, readings, film, slides, and short field trips to learn about the cultures and social characteristics of the American people.
Repeatability: This course may not be repeated for additional credits.

GUS 2031. Economic Geography. 3 Credit Hours.
This course introduces students to the complex economic patterns of the world. It examines why economic activities are distributed in particular ways and the consequences of economic location decisions. It examines a variety of economic activities and geographic perspectives on economic and settlement diversity.
Repeatability: This course may not be repeated for additional credits.

GUS 2032. Urban Systems in a Global Economy. 3 Credit Hours.
This course looks at how the global economy shapes urban society, and how people adapt to the changing global urban world. We begin examining theories, facts and debates on globalization and the development of the global economy. We then look at how cities function within an interdependent global urban system and how people actively respond to the changing economic conditions in cities around the world.
Repeatability: This course may not be repeated for additional credits.

GUS 2051. Urban Environment. 3 Credit Hours.
This course examines the interactions between theory, policy, and the urban environment. Students have the opportunity to study the urban environment not only as a physical landscape or natural ecosystem, but also as a constructed landscape shaped by local, regional and global social, economic and political processes. The course addresses issues that continue to challenge urban society, including environmental injustice and racism, degradation of local environmental quality, the impact of local-global relationships on community-scale environments and the commodification of nature.
Repeatability: This course may not be repeated for additional credits.

GUS 2061. Map Interpretation. 3 Credit Hours.
This course provides students with the basic principles of mapping and spatial data handling. Topics covered include geographic scale, projections and coordinate systems, cartographic generalization, spatial data encoding, and map design and production. Emphasis will be on a variety of geographic data technologies, including cartographic production, geographic information systems, global positioning systems, environmental remote sensing, and photogrammetry.
Repeatability: This course may not be repeated for additional credits.

GUS 2071. Geography of the United States and Canada. 3 Credit Hours.
An introduction to the major regions of the United States and Canada with emphasis on changing population and economic activity patterns, the distribution of important resources, and the characteristics of major cities and metropolitan areas. NOTE: This course can be used to satisfy the university Core American Culture (AC) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: AC
Repeatability: This course may not be repeated for additional credits.
GUS 2073. African Development. 3 Credit Hours.
This course begins with a historical synopsis of the different forms of development that have taken place on the African continent. Moving beyond preconceived notions of the continent, students will delve into the social, political, economic, and biophysical realms of Africa. Students will read and debate about issues concerning African development, including, colonialism, independence movements, political conflict, globalization, neo-liberalism, society, and health. Ultimately, in this course, students will gain a deeper appreciation of the social, economic, environmental, and political development of Africa and the challenges and opportunities it faces in the future. NOTE: This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. In addition to meeting the university Core International Studies requirement, this course meets the Non-Western/Third World IS requirement for Communication Sciences majors. Please note the recent update to the Core IS requirement at www.temple.edu/vpus/resources/coreupdates.htm#coreisupdate.

Course Attributes: IS
Repeatability: This course may not be repeated for additional credits.

GUS 2074. East and South Asia. 3 Credit Hours.
Introduction to the natural environments and diverse contemporary societies that comprise East, Southeast, and South Asia. Emphasis on such topics as poverty, economic development, and social conditions in India, Thailand, and the Philippines, as well as China, Japan, and Korea. NOTE: This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. In addition to meeting the university Core International Studies requirement, this course meets the Non-Western/Third World IS requirement for Communication Sciences majors. Please note the recent update to the Core IS requirement at www.temple.edu/vpus/resources/coreupdates.htm#coreisupdate.

Course Attributes: IS
Repeatability: This course may not be repeated for additional credits.

GUS 2097. Urban Systems in the Global Economy. 3 Credit Hours.
Globalization has been marked by a series of processes that include (a) the falling costs and rising speeds of transportation and communication, (b) the broader and more rapid dissemination of ideas and ideologies, and (c) the creation of new institutions to control the flow of people and money. As a historical process, globalization has been marked by a series of stages: mercantilism, colonialism, imperialism, nationalism, and, in the last 20 years, a period of internationalism and that some scholars call 'hyper-globalization' - led by the same key processes. Historically, it gave rise to the 'new' world of the Americas, and created nation-states in 'dark' continents and among 'primitive' peoples ruled by 'despotic' regimes. It has also affected the geography of metropolitan areas by shaping their location, growth, internal structure, prospects, and welfare distribution.

Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

GUS 2121. Russian Cities. 3 Credit Hours.
In this course we will study the Russian city, analyzing the nexus of physical geography, climate, natural resources, ethnography, history, commerce, politics and culture on the development of urban centers in Russia. The study of Moscow and St. Petersburg will occupy much of our attention in this course, but we will also examine Russia's medieval cities ("the Golden Ring"), as well as cities in Siberia and the Far East. We will read works from the disciplines of geography, history, anthropology, and sociology, as well as works of fiction; we will also view Russian films in which a city (or the city) plays an important role.

Repeatability: This course may not be repeated for additional credits.

GUS 2197. Research Design in Geography and Urban Studies. 3 Credit Hours.
This course is an introductory survey of research design in Geography and Urban Studies. It is designed to allow students to explore what it means to conduct social science research, particularly around urban and other geographic topics of study. Students have the opportunity to learn how to collect and analyze primary and secondary data. Methods covered include case study research, interview design and technique, analysis of spatial quantitative data, and tools commonly used in community and participatory action research. Individual assignments will focus on researching urban social and cultural topics. This is a writing intensive course and will require extensive writing and revision of your assignments in a semester long assignment sequence.

Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

GUS 3000. Special Topics in Geography and Urban Studies. 3 Credit Hours.
Seminars on special topics that vary according to the instructor. Check the course schedule for specific seminar topics.
Repeatability: This course may be repeated for additional credit.

GUS 3001. Images of the City in Popular Culture. 3 Credit Hours.
This course examines the representations of the city in the film, fiction, art, and music of the twentieth century. We look at images of cities in general as well as images of specific cities, especially Los Angeles and New York. (When taught in Rome or Tokyo the course focus changes to take advantage of the setting.) Imaginings about the city rely on metaphors - using a work or phrase to describe by referring to another thing not literally appropriate, e.g. urban jungle. We will discuss these metaphors and become familiar with their resonance in popular culture. A large part of the course will focus on methods of visual analysis. Active participation is required.
Repeatability: This course may not be repeated for additional credits.
GUS 3005. The City in History. 3 Credit Hours.
This course looks at the city as a product of human creativity in which the goals of collective life are debated and fought out. The workings of the city are examined in history by focus on the cultural, economic, and political significance of cities as well as on urban design. The course includes visual examples from cities in Europe, West Africa, India, and Southeast Asia as well as a walking tour in the Manayunk section of Philadelphia.
**Repeatability:** This course may not be repeated for additional credits.

GUS 3011. Historical Geography of North America. 3 Credit Hours.
This course examines the evolution of the spatial structure of North America from the early stage of predominantly rural, localized economies to conditions that could be characterized as interconnected and urbanized. Several themes will be emphasized: 1) changes in the structure of rural settlements, 2) the expansion of the transport network, 3) the emergence of an industrial economy, and 4) changes in both the internal structure of urban places and the distribution of such places.
**Repeatability:** This course may not be repeated for additional credits.

GUS 3013. African Americans in Philadelphia. 3 Credit Hours.
This course examines the historical and contemporary circumstances and roles of African Americans in the Philadelphia context. A critical look at African American migration to Philadelphia, the emergence of African American ethnicity, and the nature and workings of predominantly African American institutions in the city (e.g., families, churches, education, media, cultural and recreational institutions, gangs, political movements, and organizations).
**Repeatability:** This course may not be repeated for additional credits.

**Pre-requisites:**
GUS 1021 | Minimum Grade of C- | May not be taken concurrently.

GUS 3016. Contemporary Issues in City Planning. 3 Credit Hours.
Detailed analysis of a specific issue affecting cities and metropolitan areas, usually with a focus on the Philadelphia metropolitan area. Issues such as sprawl, redevelopment, and sustainability are often the focus of the course.
**Repeatability:** This course may not be repeated for additional credits.

GUS 3025. Urban Crime Patterns. 3 Credit Hours.
The spatial dimensions and patterns of crime and how they vary with respect to other variables in the urban environment. Possible explanations of crime, using both current literature and Philadelphia statistics.
**Repeatability:** This course may not be repeated for additional credits.

GUS 3051. Environmental Policy Issues. 3 Credit Hours.
How are environmental policies formulated and implemented in the U.S.? Topics include the role of citizen participation in decision-making, the place of environmental impact assessment, environmental justice and equity, intergovernmental relations, and environmental obligations of the U.S. toward less developed countries.
**Repeatability:** This course may not be repeated for additional credits.

**Pre-requisites:**
GUS 1051 | Minimum Grade of C- | May not be taken concurrently
OR GUS 1951 | Minimum Grade of C- | May not be taken concurrently.

GUS 3052. Environmental Problems in Asia. 3 Credit Hours.
Japan is used as an introduction and model for examining environmental issues in several East and Southeast Asian countries. Emphasis is on deforestation, river basin development, urban planning, ecotourism, and the role of non-governmental organizations.
**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
GUS 1051 | Minimum Grade of C- | May not be taken concurrently
OR GUS 1951 | Minimum Grade of C- | May not be taken concurrently.

GUS 3053. Climatology. 3 Credit Hours.
In this course, we study global climate patterns and the underlying processes that shape them. Among the specific topics we examine are: global distribution of individual climate elements, upper-atmospheric waves and jet streams, use of web-based maps and data, construction of climate models, U.S. climate regions, and major global climatic regions. In the course's final weeks, we consider historic climates, climate change mechanisms, and forecasted future climates.
**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
(GUS 1051 | Minimum Grade of C- | May not be taken concurrently
OR GUS 1951 | Minimum Grade of C- | May not be taken concurrently)
AND (GUS 1052 | Minimum Grade of C- | May not be taken concurrently).

GUS 3054. Energy, Resources, and Conservation. 3 Credit Hours.
Vital nonrenewable resources are identified and their global and North American distribution, character, and utilization studied. Special attention to energy sources now in short supply and to benign renewable sources for future needs.
**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
GUS 1051 | Minimum Grade of C- | May not be taken concurrently
OR GUS 1951 | Minimum Grade of C- | May not be taken concurrently.
GUS 3061. Fundamentals of Cartography. 3 Credit Hours.
This course is designed to introduce students to cartography and computer mapping. Through hands-on exercises, students will manipulate data, compare map projections, design, execute, and reproduce small-scale thematic maps suitable for publication using computer software. A final project involves the production of maps in color. NOTE: No prior computer knowledge is necessary.
Repeatability: This course may not be repeated for additional credits.

GUS 3062. Fundamentals of Geographic Information Systems. 3 Credit Hours.
This course teaches the theory and practical use of Geographic Information Systems (GIS). Major components of the course include vector and raster spatial data models and operations, including vector overlay and raster map algebra. At the end of the course students are expected to have an understanding of elementary GIS theory, working knowledge of a GIS software package, and the ability to develop GIS-based solutions to geographic modeling and analysis tasks.
Repeatability: This course may not be repeated for additional credits.

GUS 3063. Environmental Remote Sensing. 3 Credit Hours.
This course will teach the basic principles of environmental remote sensing using aerial photography and satellite imagery. Topics covered include the mechanics of aerial photography and satellite remote sensing systems, photointerpretation, image rectification, and image processing and classification. Emphasis will be on urban and environmental applications.
Repeatability: This course may not be repeated for additional credits.

GUS 3064. Qualitative Methods. 3 Credit Hours.
This class is designed to expose students to the purpose, scope and procedures of qualitative research, applied in different disciplines but especially in environmental studies, geography, and urban planning. It provides an opportunity for students to create qualitative research design schemes, and critically analyze research using these methods.
Repeatability: This course may not be repeated for additional credits

Pre-requisites:
GUS 2097|Minimum Grade of C-|May not be taken concurrently.

GUS 3069. GIS for Health Data Analysis. 3 Credit Hours.
Geographic Information Systems (GIS) has emerged as an essential tool for health researchers and practitioners. This course provides an introduction to the most common geographic methods utilized in health research and spatial epidemiology for mapping and analyzing health disparities, disease risk factors, health services and geographic variation in health outcomes and disease. Through lecture and laboratory exercises students will learn how to create and edit spatial data, create disease maps, develop neighborhood-based measures, conduct geographic cluster detection and point pattern analysis, map geographic health disparities, measure access to health services, and critically assess potential study bias introduced from missing geographic data or positional accuracy. Selected case studies will be presented in order to highlight methods and techniques and hands-on experience will be gained through laboratory exercises and real-world applications. Guest speakers will be invited to share their real-world examples of GIS in health research and practice.
Repeatability: This course may not be repeated for additional credits

Pre-requisites:
GUS 3161|Minimum Grade of C-|May not be taken concurrently
OR ENST 3161|Minimum Grade of C-|May not be taken concurrently
OR SOC 3201|Minimum Grade of C-|May not be taken concurrently
OR STAT 2103|Minimum Grade of C-|May not be taken concurrently
OR PBHL 2219|Minimum Grade of C-|May not be taken concurrently
OR CJ 2602|Minimum Grade of C-|May not be taken concurrently
OR ANTH 3771|Minimum Grade of C-|May not be taken concurrently.

GUS 3073. Geography of Travel and Tourism. 3 Credit Hours.
This course examines the fastest growing industry in the world from a geographic perspective. Among the topics to be covered are spatial tourism models, tourism landscapes and the built environment and the impact of tourism on local cultures and economies. Several types of tourism are compared, including rural vs. urban travel, heritage tourism and ecotourism. There is also a special project that focuses on the problems of developing a tourist industry in areas that are prone to political or environmental crises. The course presents examples of both domestic and international travel destinations.
Repeatability: This course may not be repeated for additional credits.

GUS 3074. Sicily: The Land, People and Identity. 3 Credit Hours.
An introduction to the physical and social geography of Sicily, looking at its land, history, culture, and current problems as represented in literature and on film.
Repeatability: This course may not be repeated for additional credits.

GUS 3076. Metropolitan Tokyo. 3 Credit Hours.
The growth and development of Tokyo, Japan, past and present. The course includes a profile of the city's many neighborhoods, economic activities, architecture, and challenges for urban planners. NOTE: Usually offered at Temple Japan.
Repeatability: This course may not be repeated for additional credits.
GUS 3096. Urban Policy Analysis. 3 Credit Hours.
Contemporary policy analysis of urban problems and issues, including ideological, political, social movement, and community organizing perspectives. Sample policy areas are housing, education, segregation, employment, welfare, and spatial inequality.

Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
GUS 1021|Minimum Grade of C-|May not be taken concurrently
OR GUS 1022|Minimum Grade of C-|May not be taken concurrently.

GUS 3097. Environment & Development. 3 Credit Hours.
This course looks at the interaction between human and ecological systems and economic development. We begin with an historical overview of the impact of human communities on the environment. We then shift attention to the environmental impacts of European expansion from the 1600s to the present. In the final section of the course we examine specific cases that highlight the ideas discussed previously. The cases focus on settlement systems, environmental factors and conflict, sustainable systems, vulnerability, water issues, etc. This course requires active participation.

Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
GUS 1051|Minimum Grade of C-|May not be taken concurrently
OR GUS 1951|Minimum Grade of C-|May not be taken concurrently.

GUS 3161. Spatial Statistics. 3 Credit Hours.
This course provides an introduction to statistical analysis with an emphasis on urban applications. The course covers basic statistical principles of sampling, probability, and tests of significance, measures of association; ordinary least squares regression; factor, principal component and cluster analysis and an introduction to spatial applications of these tools. The course is focused on the practical application of these techniques through exposure to the rationale and principles underpinning them. Students will attend lectures and complete problem sets that provide practical experience in the application of the theoretical concepts and methodologies.

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 0701|Minimum Grade of C-|May not be taken concurrently
OR MATH 0702|Minimum Grade of C-|May not be taken concurrently
OR MC3 Y|May not be taken concurrently.

GUS 3307. Transportation & Culture. 3 Credit Hours.
Students will learn to approach the modern geography of transportative possibility from a critical standpoint. Rather than accepting this contemporary geography as being the outcome of supposedly "superior" transport technologies' rendering marginalized technologies obsolete, students will examine how processes of cultural, political, and environmental struggle have shaped, opened up, and in some cases limited the modern array of possibilities for human mobility. Waterborne, animal-based, and human-powered modes of transportation will receive special attention, as will ongoing debates and struggles over automobile planning and mass transit. The history of transportation will be presented as necessarily entangled with parallel histories of public protest, working-class knowledge, emergency logistics, human-animal relations, guerrilla warfare, unrealized technologies, and political oppression. The course readings will look at many parts of the world: the United States, Canada, Southeast Asia, North Africa, the Middle East, China, Western Europe, the Caribbean, and Polynesia.

Repeatability: This course may not be repeated for additional credits.

GUS 3314. Food Studies: A Geographical Perspective. 3 Credit Hours.
This course introduces students to key issues in food studies from a geographical and environmental perspective. The course includes an overview of the agricultural transitions, and examines issues of food security, access and control, ultimately focusing attention on the question of how to produce more just food systems. A major goal of this course is to give students a basic foundation from which to understand and interpret food systems as well as to familiarize students with today's major issues in research on food.

Repeatability: This course may not be repeated for additional credits.

GUS 3928. Honors Metropolitan Tokyo. 3 Credit Hours.
This is an honors version of Metropolitan Tokyo. The course looks at the growth and development of Tokyo, Japan, past and present. It includes a profile of the city's many neighborhoods, economic activities, architecture, and challenges for urban planners. NOTE: Usually offered at Temple Japan.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.

GUS 4000. Special Topics in Geography and Urban Studies. 3 Credit Hours.
Seminars on special topics that vary according to the instructor. Check the course schedule for specific seminar topics.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may be repeated for additional credit.
GUS 4013. Drugs in Urban Society. 3 Credit Hours.
This course will provide an introduction to and overview of how illicit drugs have affected communities and individuals in American cities. It will focus on the history of drug use in America, the individual and social consequences of drug use, the lifestyles of crack and heroin addicts, the relationship between drugs and crime, as well as an examination of public policy options to address this problem.
Repeatability: This course may not be repeated for additional credits.

GUS 4014. Urban Social Geography. 3 Credit Hours.
This course is designed to introduce students with the major issues in urban social geography. The general questions addressed in the course include (a) how do racial and income groups come to occupy certain sectors of the city?; (b) who decides who lives where?; (c) how does a person's area of residence affect his/her behavior?; (d) what are the constraints on choosing where one lives?; and what groups are able to manipulate the geography of the city and who benefits? The course highlights interpretations associated with the cultural turn in geography and accordingly focuses on the cultural/social vs. the "economic."
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may not be repeated for additional credits.

GUS 4015. The Geographic Basis of Land Use Planning. 3 Credit Hours.
An examination of the forces that influence land use planning in and around American metropolitan regions. Considers economic perspectives (land values), public interest perspectives (zoning subdivision, housing and building codes, redevelopment and renewal programs, etc.), and social perspectives of land use. Also examines separately housing, commercial locations, and industrial development.
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may not be repeated for additional credits

Pre-requisites:
GUS 1051|Minimum Grade of C-|May not be taken concurrently
OR GUS 1951|Minimum Grade of C-|May not be taken concurrently.

GUS 4018. Economic Development Planning for Cities. 3 Credit Hours.
Causes of economic decline in American cities, the history of governmental policies to promote urban economic development, and the major tools available to economic planners.
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may not be repeated for additional credits

Pre-requisites:
GUS 1025|Minimum Grade of C-|May not be taken concurrently
OR GUS 1961|Minimum Grade of C-|May not be taken concurrently
OR GUS 2031|Minimum Grade of C-|May not be taken concurrently.

GUS 4019. Community Development Workshop. 3 Credit Hours.
Students apply the insights, skills and techniques acquired during undergraduate coursework to a number of case studies and assignments drawn from different planning contexts. As in a professional office, students will work in teams to obtain experience in cooperative action and in the management of time and effort. Projects will be selected in order to expose students to the complexity of real problems, and to suggest the range of policy and planning issues which students might encounter after graduation. Senior practitioners in the Philadelphia region work with students in the workshop.
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may not be repeated for additional credits.

GUS 4021. International Urbanization. 3 Credit Hours.
Each year the cities of the world increase by about 50 million people with most of the increase coming from cities in middle and lower income countries in Asia, South Asia and Africa. This course provides an opportunity for students to focus specifically on urbanization outside the mature urban societies of the United States, Europe and Japan. This course examines issues confronted by planners, policy makers and citizens in rapidly urbanizing areas, as well as the social and cultural tensions related to urban change. NOTE: This course is generally offered every other year. Prior to spring 2009, the course title was “Urbanization in Developing Areas.”
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may not be repeated for additional credits.

GUS 4044. Urban Housing. 3 Credit Hours.
An overview of the economic, social, physical, and political forces that structure current urban housing conditions and prospects. Examination of the implications of present trends for the future and the development of rational housing policies, emphasizing the Philadelphia metropolitan area.
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may not be repeated for additional credits

Pre-requisites:
GUS 1021|Minimum Grade of C-|May not be taken concurrently
OR GUS 1022|Minimum Grade of C-|May not be taken concurrently
OR GUS 1025|Minimum Grade of C-|May not be taken concurrently
OR GUS 1961|Minimum Grade of C-|May not be taken concurrently.
GUS 4051. Geography of Hazards. 3 Credit Hours.
This course provides a synthesis of the social and natural dimensions of disasters. Students become familiar with the concept that disasters emerge when the specific characteristics of hazards (e.g. volcanoes, droughts, floods, tsunamis) intersect with social vulnerability (e.g. class, race, gender). Case studies from around the world are used to elaborate and explore this concept.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
GUS 1051|Minimum Grade of C-|May not be taken concurrently
OR GUS 1951|Minimum Grade of C-|May not be taken concurrently.

GUS 4056. Political Ecology. 3 Credit Hours.
This course addresses the broad themes of political ecology as an academic discipline as well as a set of theoretical and methodological tools. Historically political ecology has focused on the rural developing world, but more recent work has branched out into environmental justice and resource use in industrialized societies. The course covers the concepts that have distinguished political ecology from other types of analysis like cultural and human ecology. It also introduces students to the construction of theory including a consideration of space, scale, justice, feminism, property, and nature. Finally, the course presents students with diverse case studies that may include topics like resource use, mining, bio-prospecting, forestry, conservation, fisheries, "sustainable" development, and eco-tourism.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
GUS 1051|Minimum Grade of C-|May not be taken concurrently
OR GUS 1951|Minimum Grade of C-|May not be taken concurrently.

GUS 4061. Cartographic Production. 3 Credit Hours.
A course concerned with aspects of storage, retrieval, and display of information within geographic data systems. Emphasis will be placed on computer mapping. NOTE: This course is cross-listed with ENST 4061; students will only receive credit for one course from GUS 4061 and ENST 4061.

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
GUS 3061|Minimum Grade of C-|May not be taken concurrently
OR ENST 3061|Minimum Grade of C-|May not be taken concurrently.

GUS 4065. Urban Geographic Information Systems. 3 Credit Hours.
The purpose of this course is to build on the basic principles of the introductory GIS course to demonstrate how GIS may be applied to the analysis of physical and human systems. Topics of the course include vector and raster data integration; address matching, geocoding, and network analysis; terrain and hydrological analysis; and interpolation of environmental and population data. At the end of the course the student is expected to grasp advanced GIS analysis and modeling concepts.

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
GUS 3062|Minimum Grade of C-|May not be taken concurrently
OR ENST 3062|Minimum Grade of C-|May not be taken concurrently.

GUS 4071. Medical Geography. 3 Credit Hours.
Medical geography applies concepts and methods from the discipline of geography to study medical and health related events and topics. Medical geography has a close disciplinary tie with epidemiology, biostatistics, medical ecology and medical anthropology, but it is differentiated by its focus on the spatial distributions of health/medical related events.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may not be repeated for additional credits

GUS 4075. Comparative Regional Development. 3 Credit Hours.
This course examines the transformations that, beginning with the European expansion 500 years ago, have, to a large extent, created much of the regional variation we see in the world today. We consider theoretical approaches to understanding "modernization" and "development" and build on this foundation to look at the historic factors that have shaped different parts of the world. We also examine the political, economic, social, spatial and environmental processes that have influenced those countries that share a colonial past (our primary focus) but also may examine the transition economies of Eastern Europe, Asia, and North America and Japan. NOTE: This course may be offered every other year. Prior to spring 2009, the course title was "Regional Development in the Third World."

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may not be repeated for additional credits.
GUS 4078. Research Methods in Environmental Studies. 3 Credit Hours.
This course covers basic research design and methods for environmental research, consulting, and practice. We build this around the theme of environmental impact assessment (EIA). During the course of your environmental careers, most of you will be expected to conduct, reference, evaluate, or otherwise incorporate EIA into your work. Most EIA's incorporate a diverse set of research methods - and an understanding of a wide-ranging set of research methodologies, and when and how to deploy them - is a central objective for this course. The first third of the course covers project design and methods; the second third addresses the environmental impact assessment process and especially its methodological components; and the final section is a highly interactive (with much peer review) approach to the development and defense of the methodologies you employ in the research prospectus that you develop for this course.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(GUS 1051|Minimum Grade of C-|May not be taken concurrently
OR GUS 1951|Minimum Grade of C-|May not be taken concurrently
OR ENST 1051|Minimum Grade of C-|May not be taken concurrently
OR ENST 1951|Minimum Grade of C-|May not be taken concurrently)
AND (SOC 1167|Minimum Grade of C-|May not be taken concurrently
OR PSY 1167|Minimum Grade of C-|May not be taken concurrently
OR MATH 1013|Minimum Grade of C-|May not be taken concurrently
OR STAT 2101|Minimum Grade of C-|May not be taken concurrently
OR GUS 3161|Minimum Grade of C-|May not be taken concurrently
OR SOC 1967|Minimum Grade of C-|May not be taken concurrently).

GUS 4082. Independent Study Environmental Geography. 3 Credit Hours.
Reading and/or papers undertaken by the student wishing to study a specific topic, under the active supervision of a faculty member.
Repeatability: This course may be repeated for additional credit.

GUS 4085. Internship in Geography and Urban Studies. 3 Credit Hours.
This course provides coursework during both the fall and spring semester to accompany on-the-job training with local consulting firms, planning agencies, private companies, non-profits, and various state, local and federal agencies of government, mostly but not exclusively in the Philadelphia metro area. Students apply the knowledge and skills they have acquired in such courses as GIS, cartography, data handling, land use analysis, economic development of cities and others. Students need to arrange their own positions, usually after consulting with the department's internship coordinator. The search for a placement should start several months in advance of the semester or summer session when the internship will take place. The course is available to GUS majors and minors only. NOTE: Must arrange internship independently.
Repeatability: This course may be repeated for additional credit.

GUS 4087. Mapping Practicum I. 3 Credit Hours.
Complements theoretical studies by directing advanced students through real-world cartographic experiences. The student is assigned cartographic projects and is encouraged to plan, design, and execute them for University faculty and outside firms and agencies.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
GUS 3061|Minimum Grade of C-|May not be taken concurrently.

GUS 4096. Problems of Environmental Quality. 3 Credit Hours.
Specific environmental problems, especially in the Philadelphia area. Students acting as research teams seek better understanding of such problems and practical solutions to them.
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

GUS 4097. Gender, Race, Class, and the City. 3 Credit Hours.
This course looks at gender, race, and class in the city. We begin with the assumption that urban spaces are important indicators of experience, defining what is possible and thereby influencing the life chances of the people who operate within them. We pay particular attention to women, people of color, and people in poverty. We approach the city as a crucible and receptacle containing the ideas and experiences of these diverse groups. This is a writing intensive seminar, and you will be expected to write and share your ideas with others throughout the course. There will be opportunities to write and/or think about writing during each class period.
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

GUS 4182. Independent Study Research. 1 to 3 Credit Hour.
Reading and/or papers undertaken by the student wishing to study a specific topic, under the active supervision of a faculty member.
Repeatability: This course may be repeated for additional credit.
**GUS 4198. Senior Seminar in Geography and Urban Studies. 3 Credit Hours.**

A topically organized seminar for senior majors or those obtaining a concentration in Geography and Urban Studies. NOTE: This course is for majors only. Students should take this course during their last semester.

**Field of Study Restrictions:** Must be enrolled in one of the following Fields of study: Environmental Studies, Geography/Urban Studies

**Class Restrictions:** Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits

**Course Attributes:** WI

**Repeatability:** This course may not be repeated for additional credits.

**GUS 4282. Independent Study Human Geography. 1 to 3 Credit Hour.**

Reading and/or papers undertaken by the student wishing to study a specific topic, under the active supervision of a faculty member.

**Repeatability:** This course may be repeated for additional credit.

**GUS 4382. Independent Study Urban Policy. 1 to 3 Credit Hour.**

Reading and/or papers undertaken by the student wishing to study a specific topic, under the active supervision of a faculty member.

**Repeatability:** This course may be repeated for additional credit.

**GUS 4982. Honors Independent Study Environmental Geography. 1 to 3 Credit Hour.**

Reading and/or papers undertaken by the student wishing to study a specific topic, under the active supervision of a faculty member.

**Cohort Restrictions:** Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR

**Course Attributes:** HO

**Repeatability:** This course may not be repeated for additional credits.

---

**German (GER)**

**Courses**

**GER 0868. World Society in Literature & Film. 3 Credit Hours.**

Learn about a particular national culture - Russian, Indian, French, Japanese, Italian, for example, each focused upon in separate sections of this course - by taking a guided tour of its literature and film. You don't need to speak Russian, Hindu, French or Japanese to take one of these exciting courses, and you will gain the fresh, subtle understanding that comes from integrating across different forms of human expression. Some of the issues that will be illuminated by looking at culture through the lens of literature and film: Family structures and how they are changing, national self-perceptions, pivotal moments in history, economic issues, social change and diversity. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: Arabic 0868/0968, Asian Studies 0868, Chinese 0868/0968, English 0868/0968, French 0868/0968, German 0968, Hebrew 0868, Italian 0868/0968, Japanese 0868/0968, Jewish Studies 0868, Korean 0868, LAS 0868/0968, Political Science 0868/0968, Russian 0868/0968, or Spanish 0868/0968.

**Course Attributes:** GG

**Repeatability:** This course may not be repeated for additional credits.

**GER 0968. Honors World Society in Literature & Film. 3 Credit Hours.**

Learn about a particular national culture - Russian, Indian, French, Japanese, Italian, for example, each focused upon in separate sections of this course - by taking a guided tour of its literature and film. You don't need to speak Russian, Hindu, French or Japanese to take one of these exciting courses, and you will gain the fresh, subtle understanding that comes from integrating across different forms of human expression. Some of the issues that will be illuminated by looking at culture through the lens of literature and film: Family structures and how they are changing, national self-perceptions, pivotal moments in history, economic issues, social change and diversity. (This is an Honors course.) NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: Arabic 0868/0968, Asian Studies 0868, Chinese 0868/0968, English 0868/0968, French 0868/0968, German 0868, Hebrew 0868, Italian 0868/0968, Japanese 0868/0968, Jewish Studies 0868, Korean 0868, LAS 0868/0968, Political Science 0868/0968, Russian 0868/0968, or Spanish 0868/0968.

**Cohort Restrictions:** Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR

**Course Attributes:** GG, HO

**Repeatability:** This course may not be repeated for additional credits.

**GER 1001. Introduction to German I. 4 Credit Hours.**

Classroom work devoted to understanding and speaking German and the reading of graded texts. Laboratory and videotape work stress pronunciation, aural, and oral drills based on an elementary workbook, aimed at communication.

**Course Attributes:** LA

**Repeatability:** This course may not be repeated for additional credits.
GER 1002. Introduction to German II. 4 Credit Hours.
Emphasis on understanding, speaking, reading, and writing German. Laboratory and videotapes stress communication skills.

Course Attributes: LA
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
GER 1001|Minimum Grade of C-|May not be taken concurrently
OR LCGE C1002|May not be taken concurrently
OR LCGE B1002|May not be taken concurrently
OR LCGE C1003|May not be taken concurrently
OR LCGE B1003|May not be taken concurrently
OR LCGE EXMPT|May not be taken concurrently.

GER 1003. Introduction to German III. 3 Credit Hours.
Review of grammar. Reading and discussion of texts of intermediate difficulty.

Course Attributes: LB
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
GER 1002|Minimum Grade of C-|May not be taken concurrently
OR LCGE EXMPT|May not be taken concurrently.

GER 1941. Honors Literature and Culture of Central Europe in the 20th Century. 3 Credit Hours.
An introduction to the principal issues, ideas, and genres in the literature of Central Europe since 1900. Through the study of literature, cinema, and the artistic avant-garde, it explores a unique cultural history. Readings include works from Austrian, Croatian, Czech, Hungarian, and Serbian fiction. Course materials will also include the screening of feature films from the region. NOTE: (1) Offered in English. (2) This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR

Course Attributes: HO, IS
Repeatability: This course may not be repeated for additional credits.

GER 2001. Intermediate. 3 Credit Hours.
Continued refinement of grammar. Reading and discussion of textbook and newspaper articles. Increasing vocabulary and practice of basic writing skills.

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
GER 2001|Minimum Grade of C-|May not be taken concurrently

GER 2011. Immersion in German. 1 to 3 Credit Hour.
A one-credit course for students who participate in our Summer Intensive German Program in Leipzig after the German II [German 1002 (0052)] level in order to reward the extra time and exposure they receive during the program.

Repeatability: This course may be repeated for additional credit.

Pre-requisites:
GER 1002|Minimum Grade of C-|May not be taken concurrently
OR LCGE C1003|May not be taken concurrently
OR LCGE B1003|May not be taken concurrently
OR LCGE EXMPT|May not be taken concurrently.

GER 2041. Reading I. 3 Credit Hours.
This course focuses on developing reading strategies for the advanced intermediate student. Through theory and practice using a broad range of documents, this course provides a bridge from foundation courses to those dealing with more sophisticated primary texts.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
GER 2001|Minimum Grade of C-|May not be taken concurrently.

GER 2122. Conversation I. 3 Credit Hours.
Study of German language with intensive work in skills required for understanding and speaking. Stress on pronunciation, practical vocabulary, idioms, and useful sentence structures. At the end of the course, students should be able to converse at the Intermediate Mid level (ACTFL Rating Scale).

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
GER 2001|Minimum Grade of C-|May not be taken concurrently.
GER 2131. The Contemporary German-Speaking World. 3 Credit Hours.
This course concentrates on familiarizing the student with the German-speaking countries: Germany, Switzerland, and Austria. Students explore contemporary history, geography, provinces, products, industries, customs, and cuisine of these countries. Use of the computer facilitates mapmaking, visualizing famous people and places, and accessing immediate events. Communication will be in German on such topics as contemporary politics, the environment, history, film, music, art, literature, and technology—and will improve reading, writing, speaking, and listening skills at the same time.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
GER 1003|Minimum Grade of C-|May not be taken concurrently
OR LCGE EXMPT|May not be taken concurrently.

GER 2141. Hesse, Kafka, Mann, and Rilke. 3 Credit Hours.
This course focuses on the literary giants of modern German literature. A reading knowledge in German is required since all primary and most secondary texts will be in German, although English translation of the texts may also be used. Course readings will focus on selected stories and novels by Franz Kafka, Rainer Maria Rilke, and Nobel Prize winners Hermann Hesse and Thomas Mann.
Repeatability: This course may not be repeated for additional credits.

GER 2501. German for Business I. 3 Credit Hours.
German for Business is an advanced language course for students who wish to continue their study of German while focusing on current issues in economics and business in the German-speaking countries of Europe. The goal of the course is to advance communication and comprehension skills and to introduce the specialized vocabulary of business. Some of the topics include: German unification, the European Union, transportation and infrastructure, labor unions, the major industries and companies in Germany, taxes, workers' benefits, banking and environmental policy, travel industry, and office procedures.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
GER 2001|Minimum Grade of C-|May not be taken concurrently.

GER 3011. Intensive German in Germany. 3 Credit Hours.
A course intended for German Language students who are enrolled to study abroad in a German-speaking country for a semester of the year, and need to obtain credit for courses taken at that German University.
Repeatability: This course may not be repeated for additional credits

GER 3021. Conversation II. 3 Credit Hours.
This second level course is designed to build on skills in German oral expression acquired in German Conversation I through special focus on expanding vocabulary and idiomatic fluency, honing listening skills, improving pronunciation and awareness of different linguistic registers, and increasing the ease of oral expression through frequent practice.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
GER 2122|Minimum Grade of C-|May not be taken concurrently.

GER 3096. Composition I. 3 Credit Hours.
Improvement in using the language through intensive written practice, grammar review, and study of problems in syntax and style. Use of current materials from German-speaking countries. NOTE: Capstone writing course. Required for major, minor, and language certificate in German.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
GER 2001|Minimum Grade of C-|May not be taken concurrently.

GER 3101. Introduction to German Literature I. 3 Credit Hours.
This is an introduction to German literature through analysis and discussion of selected texts within the context of German literary and cultural history. The course provides an overview of significant periods, authors, genres, and topics in German literature from the earliest periods, Old High German through Middle High German to Early Modern German of the Renaissance. The course is taught in German with discussion, reading and writing components. Students are encouraged to formulate their interpretations of literary texts both orally and in written form. The course provides ample opportunity for students to strengthen their speaking and writing skills in the German language. NOTE: Conducted in German.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
GER 2001|Minimum Grade of C-|May not be taken concurrently.
GER 3102. Introduction to German Literature II. 3 Credit Hours.
This course is a continuation of the introduction to German literature through analysis and discussion of selected texts within the context of German literary and cultural history. The course provides an overview of significant periods, authors, genres, and topics in German literature from the "Baroque" period through the Golden Ages of the 18th and 19th centuries to Modern German Literature. The course is taught in German with discussion, reading and writing components. Students are encouraged to formulate their interpretations of literary texts both orally and in written form. The course provides ample opportunity for students to strengthen their speaking and writing skills in the German language. It is recommended that the courses be scheduled in succession.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
GER 2001|Minimum Grade of C-|May not be taken concurrently.

GER 3182. Independent Study I. 3 Credit Hours.
Supervised study of a topic area agreed upon by the student and instructor.
Repeatability: This course may be repeated for additional credit.

GER 3201. Culture and Civilization I. 3 Credit Hours.
This course will examine the German-speaking peoples through the broad spectrum of their culture, history, art and literature; explore the great events and personalities who contributed to German Culture, from the Romans and earliest records of the Germanic tribes up to the Renaissance and Reformation; and continue efforts to understand, speak, read and write German with increasing proficiency and facility. NOTE: Required for major, minor, and language certificate in German.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
GER 2122|Minimum Grade of C-|May not be taken concurrently.

GER 3202. Culture and Civilization II. 3 Credit Hours.
This course continues the examination of the German-speaking peoples through the broad spectrum of their culture, history, art and literature; explores the great events and personalities who contributed to German Culture, from the religious wars of the 17th Century and Baroque period up to Post-War modern Germany; and continues efforts to understand, speak, read and write German with increasing proficiency and facility.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
GER 2122|Minimum Grade of C-|May not be taken concurrently.

GER 3221. German Culture through Film. 3 Credit Hours.
The course examines German cinema in the context of its relationship to German culture and history. Because film is an art form of creative expression as well as a vehicle for promoting awareness of social concerns, the course will introduce techniques of viewing, analyzing, and evaluating films as expressions of the contemporary culture. Basing our work on films of historical significance and those by premier directors, the course will explore the beginnings of the film industry, Nazi propaganda, the impact of the Oberhausen Manifesto, New German Films, and issues of gender and politics since the Wende.
Repeatability: This course may not be repeated for additional credits.

GER 3275. Fin-de-Siecle Vienna: Birthplace of Modernity around 1900. 3 Credit Hours.
An interdisciplinary approach to the cultural and political transformations taking place in Vienna around 1900 (art, architecture, literature, psychoanalysis, music). The common contexts and interconnections between writers such as Schnitzler, Hofmannsthal, Altenberg, and Kraus, Freud's psychoanalysis, Klimt and Schiele's "Jugendstil," the architectural innovations of Wagner, Loos and the Ringstrasse, and the music of Mahler, R. Strauss, and Schoenberg. Focus on issues such as sexuality, disease, desire, and modernity. The rise of mass politics and modern anti-Semitism will also be discussed.
Repeatability: This course may not be repeated for additional credits.

GER 3282. Independent Study II. 3 Credit Hours.
The theme for this course will be decided by the Core-Coordinators based on the needs and interests of the students enrolled. The course is intended for German majors/minors.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
GER 2001|Minimum Grade of C-|May not be taken concurrently.

GER 3363. Diabolical Dilemmas: The Faust Theme in German Literature. 3 Credit Hours.
What is meant by the term "Faustian"? Since ancient times, western societies have fostered the idea that one should strive constantly to achieve all that is in one's power. At the same time, we have been careful to set ethical and cultural limits and punish those who have overstepped these boundaries. Focusing on tracing the development and permutations of the themes of the Faust legend in Germany over the past 200 years, this course investigates literary treatments of such transgressors in German literature and film, and compares them to actual situations presenting ethical dilemmas. NOTE: (1) The course is conducted in German. (2) In Fall 2010, this course will focus on historical, literary, and philosophical aspects of the concept Faustian through literary works including Goethe's Faust, Duerenmatt's Physicists, and Thomas Mann's Mario and the Magician, as well as representations in art, music, and film. Discussion, reports, periodic examinations.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
GER 3102|Minimum Grade of C-|May not be taken concurrently.
GER 4140. Seminar in Special Topic. 3 Credit Hours.
Topic varies each semester. NOTE: Offered in English.
Repeatable: This course may be repeated for additional credit.

GER 4141. German Expressionism. 3 Credit Hours.
German Expressionism (ca. 1910-1920) is certainly one of the most innovative artistic movements in the history of German culture; it is certainly the most revolutionary. The course will trace the development of Expressionism in the arts with the major emphasis on literature. Authors such as Kafka, Trakl, Wedekind, and Werfel, will be read. The course also focuses on the beginnings of German cinema as seen in the works of F. Lang, E. Lubitsch, and F. Murnau. The rich art production of Beckmann, Kandinsky, Marc, and others will add to our understanding of the revolutionary nature of German Expressionism. This course is conducted in German.
Repeatable: This course may not be repeated for additional credits
Pre-requisites:
GER 3102 | Minimum Grade of C- | May not be taken concurrently.

GER 4142. Novelle. 3 Credit Hours.
By reading, discussing, and writing about novellas recognized as significant representative works of the genre, the course aims to provide students with tools to: locate the novella's place in German literature within cultural settings; become acquainted with research into the genre; and practice, refresh and expand all language skills, especially reading, writing, and vocabulary development skills. All of the selected texts share thematic aspects of the supernatural or surreal as integral to development of the hallmark novella twist of plot. NOTE: The course is conducted in German.
Repeatable: This course may not be repeated for additional credits
Pre-requisites:
GER 3102 | Minimum Grade of C- | May not be taken concurrently.

GER 4144. The Golden Age: Goethe and Schiller. 3 Credit Hours.
The course provides an introduction to the literary and philosophical developments of the classical period in German literature through an intensive reading and analysis of the prose, plays, and poems of Goethe and Schiller. The examination of this critical period in German literature/culture will be carried out by also scrutinizing representative works from the Storm and Stress period, as well as Early Romanticism. NOTE: The course is conducted in German.
Repeatable: This course may not be repeated for additional credits
Pre-requisites:
GER 3102 | Minimum Grade of C- | May not be taken concurrently.

GER 4145. Twentieth Century Drama: From Expressionism to the Absurd and Beyond. 3 Credit Hours.
A selection of representative German theatrical works from Expressionism to the present (Hauptmann, Hofmannsthal, Brecht, Goering, Kaiser, Duerrenmatt, Frisch, Peter Weiss, Handke, Turrini), focusing on historical and cultural contexts as well as literary and linguistic analysis. Discussion, reports, and videos. NOTE: The course is conducted in German.
Repeatable: This course may not be repeated for additional credits
Pre-requisites:
GER 3102 | Minimum Grade of C- | May not be taken concurrently.

GER 4146. Twentieth Century Prose: Searching for Identity. 3 Credit Hours.
In various types of writing - novel, novelle, short story, epistolary literature - German-speaking poets of the past century revealed a continuing, but not necessarily satisfying, search for identity. This course aims to trace that trajectory by studying representative works from Germany, Austria, and Switzerland. Readings include works by Thomas Mann, Hesse, Kafka, Seghers, Brussig, Borchert, Boell, Heym, Grass, Oezdamar, and Werfel. Discussion, videos, oral and written reports. NOTE: The course is conducted in German.
Repeatable: This course may not be repeated for additional credits
Pre-requisites:
GER 3102 | Minimum Grade of C- | May not be taken concurrently.

GER 4147. Kafka. 3 Credit Hours.
Franz Kafka is justly regarded as one of the seminal writers of the 20th century. The simplicity of his language, combined with fantasy-based situations, produces texts with surprising twists, dark humor, and great spiritual depth. They capture the deliberations of a man both fascinated and imprisoned by language and life. Issues of freedom/restrictions and imprisonment/liberation are central to Kafka's writings. Works to be read are: Amerika, Der Prozess, Gesammelte Erzaehlungen, etc. NOTE: This course is conducted in German.
Repeatable: This course may not be repeated for additional credits
Pre-requisites:
GER 3102 | Minimum Grade of C- | May not be taken concurrently.

GER 4182. Advanced Independent Study I. 3 Credit Hours.
Supervised reading, research, and reports on an advanced level in German language, literature, and civilization.
Repeatable: This course may be repeated for additional credit.
GER 4221. German Culture Through Film. 4 Credit Hours.
This course examines German cinema in the context of its relationship to German culture and history. Because film is an art form of creative expression as well as a vehicle for promoting awareness of social concerns, the course will introduce techniques of viewing, analyzing, and evaluating films as expressions of the contemporary culture. Basing our work on films of historical significance and those by premier directors, the course will explore the beginnings of the film industry, Nazi propaganda, the impact of the Oberhausen Manifesto, New German Film, and issues of gender and politics since the Wende. It includes an additional hour of instruction in German for German Majors and Minors.
Repeatability: This course may not be repeated for additional credits.

GER 4282. Advanced Independent Study II. 3 Credit Hours.
Supervised reading, research, and reports on an advanced level in German language, literature, and civilization.
Repeatability: This course may be repeated for additional credit.

GER 4296. Composition II. 3 Credit Hours.
This course builds on the skills mastered in German 3096 (W231) (Composition I) by fostering more sophisticated use of the language through written practice and study of advanced problems in syntax and style. Use of contemporary materials from German-speaking countries. NOTE: The course is conducted in German.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
GER 3096|Minimum Grade of C-|May not be taken concurrently.

GER 4301. History of the German Language. 3 Credit Hours.
Origins and development of the German language, including changes in sounds, grammar and vocabulary. NOTE: Taught in English.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
GER 1003|Minimum Grade of C-|May not be taken concurrently
OR LCGE EXMPT|May not be taken concurrently.

GER 4940. Honors: Special Topics. 3 Credit Hours.
This course requires an advanced level of proficiency in German. Prerequisite is the successful completion of a 2000-level German course, an intensive writing experience, or with instructor approval. The topic will be an advanced study of various literary genres to be selected by the Core-Coordinators, and to be announced before enrollment.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
GER 2000|Minimum Grade of C-|May not be taken concurrently.

Global Studies (GBST)

Courses

GBST 2096. Introduction to Global Studies. 3 Credit Hours.
The 21st century is an age of globalization. Individuals no longer live their lives exclusively within local and national communities, but are touched by, and interact with, states, groups, firms and individuals across the world. In the area of international security, states have always fought, and prepared to fight, wars with other states, but in the 21st century these interstate wars have been joined by both increasingly destructive civil wars within countries, and by international and global terrorism perpetrated by non-state actors. In the economic realm, recent decades have witnessed a dramatic opening of almost all the world’s economies to flows of international trade, finance, and people, such that all of us are now touched, in one way or another, by developments in the global economy. In the realm of culture, centuries-old national cultures, languages and traditions that have shaped people’s world views are increasingly coming into contact – via increased travel, mass communications, and the internet – with cultural impacts from other countries.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

GBST 4096. Capstone Seminar in Global Studies. 3 Credit Hours.
This capstone research seminar is designed for seniors in Global Studies, with the specific aim of helping students carry out and complete an independent research project in their areas of concentration. Over the course of this semester, you will select a research topic, formulate a research question, engage with the scholarly literature on this question, generate hypotheses for empirical testing (if appropriate), and set out a research design and methodology that will allow you to test and present compelling findings about your chosen research question. Whether you are coming to the seminar with well established ideas about the possible topic of your research paper, or are starting from scratch, the course will give you the skills you need to select a research question and move, step by step, to a completed work of original global studies scholarship.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
GBST 2096|Minimum Grade of C-|May not be taken concurrently.
Graphic Arts and Design (GAD)

Courses

GAD 0822. Human Behavior and the Photographic Image. 3 Credit Hours.
How do photographs become more than just a pile of disparate images? Is there more to photography than that single "decisive moment" in the hunt and capture of an image? How do photographers comment on issues that are important to them? How can photographs tell a story? Is there a way one can use the art of photography to elicit change? In this class, students will use their digital cameras to investigate individual photographs, as well as series of photographs. We will look at photography in its historical context -- at the advent of documentary photography and photojournalism, and at narrative photography in its more contemporary form, as photographers use it to chronicle their own lives and to tell a story. Through the exercises of looking at and making photographic images, several core concepts of social work, along with theories of human behavior in the social environment, will be introduced. Students will learn not only about the place photography holds in our culture, but our culture itself, and the students' place in that culture. Students will critically analyze published photographs, as well as photographs made during the class. The semester will culminate in a class exhibition where students will be given the opportunity to present their photographs to the public, demonstrating their understanding of human behavior in the social environment. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed SSWU 0822.

Course Attributes: GB
Repeatability: This course may not be repeated for additional credits.

GAD 2001. Graphic Design. 3 Credit Hours.
This course introduces students to graphic design as a conceptual and visual discipline. Projects focus on solving visual problems from a wide range of topics in a variety of media. Graphic Design 2001 is the prerequisite for the Graphic and Interactive Design (GAID) major. A final grade of B-minus or better is required in this course for students who wish to major in GAID.
Field of Study Restrictions: May not be enrolled in one of the following Majors: Art History
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts, Bach of Science Educ
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
FDPR 1521|Minimum Grade of C-|May not be taken concurrently
OR FDPR 1522|Minimum Grade of C-|May not be taken concurrently
OR VS 1651|Minimum Grade of C-|May not be taken concurrently.

GAD 2002. Graphic Design. 3 Credit Hours.
In this advanced sophomore level course students work on a variety of projects focusing on visual communication through type and image.
Field of Study Restrictions: May not be enrolled in one of the following Majors: Art History
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
GAD 2001|Minimum Grade of C-|May not be taken concurrently.

GAD 2021. Computers for Design. 3 Credit Hours.
This course introduces students to the computer as a tool for design. Students learn the fundamentals of software most commonly found in design and imaging studios. Students work primarily in Adobe Photoshop, Illustrator and InDesign (Mac platform). Basic working knowledge of Adobe Photoshop and Illustrator is required. Students will be tested for basic competency in these programs on the first day of class.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts, Bach of Science Educ
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
FDPR 1521|Minimum Grade of C-|May not be taken concurrently
OR FDPR 1522|Minimum Grade of C-|May not be taken concurrently
OR VS 1651|Minimum Grade of C-|May not be taken concurrently.

GAD 2071. Mac Design Programs I. 3 Credit Hours.
This course introduces students to the computer as a tool for graphic design and image making. Students learn the fundamentals of software most commonly found in graphic design studios and used for both print and interactive/web applications: Adobe Photoshop, Illustrator and InDesign (MAC platform). This course is not recommended for students who plan to major in Graphic & Interactive Design. Those students should contact an advisor for information about the appropriate alternative. NOTE: Prior to spring 2011, the course title was "Introduction to Computers for Design" and prior to fall 2015, the title was "Introduction to Mac Design Programs."
Repeatability: This course may not be repeated for additional credits.
GAD 2073. Introduction to Web Design. 3 Credit Hours.
This course instructs students in the fundamentals of interactive design with a focus on the use of interactive software, layout, typography, hierarchy and organization. Basic working knowledge of Adobe Photoshop and Illustrator required (MAC platform). Students will be tested for basic competency in these programs on the first day of class.

**College Restrictions:** Must be enrolled in one of the following Colleges: Art, Tyler School
**Repeatability:** This course may be repeated for additional credit.

GAD 2075. Communication Through Graphic Design. 3 Credit Hours.
This course introduces students to creative thinking processes and techniques as they relate to visual communication. Students will present ideas and information on a wide range of topics through visual rather than verbal language. Very basic drawing skills will be needed for this course.

**Repeatability:** This course may be repeated for additional credit.

GAD 2076. Introduction to Web Programming and Production. 3 Credit Hours.
Students will learn how to program and produce a simple web site from provided design templates. The web site will be completed using Adobe Dreamweaver as the main production tool, and will also include an introduction to the programming languages, CSS, HTML, and Javascript fundamentals. Students will complete a fully functioning web site, programmed in the professional, industry-standard model. NOTE: A strong basic knowledge of Photoshop and Illustrator is required. Students will be tested on the first day of class to ensure that they have sufficient knowledge to succeed in the class. This course is open to Tyler students only from all BA, BS and BFA majors. It can be taken for graduate credit with permission of an advisor. Permission from the GAID Area Head is required for students outside of Tyler.

**College Restrictions:** Must be enrolled in one of the following Colleges: Art, Tyler School
**Repeatability:** This course may not be repeated for additional credits.

GAD 2077. Introduction to Illustration. 3 Credit Hours.
This course introduces students to concept and technique in illustration. Basic drawing skills will be needed for this course. Priority will be given to students outside the Graphic & Interactive Design major.

**Degree Restrictions:** Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts, Bach of Science Educ
**College Restrictions:** Must be enrolled in one of the following Colleges: Art, Tyler School
**Repeatability:** This course may be repeated for additional credit.

GAD 2078. The Art of Infographics. 3 Credit Hours.
This course is an introduction to data visualization and infographic design. It explores the history of data visualization and infographic design, from cave paintings to contemporary design, covering static, animated and interactive solutions. Lectures on visual literacy and graphic design foundations will help the students develop the vocabulary necessary to critically analyze contemporary infographics. Students receive basic instruction in the creation of infographics and develop their own infographic utilizing supplied data. This course will include readings from Edward Tufte's *The Visual Display of Quantitative Information*. Tutorials may also be used for outside software instruction.

**Field of Study Restrictions:** May not be enrolled in one of the following: Art Education, Ceramics-Glass, Fibers and Materials Studies, Graphic and Interactive Design, Metals, Jewelry, CAD-CAM, Photography, Painting, Printmaking, Sculpture, Undeclared-Tyler School of Art, Visual Studies
**Repeatability:** This course may not be repeated for additional credits.

GAD 2401. Introduction to Photography (Online Digital Course). 3 Credit Hours.
This is an introductory course in photography. We will concentrate on learning the basic camera functions, proper exposure of an image, and the formal and conceptual considerations in composition. Although there will be an emphasis on the technical aspects of photography, this course will also introduce students to many contemporary artists working in photography, as well as the history of the photographic medium and how to appropriately approach the critique setting.

**Repeatability:** This course may not be repeated for additional credits.

GAD 2441. Photography I. 3 Credit Hours.
Principles and techniques of digital photography to include camera operation, printing, and presentation. Personal vision, introduction to photographic history, and photography within the culture will be covered in the course.

**College Restrictions:** Must be enrolled in one of the following Colleges: Art, Tyler School
**Repeatability:** This course may be repeated for additional credit.

GAD 2451. Photography I. 3 Credit Hours.
Principles and techniques of digital photography to include camera operation, printing, and presentation. Personal vision, introduction to photographic history, and photography within the culture will be covered in the course.

**College Restrictions:** Must be enrolled in one of the following Colleges: Art, Tyler School
**Repeatability:** This course may be repeated for additional credit.

GAD 2461. Digital Imaging. 3 Credit Hours.
This course deals with photographic images and how ideas can be expressed through the manipulation of these images using the computer as a tool for creative expression. Excellent basic course in image software use and introduction to the use of the computer.

**Degree Restrictions:** Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts
**College Restrictions:** Must be enrolled in one of the following Colleges: Art, Tyler School
**Repeatability:** This course may be repeated for additional credit.
GAD 2701. Survey of Printmaking Techniques. 3 Credit Hours.
A beginning survey of basic techniques of lithography and screenprinting. The course introduces a number of short projects designed to give a broad experience with the media. Additional topics include print presentation, care of tools and materials, and a historical survey in slides and actual examples.
Field of Study Restrictions: May not be enrolled in one of the following Majors: Art History
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts, Bach of Science Educ
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.

GAD 2702. Survey of Printmaking Techniques. 3 Credit Hours.
A beginning survey of the basic techniques of etching and relief printing. The course introduces a number of short projects designed to give a broad experience with the media. Additional topics include print presentation, care of tools and materials, and a historical survey in slides and actual examples.
Field of Study Restrictions: May not be enrolled in one of the following Majors: Art History
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts, Bach of Science Educ
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.

GAD 2703. Book Structures. 3 Credit Hours.
This course introduces a variety of hand bookbinding techniques, including folded, sewn and adhesive binding structures as well as a variety of protective enclosures and custom boxes. Projects will allow students to explore the book as a means to organize, structure, and present visual information in a variety of media.
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
FDPR 1521|Minimum Grade of C-|May not be taken concurrently
OR FDPR 1522|Minimum Grade of C-|May not be taken concurrently
OR VS 1151|Minimum Grade of C-|May not be taken concurrently.

GAD 2711. Serigraphy. 3 Credit Hours.
The fundamentals of screenprinting as a fine art print medium. This course introduces various handmade stencil methods as well as the photo processes. Students use non-toxic acrylic inks with projects that emphasize color organization and conceptual challenge.
Field of Study Restrictions: May not be enrolled in one of the following Majors: Art History
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts, Bach of Science Educ
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.

GAD 2731. Etching. 3 Credit Hours.
The beginning level course in intaglio and relief printing processes. This course covers traditional methods of platemaking, such as etching, drypoint, and aquatint, as well as explorations into photo transfer and color viscosity printing.
Field of Study Restrictions: May not be enrolled in one of the following Majors: Art History
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts, Bach of Science Educ
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.

GAD 2741. Etching. 3 Credit Hours.
The beginning level course in intaglio and relief printing processes. This course covers traditional methods of platemaking, such as etching, drypoint, and aquatint, as well as explorations into photo transfer and color viscosity printing.
Field of Study Restrictions: May not be enrolled in one of the following Majors: Art History
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts, Bach of Science Educ
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.

GAD 2751. Lithography. 3 Credit Hours.
A basic course in metal plate lithography. Preparation, processing, and printing are studied with the intention of giving the beginning student control over a medium that is often thought to be complicated. Students work with traditional hand-drawn imagery as well as transfer and photo-litho, in black and white and color.
Field of Study Restrictions: May not be enrolled in one of the following Majors: Art History
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts, Bach of Science Educ
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
GAD 2761. Lithography. 3 Credit Hours.
A basic course in metal plate lithography. Preparation, processing, and printing are studied with the intention of giving the beginning student control over a medium that is often thought to be complicated. Students work with traditional hand-drawn imagery as well as transfer and photo-litho, in black and white and color.
Field of Study Restrictions: May not be enrolled in one of the following Majors: Art History
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts, Bach of Science Educ
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.

GAD 2961. Honors Digital Imaging: Seeing Photographically. 3 Credit Hours.
Life is full of wonder when you simply open your eyes to it. All it takes is an open mind and a shift in your way of seeing. The primary objective of this course is to introduce students to the act of seeing photographically, creative problem solving, and thinking visually while learning contemporary digital technology and practices. Students will be instructed on the use of a variety of input and output devices (cameras, scanners, printers) and software applications. Lecture and research on historical and contemporary artwork inform creative approaches to visual thinking and assignments build on creative problem-solving skill sets. Emphasis is placed on image making, proper workflow, interpretation, and output. Students produce a portfolio that demonstrates critical visual thinking and effective skill development.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.

GAD 3001. Advanced Graphic Design. 3 Credit Hours.
Class assignments focus on visual communication in a variety of forms: logo design, packaging, brochures, invitations, posters, magazine illustration and layout, and/or environmental design. NOTE: GAD 3001 and 3002 must be taken in sequence and are required for all graphic design majors. GAD 3001 (0253) is offered in the fall semester only; GAD 3002 (0254) is offered in the spring semester only. Both courses are open to GAID majors only.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Graphic and Interactive Design
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(GAD 2001|Minimum Grade of C-|May not be taken concurrently
AND GAD 2021|Minimum Grade of C-|May not be taken concurrently).

GAD 3002. Advanced Graphic Design. 3 Credit Hours.
Class assignments focus on visual communication in a variety of forms: logo design, packaging, brochures, invitations, posters, magazine illustration and layout, and/or environmental design. NOTE: GAD 3001 and 3002 must be taken in sequence and are required for all graphic design majors. GAD 3001 (0253) is offered in the fall semester only; GAD 3002 (0254) is offered in the spring semester only. Both courses are open to GAID majors only.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Graphic and Interactive Design
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
GAD 3001|Minimum Grade of C-|May not be taken concurrently
AND GAD 3002|Minimum Grade of C-|May not be taken concurrently

GAD 3010. Special Topics. 3 Credit Hours.
This course introduces students to various areas of design practice. Areas of focus in a given semester could include one of the following: animation, art direction, branding, corporate communications, design for the public good, environmental design, exhibition design, game design, motion graphics, publication design, sustainability, typographic design, etc. The topic(s) for the course will be determined by the expertise of the instructor(s).
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(GAD 3001|Minimum Grade of C-|May not be taken concurrently)
AND (GAD 3011|Minimum Grade of C-|May not be taken concurrently)
AND (GAD 3021|Minimum Grade of C-|May not be taken concurrently).

GAD 3011. Typography. 3 Credit Hours.
This course focuses on the expressive and functional use of typography in design, one of the most important tools in visual communication for both print and interactive media. This course includes instruction in Adobe InDesign, (Mac platform), a standard typesetting program in the design industry. NOTE: This course is open to Graphic and Interactive Design majors only.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Graphic and Interactive Design
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(GAD 2001|Minimum Grade of C-|May not be taken concurrently
AND GAD 2021|Minimum Grade of C-|May not be taken concurrently).
GAD 3012. Typographic Principles. 3 Credit Hours.
This course will focus on the fundamentals of typography in design - typefaces, their history, development and characteristics, typographic hierarchy, layout, rhythm, proportion and harmony, and the technical aspects of working with type in software that meets industry standards (Adobe InDesign/Mac platform). Specific topics include the formal characteristics of typography; historic typography; information hierarchies and layout; typographic systems; punctuation and special characters; setting text; legibility and readability; setting charts and tables; and preparation of typographic files for print. NOTE: This course is open to Graphic and Interactive Design majors only.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Graphic and Interactive Design
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(GAD 2001|Minimum Grade of C-|May not be taken concurrently
AND GAD 2021|Minimum Grade of C-|May not be taken concurrently).

GAD 3013. Advanced Typography. 3 Credit Hours.
This course focuses on advanced applications of typography in design. Projects include logo design, book covers, posters, brochures and/or catalogues. NOTE: This course is open to Graphic and Interactive Design majors only.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Graphic and Interactive Design
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts, Master of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(GAD 3001|Minimum Grade of C-|May not be taken concurrently
AND GAD 3011|Minimum Grade of C-|May not be taken concurrently).

GAD 3015. Advanced Typography. 3 Credit Hours.
This course focuses on advanced applications of typography in design. Projects include logo design, book covers, posters, brochures and/or catalogues. NOTE: This course is open to Graphic and Interactive Design majors only.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Graphic and Interactive Design
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts, Master of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(GAD 3001|Minimum Grade of C-|May not be taken concurrently
AND GAD 3011|Minimum Grade of C-|May not be taken concurrently).

GAD 3021. Intermediate Computer Graphics. 3 Credit Hours.
This course for Graphic and Interactive Design Graphics focuses on the computer as an essential tool in both print and digital media. (Mac platform) NOTE: This course is open to Graphic and Interactive Design majors only.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Graphic and Interactive Design
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(GAD 2001|Minimum Grade of C-|May not be taken concurrently
AND GAD 2021|Minimum Grade of C-|May not be taken concurrently).

GAD 3023. Interactive Design. 3 Credit Hours.
This course focuses on design for web and motion graphics. A good working knowledge of Adobe Photoshop and Illustrator (Mac Platform) is necessary. Flash and After Effects will be explored from basic to intermediate levels. While staying current with the latest technologies, the emphasis will be on design for communication through interactive media. NOTE: This course is open to Graphic and Interactive Design majors only.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Graphic and Interactive Design
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts, Master of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(GAD 3001|Minimum Grade of C-|May not be taken concurrently
AND GAD 3021|Minimum Grade of C-|May not be taken concurrently).
GAD 3025. Interactive Design. 3 Credit Hours.
This course focuses on design for web and motion graphics. A good working knowledge of Adobe Photoshop and Illustrator (Mac Platform) is necessary. Flash and After Effects will be explored from basic to intermediate levels. While staying current with the latest technologies, the emphasis will be on design for communication through interactive media. NOTE: This course is open to Graphic and Interactive Design majors only.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Graphic and Interactive Design
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts, Master of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(GAD 3001|Minimum Grade of C-|May not be taken concurrently)
AND GAD 3021|Minimum Grade of C-|May not be taken concurrently).

GAD 3027. Digital Narratives. 3 Credit Hours.
The purpose of this course is to focus on the creation of a short digital animation/movie based on a supplied narrative. Strong conceptual and technical skills as well as a solid grasp of typography will be necessary for this course. Students will learn one vector based and one video based application to create this design. This course is not cell based animation. NOTE: This course is open to Graphic and Interactive Design majors only.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Graphic and Interactive Design
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts, Master of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(GAD 3001|Minimum Grade of C-|May not be taken concurrently)
AND (GAD 3021|Minimum Grade of C|May not be taken concurrently).

GAD 3029. Programming and Production for Web Sites. 3 Credit Hours.
The focus of this course is the technical production and programming aspects of producing a fully functioning web site. Topics covered will be the best-practices use of Dreamweaver for site production with an emphasis on CSS, HTML and Javascript programming languages. Students will also be introduced to the fundamentals of the ActionScript language. Students will cover the process of creating a web site and its many considerations such as flowcharts, sitemaps, and wireframes. Students will be introduced to fundamentals of information architecture and search engine optimization (SEO) for use within their site and discuss best-practices for uploading and maintaining their final site. Open to Graphic & Interactive Design BFA and MFA majors only.
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(GAD 2001|Minimum Grade of C-|May not be taken concurrently)
AND GAD 2021|Minimum Grade of C-|May not be taken concurrently)
AND GAD 3021|Minimum Grade of C-|May not be taken concurrently).

GAD 3031. Illustration. 3 Credit Hours.
This course introduces students to concept and technique in illustration. NOTE: This course is open to students in all studio majors.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(FDPR 1511|Minimum Grade of C-|May not be taken concurrently)
OR FDPR 1512|Minimum Grade of C-|May not be taken concurrently)
OR VS 1651|Minimum Grade of C-|May not be taken concurrently)
AND (GAD 2001|Minimum Grade of C-|May not be taken concurrently)
AND (GAD 2021|Minimum Grade of C-|May not be taken concurrently).

GAD 3033. Illustration. 3 Credit Hours.
This course introduces students to concept and technique in illustration. NOTE: This course is open to Graphic and Interactive Design majors only.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Graphic and Interactive Design
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(GAD 2001|Minimum Grade of C-|May not be taken concurrently)
AND GAD 2021|Minimum Grade of C-|May not be taken concurrently).
GAD 3041. Advertising Design. 3 Credit Hours.
Students will develop overall strategies as well as specific visual and verbal content for advertising campaigns. Strong conceptual ability and writing skills are necessary in addition to a solid grasp of typography and layout. NOTE: This course is open to Graphic and Interactive Design majors only.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Graphic and Interactive Design
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts, Master of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites: 
(GAD 3001|Minimum Grade of C-|May not be taken concurrently)
AND (GAD 3011|Minimum Grade of C-|May not be taken concurrently)
OR GAD 3021|Minimum Grade of C-|May not be taken concurrently).

GAD 3045. Introduction to Visual Communication. 3 Credit Hours.
This course introduces students to creative thinking processes and techniques as they relate to visual communication. Students will present ideas and information on a wide range of topics through visual rather than verbal language. NOTE: This course is open to all students sophomore through senior level.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Graphic and Interactive Design
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.

GAD 3053. Art Careers Promotion. 3 Credit Hours.
This course offers instruction in the design and content of materials needed by fine artists in professional practice. This course will cover a number of topics including: resume content and design, personal stationery packages for business communication (cover letters, professional inquiries, etc.), presentation formats for print and web. NOTE: This course is open to all students sophomore through senior level.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.

GAD 3096. The Business of Design. 3 Credit Hours.
The focus of this course is the practice of design for communication in a business context. This course will cover a number of topics, including: personal marketing, freelance practice, working with artists and vendors, business models for design entrepreneurs, sustainability, and presentation skills. This course fulfills a studio elective requirement for juniors and seniors in the GAID major. NOTE: This course is open to Graphic and Interactive Design majors only.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Graphic and Interactive Design
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Course Attributes: WI
Repeatability: This course may be repeated for additional credit.
Pre-requisites: 
(GAD 3001|Minimum Grade of C-|May not be taken concurrently)
AND (GAD 3011|Minimum Grade of C-|May not be taken concurrently)
OR GAD 3021|Minimum Grade of C-|May not be taken concurrently).

GAD 3101. Collaborative Design Workshop in Rome. 3 Credit Hours.
The six week course is geared toward design students interested in immersing themselves in the culture of Italy and producing, by the end of the workshop, a printed project about design, art, and culture in Rome. Students will have a choice of topics to research, design, and produce. Among the many topics that students could focus on are Roman decorative arts, cuisine, theatre, architecture, fashion, music, and film. Students will also be encouraged to study how the Italian design aesthetic and philosophy might be applied to their own work. An integral part of this project will be both digital and traditional image making. Students will photograph and/or illustrate an article that will be incorporated into the final collaboratively produced printed piece. NOTE: Open to majors in the following disciplines - Graphic and Interactive Design, Photography, Illustration, Fashion Design, Interior Design, Industrial Design, Landscape Architecture, Architecture, Journalism, Advertising.
Repeatability: This course may be repeated for additional credit.

GAD 3111. Graphic Design Workshop in Japan. 3 or 6 Credit Hours.
The six week course is geared toward graphic design students interested in immersing themselves in the culture of Japan and producing a design project about this experience. Students will have a choice of projects to design and produce. They will be encouraged to study how Japanese design aesthetic and philosophies might be applied to their own work. NOTE: A basic knowledge of design industry-standard print software is required for this course.
Repeatability: This course may be repeated for additional credit.
GAD 3123. Introduction to Interactive. 3 Credit Hours.
This studio elective instructs students in the fundamentals of interactive design with a focus on the use of interactive software, layout, typographic principles, including typographic hierarchy and organization as well as the balance of aesthetic and functional considerations in layout and typography.
NOTE: The course is open to students from all majors at Tyler. It fulfills a studio elective requirement.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts, Bach of Science Educ
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.

GAD 3182. Independent Study. 1 to 3 Credit Hour.
The proposal for a large-scale independent project must be approved by a faculty member who agrees to oversee the project prior to registration for the course. For photography students justification for course work outside the Photography curriculum will be required.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.

GAD 3185. Field Internship. 3 Credit Hours.
A field internship must provide practical professional experience in a setting which is relevant to the student's course of study, such as in a gallery, museum, design studio or agency, or community art center, etc. A comprehensive paper must be written. An internship is designed to give the student valuable real world career experience. Guidelines for specific area requirements are available through the GAD office. NOTE: The GAD Internship Coordinator must receive and approve a written proposal prior to the start of the internship, describing the setting and the time commitment, which must equal at least 10 hours per week for a full semester.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.

GAD 3282. Independent Study. 1 to 3 Credit Hour.
The proposal for a large-scale independent project must be approved by a faculty member who agrees to oversee the project prior to registration for the course. For photography students justification for course work outside the Photography curriculum will be required.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.

GAD 3401. Color Photography I. 3 Credit Hours.
An introduction to basic skills in color photography. This course includes camera work and understanding of light, processing and printing with an emphasis on color theory, the development of personal imagery and the history of color photography.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
GAD 2441|Minimum Grade of C-|May not be taken concurrently.

GAD 3402. View Camera. 3 Credit Hours.
This course provides an introduction to large format photography using a 4x5 view camera. Basic camera operation, various functions, specific uses, and potential as a creative tool are studied. A variety of specific exercises lead the student to proficient use of the view camera. Emphasis is on creative use as well as technical development. NOTE: Open to Photo majors only - special authorization required for non-majors.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
GAD 3412|Minimum Grade of C-|May not be taken concurrently.

GAD 3411. Digital Photography. 3 Credit Hours.
Digital photography explores advanced applications in digital imaging with an emphasis on photographic output for the artist. Emphasis will be placed on options for combining digital and traditional modalities of photographic practice to create a still image, and the development of personal vision. A professional portfolio will be required. NOTE: Special authorization required for non-majors.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
GAD 2461|Minimum Grade of C-|May not be taken concurrently.
GAD 3412. Photography II. 3 Credit Hours.
Advanced projects in black and white photography to include technical development as well as continued development of personal vision through the photographic medium. Professional, traditional black and white photographic practice will be emphasized, with an introduction to digital techniques using black and white. NOTE: Special authorization required for non-majors.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
GAD 2441|Minimum Grade of C-|May not be taken concurrently
OR GAD 2451|Minimum Grade of C-|May not be taken concurrently.

GAD 3413. Photographic Lighting. 3 Credit Hours.
At the core of any commercial or fine art photographer’s practice is an in-depth understanding of lighting. Light is the fundamental element that makes a photograph possible, and every successful photographer's control over light is the key to their success. This course will not only focus on allowing you to gain a thorough understanding of artificial lighting techniques, but also how to approach natural light situations better, and beyond that, to an understanding of how the two work in conjunction. By revisiting the fundamentals of the large format view camera, and developing an understanding of environmental and situational lighting techniques, you will learn different commercial and fine art approaches to working in a studio setting. You will also learn lighting techniques with digital and medium formats, as well as develop an understanding regarding the differences between digital capture and negative film. In addition this course will cover advanced exposure control, lighting on location, and product lighting. NOTE: This course is repeatable for credit.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
GAD 2441|Minimum Grade of C-|May not be taken concurrently
OR GAD 2451|Minimum Grade of C-|May not be taken concurrently.

GAD 3421. Digital Projects. 3 Credit Hours.
The emphasis of this course will be on creating a professional digital portfolio. Throughout the semester, students will learn a series of multimedia software applications and develop interactive presentations that will promote themselves as artists with contemporary and professional portfolios. NOTE: The course is limited to seniors and graduate students.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Graphic and Interactive Design
Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
GAD 2461|Minimum Grade of C-|May not be taken concurrently.

GAD 3422. Contemporary Photography. 3 Credit Hours.
We live in an extraordinary moment in the history of photography, a moment much hoped for and anticipated by many champions of the medium. Finally one can say without qualification that photography is a medium fully embraced by the contemporary art world. While there has always been a movement to look at and discuss photography as art, photography has never played a more central, critical and vital role in contemporary art then it does now. This course will look at both the role that photography plays in contemporary art and the role that contemporary art plays in photography. By surveying contemporary trends in photography, students in this class will develop an understanding of what exactly photography is now. At the same time the class will attempt to answer questions about what it means to be contemporary, about what the relationship between the contemporary and the historical is, and why this might be important. Through these problems students will be encouraged to develop personal work that addresses themes and ideas discussed in the class. NOTE: Open to Junior/Seniors. Special authorization required for non-majors.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
GAD 2441|Minimum Grade of C-|May not be taken concurrently
OR GAD 2451|Minimum Grade of C-|May not be taken concurrently.

GAD 3431. Color Photography I. 3 Credit Hours.
An introduction to basic skills in color processing and printing with an emphasis on development of personal imagery and the history of color picture making.
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
GAD 2441|Minimum Grade of C-|May not be taken concurrently.
GAD 3432. Color Photography II. 3 Credit Hours.
Advanced projects in color photography to include either chemical processes or digital technology. Research will focus on contemporary trends in color photography with an emphasis on the development of a personal portfolio.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
GAD 3431|Minimum Grade of C-|May not be taken concurrently.

GAD 3441. Advanced Photo Workshop. 3 Credit Hours.
A continuation of advanced black and white photography with an introduction to the zone system and a variety of professional techniques. Emphasis will be on the development of a professional portfolio, classical black and white photographic history, and focused development of personal vision. Digital photographic techniques may also be included.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(GAD 2441|Minimum Grade of C-|May not be taken concurrently
OR GAD 2451|Minimum Grade of C-|May not be taken concurrently)
AND (GAD 3412|Minimum Grade of C-|May not be taken concurrently).

GAD 3451. Advanced Photography Workshop. 3 Credit Hours.
An advanced course for students who have a firm understanding of the fundamentals involved in the exposing, processing, and printing of 35mm black and white film.

College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(GAD 2441|Minimum Grade of C-|May not be taken concurrently
OR GAD 2451|Minimum Grade of C-|May not be taken concurrently)
AND (GAD 3412|Minimum Grade of C-|May not be taken concurrently).

GAD 3461. Photo Process Workshop. 3 Credit Hours.
This course is a survey covering a wide range of experimental and historical photographic processes that extend beyond traditional silver printing. Workshop orientation emphasizes a diverse exposure to many creative possibilities from hand applied photographic emulsions to artists' book production, culminating in a professional final project.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(GAD 2441|Minimum Grade of C-|May not be taken concurrently
OR GAD 2451|Minimum Grade of C-|May not be taken concurrently)
AND (GAD 3412|Minimum Grade of C-|May not be taken concurrently).

GAD 3471. Photo Process Workshop. 3 Credit Hours.
Studio orientation to a wide range of experimental and historical photographic processes beyond traditional silver printing. Workshop orientation emphasizes a diverse exposure to many creative possibilities from hand applied photographic emulsions to artists' book production.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(GAD 2441|Minimum Grade of C-|May not be taken concurrently
OR GAD 2451|Minimum Grade of C-|May not be taken concurrently)
AND (GAD 3412|Minimum Grade of C-|May not be taken concurrently).

GAD 3711. Advanced Serigraphy. 3 Credit Hours.
Advanced screen printing with emphasis on expanding the students' stencil making and printing skills as well as personal artistic growth. Students work with non-toxic acrylic inks in projects that emphasize scale, color, and use of material.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
GAD 2711|Minimum Grade of C-|May not be taken concurrently.
GAD 3731. Advanced Etching. 3 Credit Hours.
Advanced problems in intaglio and relief processes. While the emphasis is on personal artistic development, the students are also encouraged to work toward professional standards in platemaking and printing skills. Projects often include, multi-plate color printing, copper engraving, mezzotint, various relief methods, and embossing.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
GAD 2731|Minimum Grade of C-|May not be taken concurrently
OR GAD 2741|Minimum Grade of C-|May not be taken concurrently.

GAD 3751. Advanced Lithography. 3 Credit Hours.
This course is designed to improve the students' technical skills toward professional standards and to develop the students' personal vision through the use of lithography. Study will include stone and plate lithography, color theory and practice, photo processes and editing.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
GAD 2751|Minimum Grade of C-|May not be taken concurrently
OR GAD 2761|Minimum Grade of C-|May not be taken concurrently.

GAD 3811. Printmaking Workshop. 3 Credit Hours.
Studies in all printmaking media, emphasizing individual instruction for students of varied backgrounds.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(GAD 2701|Minimum Grade of C-|May not be taken concurrently
OR GAD 2702|Minimum Grade of C-|May not be taken concurrently)
AND (GAD 3711|Minimum Grade of C-|May not be taken concurrently
OR GAD 3731|Minimum Grade of C-|May not be taken concurrently
OR GAD 3751|Minimum Grade of C-|May not be taken concurrently).

GAD 3821. Printmaking Workshop. 3 Credit Hours.
Studies in all printmaking media, emphasizing individual instruction for students of varied backgrounds.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(GAD 2701|Minimum Grade of C-|May not be taken concurrently
OR GAD 2702|Minimum Grade of C-|May not be taken concurrently)
AND (GAD 3711|Minimum Grade of C-|May not be taken concurrently
OR GAD 3731|Minimum Grade of C-|May not be taken concurrently
OR GAD 3751|Minimum Grade of C-|May not be taken concurrently).

GAD 3831. Relief and Monoprint Workshop. 3 Credit Hours.
The directness of both relief printing and monotype give the artist a unique opportunity to concentrate on the image possibilities. Students will work with non-traditional and traditional cutting methods, materials, and printing methods.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.

GAD 3841. Color Print Workshop. 3 Credit Hours.
A methodical study of color printing problems as they are presented by the intaglio, relief, lithographic and screen printing media. Color theory and practical techniques are combined, giving experience in all phases of multicolor and intermediate graphic production.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(GAD 2701|Minimum Grade of C-|May not be taken concurrently
OR GAD 2702|Minimum Grade of C-|May not be taken concurrently)
AND (GAD 3711|Minimum Grade of C-|May not be taken concurrently
OR GAD 3731|Minimum Grade of C-|May not be taken concurrently
OR GAD 3751|Minimum Grade of C-|May not be taken concurrently).
GAD 3896. Art Career Workshop. 3 Credit Hours.
Creative and practical solutions to career problems of the artist; preparation of the art student for postgraduate challenges.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts

College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School

Course Attributes: WI

Repeatability: This course may be repeated for additional credit.

GAD 4000. Senior Design: Special Topics. 3 Credit Hours.
This course focuses on topics in design not covered in the regular senior level course offerings. Topics may include, but are not limited to, Environmental Design and Signage, Type Design, Promotion Design, etc. Classroom instruction and assignments will include projects appropriate to the specific topic being offered. NOTE: This course is open to GAID majors only. It can fulfill the studio requirement in the major or a studio elective requirement.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Graphic and Interactive Design

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts, Master of Fine Arts

College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School

Repeatability: This course may be repeated for additional credit.

Pre-requisites:
(GAD 3001|Minimum Grade of C-|May not be taken concurrently)
AND (GAD 3002|Minimum Grade of C-|May not be taken concurrently)
AND (GAD 3011|Minimum Grade of C-|May not be taken concurrently)
AND (GAD 3021|Minimum Grade of C-|May not be taken concurrently).

GAD 4001. Senior Graphic Design: Senior Design Workshop. 3 Credit Hours.
Students work on projects for the Tyler Design Incubator. This includes project development and management, research on topics specific to entrepreneurial design practice, and assigned tasks for Incubator activities and events.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Graphic and Interactive Design

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts, Master of Fine Arts

College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School

Repeatability: This course may be repeated for additional credit.

Pre-requisites:
(GAD 3001|Minimum Grade of C-|May not be taken concurrently)
AND (GAD 3002|Minimum Grade of C-|May not be taken concurrently)
AND (GAD 3011|Minimum Grade of C-|May not be taken concurrently)
AND (GAD 3021|Minimum Grade of C-|May not be taken concurrently).

GAD 4002. Senior Graphic Design: Hybrid Design. 3 Credit Hours.
Students work on large assignments that have components in both print and interactive media. Instruction in the advanced use of software applications for print and/or interactive media is a significant part of the course. NOTE: This course is for GAID majors only. It can fulfill the studio requirements in the major or a studio elective requirement.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Graphic and Interactive Design

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts, Master of Fine Arts

College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School

Repeatability: This course may be repeated for additional credit.

Pre-requisites:
(GAD 3001|Minimum Grade of C-|May not be taken concurrently)
AND (GAD 3002|Minimum Grade of C-|May not be taken concurrently)
AND (GAD 3011|Minimum Grade of C-|May not be taken concurrently)
AND (GAD 3021|Minimum Grade of C-|May not be taken concurrently)
AND (GAD 3023|Minimum Grade of C-|May not be taken concurrently)
AND (GAD 3025|Minimum Grade of C-|May not be taken concurrently)
OR GAD 3029|Minimum Grade of C-|May not be taken concurrently)
OR GAD 3029|Minimum Grade of C-|May not be taken concurrently).

GAD 4003. Senior Graphic Design: Art Direction. 3 Credit Hours.
This course focuses on concept development with an emphasis on image making and image editing in a variety of forms including, book publishing, advertising and signage. NOTE: This course is for GAID majors only. It can fulfill the studio requirement in the major or a studio elective requirement.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Graphic and Interactive Design

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts, Master of Fine Arts

College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School

Repeatability: This course may be repeated for additional credit.

Pre-requisites:
(GAD 3001|Minimum Grade of C-|May not be taken concurrently)
AND (GAD 3002|Minimum Grade of C-|May not be taken concurrently)
AND (GAD 3011|Minimum Grade of C-|May not be taken concurrently)
AND (GAD 3021|Minimum Grade of C-|May not be taken concurrently).

GAD 4004. Senior Graphic Design: Packaging. 3 Credit Hours.
This course focuses on package design for a variety of products. Students work with concept, surface design, typography, materials and the physical construction of three-dimensional forms. NOTE: This course is for GAID majors only. It can fulfill the studio requirement in the major or a studio elective requirement.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Graphic and Interactive Design
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts, Master of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.

Pre-requisites:
(GAD 3001|Minimum Grade of C-|May not be taken concurrently)
AND (GAD 3002|Minimum Grade of C-|May not be taken concurrently)
AND (GAD 3011|Minimum Grade of C-|May not be taken concurrently)
AND (GAD 3021|Minimum Grade of C-|May not be taken concurrently).

GAD 4005. Senior Graphic Design: Publishing. 3 Credit Hours.
Students work on large-scale publications with a strong emphasis on the development of typographic formats and the inventive use of illustration and/or photographic imagery to create periodicals and/or books that are functional, conceptually sophisticated and visually distinctive. NOTE: This course is for GAID majors only. It can fulfill the studio requirement in the major or a studio elective requirement.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Graphic and Interactive Design
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts, Master of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.

Pre-requisites:
(GAD 3001|Minimum Grade of C-|May not be taken concurrently)
AND (GAD 3002|Minimum Grade of C-|May not be taken concurrently)
AND (GAD 3011|Minimum Grade of C-|May not be taken concurrently)
AND (GAD 3021|Minimum Grade of C-|May not be taken concurrently).

GAD 4006. Senior Graphic Design: Corporate. 3 Credit Hours.
In this course students develop two large scale identities that include logo design, stationary and collateral materials in a variety of forms that can include booklets, brochures, posters, advertising, signage and/or packaging. NOTE: This course is for GAID majors only. It can fulfill the studio requirement in the major or a studio elective requirement.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Graphic and Interactive Design
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts, Master of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.

Pre-requisites:
(GAD 3001|Minimum Grade of C-|May not be taken concurrently)
AND (GAD 3002|Minimum Grade of C-|May not be taken concurrently)
AND (GAD 3011|Minimum Grade of C-|May not be taken concurrently)
AND (GAD 3021|Minimum Grade of C-|May not be taken concurrently).

GAD 4007. Senior Interactive Design. 3 Credit Hours.
The focus of this course is interactive design for a large-scale website. This project will involve in-depth exploration of interface design, navigation, audio, digital animation and organization of information. Includes instruction in intermediate through advanced programming skills and the use of video composition. A strong grasp of the fundamentals of interactive design is required. NOTE: This course is for GAID majors only. It can fulfill the studio requirement in the major or a studio elective requirement.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Graphic and Interactive Design
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts, Master of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.

Pre-requisites:
(GAD 3001|Minimum Grade of C-|May not be taken concurrently)
AND (GAD 3002|Minimum Grade of C-|May not be taken concurrently)
AND (GAD 3011|Minimum Grade of C-|May not be taken concurrently)
AND (GAD 3021|Minimum Grade of C-|May not be taken concurrently)
AND (GAD 3023|Minimum Grade of C-|May not be taken concurrently)
OR (GAD 3025|Minimum Grade of C-|May not be taken concurrently)
OR (GAD 3029|Minimum Grade of C-|May not be taken concurrently).
GAD 4008. Senior Graphic Design: Projects in Authorship. 3 Credit Hours.
This course encourages students to express perceptions and positions on current issues and events through large-scale projects. Parameters of
assignments are generated by individual approaches, challenging each student to engage in decision making to develop unique content and form. The
work from this class expands the boundaries of the design discipline beyond traditional client-based practice. NOTE: This course is for GAID majors
only. It can fulfill the studio requirement in the major or a studio elective requirement.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Graphic and Interactive Design
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts, Master of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(GAD 3001|Minimum Grade of C-|May not be taken concurrently)
AND (GAD 3002|Minimum Grade of C-|May not be taken concurrently)
AND (GAD 3011|Minimum Grade of C-|May not be taken concurrently)
AND (GAD 3021|Minimum Grade of C-|May not be taken concurrently).

GAD 4009. Senior Graphic Design: Projects in Authorship. 3 Credit Hours.
In this course, the designer as author creates a large-scale Senior Thesis on a topic and in the form(s) of his or her choice. The Senior Thesis is required
for all Graphic and Interactive Design majors.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Graphic and Interactive Design
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(GAD 3001|Minimum Grade of C-|May not be taken concurrently)
AND (GAD 3002|Minimum Grade of C-|May not be taken concurrently)
AND (GAD 3011|Minimum Grade of C-|May not be taken concurrently)
AND (GAD 3021|Minimum Grade of C-|May not be taken concurrently).

GAD 4010. Senior Design: Special Topics. 3 Credit Hours.
This course focuses on topics in design not covered in the regular senior level course offerings. Topics may include, but are not limited to, Environmental
Design and Signage, Type Design, Promotion Design, etc. Classroom instruction and assignments will include projects appropriate to the specific topic
being offered. NOTE: This course is open to GAID majors only. It can fulfill a studio elective requirement or a required studio course in the major.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Graphic and Interactive Design
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(GAD 3001|Minimum Grade of C-|May not be taken concurrently)
AND (GAD 3002|Minimum Grade of C-|May not be taken concurrently)
AND (GAD 3011|Minimum Grade of C-|May not be taken concurrently)
AND (GAD 3021|Minimum Grade of C-|May not be taken concurrently).

GAD 4011. Senior Graphic Design: Design for the Public Good. 3 Credit Hours.
Students work on a wide variety of projects for arts and educational groups, social welfare and environmental organizations, and other clients in
the nonprofit sector. Projects done in the class will actually be produced--either in print or, in the case of web sites, posted online. Students will be
responsible for production preparation and supervision for course projects which could include identities, brochures, posters, invitations, and advertising
campaigns. NOTE: This course is for GAID majors only. It can fulfill the studio requirement in the major or a studio elective requirement.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Graphic and Interactive Design
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(GAD 3001|Minimum Grade of C-|May not be taken concurrently)
AND (GAD 3002|Minimum Grade of C-|May not be taken concurrently)
AND (GAD 3011|Minimum Grade of C-|May not be taken concurrently)
AND (GAD 3021|Minimum Grade of C-|May not be taken concurrently).
GAD 4111. Senior Illustration. 3 Credit Hours.
Assignments focus on image-making for communication. Strong concepts, the development of a personal visual approach or style and professional process will be the focus of this course. NOTE: This course can fulfill an elective requirement or a senior course requirement for GAID majors.

College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(GAD 3001|Minimum Grade of C|May not be taken concurrently)
AND (GAD 3002|Minimum Grade of C|May not be taken concurrently)
AND (GAD 3011|Minimum Grade of C|May not be taken concurrently)
AND (GAD 3021|Minimum Grade of C|May not be taken concurrently).

GAD 4112. Senior Illustration. 3 Credit Hours.
Assignments focus on image-making for communication. Strong concepts, the development of a personal visual approach or style and professional process will be the focus of this course. NOTE: This course can fulfill an elective requirement or a senior course requirement for GAID majors.

College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(GAD 3001|Minimum Grade of C|May not be taken concurrently)
AND (GAD 3002|Minimum Grade of C|May not be taken concurrently)
AND (GAD 3011|Minimum Grade of C|May not be taken concurrently)
AND (GAD 3021|Minimum Grade of C|May not be taken concurrently).

GAD 4113. Senior Illustration Portfolio. 3 Credit Hours.
This course offers students from disciplines outside of the Graphic and Interactive Design area the opportunity to develop illustration portfolios that meet professional standards and to develop strategies for promoting their work to art directors in agencies, studios and publications. This course covers several topics, including: developing stylistic consistency, conceptually driven assignments, presentation formats, pacing work within the portfolio, customizing portfolios to potential clients, and self promotional pieces.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
GAD 4111|Minimum Grade of C-|May not be taken concurrently
OR GAD 4112|Minimum Grade of C-|May not be taken concurrently.

GAD 4196. Senior Portfolio. 3 Credit Hours.
This course focuses on the development of the senior portfolio in preparation for entering professional design practice. Students assemble and design the presentation of their work in electronic and print formats. Assignments also include personal marketing pieces and the development of writing skills specific to the design profession. NOTE: This course is offered in Spring semesters only and is open to GAID majors only.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Graphic and Interactive Design
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Course Attributes: WI
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(GAD 3001|Minimum Grade of C-|May not be taken concurrently)
AND (GAD 3002|Minimum Grade of C-|May not be taken concurrently)
AND (GAD 3011|Minimum Grade of C-|May not be taken concurrently)
AND (GAD 3021|Minimum Grade of C-|May not be taken concurrently).

GAD 4441. Senior Photography. 3 Credit Hours.
Development of a contemporary theoretical and conceptual foundation for long-range involvement with professional photographic image-making and processes. The course includes research, field trips, critical theory and the organization of a final portfolio of work using various photographic materials. Career options within the field are emphasized.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Photography
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
GAD 4496. Senior Seminar in Photography. 3 Credit Hours.
The primary objective of this advanced writing intensive/studio course is to investigate the concept of photography both technically and conceptually. Students will research, revise, and present an extended, articulate, and professionally accomplished body of writings and artwork. Students will learn the professional standards of writing that are expected in the different avenues of photography. Writing and vocabulary skills appropriate to fine arts venues are different than those needed in a commercial endeavor. Students will learn how to identify and use the appropriate language, references, and resources in the photography world. This course is required for all photography majors.

College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School

Course Attributes: WI

Repeatability: This course may be repeated for additional credit.

Pre-requisites:
(GAD 2441|Minimum Grade of C-|May not be taken concurrently)
AND (GAD 2461|Minimum Grade of C-|May not be taken concurrently)
AND (GAD 3412|Minimum Grade of C-|May not be taken concurrently)
AND (GAD 3441|Minimum Grade of C-|May not be taken concurrently
OR GAD 3451|Minimum Grade of C-|May not be taken concurrently).

GAD 4511. Senior Projects Workshop/Seminar. 3 Credit Hours.
A combination workshop/seminar course in which the senior printmaker, through classroom and individual discussion with the instructor, develops and produces a major print project. The course includes a formal presentation of all the projects.

College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School

Repeatability: This course may be repeated for additional credit.

Greek (Ancient) (GRKA)

Courses

GRKA 1001. Ancient Greek 1. 4 Credit Hours.
Beginning courses in Ancient Greek with basic grammar and readings. Extended passages from major authors read towards the end of Ancient Greek II.

Repeatability: This course may not be repeated for additional credits.

GRKA 1002. Ancient Greek 2. 4 Credit Hours.
Beginning courses in Ancient Greek with basic grammar and readings. Extended passages from major authors read towards the end of Ancient Greek II.

Course Attributes: LA

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
GRKA 1001|Minimum Grade of C-|May not be taken concurrently.

GRKA 1003. Intensive Ancient Greek. 7 Credit Hours.
This course provides the equivalent of a full year of the study of Ancient Greek in one semester. Students learn the fundamentals of Greek grammar and syntax and read progressively more difficult passages adapted from ancient authors. Upon completion of this course students will be able to enter second-year Greek.

Repeatability: This course may not be repeated for additional credits

GRKA 2001. Ancient Greek 3. 3 Credit Hours.
Readings in Ancient Greek prose, usually Greek oratory (political or legal) or a short work by Plato.

Course Attributes: LB

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
GRKA 1002|Minimum Grade of C-|May not be taken concurrently
OR GRKA 1003|Minimum Grade of C-|May not be taken concurrently.

GRKA 2002. Ancient Greek 4. 3 Credit Hours.
Readings in Ancient Greek poetry, usually Homeric epic.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
GRKA 2001|Minimum Grade of C-|May not be taken concurrently.

GRKA 3002. Readings in Greek Literature II. 3 Credit Hours.
Arranged each semester. Please consult with the instructor.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
GRKA 2002|Minimum Grade of C-|May not be taken concurrently.
GRKA 3096. Readings in Greek Literature I. 3 Credit Hours.
Arranged each semester. Please consult with the instructor.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
GRKA 2002|Minimum Grade of C-|May not be taken concurrently.

GRKA 4000. Special Topics. 3 Credit Hours.
Selected readings in Greek literature.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
GRKA 3002|Minimum Grade of C-|May not be taken concurrently.

GRKA 4001. Thucydides. 3 Credit Hours.
Readings in Greek from Thucydides' History of the Peloponnesian War.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
GRKA 3002|Minimum Grade of C-|May not be taken concurrently.

GRKA 4002. Greek Dramatists. 3 Credit Hours.
Readings from the works of various Greek dramatists.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
GRKA 3002|Minimum Grade of C-|May not be taken concurrently.

GRKA 4003. Greek Historians. 3 Credit Hours.
Readings from the works of various Greek historians.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
GRKA 3002|Minimum Grade of C-|May not be taken concurrently.

GRKA 4004. Greek Philosophers. 3 Credit Hours.
Readings from the works of various Greek philosophers.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
GRKA 3002|Minimum Grade of C-|May not be taken concurrently.

GRKA 4005. Greek Orators. 3 Credit Hours.
Readings from the works of various Greek orators.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
GRKA 3002|Minimum Grade of C-|May not be taken concurrently.

GRKA 4082. Independent Study. 1 to 6 Credit Hour.
Concentrated work at an advanced level on a topic chosen by student and teacher. Weekly tutorial sessions.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
GRKA 2002|Minimum Grade of C-|May not be taken concurrently.

GRKA 4182. Independent Study. 3 Credit Hours.
Concentrated work at an advanced level on a topic chosen by student and teacher. Weekly tutorial sessions.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
GRKA 2002|Minimum Grade of C-|May not be taken concurrently.

Greek (Modern) (GRKM)

Courses
GRKM 1001. Modern Greek Elements I. 4 Credit Hours.
First semester of modern spoken Greek.
Course Attributes: LC
Repeatability: This course may not be repeated for additional credits.
GRKM 1002. Modern Greek Elements II. 4 Credit Hours.
Second semester of modern spoken Greek.
Course Attributes: LC
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
GRKM 1001|Minimum Grade of C-|May not be taken concurrently
OR LCGR C1002|May not be taken concurrently
OR LCGR B1002|May not be taken concurrently
OR LCGR C2001|May not be taken concurrently
OR LCGR B2001|May not be taken concurrently
OR LCGR EXMPT|May not be taken concurrently.

GRKM 2001. Modern Greek Intermediate I. 3 Credit Hours.
Third semester of Modern Greek.
Course Attributes: LC
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
GRKM 1002|Minimum Grade of C-|May not be taken concurrently
OR LCGR C2001|May not be taken concurrently
OR LCGR B2001|May not be taken concurrently
OR LCGR EXMPT|May not be taken concurrently.

GRKM 2002. Modern Greek Intermediate II. 3 Credit Hours.
Fourth semester of Modern Greek.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
GRKM 2001|Minimum Grade of C-|May not be taken concurrently.

Greek and Roman Classics (GRC)

Courses

GRC 0803. The Art of Sacred Space. 3 Credit Hours.
Where do people go to communicate with the divine? Explore with us where and how people of the many different cultures of the Greco-Roman world communicated with their gods. Why are graves and groves considered sacred space? When is a painting or sculpture considered sacred? Whom do the gods allow to enter a sacred building? Can a song be a prayer or a curse? How can dance sway the gods? Why do gods love processions and the smell of burning animals? The journey through sacred space in Greco-Roman antiquity will engage your senses and your intellect, and will reveal a mindset both ancient and new. NOTE: This course fulfills the Arts (GA) requirement for students under GenEd and Arts (AR) for students under Core. Students cannot receive credit for GRC 0803 if they have successfully completed GRC 0903, REL 0803 or ARTH 0803.
Course Attributes: GA
Repeatability: This course may not be repeated for additional credits.

GRC 0804. Race in the Ancient Mediterranean. 3 Credit Hours.
Learn about ancient thinking about race and ethnicity and how ancient thinking remains current and influential today. Investigate how categories of race and ethnicity are presented in the literature and artistic works of Greece and Rome. Our case studies will pay particular attention to such concepts as: notions of racial formation and racial origins; ancient theories of ethnic superiority; and linguistic, religious and cultural differentiation as a basis for ethnic differentiation. We will also examine ancient racism through the prism of a variety of social processes in antiquity: slavery, trade and colonization, migrations, imperialism, assimilation, native revolts, and genocide. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for GRC 0804 if they have successfully completed GRC 0904.
Course Attributes: GD
Repeatability: This course may not be repeated for additional credits.

GRC 0811. Greek Theater & Society. 3 Credit Hours.
Through close readings of surviving texts, through viewings of modern productions of ancient theatrical works, and through your own recreations of Greek performative media, we will examine and experience ancient Greek drama both as a product of its own historical period and as a living art form. We will ask fundamental questions about the nature and purpose of theater in the ancient world: Is this art just entertainment or does it engage and comment on the problems of Athens? How and why did this society invent theater in the Western world? We will also investigate the relationship of Greek drama to the modern world: Why do new versions of plays about Oedipus, Antigone and Dionysus keep popping up in places as diverse as New York, Utah, South Africa and China? How can ancient drama be staged now in a way that is both responsible to the surviving texts and stimulating to contemporary audiences? NOTE: This course fulfills the Arts (GA) requirement for students under GenEd and Arts (AR) for students under Core. Students cannot receive credit for GRC 0811 if they have successfully completed GRC 0911.
Course Attributes: GA
Repeatability: This course may not be repeated for additional credits.
GRC 0829. Ancient War Games: Sport and Spectacle in Greece and Rome. 3 Credit Hours.
Every four years the world stages athletic contests that are based on the practices of ancient Greece. Every year the NFL assigns a Roman numeral to the Super Bowl and suggests its players are modern gladiators. Greek athletic games and Roman gladiatorial battles developed from the practice of warfare in their societies. American sports may be viewed as the descendants of these ancient "war games." This class examines the similarities and differences in such sports and the societies that enjoyed (and enjoy) them. The Greek games replaced the blood of the battlefield with dramatic displays of military physicality, while the Roman games replicated this blood with armed combat before crowds of thousands. We begin by examining the origins, events, architecture, and rules of the Greek games, from Homer's funeral contests to the development of the circuit of athletic festivals. Next we look at the "re-foundation" of the modern Olympics and its romanticized mythology in several important films. Then we turn to Roman blood-sports (animal fights, gladiatorial contests and spectacular criminal punishments) and chariot-racing, considering also the filters of modern Hollywood. We end with the rise of modern spectator sports, especially football.
Course Attributes: GB
Repeatability: This course may not be repeated for additional credits.

GRC 0903. Honors Art of Sacred Space. 3 Credit Hours.
Where do people go to communicate with the divine? Explore with us where and how people of the many different cultures of the Greco-Roman world communicated with their gods. Why are graves and groves considered sacred space? When is a painting or sculpture considered sacred? Whom do the gods allow to enter a sacred building? Can a song be a prayer or a curse? How can dance sway the gods? Why do gods love processions and the smell of burning animals? The journey through sacred space in Greco-Roman antiquity will engage your senses and your intellect, and will reveal a mindset both ancient and new. NOTE: This course fulfills the Arts (GA) requirement for students under GenEd and Arts (AR) for students under Core. Students cannot receive credit for GRC 0903 if they have successfully completed GRC 0803, REL 0803 or ARTH 0803.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GA, HO
Repeatability: This course may not be repeated for additional credits.

GRC 0904. Honors Race in the Ancient Mediterranean. 3 Credit Hours.
Learn about ancient thinking about race and ethnicity and how ancient thinking remains current and influential today. Investigate how categories of race and ethnicity are presented in the literature and artistic works of Greece and Rome. Our case studies will pay particular attention to such concepts as: notions of racial formation and racial origins; ancient theories of ethnic superiority; and linguistic, religious and cultural differentiation as a basis for ethnic differentiation. We will also examine ancient racism through the prism of a variety of social processes in antiquity: slavery, trade and colonization, migrations, imperialism, assimilation, native revolts, and genocide. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for GRC 0904 if they have successfully completed GRC 0804.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GD, HO
Repeatability: This course may not be repeated for additional credits.

GRC 0911. Honors Greek Theater & Society. 3 Credit Hours.
Through close readings of surviving texts, through viewings of modern productions of ancient theatrical works, and through your own recreations of Greek performative media, we will examine and experience ancient Greek drama both as a product of its own historical period and as a living art form. We will ask fundamental questions about the nature and purpose of theater in the ancient world: is this art just entertainment or does it engage and comment on the problems of Athens? How and why did this society invent theater in the Western world? We will also investigate the relationship of Greek drama to the modern world: why do new versions of plays about Oedipus, Antigone and Dionysus keep popping up in places as diverse as New York, Utah, South Africa and China? How can ancient drama be staged now in a way that is both responsible to the surviving texts and stimulating to contemporary audiences? NOTE: This course fulfills the Arts (GA) requirement for students under GenEd and Arts (AR) for students under Core. Students cannot receive credit for GRC 0911 if they have successfully completed GRC 0811.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GA, HO
Repeatability: This course may not be repeated for additional credits.

GRC 0929. Honors Ancient War Games: Sport and Spectacle in Greece and Rome. 3 Credit Hours.
Every four years the world stages athletic contests that are based on the practices of ancient Greece. Every year the NFL assigns a Roman numeral to the Super Bowl and suggests its players are modern gladiators. Greek athletic games and Roman gladiatorial battles developed from the practice of warfare in their societies. American sports may be viewed as the descendants of these ancient "war games." This class examines the similarities and differences in such sports and the societies that enjoyed (and enjoy) them. The Greek games replaced the blood of the battlefield with dramatic displays of military physicality, while the Roman games replicated this blood with armed combat before crowds of thousands. We begin by examining the origins, events, architecture, and rules of the Greek games, from Homer's funeral contests to the development of the circuit of athletic festivals. Next we look at the "re-foundation" of the modern Olympics and its romanticized mythology in several important films. Then we turn to Roman blood-sports (animal fights, gladiatorial contests and spectacular criminal punishments) and chariot-racing, considering also the filters of modern Hollywood. We end with the rise of modern spectator sports, especially football.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GB, HO
Repeatability: This course may not be repeated for additional credits.
GRC 1003. Greek Drama and Culture. 3 Credit Hours.
Introduction to ancient Greek drama and the society that produced it. The course examines in detail tragedies of Aeschylus, Sophocles, and Euripides, and comedies of Aristophanes. Among the topics considered are: tragic and comic festivals, the nature of Greek theaters, theatrical production techniques, religion and drama, women and tragedy, tragic and comic heroism, democracy and drama, myth and tragedy, and the legacy of Greek tragedy in the modern world. NOTE: (1) Attendance at theatrical productions encouraged or required. (2) This course can be used to satisfy the university Core Arts (AR) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: AR

Repeatability: This course may not be repeated for additional credits.

GRC 1004. Introduction to the Ancient City. 3 Credit Hours.
Introduction to the people, urban forms, and urban institutions of the ancient Greco-Roman world. Readings from translations of primary materials and from modern authors will survey such cities as Corinth, Pergamon, and Ostia. Audio-visual enhancement. NOTE: This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: IS

Repeatability: This course may not be repeated for additional credits.

GRC 1068. Israel in the Middle East. 3 Credit Hours.
Survey of Israel's history and geography, followed by consideration on major issues facing the nation and its neighbors: water supply, political structure, society, culture, economy, and the peace process. NOTE: This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: IS

Repeatability: This course may not be repeated for additional credits.

GRC 1903. Honors Greek Drama and Culture. 3 Credit Hours.
Introduction to ancient Greek drama and the society that produced it. The course examines in detail tragedies of Aeschylus, Sophocles, and Euripides, and comedies of Aristophanes. Among the topics considered are: tragic and comic festivals, the nature of Greek theaters, theatrical production techniques, religion and drama, women and tragedy, tragic and comic heroism, democracy and drama, myth and tragedy, and the legacy of Greek tragedy in the modern world. NOTE: (1) Attendance at theatrical productions encouraged or required. (2) This course can be used to satisfy the university Core Arts (AR) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: AR

Repeatability: This course may not be repeated for additional credits.

GRC 1900. Special Topics. 3 Credit Hours.
Topics will be arranged each semester; please consult with the instructor for more information.

Repeatability: This course may be repeated for additional credit.

GRC 2001. Slavery in Antiquity. 3 Credit Hours.
Ancient Greece and Rome did not simply permit slave ownership but were critically dependent upon slave labor. To some scholars, they were "slave societies," comparable to the Caribbean, Brazil and the United States before the Civil War. This course explores the ancients' use of slaves and the effects of this practice on Greek and Roman literature and philosophy, and then considers the influence of ancient practices on later periods.

Repeatability: This course may not be repeated for additional credits.

GRC 2002. Gender in Classical Antiquity. 3 Credit Hours.
What can we learn about the lives of ancient Greek and Roman women from ancient literature - literature written primarily by men? Can we piece together the everyday lives of Greek or Roman women of any social class? Even if we believe in the equality of the sexes, would a word like "equality" have had any meaning to the ancients? In this class, we will find answers to these questions by reading Greek and Latin sources in translation as well as the works of modern Classicists. While focusing on women's lives, we will gain a greater understanding of what was expected of both genders in the ancient world.

Repeatability: This course may not be repeated for additional credits.

GRC 2003. Race: Ancient and Modern. 3 Credit Hours.
Comparative case studies on race and ethnicity in the ancient and modern worlds, concentrating on events and themes in the modern world that originate in or share key traits with racial/ethnic relations in Greek and Roman antiquity. These include: notions of racial formation and racial origins; theories of ethnic superiority; the relationship among slavery, trade and colonization, imperialism, genocide, assimilation, and native revolts; racial migration; linguistic and cultural differentiation; Indo-European language and culture; and ethnic differentiation in modern Mediterranean cultures. NOTE: This course can be used to satisfy a university Core Studies in Race and International Studies (RG) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: RG

Repeatability: This course may not be repeated for additional credits.
GRC 2011. Classical Greek and Roman Mythology. 3 Credit Hours.
An overview of the major myths of Greek and Roman antiquity including appropriate gods, heroes and heroines, and the stories told about them. The course examines the nature and social function of mythology, studying a number of different ancient and modern theories that attempt to account for this seemingly universal phenomenon. Also considered is the legacy of classical mythology in modern art and literature, including popular culture. This course provides students with the tools to understand other myths, both ancient and modern. Students encounter ancient myths through a variety of primary sources. NOTE: Formerly known as GRC 3001 Classical Greek and Roman Mythology. Students may receive credit for only one of the following courses: GRC 3001 or GRC 2011.
Repeatability: This course may not be repeated for additional credits.

GRC 2101. The Greeks. 3 Credit Hours.
This course explores who the ancient Greeks were, what they did, how they lived and what they believed. It focuses on both what we owe to the Greeks and how radically different they are from us. This is not a history of ancient Greece, but a journey through a series of connected units that explore different facets of ancient Greek civilization, from the Trojan War, to the ancient Olympics, to slavery, the family life and other topics. These topics are pursued in an interdisciplinary manner so that students examine evidence from Greek art, literature, history and philosophy. This course can serve the needs of students who seek a broad background in ancient Greek civilization and those who seek an introduction to this subject before pursuing more advanced work in Classics. NOTE: Prior to fall 2009, the course title was "Ancient Greek Civilization."
Repeatability: This course may not be repeated for additional credits.

GRC 2102. The Romans. 3 Credit Hours.
This course explores in an interdisciplinary manner who the ancient Romans were, what they did, how they lived and what they believed. Students will read some of the great works of Roman historians, poets and novelists, as well as study the physical and artistic culture of Rome, with a view to understanding the Romans' beliefs about themselves and their world. Each week, one class will be devoted to learning about larger issues of Roman daily life (education, spectacles), history (civil wars, the Augustan world) and people (men, women, slaves, Christians), and one class to learning about the authors who wrote on these subjects or during these historical periods. This course can serve the needs of students who seek a broad background in ancient Roman civilization and those who seek an introduction to this subject before pursuing more advanced work in Classics. NOTE: Prior to fall 2009, the course title was "Ancient Roman Civilization."
Repeatability: This course may not be repeated for additional credits.

GRC 2901. Honors Classical Greek and Roman Mythology. 3 Credit Hours.
This course provides students with the tools to understand other myths, both ancient and modern. Students encounter ancient myths through a variety of primary sources. NOTE: Formerly known as GRC 3001 Classical Greek and Roman Mythology. Students may receive credit for only one of the following courses: GRC 3001 or GRC 2901.
Repeatability: This course may not be repeated for additional credits.

GRC 2903. Honors Race in Greece and Rome. 3 Credit Hours.
Honors version of GRC 2003 (R112). Comparative case studies on race and ethnicity in the ancient and modern worlds, concentrating on events and themes in the modern world that originate in or share key traits with racial/ethnic relations in Greek and Roman antiquity. These include: notions of racial formation and racial origins; theories of ethnic superiority; the relationship among slavery, trade and colonization, imperialism, genocide, assimilation, and native revolts; racial migration; linguistic and cultural differentiation; Indo-European language and culture; and ethnic differentiation in modern Mediterranean cultures. NOTE: This course can be used to satisfy a university Core Studies in Race and International Studies (RG) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO, RG
Repeatability: This course may not be repeated for additional credits.

GRC 2911. Honors Classical Greek and Roman Mythology. 3 Credit Hours.
An overview of the major myths of Greek and Roman antiquity including appropriate gods, heroes and heroines, and the stories told about them. The course examines the nature and social function of mythology, studying a number of different ancient and modern theories that attempt to account for this seemingly universal phenomenon. Also considered is the legacy of classical mythology in modern art and literature, including popular culture. This course provides students with the tools to understand other myths, both ancient and modern. Students encounter ancient myths through a variety of primary sources. NOTE: Formerly known as GRC 3901 Honors Classical Greek and Roman Mythology. Students may receive credit for only one of the following courses: GRC 3901 or GRC 2911.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.

GRC 3000. Topics in Classical Culture. 3 Credit Hours.
Topics from classical antiquity which are of general and current interest based on reading Greek and Roman texts in translation. Lectures, audiovisual presentations, and large and small group work used to explore the significance of the texts.
Repeatability: This course may be repeated for additional credit.
GRC 3002. Ancient City: Augustan Rome. 3 Credit Hours.
As first princeps (emperor of Rome) Augustus claimed to re-establish republican Rome after years of external and internal wars. We will study the city that emerged from the efforts of architects, engineers and artists of all kinds enlisted to assist Augustus in the new founding of Rome.
Repeatability: This course may not be repeated for additional credits.

GRC 3003. Ancient City: Byzantium. 3 Credit Hours.
The Greek colony Byzantium found new life as capital of the Christianized Roman Empire from the 4th century to the 15th century CE. This course explores the art, architecture, literature, military, political and social history of Constantinople from its re-founding by Constantine I through the early centuries of its eminence.
Repeatability: This course may not be repeated for additional credits.

GRC 3096. Romans and Their Literature. 3 Credit Hours.
This course will examine some of the great works of Roman historians, poets and novelists with a view to understanding the Romans’ beliefs about themselves and their world. The class will investigate the origins of the Roman people through the eyes of the historian Livy as well as the great epicist Virgil, who standardized the foundation myth of the Romans in his Aeneid. Comparing the works of Cicero and Catullus will introduce life during the last days of the Republic, while the poetry and real-life tragic end of the brilliant career of the Augustan poet Ovid will raise questions about the glory of the dawning Empire. Suetonius’ gossipy record of the lives of the first twelve emperors, and Petronius’ zany “novel,” the Satyricon, are fascinating guides to Rome in the 1st century.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

GRC 3196. Classical Greek and Roman Mythology. 3 Credit Hours.
An overview of the major myths survey of Greek and Roman antiquity including appropriate gods, heroes and heroines, and the stories told about them. The course examines the nature and social function of mythology, studying a number of different ancient and modern theories that attempt to account for this seemingly universal phenomenon. Also considered is the legacy of classical mythology in modern art and literature, including popular culture. This course provides students with the tools to understand other myths, both ancient and modern. Students encounter ancient myths through a variety of primary sources.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

GRC 3296. Comparative Mythology. 3 Credit Hours.
Materials from a variety of cultures will show how human beings deal with such ideas as the creation of the universe and mankind, the definition of the hero, order in the cosmos, and eschatology. Greek and Roman myths will serve throughout as the basis for comparison with a varying selection of myths from other cultures. NOTE: Offered in even number spring semesters.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

GRC 3311. Ancient Greek Historians. 3 Credit Hours.
This course will survey Greek history from 800 BCE until the death of Alexander the Great (323 BCE) and the works of two of the most important Greek historians: Herodotus and Thucydides. A major component of the course will be an examination of the historiographical methods of these writers, but attention also will be paid to the other types of sources that are available.
Repeatability: This course may not be repeated for additional credits.

GRC 3312. Ancient Roman Historians. 3 Credit Hours.
This course will survey Roman history from the founding of Rome in the 8th century BCE through the fall of Rome in the 5th century CE. A major component of the course will be an examination of the texts and historiographical methods of important Roman historians such as Livy, Sallust and Tacitus, but attention also will be paid to other types of sources.
Repeatability: This course may not be repeated for additional credits.

GRC 3396. Classical Epic. 3 Credit Hours.
This course traces the development of a genre from its definitive manifestation in Homer’s Iliad and Odyssey, to the uses and abuses of epic by Apollonius Rhodius (The Voyage of Argo) and Vergil (Aeneid). Through close reading of these poems and some other examples of epic literature we will consider various topics, including the relationship between myth and history, the role of the hero and the status of women, oral vs. literary epic, and cultural context and broader cultural function of epic in the society in which it is produced and consumed. We will seek to define epic, and to develop an understanding of the constituent facets of the genre.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
GRC 0800 to 3400| Required Courses:1|Minimum Grade of C-|May not be taken concurrently.

GRC 3496. Writing Seminar. 3 Credit Hours.
Topics from classical antiquity which are of general and current interest based on reading Greek and Roman texts in translation. Lectures, audiovisual presentations, and large and small group work used to explore the significance of the texts.
Course Attributes: WI
Repeatability: This course may be repeated for additional credit.
GRC 3596. Ancient City: Periclean Athens. 3 Credit Hours.
This course will survey Athens in the 5th and 4th centuries BCE, examining the accomplishments and failures of one of the few truly participatory democracies the world has known. In addition to studying the history of the city as it gained and lost an empire, we will explore its arts (including theater, philosophy, and architecture) and the everyday life of its denizens.
Course Attributes: WI
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
GRC 0800 to 3400| Required Courses:1|Minimum Grade of C-|May not be taken concurrently.

GRC 3696. Ancient City: Hellenistic Alexandria. 3 Credit Hours.
At the death of Alexander his general Ptolemy moved the capital of Egypt from Memphis to Alexandria, which soon became renowned for buildings such as the Library and the Lighthouse, and as a center for commerce and arts. We will survey the art, literature, philosophy, social and economic foundations, and urban problems of this largest of Greek cities.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
GRC 0800 to 3400| Required Courses:1|Minimum Grade of C-|May not be taken concurrently.

GRC 3796. Ancient City: Augustan Rome. 3 Credit Hours.
Upon achieving mastery of the Roman world through key military victories, Octavian ostensibly returned control of the restored Republic to the Senate and People of Rome in exchange for the quasi-religious, honorific title Augustus (worthy of honor). But he retained command of Rome's armies and transformed himself into the first true emperor of a vast territory that encompassed the entire Mediterranean basin. To legitimate and raise popular support for his rule, he instituted a massive building and beautification program in Rome, promoted the literary arts, and instited legal and religious reforms, all of which ushered in Rome's Golden Age. In this course we will study--and interact with--the influential history, physical structures, ideals, social institutions and arts of Augustan Rome.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
GRC 0800 to 3400| Required Courses:1|Minimum Grade of C-|May not be taken concurrently.

GRC 3896. Ancient City: Byzantium. 3 Credit Hours.
The Greek colony Byzantium found new life as capital of the Christianized Roman Empire from the 4th century to the 15th century CE. This course explores the art, architecture, literature, military, political and social history of Constantinople from its re-founding by Constantine I through the early centuries of its eminence.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
GRC 0800 to 3400| Required Courses:1|Minimum Grade of C-|May not be taken concurrently.

GRC 3897. Ancient City: Jerusalem. 3 Credit Hours.
This course will investigate the history, society, culture, topography and art of this immensely important city during one of its most historically significant periods, focusing mainly on the period after Jerusalem fell into the ambit of the Roman Empire (63 BCE) to its destruction by the armies of Titus (70 CE). It will also consider the development of the relationship between Jerusalem and Rome, and the important role played by ethnic, cultural, and religious differences in the ultimate failure of Romano-Judaean relations, with a view to understanding how overcoming such differences today is necessary to create a successful and functioning global community. Source material will include the historical writings, contemporary non-literary sources such as coins and inscriptions, and articles or videos by modern historians and archaeologists on relevant topics.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
GRC 0800 to 3400| Required Courses:1|Minimum Grade of C-|May not be taken concurrently.

GRC 3900. Honors Topics in Classical Culture. 3 Credit Hours.
Topics from classical antiquity which are of general and current interest based on reading Greek and Roman texts in translation. Lectures, audiovisual presentations, and large and small group work used to explore the significance of the texts.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.

GRC 3996. Honors Comparative Mythology. 3 Credit Hours.
Materials from a variety of cultures will show how human beings deal with such ideas as the creation of the universe and mankind, the definition of the hero, order in the cosmos, and eschatology. Greek and Roman myths will serve throughout as the basis for comparison with a varying selection of myths from other cultures.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO, WI
Repeatability: This course may not be repeated for additional credits.
GRC 4000. Special Topics. 3 Credit Hours.
Selected readings in Greek/Latin literature.
Repeatability: This course may be repeated for additional credit.

GRC 4082. Independent Study. 1 to 6 Credit Hour.
Intensive study under individual guidance in a specific area suggested by the student and approved by the department advisor.
Repeatability: This course may be repeated for additional credit.

GRC 4182. Independent Study. 3 Credit Hours.
Intensive study under individual guidance in a specific area suggested by the student and approved by the department advisor.
Repeatability: This course may be repeated for additional credit.

GRC 4282. Independent Study. 4 Credit Hours.
Intensive study under individual guidance in a specific area suggested by the student and approved by the department advisor.
Repeatability: This course may be repeated for additional credit.

Health Information Management (HIM)

Courses

HIM 1005. International Classification of Disease, 10 Revision, CM & PCS Coding Systems for Experienced Coders. 3 Credit Hours.
The course is designed to provide individuals with ICD-9-CM coding experience with the requisite knowledge and skills to be proficient with the ICD-10-
CM and ICD-10-PCS code sets. An overview of diagnosis and procedural coding conventions and guidelines will be provided. Emphasis will be placed
on application of coding guidelines and conventions to intermediate and advanced coding cases.
Repeatability: This course may not be repeated for additional credits.

HIM 1101. Medical Terminology. 3 Credit Hours.
An introduction to the language of medicine, including medical and anatomical terminology, definitions, the process of word construction, and analysis
of terms. The focus is on the use of prefixes, suffixes, and combining forms that facilitate the ability to translate medical terms. Symptoms, diseases,
operative procedures, laboratory tests, diagnostic and treatment terms, and abbreviations are studied.
Repeatability: This course may not be repeated for additional credits.

HIM 2203. U.S. Health Care System. 3 Credit Hours.
The health care delivery system is studied, with a focus on issues related to access, cost and quality. System components are examined including:
important values and beliefs; the historical development of the health care system and the current status; health services financing; the role of health
care professionals; the use of technology; outpatient, primary care, inpatient, managed care, long-term care and integrated services; issues for special
populations; the process and purpose of health policy; and, future options for the delivery system. The role of the health information management
professional is examined within the context of the health care system, including the importance of the professional Code of Ethics.
Repeatability: This course may not be repeated for additional credits.

HIM 2215. Health Information Management IT Fundamentals. 3 Credit Hours.
The course will provide a foundation in information technology (IT) concepts related to the HIM Practitioner. Content related to IT architecture, computer
hardware, software, and networking systems, security, IT valuation, types of computer systems, centralized versus decentralized design, data capture
technologies, and emerging technologies will be explored in the context of the health care industry. Specific attention will be addressed to the application
of information technologies on the ability of health care organizations to respond to changes in the environment including regulatory, legislative, and
accrediting agency initiatives.
Repeatability: This course may not be repeated for additional credits.

HIM 3020. Special Topics in Health Information Management. 1 to 3 Credit Hour.
This course provides students the opportunity to explore new and emerging areas in the field of health information management and to gain a deeper
understanding of a specific area within the field. This course may also be used to present areas of study not normally taught in the program
Repeatability: This course may be repeated for additional credit.

HIM 3082. Independent Study in Health Information Management. 1 to 3 Credit Hour.
Exploration of an aspect of health information management, in accordance with a student's learning objectives. NOTE: Permission of the faculty member
is required.
Repeatability: This course may be repeated for additional credit.

HIM 3101. Health Record Documentation. 3 Credit Hours.
The purposes and uses of health record documentation will be explored including the primary and secondary uses of healthcare data. The development,
content, format, and standards of health record will be studied for various healthcare settings. Documentation requirements including accreditation,
regulatory, and licensure standards and required data sets will be examined. An introduction to Health Information Management functions (including
storage and retrieval, classification systems, access and release of health information, transcription, electronic document management systems) will be
provided.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Health Information Management
Repeatability: This course may not be repeated for additional credits.
HIM 3106. Pathophysiology. 3 Credit Hours.
An introduction to basic concepts of disease processes. Clinical course, related diagnostic and therapeutic procedures and expected outcomes for commonly occurring medical conditions are addressed.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Health Information Management
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(HIM 1101|Minimum Grade of C|May not be taken concurrently
OR HIM 1 Y|May not be taken concurrently)
AND (KINS 1223|Minimum Grade of C|May not be taken concurrently
OR KIN 1 Y|May not be taken concurrently)
AND (KINS 1224|Minimum Grade of C|May not be taken concurrently
OR KIN 2 Y|May not be taken concurrently).

HIM 3107. Health Information Management Leadership and Strategic Management. 3 Credit Hours.
The course is designed to explore the characteristics and functions of management in the healthcare environment with specific attention to leadership and strategic management. This course includes the study of traditional management functions including planning, organizing, leading, and controlling, with an emphasis on the administrative role of the health information management professional. Students will also explore how HIM practitioners support the organization's initiatives, mission, vision and objectives through the development of policies, procedures, and allocation of resources. Change management theories and best practices will be evaluated.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Health Information Management
Repeatability: This course may not be repeated for additional credits.

HIM 3111. Statistics and Research in Health Care. 3 Credit Hours.
Course addresses medical research methodologies; computation of routine health care institutional statistics; the United States vital statistics system; and, presentation and interpretation of health care data.

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
STAT 2101|Minimum Grade of C|May not be taken concurrently
OR MATH 1013|Minimum Grade of C|May not be taken concurrently
OR PSY 1167|Minimum Grade of C|May not be taken concurrently
OR SOC 1167|Minimum Grade of C|May not be taken concurrently
OR STT 5 Y|May not be taken concurrently.

HIM 3113. Healthcare Database Design and Development. 3 Credit Hours.
Efficient and effective database design is critical to a healthcare organization's ability to collect, report, analyze and use data. In this course, students will effectively design and build relational databases in 3NF using multiple relational database management systems with specific attention to design which facilitates performance of daily operations. In addition, students will become adept at a wide range of data definition functions including updating, deleting, saving, and reverting to older versions of databases. Significant attention is devoted to the data manipulation language. Query development will include simple and complex queries such as conditions, aggregation, string functions, nested queries, mathematical functions, and joins using traditional forms and ANSI standard forms. An introduction in data analysis and migration will also be explored with pivot tables and data exports and imports. This course requires extensive hands on laboratory assignments.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Health Information Management
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
CIS 1055|Minimum Grade of C|May not be taken concurrently
OR CS 04 Y|May not be taken concurrently
OR BCP PASS|May not be taken concurrently.

HIM 3203. Electronic Health Record Systems. 3 Credit Hours.
The role of the electronic health record systems (EHRs) as they support improvements in the quality of patient care and reduction of healthcare costs will be addressed. This class offers an overview of the features and functions in electronic health record systems and their application across the healthcare continuum with emphasis on the acute care and ambulatory care settings. The course will explore the history of the development of interoperable EHRs, the drivers and impediments for adoption, and the development of nationwide health information exchange. The course will cover the various types of health information systems that serve as feeders to clinical repositories.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Health Information Management
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
HIM 2215|Minimum Grade of C|May be taken concurrently
OR HIM 3 Y|May not be taken concurrently.
HIM 3208. International Classification of Diseases. 3 Credit Hours.
An intensive coding course based on the International Classification of Diseases diagnosis and procedural classification systems, as modified for use in the United States. The emphasis of instruction will be on application of coding principles for the acute care inpatient setting. The Medicare inpatient prospective payment system and the determination of diagnostic related groups (DRGs) for hospital reimbursement will also be addressed.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Health Information Management
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
HIM 3106|Minimum Grade of C|May not be taken concurrently.

HIM 3212. Clinical Procedures. 2 Credit Hours.
The course is designed to develop an understanding of technical aspects of commonly performed surgical and medical procedures and diagnostic tests. Detailed descriptions of procedures, approaches, equipment and implanted devices used will be analyzed. The procedural objective in terms of diagnosis versus treatment will also be discussed.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Health Information Management
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
HIM 3106|Minimum Grade of C|May not be taken concurrently.

HIM 3214. Pharmacology. 1 Credit Hour.
An introduction to the principles of pharmacology, including drug terminology; drug origins, forms, and actions; routes of administration; and the use of generic name drugs, trade name drugs and categories of drugs to treat various body systems.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Health Information Management
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
HIM 3106|Minimum Grade of C|May not be taken concurrently.

HIM 3271. Professional Development. 1 Credit Hour.
This course is designed to help prepare students for career planning. The emphasis is on interview preparation (including behavioral event interviewing), expected behaviors and legal issues. Career options and resume preparation in the context of life long career development will be explored.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Health Information Management
Repeatability: This course may not be repeated for additional credits.

HIM 3297. Health Information Management Human Resource Management. 3 Credit Hours.
Personnel policies and practices are evaluated for the healthcare environment, including: recruitment, selection and retention; personnel training and development; job design and analysis; performance management; employee and labor relations; compensation and benefits programs; and health and safety issues. NOTE: Writing Intensive course.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Health Information Management
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
HIM 3107|Minimum Grade of C|May not be taken concurrently.

HIM 4101. Health Informatics: Infrastructure and Standards. 3 Credit Hours.
This course will explore the purpose, use, benefits and challenges of various standards to achieve semantic interoperability for health information exchange. Healthcare standardization related to privacy, security, clinical vocabularies, data communication, architectural framework, and data content will be evaluated in the context of meaningful use of electronic health record systems (EHRS). National and international standards development efforts are also discussed. Gaps between adopted standards and existing practice will be evaluated. Key content and data standards will be explored.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Health Information Management
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
HIM 3203|Minimum Grade of C|May not be taken concurrently.

HIM 4102. Legal Aspects of Health Information Management. 3 Credit Hours.
This course provides a foundation of the legal, ethical and regulatory requirements that affect the use, access and disclosure of health information. The U.S. legal system, sources of laws and regulations, elements of case law, civil procedures and trial processes will be addressed. Emphasis will be on issues related to privacy and confidentiality; negligence, malpractice and liability; informed consent and contracts.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Health Information Management
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(HIM 3101|Minimum Grade of C|May not be taken concurrently)
AND (HIM 2203|Minimum Grade of C|May not be taken concurrently OR HIM2 Y|May not be taken concurrently).
HIM 4104. Health Information Management Operations Management. 3 Credit Hours.
This course will explore methods and management tools used in the analysis of health information systems. Students will develop objectives, policies and procedures and will perform benchmarking, productivity measurement, and workflow and layout analyses. Traditional business process analysis and redesign tools such as data flow diagramming, flow charting, and swimlanes, will be evaluated including the benefits and challenges of each technique. A survey of functional requirement specification gathering approaches will be reviewed and evaluated. Contract management, resource allocation, and workflow process redesign within the context of health information systems will also be addressed.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Health Information Management
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(HIM 3297|Minimum Grade of C|May not be taken concurrently)
AND (HIM 3203|Minimum Grade of C|May not be taken concurrently).

HIM 4105. Current Procedural Terminology Coding. 3 Credit Hours.
A coding course, based on the Current Procedural Terminology (CPT) coding system that is used for classifying physician and hospital outpatient services. The course examines the role of CPT codes in claim submission, benefit adjudication and provider reimbursement. The Healthcare Common Procedure Coding System (HCPCS) II is also addressed and coding skills for the application of coding principles are developed.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Health Information Management
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(HIM 3106|Minimum Grade of C|May not be taken concurrently)
AND (HIM 3212|Minimum Grade of C|May not be taken concurrently).

HIM 4113. Healthcare Reimbursement Systems. 3 Credit Hours.
Reimbursement methodologies are studied, as they relate to a variety of health care settings, payers and patient populations. Case mix analysis, charge master description, revenue cycle management, claims processing and fraud and abuse are discussed. Provides an overview of accounting and financial terms used by health care managers.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Health Information Management
Co-requisites: HIM 4105
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(HIM 3208|Minimum Grade of C|May not be taken concurrently)
AND (HIM 2203|Minimum Grade of C|May not be taken concurrently)
OR HIM 2 Y|May not be taken concurrently).

HIM 4121. Healthcare Data Analytics. 1 Credit Hour.
Healthcare organizations have an ever increasing need to access, interpret, and analyze information from a multitude of data sources to respond quickly to changes in clinical practices, legislative, regulatory, and accrediting body initiatives, and the competitive marketplace. This course will explore data mining and analytic tools which facilitate the analysis of complex healthcare data. Students will review computer tools for manipulation, analysis and presentation of data using real-world examples across a wide range of healthcare settings.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Health Information Management
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
HIM 3113|Minimum Grade of C|May not be taken concurrently.

HIM 4185. Professional Practice Internship. 1 Credit Hour.
A supervised internship that facilitates an understanding of the professional practice aspects of the health information system. The student will learn about the organization, regulation, accreditation and logistics of the acute care information system, as well as non-acute care components, such as, long term care; behavioral health; utilization, risk and quality management; classification and reimbursement systems and datasets; and patient care registries.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Health Information Management
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(HIM 3101|Minimum Grade of C|May not be taken concurrently)
AND (HIM 3106|Minimum Grade of C|May not be taken concurrently)
AND (HIM 3111|Minimum Grade of C|May not be taken concurrently)
AND (HIM 3107|Minimum Grade of C|May not be taken concurrently)
AND (HIM 3113|Minimum Grade of C|May not be taken concurrently)
AND (HIM 3297|Minimum Grade of C|May not be taken concurrently)
AND (HIM 3212|Minimum Grade of C|May not be taken concurrently)
AND (HIM 3208|Minimum Grade of C|May not be taken concurrently)
AND (HIM 3203|Minimum Grade of C|May not be taken concurrently)
AND (HIM 3214|Minimum Grade of C|May not be taken concurrently)
AND (HIM 3271|Minimum Grade of C|May not be taken concurrently).
HIM 4202. Health Information Management Project Management. 3 Credit Hours.
Managing EHRS projects centers on managing uncertainty at all stages. In this course, students will be introduced to the concepts of managing EHR projects by focusing on initiating, planning, executing, controlling, and closing projects in the context of topics such as integration, scope, timing, cost, quality, human resource, technology, communication, contracts, risk and procurement. The System Development Life Cycle of the EHRS development will be explored in depth. Topics surrounding cost-benefit analysis, return on investment, requests for proposal, and vendor selection will be emphasized.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Health Information Management
Repeatability: This course may not be repeated for additional credits
Pre-requisites: HIM 4104

HIM 4206. Intermediate Coding. 3 Credit Hours.
This course focuses on advanced topics in diagnosis and procedural coding using the ICD-10-CM, ICD-10-PCS, CPT and HCPCS coding systems. Emphasis will be placed on applying official coding guidelines, and health record documentation analysis and reimbursement optimization. Students will be able to code inpatient, ambulatory surgery and physician encounter cases. Computerized coding and grouping software will be used. The emerging role of computer assisted coding will also be addressed.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Health Information Management
Repeatability: This course may not be repeated for additional credits
Pre-requisites: (HIM 3208|Minimum Grade of C|May not be taken concurrently)
AND (HIM 4105|Minimum Grade of C|May not be taken concurrently)
AND (HIM 4113|Minimum Grade of C|May not be taken concurrently).

HIM 4207. Healthcare Quality Improvement. 3 Credit Hours.
This course provides a foundation in quality and patient safety management processes in healthcare. The role of performance measurement and reporting, professional staff credentialing, registries, risk and utilization management, data analysis, and presentation in healthcare quality management will be discussed.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Health Information Management
Repeatability: This course may not be repeated for additional credits
Pre-requisites: (HIM 3208|Minimum Grade of C|May not be taken concurrently)
AND (HIM 3111|Minimum Grade of C|May not be taken concurrently).

HIM 4286. Management Internship. 4 Credit Hours.
Intensive professional practice experience on a full-time basis for 4 weeks at selected affiliated institutions; emphasis on administrative aspects of health information management services.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Health Information Management
Repeatability: This course may be repeated for additional credit
Pre-requisites: (HIM 4101|Minimum Grade of C|May not be taken concurrently)
AND (HIM 4102|Minimum Grade of C|May not be taken concurrently)
AND (HIM 4105|Minimum Grade of C|May not be taken concurrently)
AND (HIM 4113|Minimum Grade of C|May not be taken concurrently)
AND (HIM 4207|Minimum Grade of C|May not be taken concurrently)
AND (HIM 4185|Minimum Grade of C|May not be taken concurrently)
AND (HIM 4121|Minimum Grade of C|May not be taken concurrently).

HIM 4298. Health Information Management Senior Seminar. 3 Credit Hours.
Writing intensive capstone course that requires a formal paper regarding an important and current health information management issue. Problems and cases are also used for the development of critical thinking, problem-solving, and decision-making skills. The assignments facilitate the application of health information management expertise and the skills needed for a professional career path. NOTE: Writing intensive course.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Health Information Management
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites: (HIM 4101|Minimum Grade of C|May not be taken concurrently)
AND (HIM 4102|Minimum Grade of C|May not be taken concurrently)
AND (HIM 4105|Minimum Grade of C|May not be taken concurrently)
AND (HIM 4113|Minimum Grade of C|May not be taken concurrently)
AND (HIM 4185|Minimum Grade of C|May not be taken concurrently)
AND (HIM 4121|Minimum Grade of C|May not be taken concurrently)
AND (HIM 4207|Minimum Grade of C|May not be taken concurrently).
Health Related Professions (HRPR)

Courses

HRPR 1001. Public Health: The Way We Live, Work and Play. 3 Credit Hours.
Public Health: The Way We Live, Work and Play is designed to help students think about contemporary health issues from an interdisciplinary perspective. The course includes an introduction to the five core areas of public health–biostatistics, epidemiology, environmental health, health services administration, and social and behavioral sciences—and how these areas relate to various health, health care, and human service professions. Public health helps inform decisions that shape the behavior of individuals and communities. Students will analyze health issues such as health promotion, disease prevention, and health care policy from a variety of perspectives. As part of the course, students will work in small interdisciplinary teams to access and evaluate information about a particular individual or population-level health issue, and learn to argue persuasively, both orally and in writing, for interdisciplinary approaches to that health issue. An aim of the course is to engage students’ curiosity about how the discipline of public health and interdisciplinary approaches apply to issues students may confront in their future professional work.

Repeatability: This course may not be repeated for additional credits.

HRPR 1101. Contemporary Aspects of Disability. 3 Credit Hours.
An examination of psychological and social issues related to individual and social-cultural perspectives of disability, including social stigma and discrimination, portrayal by media, self-advocacy, family and other social relationship issues that impact the culture of disability and an individual’s quality of life. NOTE: This course can be used to satisfy the university Core Individual and Society (IN) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: IN
Repeatability: This course may not be repeated for additional credits.

HRPR 2103. Health Psychology and Human Behavior. 3 Credit Hours.
This course introduces health psychology, health behavior, and health. The relationship between human behavior and health is explored. Course topics include major theoretical models of health behavior, applications to chronic illness and disability, and wellness and life management approaches.

Repeatability: This course may not be repeated for additional credits.

Healthcare Management (HCM)

Courses

HCM 3501. Introduction to Health Services Systems. 3 Credit Hours.
Introduction to the organization, delivery and financing of health care. An overview of management issues designed for those preparing for careers as risk and insurance, public health, or healthcare professionals, or business majors interested in career opportunities in the healthcare industry. NOTE: This course can be used to satisfy the university Core Individual and Society (IN) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.


Course Attributes: IN
Repeatability: This course may not be repeated for additional credits.

HCM 3502. Healthcare Financing and Information Technology. 3 Credit Hours.
The insurance, payment mechanisms, contractual arrangements and control mechanisms related to the provision of health services with an emphasis on what the financial manager can do to enhance financial position of the healthcare institution. The course emphasizes information technology applications and hands-on exercises using web-based information resources. NOTE: This is an information management/technology approved course for FSBM majors.


Repeatability: This course may not be repeated for additional credits

Pre-requisites:
HCM 3501|Minimum Grade of C|May not be taken concurrently.
HCM 3580. Special Topics - Healthcare Management. 3 Credit Hours.
Special topics in current developments in the field of healthcare management.
College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatability: This course may be repeated for additional credit.

HCM 4596. Healthcare Quality and Risk Management. 3 Credit Hours.
The course focus is on the relationships among risk management, quality improvement and patient safety and how these impact the business of healthcare and patient health. The foundation of the study of these topics is the nature of risk and the risk management process as it pertains to health and healthcare organizations. The course emphasizes independent business research, independent and group problem solving, professionally prepared written and oral presentations and refining one's ability to prioritize multiple assignments/tasks. The learning environment is structured to approximate the business setting. To bridge the gap between the classroom and the actual practice of risk management, patient safety, and quality, students attend Healthcare Risk Management Grand Rounds at an area healthcare institution. The Grand Rounds include real time risk management, patient safety and quality improvement rounds with practicing leaders in these disciplines. NOTE: Must be a Risk Management and Insurance major, Healthcare Management minor or Business Management major with a Healthcare Management concentration. Students must earn a grade of C in this course if they are using it to fill the writing intensive course requirement for their degree.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
HCM 3502|Minimum Grade of C|May not be taken concurrently
OR (HCM 3501|Minimum Grade of C|May not be taken concurrently
AND RMI 3501|Minimum Grade of C|May not be taken concurrently).

Hebrew (HEBR)

Courses

HEBR 0868. World Society in Literature & Film. 3 Credit Hours.
Learn about Israeli culture by taking a guided tour of its literature and film. You don't need to speak a language other than English to take this exciting course, and you will gain the fresh, subtle understanding that comes from integrating across different forms of human expression. Some of the issues that will be illuminated by looking at culture through the lens of literature and film include family structures and how they are changing, national self-perceptions, pivotal moments in history, economic issues, social change and diversity. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: Arabic 0868/0968, Asian Studies 0868, Chinese 0868/0968, English 0868/0968, French 0868/0968, German 0868/0968, Italian 0868/0968, Japanese 0868/0968, Jewish Studies 0868, Korean 0868, LAS 0868/0968, Political Science 0868/0968, Russian 0868/0968, or Spanish 0868/0968.
Course Attributes: GG
Repeatability: This course may not be repeated for additional credits.

HEBR 0871. Arts in Cultural Context. 4 Credit Hours.
View the arts as an expression of cultural identity as it occurs across the globe. Each semester, we will focus on a particular world region or country, including but not limited to Russia, Japan, and Latin America. The exploration of cultural identity begins with an overview of the region or country's historical and religious influences and then studies the culture's arts, including the visual arts (painting, sculpture), musical traditions, literature (folktales, national mythology), the vernacular arts (crafts, storytelling), film and theater. You will take field trips or have experiences that will allow you to encounter the region's arts firsthand, and to develop a blended understanding of a people's cultural identity and the larger world. NOTE: This course fulfills the Arts (GA) requirement for students under GenEd and Arts (AR) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: Arabic 0871, Asian Studies 0871 or Russian 0871.
Course Attributes: GA
Repeatability: This course may not be repeated for additional credits.

HEBR 1001. Elements I. 4 Credit Hours.
Introducing the Hebrew alphabet (print and cursive), functional grammar, basic vocabulary for daily life and basic sentence structures. The goal is to set up a solid base for the communication skills of reading unvocalized text, writing and basic conversation.
Course Attributes: LA
Repeatability: This course may not be repeated for additional credits.
HEBR 1002. Elements II. 4 Credit Hours.
Continuation of Hebrew 1001. Introducing more advanced sentence structures and three additional grammar paradigms and the past tense. The emphasis is on expansion of vocabulary to aid in understanding more varied texts and facilitating more ease in speaking, writing and reading.

Course Attributes: LA
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
HEBR 1001|Minimum Grade of C-|May not be taken concurrently.

HEBR 2001. Intermediate I. 3 Credit Hours.
Reading of moderately difficult Hebrew texts with discussion in Hebrew. Introducing more advanced sentence structures, the rest of the grammar paradigms and the future tense. Class is conducted mostly in Hebrew with the goal of strengthening communication skills.

Course Attributes: LB
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
HEBR 1002|Minimum Grade of C-|May not be taken concurrently.

HEBR 2002. Intermediate II. 3 Credit Hours.
Reading of moderately difficult Hebrew texts with discussions in Hebrew. Learning more advanced sentence structures, the rest of the grammar paradigms in all tenses. Class is conducted mostly in Hebrew with strong emphasis on understanding text and speaking with more ease.

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
HEBR 2001|Minimum Grade of C-|May not be taken concurrently.

HEBR 2447. Kabbalah and Mysticism. 3 Credit Hours.
Introduction to the basic concepts, worldview and psychology of the Kabbalah. Mystical experiences and spiritual practices of the Kabbalists are situated within the context of comparative mysticism.

Repeatability: This course may not be repeated for additional credits.

HEBR 2779. Love Themes in Hebrew Literature. 3 Credit Hours.
A selection of love poetry from the Biblical Song of Songs, through the Middle Ages to contemporary Israel, including secular and mystical poems. Love themes and aspects, images, metaphors, symbols and poetic structures will be analyzed with special attention to influences and interrelationships between the different periods.

Repeatability: This course may not be repeated for additional credits.

HEBR 2797. Jewish Humor Past and Present. 3 Credit Hours.
A survey course of Jewish humor from its sources in 19th century Europe through early Jewish American humor to modern American and Israeli humor. The course analyzes humor themes and their connection to Jewish life and issues as they are expressed in literary forms of humor and satire as well as folk wit and jokes. Some authors studied are Shalom Aleichem, Philip Roth and Ephraim Kishon. NOTE: The course will be conducted in English.

Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

HEBR 3002. Advanced Hebrew Readings II. 3 Credit Hours.
Reading and discussing difficult texts and newspaper articles. Acquisition of idiomatic phrases. Emphasis on writing and conversing fluently.

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(HEBR 2002|Minimum Grade of C-|May not be taken concurrently
AND HEBR 3098|Minimum Grade of C-|May not be taken concurrently).

HEBR 3082. Independent Study. 3 Credit Hours.
Permission of instructor required.

Repeatability: This course may be repeated for additional credit.
Pre-requisites:
HEBR 2002|Minimum Grade of C-|May not be taken concurrently.

HEBR 3098. Advanced Hebrew Readings I. 3 Credit Hours.
Reading and discussing difficult texts. Acquisition of idiomatic phrases. Emphasis on writing and conversing fluently.

Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
HEBR 2002|Minimum Grade of C-|May not be taken concurrently.

HEBR 3711. Israelis and Palestinians. 3 Credit Hours.
The course explores the Israeli/Palestinian relationship, from the beginning of the 20th century till today, as it is represented in both Israeli and Palestinian literature and art. We will analyze themes, feelings and belief systems with a strong emphasis on the development of the image of the other in each group and its connection to self identity. NOTE: The course will be conducted in English.

Repeatability: This course may not be repeated for additional credits.
HEBR 3720. Topics in Hebrew Culture. 3 Credit Hours.
Topics from Hebrew culture, which are of general and current interest based on reading Hebrew texts in translation. Lectures, audiovisual presentations, and large and small group work used to explore the significance of the texts.
Repeatability: This course may be repeated for additional credit.

HEBR 3797. Literature and Art of the Holocaust. 3 Credit Hours.
In the midst of the horrors and atrocities of the Holocaust, there were many acts of Kiddush Ha`chaim - the sanctification and affirmation of life. We will study stories, poems, paintings and drawings composed during the Holocaust as well as stories of people who risked their lives to save minorities as a proof that the human spirit cannot be broken. The course elaborates on the injunction these artists left for us: “And you shall choose life.” NOTE: The course will be conducted in English.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

HEBR 3798. Writing Seminar I. 3 Credit Hours.
Topics from Hebrew culture, which are of general and current interest based on reading Hebrew texts in translation. Lectures, audiovisual presentations, and large and small group work used to explore the significance of the texts.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

HEBR 4082. Independent Study. 4 Credit Hours.
Permission of instructor required.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
HEBR 2002|Minimum Grade of C-|May not be taken concurrently.

HEBR 4382. Independent Study. 3 Credit Hours.
Arranged each semester; please consult with the instructor.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
HEBR 2002|Minimum Grade of C-|May not be taken concurrently.

Hindi (HIN)

Courses

HIN 1001. Hindi Elements I. 4 Credit Hours.
First semester level of Hindi.
Course Attributes: LC
Repeatability: This course may not be repeated for additional credits.

HIN 1002. Hindi Elements II. 4 Credit Hours.
Second semester level of Hindi.
Course Attributes: LC
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
HIN 1001|Minimum Grade of C-|May not be taken concurrently.

Third semester of Hindi.
Course Attributes: LC
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
HIN 1002|Minimum Grade of C-|May not be taken concurrently.

HIN 2002. Hindi Intermediate II. 3 Credit Hours.
Fourth semester of Hindi.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
HIN 2001|Minimum Grade of C-|May not be taken concurrently.

History (HIST)
Courses

HIST 0824. Gender and World Societies. 3 Credit Hours.
Learn about the history of feminine and masculine gender roles from comparative and international perspectives. Using case studies from Ancient Greece, Medieval Europe, West Africa, Victorian Britain, Modern Europe, the Middle East, South Asia, East Asia, and/or Latin America, we will explore certain themes - The State, The Sacred, Work, The Family, The Body and Sexuality, Modern Revolutionary Movements - to investigate how gender and gender roles have changed over time, and their significance today. Readings include primary sources written both by men and by women, secondary sources, novels, and films. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Duplicate Credit Warning: Students may take only one of the following courses for credit; all other instances will be deducted from their credit totals: History 0824, 1708, C065, Women's Studies 0824, 1708, or C065.
Course Attributes: GG
Repeatability: This course may not be repeated for additional credits.

HIST 0829. The History & Significance of Race in America. 3 Credit Hours.
Why were relations between Native Americans and whites violent almost from the beginning of European settlement? How could slavery thrive in a society founded on the principle that “all men are created equal”? How comparable were the experiences of Irish, Jewish, and Italian immigrants, and why did people in the early 20th century think of them as separate “races”? What were the causes and consequences of Japanese Americans’ internment in military camps during World War II? Are today’s Mexican immigrants unique, or do they have something in common with earlier immigrants? Using a variety of written sources and outstanding documentaries, this course examines the racial diversity of America and its enduring consequences. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Duplicate Credit Warning: Students may take only one of the following courses for credit; all other instances will be deducted from their credit totals: African American Studies 0829, Anthropology 0829, Geography and Urban Studies 0829, History 0829, Political Science 0829, Sociology 0829, 0929, 1376, 1396, R059, or X059.
Course Attributes: GD
Repeatability: This course may not be repeated for additional credits.

HIST 0831. Immigration and the American Dream. 3 Credit Hours.
As a Temple student, you go to school and live in a city full of immigrants. Perhaps your own relatives were immigrants to the United States. But have you ever listened to their stories? With an historical and sociological framework as a basis, we will take an in-depth and more personal look at the immigrant experience as expressed through the immigrants’ own voices in literature and film. Topics explored include: assimilation, cultural identity and Americanization, exploitation and the American Dream, ethnic communities, gender, discrimination and stereotyping. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: ANTH 0831, CRIT 0831, Italian 0831/0931, Russian 0831, SOC 0831, or SPAN 0831/0931.
Course Attributes: GD
Repeatability: This course may not be repeated for additional credits.

HIST 0832. Politics of Identity in America. 3 Credit Hours.
Gay or straight. Black or white. Male or female. What do these different group identities mean to Americans? How do they influence our politics? Should we celebrate or downplay our diversity? This course explores how we think about others and ourselves as members of different groups and what consequences it has for how we treat one another. Our fundamental social identities can be a source of power or of powerlessness, a justification for inequality or for bold social reform. Students learn about the importance of race, class, gender and sexual orientation across a variety of important contexts, such as the family, workplace, schools, and popular culture and the implications these identities have on our daily lives. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: ANTH 0831, CRIT 0831, Italian 0831/0931, Russian 0831, SOC 0831, or SPAN 0831/0931.
Course Attributes: GD
Repeatability: This course may not be repeated for additional credits.

HIST 0834. Representing Race. 3 Credit Hours.
From classical Greeks and Romans, who saw themselves under siege by the “barbarian hordes,” to contemporary America and its war on “Islamic extremism,” from “The Birth of a Nation” to “Alien Nation,” Western societies have repeatedly represented some group of people as threats to civilization. This course will examine a wide range of representations of non-Western people and cultures in film, literature, scientific and legal writings, popular culture and artistic expression. What is behind this impulse to divide the world into “us” and “them”? How is it bound up with our understanding of race and racial difference? And what happens when the “barbarian hordes” talk back? NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they have successfully completed AAS 0834, Anthropology 0834/0934, Asian Studies 0834, or English 0834/0934.
Course Attributes: GD
Repeatability: This course may not be repeated for additional credits.
HIST 0847. American Military Culture. 3 Credit Hours.
You live in a country that possesses the world's strongest military forces. Up through the Vietnam War, Americans viewed military service in wartime as a basic obligation for all adult male citizens - the ultimate test of their patriotism and manhood - but a temporary sacrifice that ceased for most on the return of peace. Today, the American people have outsourced their awesome war-making power to a restricted number of men and women - many of whom consider military service their career. We will explore the distinctive culture that shapes the composition and behavior of America's armed forces and probe how it reflects the strengths and weaknesses of American society. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed AMST 0847.
Course Attributes: GU
Repeatability: This course may not be repeated for additional credits.

HIST 0848. American Revolutions. 3 Credit Hours.
From the first encounters with Native Americans to the present, a series of pivotal moments have had an enduring influence on American society, culture, and politics. In each class, three modules will focus on three pivotal moments, such as King Philip's War, Nat Turner's Rebellion, the Scopes trial, the Civil Rights movement, the women's movement, the emergence of Elvis Presley, the sexual revolution, the rise of environmentalism, the Reagan Revolution, and 9-11. In each module, students will first place the main subject of the module in context, and then seek to understand how it changed American society. The last week of each module will be devoted to a consideration of how the subject of that module has become part of American collective memory. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: AMST 0848, ANTH 0848, GUS 0848, or SOC 0848.
Course Attributes: GU
Repeatability: This course may not be repeated for additional credits.

HIST 0849. Dissent in America. 3 Credit Hours.
Throughout American history individuals and groups of people have marched to the beat of a different drummer, and raised their voices in strident protest. Study the story and development of dissent in America. How has dissent shaped American society? In addition to studying the historical antecedents of dissent, students will have first-hand experience visiting and studying a present-day dissent organization in the Philadelphia area to investigate connections between the history of dissent and the process of making dissenting opinion heard today. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed English 0849/0949, History 0949 or SOC 0849/0949.
Course Attributes: GU
Repeatability: This course may not be repeated for additional credits.

HIST 0859. The Making of American Society: Melting Pot or Culture Wars?. 3 Credit Hours.
Terrorism, illegal immigration, gay marriage, religious conflict, political in-fighting, corporate corruption, racial animosities, civil liberties assaults, media conglomeration, Wal-Mart goes to China and the rich get richer. America in the 21st century is a contentious society. How did we get to this place in time? Examine what makes American society distinctive from other advanced industrial democracies as we study the philosophical origins of America, the development of social and economic relationships over time, and the political disputes dominating contemporary American life. The course relies heavily on perspectives from History, Sociology and Political Science to explain the challenges facing contemporary American society. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: AMST 0859, PHIL 0859, POLS 0859, or SOC 0859.
Course Attributes: GU
Repeatability: This course may not be repeated for additional credits.

HIST 0861. Global Slavery. 3 Credit Hours.
Investigate global slavery as an historic phenomenon and a current reality. How is it that after the great emancipation movements of the 19th century and the International Geneva Convention (1926) outlawing slavery there are still 27 million slaves and counting? This course argues that any critique of globalization requires an understanding of why it has taken several millennia for anti-slavery law to emerge and why such legislation continues to have limited reach and effectiveness. It argues that there is no modernity and no globalization without slavery. Explore this problem by asking a basic question: By what techniques, abstract and concrete, do masters make themselves as visible by constructing slaves as invisible? With film viewings, carefully selected readings, debates and group projects, you will be led to make your own connections to these themes, and to consider global slavery as part of the past and the present. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core.
Course Attributes: GG
Repeatability: This course may not be repeated for additional credits.
HIST 0862. Development & Globalization. 3 Credit Hours.

Use historical and case study methods to study the differences between rich and poor nations and the varied strategies available for development in a globalizing world. Examine the challenges facing developing countries in historical and contemporary context and analyze the main social, cultural, and political factors that interact with the dynamic forces of the world economy. These include imperialism/colonialism, state formation, labor migration, demographic trends, gender issues in development, religious movements and nationalism, the challenges to national sovereignty, waves of democratization, culture and mass media, struggles for human rights, environmental sustainability, the advantages and disadvantages of globalization, and movements of resistance. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: GUS 0862, POLS 0862/0962, or SOC 0862/0962.

Course Attributes: GG

Repeatability: This course may not be repeated for additional credits.

HIST 0864. War and Peace. 3 Credit Hours.

Total war, weapons of mass destruction, genocide. These were not solely inventions of the 20th century nor are they the natural consequences of a violent human nature. Leaders, armies, and the strategies they pursue are rooted in their social and political context. Weapons are the products of not merely technological but also historical and cultural development. Battles occur on a political and historical terrain. Learn how ancient ideology, medieval technology, modern propaganda, and more have changed how humans wage war and make peace. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for History 0864 if they have successfully completed History 0964 or POLS 0864.

Course Attributes: GG

Repeatability: This course may not be repeated for additional credits.

HIST 0865. The Global Crisis: Power, Politics and the Making of Our Times. 3 Credit Hours.

Are we living in a time of global crisis? This course will provide you with the tools you need to find out. The course focuses on world politics over the past century, up to today. We will examine a number of key global problems as they have changed over time. We will adopt an historical approach, which means we will read texts and documents about the past as a way to understand the present. Together we will explore debates like: Is America an empire? What is ideology and is it a factor in world politics today? What role do diplomacy, strategy, and military power play in world affairs? How have non-western peoples and states challenged the power of the West, and with what results? What are the roots of ethnic and religious conflict? And what can we as citizens do to address truly global problems? Drawing on examples from 20th century world history, this course introduces you to world politics and the great debates of our time. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core.

Course Attributes: GG

Repeatability: This course may not be repeated for additional credits.

HIST 0866. World Affairs. 3 Credit Hours.

We live in a global age when events beyond our borders significantly affect our lives. Sharpen your understanding of international developments, including wars, economic globalization, wealth and poverty, the spread of democracy, environmental degradation, and global pandemics. This course offers an introduction to the study of world affairs that gives you the conceptual tools to deepen your understanding of how major historical and current trends in the world affect your life and that of others around the globe. Readings include historical documents, classic texts in the study of international relations, and current perspectives on the state of the world from multiple disciplinary perspectives. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: GUS 0866 or POLS 0866/0966.

Course Attributes: GG

Repeatability: This course may not be repeated for additional credits.

HIST 0867. Founding Philadelphia. 3 Credit Hours.

This course will explore the important role of Philadelphia in the founding of the United States. It will not be, however, a mostly nostalgic visit to patriarchic historical sites that glorify the founding fathers, but an in-depth examination into the actual social, cultural, and political events that shaped a city and a nation, as well as an evaluation of how we view these historical events and figures today. Is there a great discrepancy between myth and reality? What does our view of the past say about the present? In what ways can Philadelphia be viewed as a microcosm of the United States and in what ways does the development of Philadelphia, through political turmoil, industrial growth, and the creation of ethnic neighborhoods by a constant flood of immigrants tie in with global developments?

Course Attributes: GU

Repeatability: This course may not be repeated for additional credits.

HIST 0871. Turning Points in Human History: The Ancient World. 3 Credit Hours.

Turning Points in Ancient History explores five of the most significant transformations in human life from 1) our evolution into Homo sapiens sapiens, to 2) the agricultural revolution, 3) the establishment of the first human settlements, from villages to early cities, 4) the formation of the first empires, and concluding with 5) the establishment of the first religions with representation throughout Afro-Eurasia. (A second course will continue with five turning points in modern history.) The course looks at world history whole, asking how we have become who we are through our global history. It compares societies to foster analysis. It also examines interactions among societies to foster synthesis. The analysis of primary and secondary documents will be central to this course, along with study of secondary sources commenting on them. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core.

Course Attributes: GG

Repeatability: This course may not be repeated for additional credits.
HIST 0872. Turning Points in Human History: The Modern World. 3 Credit Hours.
Turning Points in Modern History explores five of the most significant transformations in human life from 1) the establishment of world trade networks following Columbus’ voyages, to 2) the democratic revolutions of the seventeenth, eighteenth and nineteenth centuries, 3) the industrial revolution in global perspective, 4) the growing significance of ecological balance, and 5) the search for identity in contemporary history. (Another course, which is not a requirement for this one, will cover five turning points in ancient history.) The course looks at world history whole, asking how we have become who we are through our global history. It compares societies to foster analysis. It also examines interactions among societies to foster synthesis. The analysis of primary and secondary documents will be central to the course, along with study of secondary sources commenting on them. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core.

Course Attributes: GG

Repeatability: This course may not be repeated for additional credits.

HIST 0874. Confronting Empire: Voices of Resistance. 3 Credit Hours.
What is “empire”? For millions of people throughout history, this is not just an academic question but a lived reality. In this class, you will confront the realities of empire, and you will observe ways that many others have confronted empire in the past. To find out what empire means, this class will introduce students to Asian, African and Latin American people whose lives have been shaped by Western colonial rule from the 18th to the 20th centuries. What was it like to live as a colonized person in the age of empire? What kind of power did one have to lead a free life? What sorts of opposition and resistance was available to colonized peoples? How has the struggle between colonized peoples and the powerful imperial states shaped the world we live in today? And do we still live in a world that has colonial dimensions to it? In this class, we will listen to the voices of those who experienced Western imperialism and follow them as they confronted and challenged that process. We bring together a variety of sources including speeches, newspapers, novels, films, and government documents to reconstruct specific moments of collective action on the part of the colonized. We will explore how this struggle carries on today. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core.

Course Attributes: GG

Repeatability: This course may not be repeated for additional credits.

HIST 0876. Religion in Philadelphia. 3 Credit Hours.
The argument is sometimes made that religion in dense urban spaces is characteristically very different from religion as it appears elsewhere. A study of religion in Philadelphia provides numerous ways to explore that idea, especially since the city encompasses a variety of ethnic and immigrant groups, encouraging the generation of new and hybrid forms of religious life that are less possible in smaller populations. Learn how ideas of tolerance and freedom, the urban environment, and immigration helped to define the role of religion in the life of this city. Study various religious traditions as they are manifested in the greater Philadelphia area and look at the influences religion has had on the fabric of Philadelphia's history and cultural life including politics, art, education, journalism and popular culture. You will visit and write about various religious sites and institutions. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed REL 0976, 1003, 1903, C052, H092 or History 0976.

Course Attributes: GU

Repeatability: This course may not be repeated for additional credits.

HIST 0874. Confronting Empire: Voices of Resistance. 3 Credit Hours.

Throughout American history individuals and groups of people have marched to the beat of a different drummer, and raised their voices in strident protest. Study the story and development of dissent in America. How has dissent shaped American society? In addition to studying the historical antecedents of dissent, students will have first-hand experience visiting and studying a present-day dissent organization in the Philadelphia area to investigate connections between the history of dissent and the process of making dissenting opinion heard today. (This is an Honors course.) NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed English 0849/0949, History 0849 or SOC 0849/0949.

Course Attributes: GU

Repeatability: This course may not be repeated for additional credits.

HIST 0872. Turning Points in Human History: The Modern World. 3 Credit Hours.

Turning Points in Modern History explores five of the most significant transformations in human life from 1) the establishment of world trade networks following Columbus’ voyages, to 2) the democratic revolutions of the seventeenth, eighteenth and nineteenth centuries, 3) the industrial revolution in global perspective, 4) the growing significance of ecological balance, and 5) the search for identity in contemporary history. (Another course, which is not a requirement for this one, will cover five turning points in ancient history.) The course looks at world history whole, asking how we have become who we are through our global history. It compares societies to foster analysis. It also examines interactions among societies to foster synthesis. The analysis of primary and secondary documents will be central to the course, along with study of secondary sources commenting on them. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core.

Course Attributes: GG

Repeatability: This course may not be repeated for additional credits.
HIST 0976. Honors Religion in Philadelphia. 3 Credit Hours.
The argument is sometimes made that religion in dense urban spaces is characteristically very different from religion as it appears elsewhere. A study of religion in Philadelphia provides numerous ways to explore that idea, especially since the city encompasses a variety of ethnic and immigrant groups, encouraging the generation of new and hybrid forms of religious life that are less possible in smaller populations. Learn how ideas of toleration and freedom, the urban environment, and immigration helped to define the role of religion in the life of this city. Study various religious traditions as they are manifested in the greater Philadelphia area and look at the influences religion has had on the fabric of Philadelphia’s history and cultural life including politics, art, education, journalism and popular culture. You will visit and write about various religious sites and institutions. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed REL 0876, 0976, 1003, 1903, C052, H092 or History 0876.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GU, HO
Repeatability: This course may not be repeated for additional credits.

HIST 1001. History of Philadelphia. 3 Credit Hours.
This course is intended as an introduction to the history of Philadelphia, broadly defined as the region as well as the city, and assumes no background or deeply developed interest in American history. It presents a general survey that can pique the curiosity of anyone who wants to explore one of the nation's most exciting cities, but it is also meant to be especially useful to students imagining careers in such diverse fields as hospitality and tourism, journalism and education, environmental studies and law. The course will examine both how national and international events (say, the Revolution or the rise of the modern global economy) impacted the city, and also how the city experienced forces (like the adoption of the automobile) that transformed it.
Repeatability: This course may not be repeated for additional credits.

HIST 1002. America in the Age of Lincoln. 3 Credit Hours.
This course uses Abraham Lincoln's extraordinary life as a prism through which to view the Civil War era. We will read and analyze Lincoln's legendary speeches and other primary sources, and sample the vast scholarship on his political career and personal life. We will debate his views on slavery, emancipation, civil liberties, and military strategy, and evaluate his record and his legacy as a leader.
Repeatability: This course may not be repeated for additional credits.

HIST 1003. History of the American West. 3 Credit Hours.
This course examines the American West as a place of conquest, as a largely desert environment quite unlike the East, and as an icon of American culture. Through lecture, reading, and discussion, we will explore these three overlapping themes: 1) cultural encounters in the West, among Euroamericans, Indians, Mexican-Americans of the Southwestern borderlands, and Asian immigrants to the Pacific Coast; 2) the reciprocal relationship between people and the environment; and 3) the cultural symbolism of the American West, both as an enduring national icon and as an ideology that has shaped settlement.
Repeatability: This course may not be repeated for additional credits.

HIST 1004. United States at War. 3 Credit Hours.
This course is a survey of the rise of the American military establishment from its origins as a small, neglected cadre of coastal and frontier guardians to a mighty world police force and the most expensive concern of the federal government. Emphasis will be placed on the development of military policy, the principles of war, and the inter-relationship between military affairs, technology, politics, and social change.
Repeatability: This course may not be repeated for additional credits.

HIST 1005. Youth, Romance, and Sex in post-WWII America. 3 Credit Hours.
American understandings of what is appropriate sexual and romantic behavior for youth changed dramatically over the second half of the 20th century - as did the actual behavior of young people. In this course we will try to understand why those changes took place and how the meanings of ‘romance’ and ‘sex’ have been struggled with in our recent past. This course is also an introduction to the study of history: students will work extensively with primary documents, do oral histories, and analyze different scholarly interpretations of the same set of events.
Repeatability: This course may not be repeated for additional credits.

HIST 1006. History of Sex and Gender in Film. 3 Credit Hours.
Students will analyze mainstream, popular films produced in the post-WWII 20th century U.S., treating them as cultural texts that shed light on the ongoing historical struggles over gender identity and appropriate sexual behaviors. The course focuses on a volatile and complicated period in America's history: the years from World War II through the present. In those years, America's social-sexual mores and our ideas of masculinity and femininity (as well as our definitions of appropriate gender roles) have changed dramatically, but not without controversy. In watching and analyzing films that millions of Americans saw when they were first released, we will try to understand how these films fit into ongoing conversations about sex and gender in specific historical eras.
Repeatability: This course may not be repeated for additional credits.
HIST 1007. Popular Culture in 20th Century America. 3 Credit Hours.
This course examines the roles that stereotypes, fashions, sports, the automobile, movies, radio, television, and leisure activities, have played in 20th century American culture, and the manifestations of political and cultural life that the artifacts and leisure activities of the average American exemplified. A knowledge of the history and development of popular culture reveals the roots of modern American society and culture, and explains why Americans have not only developed in a unique way, but why their cultural influence has been so great on a global scale. As such, the course allows students to gain a broader view of American society while providing depth and clarity of understanding of it through areas not usually addressed by more traditional avenues of learning. Toward this end, students will write a research paper on a topic in popular culture using written, oral, and visual materials. Emphasis will be placed on the development of the student's topic through an analysis of historical context, asking a proper historical question, analyzing multiple historical factors, and formulating historical arguments.
Repeatability: This course may not be repeated for additional credits.

HIST 1008. The Sixties: The American Experience. 3 Credit Hours.
This course will explore the history of the United States in the Sixties era with a major focus on struggles for social justice, the Vietnam War, and the counterculture. Through readings, films, guest speakers, lectures, and discussion, we will tackle the great controversies and debates of the era.
Repeatability: This course may not be repeated for additional credits.

HIST 1011. Modern U.S. History Through Film. 3 Credit Hours.
This course will examine aspects of U.S. history in the 20th century through the use of public released feature motion pictures. In this visually oriented society, every student encounters images of history and culture on an almost daily basis. Critical thinking about the visual media must be learned. Every motion picture is a primary document that can be read, interpreted, and studied with as much depth as a written document. Because of their complexity, however, motion pictures reveal a vast array of contemporary attitudes specific to their period. A series of motion pictures will be shown illustrating different aspects of American history, and students will learn to critically examine these historical documents for different levels of meaning. They will analyze not only the surface plots of the films, but the underlying historical assumptions that provided the intellectual underpinning of the movies. They will write papers based on their abilities to analyze the visual documents and fashion an historical argument.
Repeatability: This course may not be repeated for additional credits.

HIST 1013. History of the American Presidency. 3 Credit Hours.
This course examines historical developments in the office of the U.S. president from its establishment to contemporary times. Through lectures, discussions, class projects, and outside assignments, we will explore the historical literature dealing with the creation and evolution of the office; the presidents who have shaped the office; the powers and limitations of the office in both foreign and domestic affairs; the president's relationship to the courts, the Congress, the people, and the press; and the broad political developments essential to our understanding of the place of the presidency within our changing political culture. This course asks: How has our most important national political institution come to be what it is? Two themes permeate the course: (1) What is the source and nature of presidential power? (2) Who are the men who have held the office and why have they failed or succeeded? This course prepares students for further historical or other academic studies and for related professional careers in law, journalism, or executive management. More importantly, the course engages students' concerns as life-long participants in American democracy.
Repeatability: This course may not be repeated for additional credits.

HIST 1022. Latin American Social Struggles. 3 Credit Hours.
An examination of Latin America's contemporary history from the Cuban Revolution in 1959 through the end of the Cold War to the present. The course explores such matters as revolution and counter-revolution; human rights and institutional accountability; city life and social change; the movement of people, narcotics, goods; and new forms of political and cultural conflict. Methods of instruction include paperback readings, the internet, and video clips.
Repeatability: This course may not be repeated for additional credits.

HIST 1041. Before the Da Vinci Code: The Holy Grail. 3 Credit Hours.
This course is intended to acquaint students with the interlinked problems of cultural violence, history writing, and the invention and popularity of Grail romances in 12th century Europe. The Grail romance cycle emerged in the wake of violence perpetrated by Christian Crusaders who traveled to the Eastern Mediterranean to capture Jerusalem and other pilgrimage sites from their Muslim rulers. We will study how the Grail story stages a crisis in chivalric masculinity and enacts fierce contests over knowledge, power, capital, and religious difference endemic in 12th and 13th century Europe. We will also explore why the Grail never lets go in the Western imaginary. We will study how bits and pieces of the Grail story recycled themselves in imperial fantasies of the 19th century, in Nazi Germany, as well as post-War new-Nazi fantasies, up to the Da Vinci Code.
Repeatability: This course may not be repeated for additional credits.

HIST 1043. Living Royally: The World of Europe's Kings and Queens. 3 Credit Hours.
This course is designed as an introduction to the history, culture, and politics of the European royal court in the pre-1800 period. We will be examining the court as a social institution and a network of privilege and patronage; the court as a physical space that determined access to power, as well as the court as a practical challenge that included the staffing, provisioning, and organization of a household of this size and importance; and the court as the household of the royal family and court nobility. This will include investigation of the sexual, cultural, and social world of the royal family, as well as the rituals and ceremonies associated with noble power and royal kingship.
Repeatability: This course may not be repeated for additional credits.
HIST 1045. Sex in 20th Century Europe: Panic and Liberation. 3 Credit Hours.
This course examines the 20th century history of sexual attitudes, desires, behaviors, identities, communities, and movements in western Europe (most notably Germany, France and the United Kingdom). We will focus on the period from the 1920s until today, years when celebrations and concerns about sexual liberation, hedonism, the 'decline of virtue', the end of repression, etc., have been constantly at the center of political, social, religious and scientific debates. Among the topics covered are reproduction, fertility, birth control, and abortion; prostitution and commercialized sex; sexually-transmitted diseases; interracial and interethnic sexualities; and same-sex (homo-) and cross-sex (hetero-) sexualities. We explore the importance of sexuality in history and the ways in which the study of sexuality offers opportunities to re-think major themes in the social, cultural, and political histories of the West.
Repeatability: This course may not be repeated for additional credits.

HIST 1046. History of Nazi Germany. 3 Credit Hours.
This course studies the rise and decline of Hitler's Third Reich, from its intellectual origins in the 19th century and World War I, through the meteoric rise of the National Socialist movement during the early 1930's, to its demise in the ruins of Berlin in 1945. Special attention is given to the sources of support for Nazism among German voters, the structure of the National Socialist state, the role of Adolf Hitler, the Holocaust, and the causes and consequences of the Second World War.
Repeatability: This course may not be repeated for additional credits.

HIST 1051. Che Guevara and the Question of Revolution. 3 Credit Hours.
Between the coming to power of the Cuban Revolution in 1959 and the early 1990s, Latin America found itself convulsed by revolution and counter-revolution. For many around the world, Che Guevara symbolized heroic revolutionary struggle. Through the prism of Che's life and image, this course will examine Latin America's conflicts during this era and discuss the urgent issues that still remain from the question of revolution.
Repeatability: This course may not be repeated for additional credits.

HIST 1061. The United States and the Middle East, 1990-Present. 3 Credit Hours.
This course introduces students to one of the most important global problems facing the United States, namely, its relations with Middle Eastern peoples and states. It begins with the U.S. involvement in the defeat of the Soviet Union in Afghanistan and moves on to look historically at American conflict with Iraq in the 1990s, the Arab-Israeli problem, and the challenge presented by the geopolitical contest over oil supplies. The U.S. involvement in the region has had huge consequences for the Middle East and South Asia as well as for the American people. The course will use a variety of sources to introduce students to the background of these contemporary conflicts.
Repeatability: This course may not be repeated for additional credits.

HIST 1062. Power and Resistance in the Age of Imperialism. 3 Credit Hours.
This course introduces key themes and issues in the study of both modern imperialism and the opposition and challenges to it emanating from the third world/global South, past and present. Bringing together a variety of primary and secondary source materials, the course examines case studies and specific moments of collective struggle drawn from the disarticulated sites labeled the "third world." It spotlights anti-imperialism as a unifying axis of multidimensional opposition, but also reveals the radically democratic aspirations and efforts to achieve participatory social justice that have formed points of commonality among third world people. As such, it develops the tools for comprehending third world peoples as historic agents in the shaping of alternative modernities and imaginings about the end of empire, and through their confrontations as key actors thwarting and destabilizing the imperialist project in the modern world. NOTE: Prior to fall 2011, the course title was "Confronting Empire: Imperialism, Resistance, and the Third World."
Repeatability: This course may not be repeated for additional credits.

HIST 1101. U.S. History to 1877. 3 Credit Hours.
This course, United States History to 1877, traces the historical roots of what is now the United States of America: the Mississippian development of agriculture and urban life, the competition of various empires over land and peoples, the successes and failures of European settlements, the forced migration of West Africans and the invention of enslavement and race. By 1776, the United States of America was formed under promises of liberty, equality, property rights, and tolerance. But who would benefit? Who should rule? Partial industrialization, the consolidation of slavery, agricultural specialization, and expansion to the west, along with demands for reform and democracy, made these questions ever more vexed and led to a Civil War and a flawed attempt to reconstitute the Union by 1877. There are no prerequisites. NOTE: This course can be used to satisfy the university Core American Culture (AC) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: AC
Repeatability: This course may not be repeated for additional credits.

HIST 1102. U.S. History since 1877. 3 Credit Hours.
This is a general survey of the main currents in American history since 1877. Since the 1870s, the people of the United States have struggled over the meaning of equality, the practice of democracy, the politics of economic development, and the role of the United States in the world. This course will explore these themes and others in order to analyze the history of the modern United States. NOTE: This course can be used to satisfy the university Core American Culture (AC) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: AC
Repeatability: This course may not be repeated for additional credits.
HIST 1103. Race and Ethnicity in American History. 3 Credit Hours.
This course deals centrally with the social process by which societies create racial and ethnic groups and define their place in relation to other racial or ethnic groups. Because the emergence of racial and ethnic groups is a historical process, the course will examine American history from the colonial period to the present in order to understand the changing ways that Americans have viewed each other and divided into groups. In short, the course will be rooted in specific processes in American history, but will examine how America formed groups that are given power and prestige, recognized as real Americans, discriminated against, marginalized, enslaved or killed. The groups to be examined include, but are not limited to, Blacks, Native Americans, Irish-Americans, Italian-Americans, Chinese-Americans, Jews, and Chicanos. NOTE: This course can be used to satisfy the university Core Studies in Race (RS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: RS
Repeatability: This course may not be repeated for additional credits.

HIST 1104. American Empire. 3 Credit Hours.
This course surveys and interprets the creation and growth of the American empire from the colonial era to contemporary times. In doing so, it addresses the fundamental questions of how and why a republic, founded on the lofty principles concerning liberty and equality eloquently expressed in the Declaration of Independence, behaved so aggressively in pursuing territorial and commercial aggrandizement, including the subjugation and in some cases extermination of peoples and nations. The course will also examine the instruments the United States employed to expand its influence and dominion. These include traditional means like force, diplomacy, and economics, and less orthodox methods and agents, ranging from missionaries to movie moguls to the Marlboro Man. Consequently, a major challenge of this course will be both to arrive at an appropriate definition of empire, and further, to identify the constituencies from within the private as well as public sectors, and to a degree from the international community, that contributed to the realization of George Washington's vision of the United States as a rising empire.
Repeatability: This course may not be repeated for additional credits.

HIST 1171. U.S. History to 1877. 1 Credit Hour.
A companion course to History 1101 (C067) for first-term freshmen. This course provides guidance with the assignments of the core course. Emphasis is on reading, listening, speaking, and writing within the context of the core course. Assistance is also given in the continued development of English-language skills, especially academic reading and the acquisition of a general academic vocabulary. NOTE: Offered at Temple University Japan only.
Repeatability: This course may not be repeated for additional credits.

HIST 1202. U.S. History Since 1877. 1 Credit Hour.
A companion course to History 1102 (C068) for first-term freshmen. This course provides guidance with the assignments of the core course. Emphasis is on reading, listening, speaking, and writing within the context of the core course. Assistance is also given in the continued development of English-language skills, especially academic reading and the acquisition of a general academic vocabulary. NOTE: Offered at Temple University Japan only.
Repeatability: This course may not be repeated for additional credits.

HIST 1301. Modern Europe. 3 Credit Hours.
This course focuses on major developments in Europe from the 18th through the 20th centuries. Europeans in this period gave shape to the modern state system, spurred the industrial revolution, and founded global empires. They also triggered revolutions, engaged in constant warfare with each other and many non-European peoples, and gave birth to new ideologies such as Communism, Fascism, and Nazism. During this period, Europe also made important advances in science, technology, the humanities and the arts that gave shape to the modern world. This course surveys these developments by drawing on the work of contemporary historians as well as a wide array of primary sources, including novels, memoirs, musical and visual materials. The course provides a basic foundation for further course work in any field of modern history. NOTE: This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: IS
Repeatability: This course may not be repeated for additional credits.

HIST 1501. Third World History. 3 Credit Hours.
Third World History offers a form of global history since 1500 that focuses upon the Third World, approximately three-quarters of the world's population whose experience has been powerfully shaped by colonialism and imperialism as well as by resistance to these forces. The historical issues raised in the course constitute some of the most fundamental elements shaping the present-day world as well as the immediate future. Particular attention is given to the 20th century. Assignments in the course are concerned with both historical issues and with the development of student analytical and writing skills. NOTE: This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. In addition to meeting the university Core International Studies requirement, this course meets the Non-Western/Third World IS requirement for Communication Sciences majors. Please note the recent update to the Core IS requirement at www.temple.edu/vpus/resources/coreupdates.htm#coreupdate.
Course Attributes: IS
Repeatability: This course may not be repeated for additional credits.
HIST 1652. Modern Asia. 3 Credit Hours.
This course covers the incursions of Western imperialism, nationalism and independence movements, and postcolonial developments in South, Southeast, and East Asia. It will explore continuity and change in state, society, and culture in the major countries and regions. As in Asian Studies 1051 "Premodern Asia," comparisons will shed light on similarities and differences in patterns of cultural adaptation and the diversity of Asian cultures and institutions. This course is cross-listed with Asian Studies 1052.
Repeatability: This course may not be repeated for additional credits.

HIST 1701. World History Ancient. 3 Credit Hours.
An introduction to world history from earliest times until the 15th century. The course surveys the birth of agriculture, early human settlements, the establishment of cities and "civilizations," the organization of global cultural and religious systems, the power and authority of massive empires, the influence of business interests, and "border peoples" on the fringes of the great systems. The scope is global, and we always ask "How do we know?" and "What is its significance?" NOTE: This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. In addition to meeting the university Core International Studies requirement, this course meets the Non-Western/Third World IS requirement for Communication Sciences majors. Please note the recent update to the Core IS requirement at www.temple.edu/vpus/resources/coreupdates.htm#coreisupdate.
Course Attributes: IS
Repeatability: This course may not be repeated for additional credits.

HIST 1702. World History Modern. 3 Credit Hours.
This course begins with Columbus' voyages, which linked the major trading regions of the world together, and continues through the expansion of imperialism, the revolts against excessive government power and authority, and the invention of astonishing new technologies of creativity and destruction. The course concludes with the formation of new international, national, religious, and gender identities in the last few decades. We analyze economics, politics, technology, culture, religion, and innovative ideas as formative influences. We always ask "How do we know?" and "What is its significance?" as well as "What do we know?" The course serves as an introduction to modern world history that students can build upon in subsequent course work. NOTE: This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. In addition to meeting the university Core International Studies requirement, this course meets the Non-Western/Third World IS requirement for Communication Sciences majors. Please note the recent update to the Core IS requirement at www.temple.edu/vpus/resources/coreupdates.htm#coreisupdate.
Course Attributes: IS
Repeatability: This course may not be repeated for additional credits.

HIST 1705. War and Society. 3 Credit Hours.
This course explores history through the prism of wars, their origins and consequences--with a focus on social, economic, technological, and cultural changes and their correlations with the nature of warfare. Various incarnations of the course examine virtually all regions of the globe, over time periods ranging from the prehistoric to the contemporary. NOTE: This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: IS
Repeatability: This course may not be repeated for additional credits.

HIST 1708. Gender and History. 3 Credit Hours.
This course will introduce you to the history of feminine and masculine roles from a comparative international perspective. It will cover basic facts, concepts, and themes relating to six topics: The state, the sacred, work, the family, the body, and modern social movements (feminism, women's suffrage, pacifism, and socialism), using as case studies Ancient Greece, Medieval Europe, West Africa, Modern Europe, and the United States. NOTE: This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: IS
Repeatability: This course may not be repeated for additional credits.

HIST 1900. Honors Special Topics. 3 Credit Hours.
Arranged each semester, please consult with the instructor. See the history department web site (www.temple.edu/history) for the specific topics offered each semester.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.
HIST 1901. Honors U.S. History to 1877. 3 Credit Hours.
This course examines major themes in American history from the early 17th century to the last quarter of the nineteenth century. The period includes some of the most important developments and events in American history: encounters between Native Americans and European colonists, the formation of colonial societies, the American Revolution, the making of the new republic, the beginning of industrialization, the settlement of the West, and the Civil War. One of the themes that unite this long period is the formation of the American political philosophy within a pluralistic society, and Americans' struggles to fulfill the promises inherent in its revolutionary political philosophy. There are no prerequisites. NOTE: This course can be used to satisfy the university Core American Culture (AC) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: AC, HO
Repeatability: This course may not be repeated for additional credits.

HIST 1902. Honors U.S. History since 1877. 3 Credit Hours.
This is a general survey course of the main currents in American history since 1877. Since the 1870s, the people of the United States have struggled over the meaning of equality, the practice of democracy, the politics of economic development, and the role of the United States in the world. This course will explore these themes and others in order to analyze the history of the modern United States. NOTE: This course can be used to satisfy the university Core American Culture (AC) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: AC, HO
Repeatability: This course may not be repeated for additional credits.

HIST 1903. Honors Race and Ethnicity in American History. 3 Credit Hours.
This course deals centrally with the social process by which societies create racial and ethnic groups and define their place in relation to other racial or ethnic groups. Because the emergence of racial and ethnic groups is a historical process, the course will examine American history from the colonial period to the present in order to understand the changing ways that Americans have viewed each other and divided into groups. In short, the course will be rooted in specific processes in American history, but will examine how America formed groups that are given power and prestige, recognized as real Americans, discriminated against, marginalized, enslaved or killed. The groups to be examined include, but are not limited to, Blacks, Native Americans, Irish-Americans, Italian-Americans, Chinese-Americans, Jews, and Chicanos. NOTE: This course can be used to satisfy the university Core Studies in Race (RS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO, RS
Repeatability: This course may not be repeated for additional credits.

HIST 1904. Honors War and Society. 3 Credit Hours.
This course explores history through the prism of wars, their origins and consequences—with a focus on social, economic, technological, and cultural changes and their correlations with the nature of warfare. Various incarnations of the course examine virtually all regions of the globe, over time periods ranging from the prehistoric to the contemporary. NOTE: This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.

HIST 1905. Honors Gender and History. 3 Credit Hours.
This course will introduce you to the history of feminine and masculine roles from a comparative international perspective. It will cover basic facts, concepts, and themes relating to six topics: The state, the sacred, work, the family, the body, and modern social movements (feminism, women's suffrage, pacifism, and socialism), using as case studies Ancient Greece, Medieval Europe, West Africa, Modern Europe, and the United States. NOTE: This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO, IS
Repeatability: This course may not be repeated for additional credits.

HIST 1908. Honors Gender and History. 3 Credit Hours.
Arranged each semester, please consult with the instructor. See the history department web site (www.temple.edu/history) for the specific topics offered each semester.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.
HIST 1997. Honors World History Ancient. 3 Credit Hours.
Honors version of History 1701 (C061). History 1997 is a writing-intensive course. NOTE: This course can be used to satisfy a university Core International Studies (IS) and Writing Intensive (WI) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. In addition to meeting the university Core International Studies requirement, this course meets the Non-Western/Third World IS requirement for Communication Sciences majors. Please note the recent update to the Core IS requirement at www.temple.edu/vpus/resources/coreupdates.htm#coreisupdate.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO, IS
Repeatability: This course may not be repeated for additional credits.

HIST 2103. African American History to 1865. 3 Credit Hours.
This course will examine the activities of African Americans in America from slavery to 1865. Among the topics to be studied are: Slavery, The American Revolution, and the Civil War. In addition, much attention will be devoted toward emphasizing the multi-dimensional aspect of the African American Community, and the crucial role which African American women have played in America will be stressed. The course will focus on themes and questions which are essential to an understanding of the past and to an understanding of the present struggles for full citizenship on the part of African Americans. NOTE: This course can be used to satisfy the university Core Studies in Race (RS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: RS
Repeatability: This course may not be repeated for additional credits.

HIST 2104. African American History 1865-Present. 3 Credit Hours.
This course will examine the activities of African Americans in America from Reconstruction to the present. Among the topics to be studied are: Reconstruction, the evolution of African American leadership, the Harlem Renaissance, the Civil Rights Movement, and Black Power. In addition, much attention will be devoted toward emphasizing the multi-dimensional aspect of the African American Community, and the crucial role that African American women have played in America will also be stressed. The course will focus on themes and questions, which are essential to an understanding of the past and to an understanding of the present struggles for full citizenship on the part of African Americans. This course meets the university Studies in Race requirement. NOTE: This course can be used to satisfy the university Core Studies in Race (RS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: RS
Repeatability: This course may not be repeated for additional credits.

HIST 2105. Race and the U.S. Constitution. 3 Credit Hours.
The central focus of the course is how the issue of race has shaped the history of the United States Constitution and how constitutional law contributed to the history of ideas about race in the United States. We study the origins of the law of race and slavery in the pre-revolutionary period and end with understanding the origins of affirmative action in the post-World War II period. Students will read various books about U.S. Constitutional history in order to understand various interpretations of historical events and ideas about race. Students will also read original court cases about racial minorities in order to develop an understanding of original historical texts. Many of the skills emphasized in the class prepare students for law school, public service, and analyzing the historical roots of contemporary issues. Class discussion about constitutional issues is designed to give students confidence and precision in public speaking. Students will also write book reviews in order to develop an understanding of how historians collect evidence in order to construct historical interpretations and to develop their own interpretations of historical events and their personal writing skills. NOTE: This course can be used to satisfy the university Core Studies in Race (RS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: RS
Repeatability: This course may not be repeated for additional credits.

HIST 2107. Asian American History. 3 Credit Hours.
An introductory survey of the historical experiences of Chinese, Japanese, Filipino, Korean, South, and Southeast Asian immigrants in the United States. Considers economic, social, political, and cultural trends, beginning with the arrival of the Chinese in the 1830s and ending with issues facing Asian-Americans today. Includes the development and significance of Asian-American communities and culture as well as approaches to the study of Asian-Americans in racial hierarchies. The aims of the course are to analyze commonalities and differences in the historical and contemporary experiences of Asian ethnic groups and to explore perspectives on the position of Asians in U.S. society - assimilation, model minority, institutional racism, and internal colonialism. Instructional methods include lectures and audio-visual materials, but they also emphasize active student participation in learning through discussion, oral reports, and written assignments. NOTE: This course can be used to satisfy the university Core Studies in Race (RS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: RS
Repeatability: This course may not be repeated for additional credits.
HIST 2108. Growing Up in America. 3 Credit Hours.
This course will examine the changing perception and experience of growing up in the United States from colonial times to the present. It will argue that childhood and adolescence are social constructions that change over time. The course will explore the emergence of childhood and adolescence as distinct stages in the life cycle, the evolving role of the family in the process of growing up, and the increasing importance of social institutions other than the family in the lives of the young. Particular attention will be paid to the difference between growing up rich or poor, black or white, male or female, and rural or urban. Finally, it will consider the reciprocal relationship between popular culture and the lives of young Americans.
Repeatability: This course may not be repeated for additional credits.

HIST 2109. Sexuality and Gender in American History. 3 Credit Hours.
How do sexuality and gender shape the way a society views the behavior of men and women? How do they create images and stereotypes of ideal or "typical" female and male behavior? And how do the ways in which people actually act compare to the society's conventional ideas about how they ought to act? This course takes us from the beginning of the 19th century to the present, exploring the social, cultural, and political dimensions of the public and private roles of women and men in the United States. It examines changing cultural values and social norms of masculinity and femininity and considers the actual behavior of women and men in the family, at work and at play, in love, and in the life of the nation. It also probes the ways in which race, social class, and sexual orientation have affected the experience of gender.
Repeatability: This course may not be repeated for additional credits.

HIST 2111. Recent American History. 3 Credit Hours.
The purpose of this course is to describe the political, social, and economic changes that the United States has experienced in making the transition from the Cold War era to the post-Cold War (and post-industrial) society of the late 20th century. The subject matter should be of interest to students in Education, Journalism, Urban Studies, and Psychology, as well as History majors. The course covers the entire period since World War II, but there is more emphasis on social change since 1970. Topics covered include: the origins of the Cold War; anti-Communism in American society and politics; the Civil Rights movement; the Vietnam War and anti-war movement; conservative backlash; Nixon and Watergate; the rise of a post-industrial economy; post-industrial social trends (gender, race, and the new immigration); and the growing impact of media on society and politics.
Repeatability: This course may not be repeated for additional credits.

HIST 2207. Religion in the Modern United States. 3 Credit Hours.
A central aspect of a democratic society is the constitutional guarantee that all citizens possess freedom of speech, thought and conscience. Throughout American history individuals and groups of people, often times vociferously, marched to the beat of a different drummer, and raised their voices in strident protest. This course focuses on the story and development of dissent in America. How has dissent shaped American society? Why is it that some people never buy into the American Dream? How has dissent molded groups of people within American society and, indeed, even transformed individuals? This course will look at such historical figures as Anne Hutchinson, Roger Williams, Mary Dyer, Henry David Thoreau, David Walker, Susan B. Anthony, Randolph Bourne, Martin Luther King, Malcolm X, Allen Ginsberg, Abbie Hoffman, Timothy Leary, George Lincoln Rockwell, Timothy McVeigh, Ani DiFranco, Cindy Sheehan and others who have dissented from mainstream America.
Repeatability: This course may not be repeated for additional credits.

HIST 2208. History of the American Economy and American Business. 3 Credit Hours.
This course is intended to provide the student with a history of the development of the American economy with an emphasis on the part which business played in its development. Topics covered include the agricultural economy; the rise of manufacturing; the development of the corporation, the stock exchanges, finance capitalism, and the rise of banking; 19th century business cycles; the expansion of the American corporation in the years between the Civil War and the Great Depression; the overseas expansion of business and the development worker's capitalism in the 1920s; the changes produced by the Great Depression and the Second World War; and the rise of the modern economy with its trans-national connections, the movement towards deregulation, and the move from manufacturing to a service economy. Students will be introduced to a number of skills aimed at making them better able to understand the current American economy, to the use of historical data as a means of judging current trends in finance and business, and to some of the major web sites and journal literature on the subject. They will make written and oral presentations in which they defend their ideas, take a mid-term and a final exam, both of which will require students to answer essay questions, and write a short paper (10-15 pages) on a historical topic dealing with business or economic issues.
Repeatability: This course may not be repeated for additional credits.

HIST 2214. History of the National Park Service. 3 Credit Hours.
This course will examine ideas that have shaped the National Park Service and its mission. It will introduce students to key events and figures responsible for creating the National Park Service that played critical roles in its development. Particular focus will be placed on significant legislation bearing on the agency's function, turning points in its institutional evolution, genesis of bureaucratic hierarchies and process, origins and evolution of its interpretive strategies and the relationship over time between the agency and broad currents in American history. Note: For history majors, this course is in the American history category.
Repeatability: This course may not be repeated for additional credits.
HIST 2216. U.S. Civil War. 3 Credit Hours.
This course will present a detailed survey of the causes, conduct, and immediate consequences of the American Civil War, the bloodiest conflict in United States history. Special emphasis will be placed on the sectional, racial, political, and economic differences that culminated in the dissolution of the Union, the formation of the Confederate nation, strategy and tactics, the personalities of major Union and Confederate commanders and statesmen, the role of Abraham Lincoln in preserving the Union, and the federal government's conflicting and ultimately unsuccessful efforts to reconstruct Southern politics and society.
Repeatability: This course may not be repeated for additional credits.

HIST 2217. Vietnam War. 3 Credit Hours.
The Vietnam War is a microcosm of the forces that have shaped the 20th century world: colonialism, imperialism, nationalism, revolution, modernization, nation building, Third World development, capitalism, communism, the cold war, and more. It was a defining moment for both Americans and Vietnamese, although the peoples of neither nation can agree on what precisely it defined. For the United States, the loss of the war produced a crisis of national identity. For Vietnam, the victory meant the culmination of thirty years of revolutionary struggle. To the present day both suffer from the failure to resolve problems inherent in these outcomes. This course is designed to emphasize the war as a problem for both Americans and Vietnamese. The question will be why almost complete strangers prior to World War II became such bitter enemies so soon thereafter, and as a consequence engaged in mortal combat for more than a decade. The strategy will be to explore the social, political, economic, military, and diplomatic dimensions and ramifications from the perspective of each.
Repeatability: This course may not be repeated for additional credits.

HIST 2219. Cold War Culture in America. 3 Credit Hours.
In the years following World War II, the United States held a position of unprecedented global power. Yet many Americans experienced a sense of insecurity about the world as never before. Anxieties about communism at home and abroad as well as the constant fear of a nuclear Armageddon shaped American daily life in the early postwar period. This seminar traces the correlation between America's foreign relations and its culture and society between 1945 and 1960. Participants will discuss the influence of the atomic bomb on American culture, the emergence of the national security state, the effect of anticomunism on individual liberties at home as well as containment policies abroad, cold war gender relations, and the international dimensions of the civil rights movement.
Repeatability: This course may not be repeated for additional credits.

HIST 2280. Topics in American History. 3 Credit Hours.
Arranged each semester, please consult with the instructor. See the history department web site (www.temple.edu/history) for the specific topics offered each semester.
Repeatability: This course may be repeated for additional credit.

HIST 2301. Pre-Modern Europe. 3 Credit Hours.
The evolution of Europe from Roman times until 1750. The different cultures that went to make up Europe-Roman, Christian, “Barbarian,” Muslim; formation of proto-states; technological and economic change; contact with non-Europeans; social and cultural movements over the medieval and early modern periods. Europe before the modern era was not a static, fossilized culture but rather a dynamic one marked by important discontinuities as well as continuities.
Repeatability: This course may not be repeated for additional credits.

HIST 2303. History of Central Europe, 1618-1871. 3 Credit Hours.
This course will examine the political, social, and cultural history of Central Europe from the Thirty Years War until the unification of Germany in 1871. Although Central European history is dominated by German history, this course will cover Central Europe broadly defined. In addition to German and Habsburg history, we will be looking at the important historical changes taking place in Poland, Hungary, and the other non-German regions of the Habsburg lands. In the course of the term we will concentrate on a number of overarching questions: the structure and political traditions of the early modern state (absolutism, rise of bureaucracies and modern state structures, development of political parties); the questions of backwardness, modernization, and relative economic and social development; the rise of nationalism and the emergence of unification politics; and the broad implications of profound changes in the way people in Central Europe thought about and lived their lives.
Repeatability: This course may not be repeated for additional credits.

HIST 2304. 20th Century Europe: A Continent in Crisis. 3 Credit Hours.
This course explores Europe's tumultuous history during the past century. Over the course of the semester, we will study important moments, stories, groups and individuals from this period, and try to understand why Europeans fought two devastating wars within thirty years, wars that reshaped modern world history. We will explore Europe’s gradual recovery from war and the paths it has taken toward unification and democratization. We will pay significant attention to the histories of Germany, France, and the United Kingdom and some attention to Eastern Europe and Russia/the Soviet Union. We will also look at Europe's global role, especially its imperial and colonial legacies, as well as the construction of the European Union.
Repeatability: This course may not be repeated for additional credits.

HIST 2306. Rise of the European Dictators. 3 Credit Hours.
The rise to power of Hitler, Stalin, and Mussolini was conditioned by a prolonged crisis in Europe that began with the First World War and passed through economic depression, cultural upheaval, and the collapse of liberal democracy. This course examines this era of crisis (1918-1945) and explores the ways that these dictators harnessed Europe's troubles to create powerful mass movements. It examines their use of propaganda, nationalism, racism, and ideology. It also looks at the response of democratic nations to the challenges of Fascism, Nazism, and Communism. The course follows these dictators through to the catastrophe of World War II.
Repeatability: This course may not be repeated for additional credits.
HIST 2307. Europe Divided and United, 1939-1995. 3 Credit Hours.
The creation of today's united, democratic and peaceful Europe has not been easy. It was achieved only after a half century of war, division, and ideological conflict. This course will treat the impact of the Second World War on Europe and its peoples, and then chart the division and occupation of the continent during the cold war. The course covers the major social, political, and economic trends in Europe since 1945, including the rise of the European Union, and shows how, in 1989, the continent was able to shake off the cold war and bring about peaceful revolution. The course also provides a survey of the major issues facing contemporary Europe, such as unemployment, racism, immigration, and the debate over Europe's role in world affairs.
Repeatability: This course may not be repeated for additional credits.

HIST 2317. Central Europe Through Wars and Revolution, 1848-1989. 3 Credit Hours.
This course introduces students to new narratives of European nationalism and identity. The traditional courses on European history have relied on an understanding of European politics that divides the continent between east and west, and relies on Great Power perspectives. Using the concept of Central Europe, and the ways that it has been interpreted, this course encourages students to restore Central and Eastern Europe to the broader histories of the continent. Narratives of Eastern European peoples, Germans, Slavs, Hungarians, and others, were defined by the struggle between forces of nationalism and geopolitical realities, conflicting desires of sovereignty and security, freedom and social justice. This region, now part of the European Union, is rich in history and culture, as well as cultural and religious diversity. This course will highlight how East Europeans went from objects of high politics to subjects of European and world history.
Repeatability: This course may not be repeated for additional credits.

HIST 2400. Special Topics. 4 Credit Hours.
Arranged each semester, please consult with the instructor. See the history department web site (www.temple.edu/history) for the specific topics offered each semester.
Repeatability: This course may be repeated for additional credit.

HIST 2411. Film in European History. 3 Credit Hours.
The renowned film historian Anton Kaes once wrote: "Historical films interpret national history for the broad public and thus produce, organize, and, to a large degree, homogenize public memory. Surpassing schools and universities, film, and television have become the most effective (and paradoxically least acknowledged) institutional vehicles for shaping historical consciousness." This course seeks to right that imbalance by acknowledging and studying the way that films (and other visual media) teach us about history. Using prominent American and European films (primarily), students will learn to critically analyze visual media, examining them for content, bias, and interpretation. The course will cover key episodes in modern European history and will provide historical background/context for the period necessary to evaluate and study films as historical documents.
Repeatability: This course may not be repeated for additional credits.

HIST 2415. Russian History in Literature and Film. 3 Credit Hours.
Students will read and study a short history of Russia and then read literary works and watch films depicting various periods, topics, events, figures, and issues in Russian history.
Repeatability: This course may not be repeated for additional credits.

HIST 2480. Topics in European History. 3 Credit Hours.
Arranged each semester, please consult with the instructor. See the history department web site (www.temple.edu/history) for the specific topics offered each semester.
Repeatability: This course may be repeated for additional credit.

HIST 2501. Introduction to East Asia: China. 3 Credit Hours.
Overview from ancient times to the present. Designed to provide students with a basic understanding of major themes and broad processes of social change in Chinese history. Emphasizes those aspects of continuity and change that are particularly relevant to contemporary China. Topics include: state formation; the development of characteristic institutions, thought, and cultural practices; long term trends in social dynamics and the economy; imperialism and semi colonialism; revolutionary transformation in the early 20th century; the Maoist road to socialism after 1949; and the post-socialist trajectory of the past two decades and its critique. Course materials include films, primary documents, and literature.
Repeatability: This course may not be repeated for additional credits.

HIST 2502. Introduction to East Asia: Japan. 3 Credit Hours.
A survey of Japanese history from early times to the 20th century. Major themes include religious, political, and social change. Major topics are: early state and religion; classical government, culture and society; emergence of the warrior class in medieval Japan; and the modern transformation into an urban, industrial empire. Course emphasizes broad historical themes of continuity and change and analysis of short primary documents in translation. Generally offered in alternate spring semesters.
Repeatability: This course may not be repeated for additional credits.

HIST 2503. Introduction to Southeast Asia: Insular. 3 Credit Hours.
This course covers the histories of the Philippines, Indonesia, Malaysia, and Singapore from the 16th century until modern times. It will introduce students to the island worlds of Southeast Asia, its peoples, their histories, societies, and economies. To familiarize students with non-Western worlds, lectures will be illustrated with videotapes, slides, and transparencies. Excerpts of articles and indigenous documents will also be used for discussion. Course work will include readings, discussions, examinations, and book reviews.
Repeatability: This course may not be repeated for additional credits.
HIST 2504. Introduction to Southeast Asia: Mainland. 3 Credit Hours.
This course covers the histories of Burma, Thailand, Laos, Cambodia, and Vietnam, from the 16th century until modern times. It is a course designed to introduce students to the analysis of such forces as religion, statecraft, ideology, and trade, and the manner in which they have shaped the mainland countries of Southeast Asia. Mainland Southeast Asia’s role in world politics and economy will also be analyzed. Reference will be made to contemporary events taking place in the region, and students will be encouraged to follow these developments through the media and integrate their knowledge in class discussions.
Repeatability: This course may not be repeated for additional credits.

HIST 2511. Introduction to African History. 3 Credit Hours.
This course is an introduction to the study of African history. History is the record of human activities transmitted to posterity either in written or oral form. Africa has the longest record of human habitation, making African history the oldest in the family of human history. Given the immense complexity and richness of African history, we could only scan through the major themes of African history by studying the intertwining of African culture with African history proper. There are six books assigned for this course. They cover interdisciplinary issues pertaining to cultural studies, anthropological explorations, gender relations, and historical studies proper.
Repeatability: This course may not be repeated for additional credits.

HIST 2512. Mexican Migration to the United States. 3 Credit Hours.
Illegal immigration remains a volatile and divisive question for the United States. Most discussions in the political system and in the mass media ignore the extensive history of Mexican migration to the United States. We will examine the pervasive influence of that history upon the present as well as the tight connections that exist between Mexican labor migration and phenomena that most US citizens prize--the spread of American culture and influence abroad, international political stability, reliable domestic economic growth, and the availability of inexpensive goods and services. Instruction takes place through discussion, lecture, film, and computer projection. Readings include both primary documents stemming from historical events themselves as well as secondary academic studies.
Repeatability: This course may not be repeated for additional credits.

HIST 2513. Cold War Africa. 3 Credit Hours.
This course explores African societies and politics during the Cold War. We pay close attention to the ways in which the politics of the Cold War were played out through proxy wars, interventionist policies, and the exploitation of natural resources in newly independent and emergent African nations. At the same time, we examine the ways in which African leaders and nations used the Cold War to define their own post-colonial experiences and identities. In addition, we investigate the significance of African nationalism and independence for redefining race and race relations in South Africa and the United States. Although we use examples from throughout the continent to explore issues of nationalism, sovereignty, race, socialism, and development within the Cold War context, we pay particular attention to Guinea-Bissau, Angola, Congo, South Africa, Ghana, and Ethiopia. Note: For history majors, this course is in the "Global/Comparative" category.
Repeatability: This course may not be repeated for additional credits.

HIST 2514. Introduction to Latin America. 3 Credit Hours.
An overview of Latin American history from pre-Hispanic civilizations through the Spanish and Portuguese colonial periods and nationhood to the present. Organized both chronologically and thematically, the course probes such issues as the rise and fall of political systems; matters of race, gender, and class; the economic conditions of work and survival; and patterns of social and cultural change. Methods of instruction include paperback readings, the Internet, and video clips.
Repeatability: This course may not be repeated for additional credits.

HIST 2515. Civilization and Modernity in the Caribbean. 3 Credit Hours.
This course surveys post-Emanicipation Caribbean history, regarding it as a complex process dominated by notions of "civilizing" and "modernizing." We will address the significance of both terms, exploring what they have meant for the diverse peoples inhabiting the region. What did civilizing mean for the labor practices and religious expressions of free blacks and indentured Indians in the late 19th century? What did modernizing mean for concepts of peoplehood, cultural production and representation in the 20th century? Who have been the primary agents of "civility" and "modernity"? And how have others responded to - resisted, embraced, negotiated - their efforts and ambitions? In answering these questions, we will turn to a range of disciplines including history, anthropology, literature and political science.
Repeatability: This course may not be repeated for additional credits.

HIST 2516. Modern Islamic History. 3 Credit Hours.
This course studies Sunni Islam in terms of its modernist tendencies and its more traditional ones, comparing it to other major trends in the religion, Shi'ism and Sufism. Some emphasis is placed on Egyptian cultural history. The course encourages analytic skills through class participation and written work.
Repeatability: This course may not be repeated for additional credits.

HIST 2518. The Ancient Near East. 3 Credit Hours.
A survey of ancient Mesopotamian culture starting with the end of the neolithic period and covering Sumerian, Akkadian, Babylonian, Assyrian, Neo-Babylonian and Persian civilizations. Students will be introduced to the literature and the archaeology of these cultures and their influence on the Bible and later civilizations.
Repeatability: This course may not be repeated for additional credits.
HIST 2519. Pre-Colonial Africa. 3 Credit Hours.
This course examines the events and processes that shaped African history prior to European colonial rule. Specifically, we explore the changing nature of African cultures; Islam as a political force; the relationship between Christianity, culture, and politics; slavery and the slave trades; and migration and the transformation of the African cultural landscape. Our goal is to understand the forces that shaped African material and political culture prior to European political domination and the relationship between African societies and the wider world to 1900. Note: For history majors, this course is in the “Global/Comparative” category.
Repeatability: This course may not be repeated for additional credits.

HIST 2611. Third World Issues through Film. 3 Credit Hours.
Films bring alive the texture of society and the context of ideas, events, lives, and conflicts in a way that standard textbooks and readings cannot. This survey course introduces repeating, powerful, and important themes in modern history through the study of issues raised in Asian, African, and Latin American cinema. Unit I presents issues of Colonialism, Nationalism, and Independence Movements. Unit II, Post-Colonial Themes, includes nation building, neocolonialism, and responses to neocolonialism as well as issues of cultural reconstruction, political leadership, class, gender, race, and ethnicity in post-independence eras. Written texts complement the films; class discussion and assignments focus on analysis of the characters, events, institutions, and ideas represented in the films and readings.
Repeatability: This course may not be repeated for additional credits.

HIST 2670. Topics in African History. 3 Credit Hours.
Arranged each semester, please consult with the instructor. See the history department web site (www.temple.edu/history) for the specific topics offered each semester.
Repeatability: This course may be repeated for additional credit.

HIST 2680. Topics in Asian History. 3 Credit Hours.
Arranged each semester, please consult with the instructor. See the history department web site (www.temple.edu/history) for the specific topics offered each semester.
Repeatability: This course may be repeated for additional credit.

HIST 2702. Imperialism, Race, and Empire. 3 Credit Hours.
This course introduces key themes and issues central to an understanding of race in modern history. Examining the intersection of race and imperialism(empire over the last two centuries, it places special importance on: how ideas about race were profoundly affected by the colonial encounter; how rationalizations for imperialism have often depended on race; and the resistance of subordinated people to racialist discourses and forms of rule. NOTE: This course can be used to satisfy the university Core Studies in Race (RS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: RS
Repeatability: This course may not be repeated for additional credits.

HIST 2703. African Diaspora. 3 Credit Hours.
This course deals with the history of the African Diaspora in the Americas for the last five hundred years. How this African presence impacted upon the social, economic, cultural, religious, and demographic set-up of the Americas will be addressed. Themes like pan-African nationalism and racial discourse will also be discussed. NOTE: This course can be used to satisfy the university Core Studies in Race (RS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: RS
Repeatability: This course may not be repeated for additional credits.

HIST 2705. Anti-Semitism/Holocaust/Racism. 3 Credit Hours.
This course examines the history of antisemitism with a focus on the Holocaust and racism. It investigates the development and implementation of racial antisemitism in Germany and compares Nazi antisemitism with other forms of racism and antisemitism in Europe and America. The course also explores the social construction of race, the connection between antisemitism and anti-Zionism, the growth of neo-Nazism, the complex relationship between American Jews and African Americans, and racism in the world today. NOTE: This course can be used to satisfy the university Core Studies in Race (RS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: RS
Repeatability: This course may not be repeated for additional credits.

HIST 2706. Jewish Diaspora. 3 Credit Hours.
Jewish history from the destruction of the Second Jewish Commonwealth to the creation of the State of Israel. Focus on minority status, migration, persecution, economic adaptation, gender roles in different environments, acculturation and identity. Will include the medieval Jewish experience under both Christian and Islamic rule; the development of Jewish communities in Eastern Europe, Western Europe, and the United States; the changing role of Jewish women; the rise of Zionism; and the Holocaust.
Repeatability: This course may not be repeated for additional credits.
HIST 2803. Soldiers, Wars, and Societies: The British Army. 3 Credit Hours.
This course will trace the history of the British Royal Army from its founding in 1660-61 to the present. Emphasis will be placed on organization, recruitment, wars, battles, campaigns, prominent commanders, and how changes in the British Army mirrored changes in British society. Other important themes will be the army's role in conquering and defending the British Empire and major developments in British military policy and strategy. 
Repeatability: This course may not be repeated for additional credits.

HIST 2804. Peace, Conflict, and Social Change. 3 Credit Hours.
This course addresses the question of conflict/violence in terms of local, domestic, national, and international issues. Course material will consider conflict/violence using the following subtopics: weapons proliferation and peacekeeping; racism, the global economy; women, children, and the family; conflict and cooperation over the environment. Guest lecturers will offer their expertise on particular case studies related to the topic. In the final weeks of the semester, students will be asked to submit a paper and give presentations that address conflict and options for conflict resolution using selected case studies from one of the above topics. 
Repeatability: This course may not be repeated for additional credits.

HIST 2805. Nationalism and Revolution. 3 Credit Hours.
Beginning with the establishment of civil and political rights during the French Revolution, the course will address the relationship of the individual to the nation-state in Western Europe from the French Revolution to World War I. The course will include problematical issues that emerged during this period such as: the Napoleonic wars and the emergence of the modern nation-state; the development of the industrial revolution and its socio-economic impact on members of the working and middle classes; the consolidation of the nation-state and its impact on personal and political freedom. But in addition to considering the expansion of liberal political developments in the West, the course will consider the effects of imperialism on Asian and African countries during the final decades of the century. The final unit will consider how nationalism and imperialism contributed to the outbreak of the First World War and to the breakdown of old political states and traditional values in the Western societies. 
Repeatability: This course may not be repeated for additional credits.

HIST 2806. Colonial North Africa in European History. 3 Credit Hours.
The Mediterranean has always been a crossroads between peoples and religions, traversed by commodities, ideas, and conquerors, and it remains so today. Yet at the beginning of the 19th century, Europeans increasingly described North Africa - and its people - as starkly foreign, wholly 'other'. This course will examine European and North African interactions over the period of 1798 to the present, with a particular focus on European invasions and colonizations - including Napoleon in Egypt, Lyautey in Morocco, and Musсолini in Libya. How did Europeans shape North African history and how did colonizing North Africa form modern European institutions and ideas? The class will examine these questions by focusing on both sides of the Mediterranean 'divide', including recent debates in Europe on North African immigrants, political invocations of Islam, and Islamophobia. 
Repeatability: This course may not be repeated for additional credits.

HIST 2811. World War I. 3 Credit Hours.
The First World War (1914-1918) did more to shape the history of the 20th century than any other military conflict. It led to the destruction of empires, the outbreak of revolutions, and gave rise to Communism, Fascism and Nazism. The war catapulted the United States into a position of global dominance that it still maintains today. The war also transformed modern arts and culture. This course surveys not just the military history of the conflict, but its political, social, and cultural impact on Europe, the Middle East, the United States, Africa, and Asia. Extensive use is made in this course of primary sources, including soldiers' diaries, memoirs, poetry, novels, propaganda, and photographs. Research projects will draw upon extensive online collections. 
Repeatability: This course may not be repeated for additional credits.

HIST 2812. World War II. 3 Credit Hours.
This course offers a survey of World War II, the largest and most destructive armed conflict in human history, with coverage of its causes and consequences. It utilizes the prism of grand strategy to analyze national policy and military strategy. In addition to detailed descriptions of major military operations, the course will assess the impact that Adolph Hitler, Benito Mussolini, Winston S. Churchill, Joseph Stalin, and Franklin D. Roosevelt had on the war. While this course emphasizes military events and wartime diplomacy, some attention will be paid to the internal politics of the major belligerents and economic factors. There are no prerequisites for this course. 
Repeatability: This course may not be repeated for additional credits.

HIST 2815. Love, Marriage, and Family. 3 Credit Hours.
It is easy to assume that love, marriage, and family go together; but this has not always been the case. These concepts have a history. This course is a comparative examination of love, marriage, and family and the related themes of gender and sexuality in different historical periods and geographical areas. It includes ancient, medieval, and modern texts and materials and covers both western (European and American) and non-western (Asia, Africa, and perhaps Middle Eastern and Latin American) case studies. NOTE: Each instructor may place a different emphasis among those topics and regions. 
Repeatability: This course may not be repeated for additional credits.

HIST 2816. Gender, Class, Nation. 3 Credit Hours.
An exploration of social and economic roles of women and men in modern Europe. Comparison of the impact of gender, class, and nationality on middle-class, working-class and peasant women and men in England, France, Germany, Italy, and Russia. The effects of industrialization, nationalism, war, fascism, communism, and the welfare state on women's and men's lives. The evolution of the role of girls and women in the family and the changing status of single and married women in the home and the workplace. 
Repeatability: This course may not be repeated for additional credits.
HIST 2817. Gender, War, and Society. 3 Credit Hours.
In wartime, the traditional organization of society is often radically altered to meet the pragmatic and ideological needs of triumphing in the ongoing conflict. Ideas about gender - i.e., how masculinity and femininity are defined - are frequently subject to radical revision in the context of a society at war. This course examines the European and, to a lesser extent, the American experiences of war during the two World Wars and the intervening 20 year period, to understand how war and ideas of gender are related. Using both primary and secondary source materials, as well as films about World Wars I and II, the course looks at the experiences of men and women on the front lines and on the home front, those who participated in the wars and those who resisted them, those who benefited from war and those who were its victims. The course examines not only how wartime experiences construct and revise ideas about gender, but also how the rhetoric of gender is often used to further wartime aims.
Repeatability: This course may not be repeated for additional credits.

HIST 2818. American Icons. 3 Credit Hours.
The Statue of Liberty. Lincoln. Barbie. Route 66. Disneyland. Elvis. Ali. These are all American Icons. This course will explore iconic images of America as a way to understand the central myths, promises, and ideas behind the nation – ideas about freedom, individuality, democracy, mobility, second chances, masculinity and femininity, race and class. Each unit will focus on an individual icon, its origins, what it represented, and how this representation has changed over time and place. The course will invite a critical analysis of these icons and their economic and cultural impact in a global context.
Repeatability: This course may not be repeated for additional credits.

HIST 2819. Global Connections. 3 Credit Hours.
This course introduces students to major themes in global history over the past two centuries. It will chart the trajectory of transnational human relations from the overlapping cosmopolitan webs of the early nineteenth century to the global webs of the early twenty-first century. The course will place equal weight on economic, political, and cultural transformations. Students will explore the economic, political, social, and cultural changes that attended the growth and increasing integration of these webs. They will study the constant tension between conflict and cooperation that simultaneously brought them closer together and pulled them farther apart. The course will help students understand the origins of the current world system by exploring global transformations since the American and French revolutions. Themes include the rise of nationalism; the revolutions of 1848; American expansion; industrialization; the opening of Japan; colonialism; imperialism; world migrations; the decline of the British and the rise of the American empire in the first half of the 20th century; the two World Wars; the cold war; decolonization movements in the 1950s; cultural and economic globalization; and the transportation and communication revolutions of the last third of the 20th century.
Repeatability: This course may not be repeated for additional credits.

HIST 2870. Topics in Women's History. 3 Credit Hours.
Arranged each semester, please consult with the instructor. See the history department web site (www.temple.edu/history) for the specific topics offered each semester.
Repeatability: This course may be repeated for additional credit.

HIST 2882. Independent Study. 1 to 3 Credit Hour.
Arranged each semester, please consult with the instructor.
Repeatability: This course may be repeated for additional credit.

HIST 2900. Honors Special Topics I. 3 Credit Hours.
Arranged each semester, please consult with the instructor. See the history department web site (www.temple.edu/history) for the specific topics offered each semester.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.

HIST 2910. Honors Special Topics II. 3 Credit Hours.
Arranged each semester, please consult with the instructor. See the history department web site (www.temple.edu/history) for the specific topics offered each semester.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.

HIST 2815. Honors Russian History in Literature and Film. 3 Credit Hours.
In this honors course, students read and study a short history of Russia and then read literary works and watch films depicting various periods, topics, events, figures, and issues in Russian history. Students in the course develop an understanding of the depiction of history in literature and film as contingent on the ideological perspective of the storyteller; students also learn to identify ideological perspective through attention to symbol, metaphor, and theme in both literature and film and, in addition, in film, through attention to lighting, sound and other filmic devices.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.
HIST 2918. Honors American Icons. 3 Credit Hours.
The Statue of Liberty. Lincoln. Barbie. Route 66. Disneyland. Elvis. Ali. These are all American Icons. This course will explore iconic images of America as a way to understand the central myths, promises, and ideas behind the nation – ideas about freedom, individuality, democracy, mobility, second chances, masculinity and femininity, race and class. Each unit will focus on an individual icon, its origins, what it represented, and how this representation has changed over time and place. The course will invite a critical analysis of these icons and their economic and cultural impact in a global context.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.

HIST 2920. Honors Special Topics. 3 Credit Hours.
Arranged each semester, please consult with the instructor. See the history department web site (www.temple.edu/history) for the specific topics offered each semester.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.

HIST 2930. Honors Special Topics. 3 Credit Hours.
Arranged each semester, please consult with the instructor. See the history department web site (www.temple.edu/history) for the specific topics offered each semester.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.

HIST 2940. Honors Special Topics. 3 Credit Hours.
Arranged each semester, please consult with the instructor. See the history department web site (www.temple.edu/history) for the specific topics offered each semester.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.

HIST 2970. Honors Topics in Latin American History. 3 Credit Hours.
This is an upper division honors course. It focuses on a special topic that changes each term. For more information, please see the history department web site at www.temple.edu/history.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.

HIST 3101. Colonial America. 3 Credit Hours.
Many important aspects of U.S. society developed significantly before the Revolution. The purpose of this course is to understand better how this society took shape in that formative early era. The first classes deal with some general issues that colonizers faced as they tried to form and develop settlements in North America, and the way the English entered into this process. Then characteristics of how three regions of the colonies evolved are examined: the South, New England, and the Middle Atlantic. The final few weeks of the course take up changes in political life, economics, and culture that all parts of the colonies experienced in the 1700s and which tended to bring them together towards becoming one new nation, though not a nation without differences and conflicts.

Repeatability: This course may not be repeated for additional credits.

HIST 3102. American Revolution and Republic, 1754-1789. 3 Credit Hours.
This course examines the transformations in politics, culture and society that we call the American Revolution. What was revolutionary and not revolutionary about the period? What did the Revolution mean to the people who lived through it, and how might the answer be different for different groups of people? What was the relationship between the famous, enduring ideals of the Revolution and the realities of life in late 18th century America? And what kind of republic came out of the process? We will also consider the revolution as, among other things, a crisis in the first British empire, the creation of independent states and a nation, a civil war, and a massive slave rebellion, the aftershocks of which reverberated in the 19th century.

Repeatability: This course may not be repeated for additional credits.

HIST 3103. The Early United States, 1787-1846. 3 Credit Hours.
This course covers the political, social, and cultural history of the U.S. from ratification of the Constitution to the beginnings of the crisis over expansion and slavery. It examines the democratization of politics and the problems of national independence; territorial expansion; economic change; the development of regional, class, religious, racial, ethnic and gendered subcultures; slavery and resistance to slavery; and the new political and reform movements that responded to the era's deep and lasting changes.

Repeatability: This course may not be repeated for additional credits.
HIST 3104. 19th Century America. 3 Credit Hours.
This is an advanced level history course aimed at giving history majors and students in other disciplines such as English and Political Science an understanding of the changes in American life during the 19th century. This is truly a “World We Have Lost,” a society dominated by agriculture, but becoming increasingly industrial and urbanized. But even though a visit to the world of 100 years ago is as foreign to contemporary students as the visit by the anthropologist to a non-western culture, the consequence for modern American life is immense. The topics discussed in this course are related to the changes in the United States that promoted its development as a multicultural democracy and an economic superpower.
Repeatability: This course may not be repeated for additional credits.

HIST 3105. 20th Century America. 3 Credit Hours.
This course analyzes American politics, society and culture in the 20th century. Among the topics to be analyzed are the changing role of the presidency from McKinley to Clinton, progressivism, World War I, the conflictive 1920s, the depression and the New Deal, World War II, affluence in the 1950s, the Cold War, anti-Communism, racism, the civil rights movement, the rebellious 1960s, the war in Vietnam, Nixon, the Great Society, the women's movement and gender issues, the conservative backlash, and the new diversity.
Repeatability: This course may be repeated for additional credit.

HIST 3107. American Cultural History. 3 Credit Hours.
This course will not attempt to cover all aspects of American cultural history in one semester. Instead, it will examine some important themes from the 19th and 20th centuries. It will use material drawn from elite and popular sources to explore the meaning of “culture” in a diverse, democratic society. It will ask when and why Americans began to think that there was such a thing as American culture. It will interrogate this culture for some basic elements, taking into account the role of such important features of American life as liberalism, pragmatism, patriotism, consumerism, and modernism as well as the impact of science, technology, the arts, and religion. It will distinguish between public culture, intended for the edification of all, and the private cultures of different subgroups.
Repeatability: This course may not be repeated for additional credits.

HIST 3108. Modern American Social History. 3 Credit Hours.
The purpose of this course is to provide an overview of the main elements of American social/economic development during the industrial period, approximately 1870-1945, with some attention to the transition to the post-industrial era after World War II. Topics covered include the growth of new industries and changing work conditions, urbanization, class divisions, immigration and black migration, the changing status of the family, and the impact of the Great Depression and the New Deal on American life. Both secondary and primary sources, including two important novels with social history themes, are used in the course, and students are required to write an essay (and give an in-class report) that analyzes a specific primary source dealing with one of the aspects of social history covered in the lectures and required readings. The take-home final exam essay also requires that students evaluate sources. Class participation in discussing the readings is also an important part of the course.
Repeatability: This course may not be repeated for additional credits.

HIST 3201. California Dreams, California Nightmares. 3 Credit Hours.
Over the century and a half since California was forcibly incorporated into the United States, it has exercised a powerful role upon the imagination and reality of every generation. California has been, at once, the golden gate of opportunity and the grapes of wrath of the downtrodden; social mobility and the policy of incarceration, the glamour of Hollywood and monotony of tract housing, the high-tech of Silicon Valley and the high-sweat of agricultural labor, the Eden of natural bounty and the ecological disaster of sprawl and smog. This course concentrates on the historical role that categories of race have played in defining by whose means, to whose benefit, and in whose image California’s wealth would be produced and consumed. As an intermediate-level history course, this course offers a mix of primary and secondary sources, emphasizes the interaction of multiple causal factors, and encourages students to interpret and to write analytical historical arguments. In addition to discussion, lecture, and common readings, methods of instruction in the course include use of a computer-assisted classroom to provide image and text projections, video clips, and internet linkages. NOTE: This course can be used to satisfy the university Core Studies in Race (RS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: RS
Repeatability: This course may not be repeated for additional credits.

HIST 3211. Development of the Modern American City. 3 Credit Hours.
The course examines the way that the American city has undergone two revolutionary changes in the 135 years since the Civil War. In the mid- to late 19th century the city went from a walking city to a streetcar city, altering the basic social and economic geography. Then in the 20th century American cities were transformed from streetcar cities to automobile cities, again revolutionizing the cities' basic geography. The two transformations were rooted in technological innovation in such areas as transportation, power, and building construction. But the changes also depended upon what American urban dwellers chose to make of the technologies. History, by examining the way that American cities have changed in the past, can illuminate what the American city has become and thus can provide insight into the factors that should be taken into account in influencing the future of cities.
Repeatability: This course may not be repeated for additional credits.

HIST 3214. North American Environmental History. 3 Credit Hours.
This course examines the interactions between human societies and the natural world in North America. That relationship is complex: the environment both reflects people's influences and affects human history. Through lectures, reading, and discussion, participants in this course will examine this reciprocal relationship. Issues to be discussed in the course include Native American management of the environment; the effects of the European ecological invasion; resource exploitation in the industrial era; the foundations of the preservationist and conservationist movements at the beginning of the 20th century; the evolution of 20th century environmentalism; and the historical context of current environmental problems.
Repeatability: This course may not be repeated for additional credits.
HIST 3215. Historical Roots of Urban Crime. 3 Credit Hours.
The course focuses on two aspects of the history of the underworld of American cities: The first aspect might be called the life within the underworld, or what it means to live the life of a criminal. The course examines how bookmakers or madams run their businesses, how pickpocket gangs pick pockets, how loan sharks collect their money, and what kind of culture and social life characterizes those who are part of the underworld life. The second aspect is the way that underworld activities both reflect and influence the wider society. The course, then, examines the interrelationships of crime, on the one hand, and ethnic groups, neighborhood structure, urban politics, criminal justice institutions, the rise of professional sports, the changing sexual mores of the society, and even such aspects as the changing role of the family and the impact of technology. Crime becomes a prism through which students will learn about the history of American urban society.
Repeatability: This course may not be repeated for additional credits.

HIST 3216. Media and American Culture, 1706-Present. 3 Credit Hours.
This course will explore the role of media in the development of American popular culture, with particular emphasis on the cultural transformations brought about by mass media after 1880. Historical analysis will demonstrate the profound shift in media roles within the past century; from media expressions of popular culture before 1889, to media as generators of popular culture after that point. A by-product of this analysis will be the formulation of a critical definition of mass media in terms of a specific relationship between the media and the audience.
Repeatability: This course may not be repeated for additional credits.

HIST 3217. African American Church and Black Liberation. 3 Credit Hours.
Race has been and is a central issue in America. Race has played a very important role in the lives of black people and in the history of African Americans. Historically the black church has been a central institution for addressing pressing societal issues that threaten the existence of black people. African Methodism, the first major black Christian organization came into existence as a liberation movement and a protest against racism and segregation in the Christian Church. Utilizing selected historic periods, i.e., ante-bellum, Civil War and Reconstruction, the 1920s and 1930s, and the 1960s, this course will explore the meaning of freedom and liberation as defined by the historic African American church and its leadership, and will examine the different ideologies and strategies employed by church leaders in addressing and resolving issues regarding the individual and collective freedom of black people. American and African American history will be used as the context, for examining issues, events, movements and personalities important to understanding the role and impact of the black church on the development of liberationist black thought and movements during different periods.
Repeatability: This course may not be repeated for additional credits.

HIST 3218. America's Rise to Globalism. 3 Credit Hours.
This course surveys the history of U.S. foreign relations from World War II to the present. It focuses on the ways that political, economic and cultural forces, both at home and abroad, helped shape America's relationship with the wider world. The course deals with issues such as the American response to the challenge of war; the impact of anti-Communism on American society and foreign policy; the role of economic interests in shaping U.S. foreign policy; and the creation of the national security state during the Cold War. This course shows the many ways that the United States has deployed its power during what is often called the American Century.
Repeatability: This course may not be repeated for additional credits.
HIST 3280. Topics in American History. 3 Credit Hours.
Arranged each semester, please consult with the instructor. See the history department web site (www.temple.edu/history) for the specific topics offered each semester.

Repeatability: This course may be repeated for additional credit.

HIST 3296. Intermediate Writing Seminar in American History. 3 Credit Hours.
Topics for this seminar will vary, and complete descriptions of current offerings can be found on the History Department web site (www.temple.edu/history). All seminars are writing-intensive; frequent writing assignments will help students develop or practice specific writing skills and the research skills that will be critical for success in the senior-level capstone seminar.

Course Attributes: WI
Repeatability: This course may be repeated for additional credit.

HIST 3311. Greek History. 3 Credit Hours.
The Greek History survey begins with the Bronze Age and ends shortly after the Peloponnesian Wars. Students will read a narrative history, a study of the art in historical context, and a selection of the ancient literary sources upon which our knowledge is based. Strong emphasis is placed on the archaeological material and how it is used to augment the literary sources. The philosophical and cultural achievements of ancient Greece will be put in historical context.

Repeatability: This course may not be repeated for additional credits.

HIST 3312. Roman History. 3 Credit Hours.
This survey of Roman History begins with the foundation of Rome in the 8th century B.C. and ends with the founding of the Christian capital of the Empire at Constantinople. Students will read a narrative history, a study of various aspects of Roman society and culture, and a selection of the ancient sources upon which our knowledge is based. Archaeological material will be used to augment the literary sources. The influence of Rome on later Western Civilization in government and law will be studied as well as its role in determining the foundation of Christianity.

Repeatability: This course may not be repeated for additional credits.

HIST 3315. Becoming England: Narrating the Medieval Nation. 3 Credit Hours.
How are nations invented and notions of national identity imagined? This course will explore the cultural, political and technological strategies whereby an identity called Englishness and a nation called England came to be forged on an island amidst a mosaic of ethnic communities speaking different languages and subject to waves of conquest. We will study how this notion of Englishness became a powerful force in attempts to colonize the British Isles (Ireland, Wales, Scotland) and beyond.

Repeatability: This course may not be repeated for additional credits.

HIST 3321. Irish History. 3 Credit Hours.
Irish and Irish American culture, society, religion, and problems associated with minority status and oppression. Special questions relating to the changing structure of family ties and women and related issues; Irish American consciousness as exemplified by support over the recent troubles in Northern Ireland. The recent and dramatic improvements in the standard of living in the Republic and the growing disparity amongst the urban Irish will serve to complete this study.

Repeatability: This course may not be repeated for additional credits.

HIST 3331. History of England. 3 Credit Hours.
How the kingdom of England was created and how its government evolved from a feudal monarchy to a constitutional democracy that has been a model for other countries, especially the United States. How England became the first industrial nation and how its society and culture responded to this change.

Repeatability: This course may not be repeated for additional credits.

HIST 3332. Historic Britain, 1688-1815. 3 Credit Hours.
This course examines British history from the “Glorious Revolution” of 1688 through the end of the Napoleonic Wars in 1815. Using a variety of primary and secondary sources, including novels, the course will examine the debates and arguments that contributed to the establishment of the modern industrialized nation-state in Britain. The course examines such important events as the industrial revolution and its implications for Britain and the world, the development of a constitutional parliamentary form of government which was important for the nascent United States, as well as for Britain, the development of mass politics and radical politics, and Britain’s involvement in European and world affairs.

Repeatability: This course may not be repeated for additional credits.

HIST 3333. Modern Britain: Empire, War, Rock and Roll. 3 Credit Hours.
This course examines the history of Britain from the end of the Napoleonic Wars in 1815 until the present. Using a variety of historical sources, including primary and secondary historical sources, as well as novels and journalistic reportage, the course looks at the critical questions that have faced Britain and have influenced world history over the course of the 19th and 20th centuries. Among the issues to be examined are the development of mass politics, and the inclusion of the working classes and women in the British polity, the development and Thatcherite decline of the welfare state, the construction and demise of the British Empire, Britain’s military and diplomatic roles in the two world wars, and position in the emerging European Union. The course examines these questions from a variety of different angles, including political, cultural, economic and social.

Repeatability: This course may not be repeated for additional credits.
HIST 3341. French Revolution and Napoleon. 3 Credit Hours.
This course will treat the history of the French Revolution from the mid 18th century through the Napoleonic era (1750-1821). Material in the course will address varied interpretations of the revolution from classical Marxist to more recent cultural, feminist, and post-modern perspectives on the subject. In addition to various texts on the revolution, the course also includes a detailed discussion of Napoleon Bonaparte's military and political career with due consideration given to the French empire and its impact on the subsequent political configuration of 19th century Europe.
Repeatability: This course may not be repeated for additional credits.

HIST 3342. Revolutionary Europe. 3 Credit Hours.
This course treats major social, political, and cultural revolutions that occurred in Europe during the modern period (1789-1989). By addressing specific revolutions, the class will attempt to discern some patterns in the causes and occurrence of revolutionary events. More precisely, the course will consider historical factors related to the outbreak of revolutions due to rural economics, industrial transformation, class conflict, commercial changes, and ideological influence prior to or during revolutionary periods. Specific topics include: the French Revolution; the Industrial Revolution and Revolutions of 1848; the French Commune; the Russian Revolution, and the social and cultural revolutions of the 30's.
Repeatability: This course may not be repeated for additional credits.

HIST 3343. Getting Crusaded: Making Europe/Making Orientalism. 3 Credit Hours.
Some historians contend that the history of medieval Crusading movements is an overdone cliche of 19th century European historiography; other historians argue that such movements were violently constitutive of the formation of Europe. We will explore these contrasting claims by focusing on the following questions: How can we talk critically about historiographical cliche? How did Christians come to fabricate an imaginary territorial space called the 'Holy Land' and then imagine that it required Christian military defense? How did medieval Christians paradoxically link the notion of a perpetual peace of God to perpetual holy war? How did the Pope in Rome become an imperial monarch capable of controlling holy wars? How did medieval Christians create an imaginary world of Saracens (their word for Muslims) to which they attached sexualized fantasies of pollution and aggression? How did Western Christendom come to bundle together Eastern Christians, Jews, heretics, and pagans with 'Saracens' as enemies of Christendom that must be destroyed?
Repeatability: This course may not be repeated for additional credits.

HIST 3344. Love, Money, War: Medieval Style. 3 Credit Hours.
Counting money, accounting for debt, managing the budget - could such simple everyday practices actually be forces for transformation that change the way we think about embodiment, space, time, love, violence, power? This course will explore the world of the English royal treasury in the 12th century. At that time royal accountants invented new financing techniques. We will explore these fiscal inventions and then trace their ripples throughout society from the ways English kings made love, waged war, legislated law, and exercised rights over bodies, especially the Jews residing in England at this time. We will study how technologies can work not only as tools, but also as weapons. Thus, the question of violence and technology is central to our study.
Repeatability: This course may not be repeated for additional credits.

HIST 3351. Rome and Italy: Renaissance to the Present. 3 Credit Hours.
A broad survey of Italian history from medieval to modern times. Although the unified Italian state is a modern creation little more than a century old, Italy gave birth to Europe's first urban civilization in its glorious renaissance cities. Italy finally achieved unity and played a major role in European affairs, which unfortunately included two world wars and the fascist dictatorship of Benito Mussolini. More than is the case with most countries Italian history is the history of its great cities like Rome, Florence, Venice, and Milan. We will focus on those centers, especially Rome, which is also the home of the Popes whose role in Italian and world history is immense, and Florence, the home of great artists and such great modern figures as Dante, Machiavelli, and Galileo.
Repeatability: This course may not be repeated for additional credits.

HIST 3352. Roman Archaeology. 3 Credit Hours.
In this course, students will discuss and examine the physical remains of Roman culture, and explore the ways these artifacts affect the study of history. After looking at the Greek and Etruscan contributions to Rome life and a brief look at the limited remains from Republican Rome, the material from the Roman Empire will be surveyed. Special attention will be paid to architecture, city planning and sculpture. Detailed examination of the ruins from the cities of Rome, Pompeii, Herculanem and Ostia will comprise the bulk of the course. Students will be expected to do some work at area museums.
Repeatability: This course may not be repeated for additional credits.

HIST 3361. Early Russian Empire, 1547-1905. 3 Credit Hours.
This course will examine many of the dramatic political and social events of the construction of Russian empire from the 16th century to the Revolt of 1905. Major attention will be paid to peasant issues, the role of the intelligentsia, and international competition.
Repeatability: This course may not be repeated for additional credits.

HIST 3362. Russia: Nationality and Empire. 3 Credit Hours.
This course examines factors and events that shaped Russia's history between 1700 and 1917. Special focus is on the role of "enlightened" autocracy, the rise of bureaucratic state, and spread of Western values, but also on various forms and ways of popular resistance, from peasant's rebellions to Populists and revolutionaries. Another emphasis is on placing Russian history in a broader context of modern European history, Enlightenment, liberalism, and progressivism. Lectures and reading projects are complimented by wide use of multimedia and Internet resources, films and music.
Repeatability: This course may not be repeated for additional credits.
HIST 3363. Russia: Revolution, State, and Empire. 3 Credit Hours.
This course focuses on the rise and fall of the Soviet Union, from the Russian Revolution of 1917 until the collapse of the Soviet Union in 1991. It deals with major factors and events, including Communism, two world wars, and the Cold War, that shaped Soviet history. The course explores Soviet impact on European and world developments, and Soviet motives in confrontation with the United States. Reading and lectures are complimented with multimedia and Internet sources, discussions and individual presentations.
Repeatability: This course may not be repeated for additional credits.

HIST 3411. Belief and Society in Pre-Modern Europe. 3 Credit Hours.
An examination of changes in belief systems (both religious and ideological) and their impact on, and influence by, the society around them. The course will focus especially on beliefs as understood and interpreted by the wider society, not just a few intellectuals. Focus is on diversity of belief and practice within an overwhelmingly, but not monolithically, Christian society.
Repeatability: This course may not be repeated for additional credits.

HIST 3412. Power and Conflict in Pre-Modern Europe. 3 Credit Hours.
An examination of the kinds of power struggles that took place in Europe during the medieval and early modern period, and the military, legal, and other means used to resolve them. Struggles among monarchs and territorial magnates; the Crusades; heresy and its suppression; religious wars; and much more local and personal disputes as well.
Repeatability: This course may not be repeated for additional credits.

HIST 3413. Getting Medieval: Gender, Sex, and Power. 3 Credit Hours.
Does Europe have a sex? Can everyday gender normativity be politically constitutive and also the occasion of excessive violence? To answer these questions we will study what bodies mattered in pre-modern Christian Europe and think about the fate of bodies that did not matter. This course explores different strategies of constructing masculinities and femininities in pre-modern Christian Europe and asks who/what had the power to universalize and discipline such fabrications. We will study how the papacy and medieval monarchies regulated gender and sexuality among Christians and also between Christians, Jews, Muslims and so-called "pagans" from c 500 CE to 1500 CE and in so doing creating a powerful political notion of a territorial "inside" called Europe.
Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
Repeatability: This course may not be repeated for additional credits.

HIST 3414. Antigone and the Limits of Sovereignty. 3 Credit Hours.
The corpse of a young warrior lies stinking in the sun, prey to birds and animals. The head of state has proclaimed a death sentence on whomever would dare to attempt its burial. To whom does the corpse belong? How does one speak out against sovereign force? The rotting corpse goes to the heart of sovereign power and its limits. How does the shameful rotting corpse tell a story about politics, technology, and the construction of the human and the inhuman? Sophocles' Greek tragedy, performed in 442 BCE, posed this question at the height of imperial power in Athens. At other times of political crisis great poets and dramatists have used the play, "Antigone," to remind us again of the limits of sovereign power. We will read Sophocles' "Antigone" and study how translations and rewriting of the play have occurred during periods of political emergency in Periclean Athens, during the "terror" of French Revolution, in the aftermath of Holocaust, in the shadow of South African apartheid. How have dramatists such as Sophocles, Francis Hoelderlin, Bertolt Brecht, Athol Fugard used "Antigone" to reflect on sovereignty? We will read and compare these different renderings of "Antigone" alongside the recent work of the philosophers Alain Badiou and Giorgio Agamben who have urgently questioned once again the relation of the state to "nature" and have asked us once again to pause and consider the relation of evil to "business as usual."
Repeatability: This course may not be repeated for additional credits.

HIST 3422. Art, Culture, and European Societies. 3 Credit Hours.
This course examines the shift from elitist forms of representation in the arts to the increased popularization (and democratization) of European politics and culture from the 18th to the 20th centuries. Using both contextual (historical) and formal (art historical) tools for analysis, the class will trace stylistic changes in art, literature, music and the press. More specifically, this includes a consideration of political propaganda and neoclassicism during the revolutionary epoch to romanticism, realism, impressionism, and expressionism concurrent with the establishment and commercial expansion of the modern nation state. Additionally, the course will consider the "democratization" (or popularization) of visual and material culture through the lithographic press, the daily newspaper, photography, and poster publicity. The concluding unit will incorporate visual propaganda in particular European countries during the perilous decades that preceded and followed World War I.
Repeatability: This course may not be repeated for additional credits.

HIST 3425. Europe and the Other. 3 Credit Hours.
Modern society is not the first to deal with issues of racial, ethnic, religious, gender, or sexual difference. This course explores European interactions during the late antique, medieval, and early modern periods with those they saw as different: either outside their society (from the early Roman encounters with the barbarians to the European explorations in Africa and the "New World") or within (Jews, Muslims, women, the poor, dissidents, and deviants).
Repeatability: This course may not be repeated for additional credits.
HIST 3431. Women’s Lives in Modern Europe. 3 Credit Hours.

This course treats issues related to women’s status and power in Modern European History from the 18th century to the present. The emphasis of the course will be on the experiences of women in England, France, Germany, and Russia where significant economic and political changes have occurred in the past few centuries. The purpose of this course is to discuss important issues that women have confronted in the past, and that continue to influence problems that women face today such as: personal, economic, and political power, education, sexuality, psychology, and social esteem, women’s position in the home and workplace plus the continuing question of conventional versus unconventional gender roles in Western Societies. To supplement a general text and several published sources in European history, students will be reading memoirs and essays written by women on economic, political, and social issues pertaining to women, work, and the family during the past two centuries.

Repeatability: This course may not be repeated for additional credits.

HIST 3433. Blood and Iron: 19th Century European Diplomacy. 3 Credit Hours.

This will be a survey of the history of European diplomacy from the wars of the French Revolution until the outbreak of World War I in 1914. Modern warfare, nationalism, and tremendous economic, social, and technological upheaval shaped the 19th century and fundamentally altered the way nation-states interacted. Therefore, we cannot be content in this course to study the biographies of Metternich, Napoleon III, Bismarck, and other great diplomats of the 19th century, though they will receive due attention. In order to explain the events that in many ways laid the groundwork for the world situation in our own time, we will examine cultural and intellectual movements, military and scientific innovations, and political and social changes that still affect the way nations conduct diplomacy.

Repeatability: This course may not be repeated for additional credits.

HIST 3434. Cold War from the Other Side: The Communist Countries and International History, 1945-1991. 3 Credit Hours.

The course will explore the history of the Cold War from the perspective of the main U.S. adversaries in the Cold War: the Soviet Union and China. Also, the course provides secondary themes, covering the motives and actions of other communist countries, including Eastern European countries, Vietnam, and Cuba.

Repeatability: This course may not be repeated for additional credits.

HIST 3435. Military Strategy and Policy. 3 Credit Hours.

This class develops students’ comparative analytical skills in the identification and comprehension of historical arguments at the same time that it examines the multiple causal factors that have shaped warfare over the last two thousand years.

Repeatability: This course may not be repeated for additional credits.

HIST 3438. Post-Colonial Europe: Decolonization and After. 3 Credit Hours.

At the end of World War II, European states still controlled vast overseas empires, which very soon afterwards disappeared. This course examines how the decolonization of these empires shaped political, cultural and intellectual events and developments in Europe’s recent past. We will focus on Great Britain and France, the two most important imperial states, but also look at other countries that lost their empires in these years, such as the Netherlands and Portugal. We will think about why empire was so important to these countries as well as why their political leaders and historians sought to erase this importance. Our topics will range from efforts to redefine foreign relations after empire to “post-colonial” immigration and the emergence of “multicultural” European nation-states. We will look at the cultural effects of immigration and how European political activists drew inspiration from anti-colonial movements.

Repeatability: This course may not be repeated for additional credits.

HIST 3480. Topics in European History. 3 Credit Hours.

Arranged each semester, please consult with the instructor. See the history department web site (www.temple.edu/history) for the specific topics offered each semester.

Repeatability: This course may not be repeated for additional credit.

HIST 3496. Intermediate Writing Seminar in European History. 3 Credit Hours.

Topics for this seminar will vary, and complete descriptions of current offerings can be found on the History Department web site (www.temple.edu/history). All seminars are writing-intensive; frequent writing assignments will help students develop or practice specific writing skills and the research skills that will be critical for success in the senior-level capstone seminar.

Course Attributes: WI

Repeatability: This course may be repeated for additional credit.

HIST 3511. Southern Africa: A History. 3 Credit Hours.

This course deals with the history of Southern Africa focusing on South Africa. It also includes the history of Angola, Mozambique, Namibia, Zambia, and Zimbabwe. A good part of the course deals with a detailed study of the history of apartheid in South Africa from its inception to its political demise in 1994. It also deals with the history of African resistance against the Dutch-British racial order. Some of the themes of the course include: African societies in Southern Africa; European slave traders, settlers, and colonizers (Portuguese, Dutch, British, and German); racism and apartheid in South Africa and Southern Africa at large; African nationalism and the struggle against white domination; the demise of Portuguese colonialism in Angola and Mozambique; the political demise of apartheid and post-apartheid Southern Africa.

Repeatability: This course may not be repeated for additional credits.
HIST 3521. The Chinese Revolution. 3 Credit Hours.
This course is a general introduction to the Chinese Revolution (1921-49) from the perspective of sociopolitical history. Special emphasis on: the internal historical trends and external (semi-colonialist) interventions that shaped the struggle for revolutionary change in the 20th century; conditions in the countryside on the eve of revolution; the urban and rural contours of the Communist Movement; the evolution of Mao Zedong's thought; and revolutionary process and dynamics.
Repeatability: This course may not be repeated for additional credits.

HIST 3522. Contemporary China. 3 Credit Hours.
This course examines society, the state, and popular politics in the Peoples' Republic of China from 1949 to the present. Special emphasis on: revolutionary transformation and socialist construction during the Maoist years (1949-79); the postsocialist trajectory and its critique over the last two decades.
Repeatability: This course may not be repeated for additional credits.

HIST 3531. Modern India. 3 Credit Hours.
Beginning with some of the basic social structures of village India, we move on to study changes introduced by the British during 200 years of colonial rule. An analysis of anti-imperial nationalism, headed by Gandhi, leads in turn to the study of India since independence in 1947, with special attention to international relations, non-governmental organizations, the politics of religious militance, and the causes and consequences of India's opening to the global economy.
Repeatability: This course may not be repeated for additional credits.

HIST 3541. Japan Today. 3 Credit Hours.
This course examines important social, political, and economic trends in Japan from 1945 to the 1990s through lecture, discussion, audio-visual materials, and group oral reports. Topics include the Occupation, the "economic miracle," state and society, the world of work, women, and gender, international relations, impact of affluence, post-bubble Japan, and varying approaches to the study of postwar Japanese history and society.
Repeatability: This course may not be repeated for additional credits.

HIST 3542. Women and Society in Japan. 3 Credit Hours.
This course analyzes the changing position of women in Japanese society from ancient times to the present. Through discussions, lectures, and audiovisual materials, students learn about goddesses, female diviners, empresses, the classical female writers, women in warrior culture, women in industrializing Japan, and Japanese women's movements.
Repeatability: This course may not be repeated for additional credits.

HIST 3551. History of Vietnam. 3 Credit Hours.
Emphasizing cultural, social, and economic factors, the course traces Vietnamese history from its mythological origins to the 21st century. Topics include indigenous social formations, the period of Chinese domination, the rise of independent Vietnamese dynasties, the French colonial era, the Vietnamese Revolution, and the three Indochina Wars, including the Vietnam Conflict in the 20th century. It will close with consideration of life under the current Socialist Republic of Vietnam.
Repeatability: This course may not be repeated for additional credits.

HIST 3556. Vietnam, 1945-1992: Resistance, War and Society. 3 Credit Hours.
First known as the Democratic Republic of Vietnam, today's Socialist Republic of Vietnam was created in the wave of nationalism which swept through Southeast Asia at the end of the War in the Pacific in 1945. This course examines the internal and external forces which shaped the new state, paying close attention to the role of the communist party. We will use books based on recent archival research, mainly in Vietnam and France, to attempt to move beyond the ideological history and prejudices of the Cold War. Vietnam provides a fascinating case study of a country which was both strongly influenced by the Cold War, but which at the same time itself had a strong influence on the course of international history.
Repeatability: This course may not be repeated for additional credits.

HIST 3561. History of Brazil. 3 Credit Hours.
Brazil is one of the world's largest nations being inferior in territorial size only to the United States, Russia, and China. With more than 150,000,000 people, Brazil is second in population among western hemisphere nations to the United States, and far larger than any Latin American nation. Brazilians can claim national unity solidly based on a common language and common cultural heritage. Brazilians are descended from Native Americans, Africans, and Europeans, but can claim a recent history relatively free of ethnic or racial strife. Brazil is rich in natural resources, and has one of the world's few natural resource frontiers. Finally, Brazil continues to produce outstanding architects, artists, writers, composers, social scientists and legal intellectuals, religious and political leaders, entrepreneurs and athletes. At the same time, persistent problems block Brazilian development. They include widespread racism and class bias, excessive dependence on foreign capital and technology, a shamefully inadequate public school system, a perverse distribution of income that favors the wealthy, and fragile democratic institutions. After 500 years of history, Brazilians have immense tasks before them, while the promise of national greatness remains unfulfilled.
Repeatability: This course may not be repeated for additional credits.
HIST 3562. Contemporary Mexico. 3 Credit Hours.
Over the past several years, Mexico has become increasingly integrated with the United States economically, socially, and culturally; a phenomenon that has presented new challenges to both countries to organize this irreversible process constructively. We will look at the present-day questions between the United States and Mexico through the experience of Mexico's history since 1940. This period includes decades of industrialization, city growth, labor migration to the United States, cultural flourishing, political restlessness, the emergence of narcotics trafficking, and incorporation into the North American Free Trade Agreement (NAFTA). This course concludes with some speculative considerations about the future. Instruction takes place through discussion, lecture, film, computer projection, and readings from the new historical scholarship that has emerged on post-1940 Mexico.
Repeatability: This course may not be repeated for additional credits.

HIST 3563. Puerto Rican History. 3 Credit Hours.
This course explores particular issues related to the political, economic, and social development of Puerto Rico with special emphasis given to the 19th and 20th centuries. The course will not only address historical paragons but also questions of interpretations. In each class a combination of readings, discussion, lectures, and videos will be used to view the various issues in a comprehensive manner.
Repeatability: This course may not be repeated for additional credits.

HIST 3564. Caliban's World: Cultural Politics in the 20th Century Americas. 3 Credit Hours.
This course considers the history of struggles for decolonization primarily but not exclusively in the Americas during the 20th century. It focuses particularly on the uses of "culture" and the significance of creative expression in movements dedicated to dismantling the hegemony of the "West." From writers wrestling with Shakespeare's Tempest to musicians arranging artful ways to "curse," we examine texts, music and films in which people work to imagine a world beyond colonialism.
Repeatability: This course may not be repeated for additional credits.

HIST 3565. Hist Latin Amer to 1930. 3 Credit Hours.
Repeatability: This course may not be repeated for additional credits.

HIST 3566. Race, Gender, and Empire in the Iberian World. 3 Credit Hours.
Latin America is a culturally rich and diverse region. Its complex and fascinating history is the product of different worlds and cultures coming together in the 16th century. In this course we will analyze this encounter and its consequences by looking at two main topics: race and gender. Following a chronological order that starts with the conquest of the Americas by the Spaniards and Portuguese in the 16th century and ends with the breakdown of the Spanish empire in the early nineteenth century, the course will explore the ways in which different peoples have interacted. We will discuss the various roles men and women assumed in these societies and the significance of race. In so doing, we will attempt a deeper analysis of the social dynamics of Latin America in the past that will give us a better understanding of its present and future. Note: For history majors, this course is in the "Global/Comparative" category.
Repeatability: This course may not be repeated for additional credits.

HIST 3571. Israel: History, Politics and Society. 3 Credit Hours.
This course traces the political and social history of modern Israel/Palestine since the late 19th century, examining the evolution of Zionism; the relationship between Jews and Muslims; the conflict between Zionists and Arabs; the development of the Jewish settlement in Palestine; and the creation of the State of Israel. It explores Israeli politics, society and identity, especially the role of immigration, ethnicity and religion, and also discusses the wars and tensions between Israel and neighboring Arab states; the status of the Arab/Palestinian minority in Israel; and the growth of Palestinian nationalism, the PLO and Hamas. Through studying Israeli history, politics and society this course helps students gain an understanding of the ongoing conflict in the Middle East.
Repeatability: This course may not be repeated for additional credits.

HIST 3572. Modern Middle East. 3 Credit Hours.
This course surveys the history of the modern Middle East, analyzing some of the great controversies of the region. How the modern Middle East arose, why so many conflicts in the region in modern times have taken place, why the Great Powers have been so involved, and how the struggles of the working class have fared are among the questions to be addressed.
Repeatability: This course may not be repeated for additional credits.

HIST 3580. Topics in Asian History. 3 Credit Hours.
Arranged each semester, please consult with the instructor. See the history department web site (www.temple.edu/history) for the specific topics offered each semester.
Repeatability: This course may be repeated for additional credit.

HIST 3675. Third World Women's Lives. 3 Credit Hours.
Explores the themes of imperialism, colonialism, class, race, interlocking oppressions, commitments to family and community, migration, resistance/insurgency/revolution, collective action, memory, and alternative visions as crossroads of identities in Third World women's lives. Utilizes a variety of source materials with emphasis on the voices of Third World women themselves (testimonies, oral interviews, and documentary visual media). Compares these life texts to those of other working women as they speak to the experiences of being women of color or poor white women in a late capitalist world. Develops the tools for understanding the experiences and perspectives of diverse groups of women to create liberating ways of thinking and living.
Repeatability: This course may not be repeated for additional credits.
HIST 3696. Asian Women in Transition. 3 Credit Hours.
This course introduces and compares the experiences of women in Asia and Asian women in migration to the United States in the modern period, including rural and urban women, and ordinary and elite women in the late 19th and 20th centuries. Topics include women in households, women and work, and women's activism.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

HIST 3697. Intermediate Writing Seminar in African, Asian, Caribbean, and Latin American History. 3 Credit Hours.
Complete descriptions of current offerings can be found on the History Department web site (www.temple.edu/history). All seminars are writing-intensive; frequent writing assignments will help students develop or practice specific writing skills and the research skills that will be critical for success in the senior-level capstone seminar.
Course Attributes: WI
Repeatability: This course may be repeated for additional credit.

HIST 3711. The City in History. 3 Credit Hours.
From Catal Huyuk and Sumer to Florence and Xian to Manchester and Ahmedabad to Los Angeles and Mexico City we examine the significance of the city in the economic, political, social, and cultural life of our planet. Why and how have people created such different kinds of cities? What interest groups have dominated them? What strategies have planners proposed for making them more liveable? For whom? How can studies of cities in other times and places help us understand our own cities? Extensive use of visual materials and some field trips.
Repeatability: This course may not be repeated for additional credits.

HIST 3712. Women in Preindustrial Societies. 3 Credit Hours.
Women's experience in the preindustrial period varied greatly across different regions of the globe, yet there were also important commonalities. This course examines comparatively, in various traditional European and Third World societies, some important themes in women's history: work, sexuality, marriage, social control, science and medicine, and religion. It also discusses ways of studying the history of people who were for the most part not literate and left few traces of their own thoughts and experiences.
Repeatability: This course may not be repeated for additional credits.

HIST 3741. Comparative Slavery. 3 Credit Hours.
This course deals with the study of comparative slavery in four distinct historical-cultural domains: Ancient Greece, "New World" slavery, Arab-Ottoman Islamic civilizations, and Africa. The course analyzes the four locales separately, and compares similarities in the general structure of slave societies as well as differences in their details. Issues pertaining to manumission or the lack of it and integration of ex-slaves into the larger society will be discussed.
Repeatability: This course may not be repeated for additional credits.

HIST 3751. Colonialism and Decolonization. 3 Credit Hours.
This course looks at the decline and fall of the modern European empires. It adopts a case study method to allow students to acquire in-depth knowledge of the colonial and post-colonial environment in four distinct regions of the world: Indonesia, North Africa, India and West Africa/Britain. The course examines the cultural construction of colonialism in Indonesia and North Africa, examining such issues as relations between the colonizers and the colonized peoples in terms of race and gender, construction of an imperial architecture and environment, and modes of resistance to the imperial project. Moving to India, the course looks at the rise of colonial nationalism, including the various discourses and tactics that are implemented to resist, modify, and ultimately abolish colonialism. Finally, the course examines the repercussions of imperialism for the contemporary, discussing post-colonial theory and the cultural, economic, political, and demographic effects of de-colonization on both Europe and its former colonies.
Repeatability: This course may not be repeated for additional credits.

HIST 3811. World Economy Since 1945. 3 Credit Hours.
At the turn of the millennium, economic globalization is profoundly transforming many long-standing patterns of human existence. Public discussion about globalization, nevertheless, remains often shallow and misleading. This course aims to offer a deeper perspective on the present by examining the experience of the world economy over the formative period since World War II. It concentrates on two basic questions: 1) How did the domestic and global foundations of the current world economy come into being over the last half century? And 2) What are the implications of this historical process for our immediate and future lives? As an intermediate level course, it assumes no prior student backgrounds in either history or economics--only a lively interest in learning about broad historical trends and in developing intellectual skills. In addition to discussion, lecture, and common readings, methods of instruction in the course include use of a computer-assisted classroom to provide image and text projections, video clips, and Internet linkages.
Repeatability: This course may not be repeated for additional credits.

HIST 3860. Topics in World History. 3 Credit Hours.
Arranged each semester, please consult with the instructor. See the history department web site (www.temple.edu/history) for the specific topics offered each semester.
Repeatability: This course may be repeated for additional credit.

HIST 3870. Topics in World History. 3 Credit Hours.
Arranged each semester, please consult with the instructor. See the history department web site (www.temple.edu/history) for the specific topics offered each semester.
Repeatability: This course may be repeated for additional credit.
HIST 3880. Topics in Comparative History. 3 Credit Hours.
Arranged each semester, please consult with the instructor. See the history department web site (www.temple.edu/history) for the specific topics offered each semester.
Repeatability: This course may not be repeated for additional credits.

HIST 3900. Honors Special Topics. 3 Credit Hours.
Arranged each semester, please consult with the instructor. See the history department web site (www.temple.edu/history) for the specific topics offered each semester.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.

HIST 3910. Honors Special Topics. 3 Credit Hours.
Arranged each semester, please consult with the instructor. See the history department web site (www.temple.edu/history) for the specific topics offered each semester.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.

HIST 3911. Honors World Economy Since 1945. 3 Credit Hours.
At the turn of the millennium, economic globalization is profoundly transforming many long-standing patterns of human existence. Public discussion about globalization, nevertheless, remains often shallow and misleading. This course aims to offer a deeper perspective on the present by examining the experience of the world economy over the formative period since World War II. It concentrates on two basic questions: 1) How did the domestic and global foundations of the current world economy come into being over the last half century? And 2) What are the implications of this historical process for our immediate and future lives? As an intermediate level course, the World Economy Since 1945 it assumes no prior student backgrounds in either history or economics—only a lively interest in learning about broad historical trends and in developing intellectual skills. In addition to discussion, lecture, and common readings, methods of instruction in the course include use of a computer-assisted classroom to provide image and text projections, video clips, and Internet linkages.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.

HIST 4034. Historiography and Research Methods. 3 Credit Hours.
Each generation of historians reinterprets and rewrites the past according to the political and social views of its time. When we read history we learn just as much, if not more, about the times in which the historian is writing as we learn about the era he/she is writing about. Historical facts do not change, but the choice of which facts are to be emphasized and the interpretation of those facts reflect the Zeitgeist of the historian. A further complicating issue is that there are also many differences of opinion within each generation, debates over the basic issue of history as consensus or history as conflict. This course will introduce students to the various ways professional historians have interpreted and written about the past, from 19th century German historian Leopold von Ranke’s association of history with scientific objective (wie es eigentlich gewesen), through the challenges of progressivism, relativism, universalism, and particularism. Is history the study of the past or its own sake or should historians turn on the past, as Carl Becker observed, and use it to influence the present? Students will also be trained in the types of research methods and archival research employed by professional historians and the problems historians encounter in evaluating and interpreting historical sources. This is an intensive reading seminar that will be conducted chiefly through discussion. There will be lectures on the evolution of historiography as well as lectures on research methods. Members of the class will be expected to do demanding work each week reading the assignments, preparing papers, and leading discussions on the results of their weekly research and writing.
Repeatability: This course may not be repeated for additional credits.

HIST 4221. The American South. 3 Credit Hours.
What makes the South different from the rest of the United States? This seminar will explore the history of the American South from the colonial period to 1900, and it will engage the changing nature and meaning of “southern distinctiveness.” We will focus on the history of slavery and race relations; on gender roles and relations; on sectionalism and the origins of the Civil War; on Reconstruction and the “New South”; and on social, regional, political and ideological divisions within the South.
Repeatability: This course may not be repeated for additional credits.

HIST 4280. Special Topics - American History. 3 Credit Hours.
Arranged each semester, please consult with the instructor for a specific course description. The history department web site (www.temple.edu/history) provides a listing of the specific topics offered each semester.
Repeatability: This course may be repeated for additional credit.

HIST 4282. Independent Study. 3 Credit Hours.
Arranged each semester, please consult with the instructor
Repeatability: This course may be repeated for additional credit.

HIST 4289. Fieldwork in History. 3 Credit Hours.
Arranged each semester, please consult with the instructor.
Repeatability: This course may be repeated for additional credit.
HIST 4296. American History Writing Seminar. 3 Credit Hours.
This course will focus on a special topic in U.S. history and assist students in the development of advanced-level skills in historical writing, argumentation, and research. Students will complete a research project during the semester. See the history department web site (www.temple.edu/history) for the specific topics offered each semester.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

HIST 4297. Social History of American Medicine. 3 Credit Hours.
This course in the history of public health examines the shifting boundaries between public and private medicine, professional authority and personal responsibility, and prevention and therapy from the colonial period into the 20th century. Specific topics include epidemics, environmental concerns, occupational hazards, immigration, and ethnicity.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

HIST 4400. Special Topics in History. 3 Credit Hours.
Arranged each semester; please consult with the instructor for a specific course description. The history department web site (www.temple.edu/history) provides a listing of the specific topics offered each term.
Repeatability: This course may be repeated for additional credit.

HIST 4496. Eastern Europe: Nationalism, Authoritarianism, and Communism. 3 Credit Hours.
This course examines the development of nation-states of Eastern Europe in the 20th century, including Poland, Hungary, Romania, Bulgaria and Albania, as well as Czechoslovakia, Yugoslavia, and their successor states. Topics include the emergence of national identities; the break-up of the Habsburg, Russian and Ottoman Empires; the redrawing of boundaries and problems of national minorities after World War I; the rise of authoritarian governments during the interwar years; World War II and the Communist takeovers; the varieties of Communist regimes and the impact of Communism on daily life; the post-Communist era and the resurgence of nationalism and authoritarianism in the Balkans. Each student will be expected to specialize in one country or nationality.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

HIST 4497. European History Writing Seminar. 3 Credit Hours.
This course will focus on a special topic in European history and assist students in the development of advanced-level skills in historical writing, argumentation, and research. Students will complete a research project during the semester. Seminar format. See the history department web site (www.temple.edu/history) for the specific topics offered each semester.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

HIST 4540. Special Topics: Latin American History. 3 Credit Hours.
Arranged each semester; please consult with the instructor for a specific course description. The history department web site (www.temple.edu/history) provides a listing of the specific topics offered each term.
Repeatability: This course may be repeated for additional credit.

HIST 4623. Asian Biographies: Traditional and Otherwise. 3 Credit Hours.
This course exposes upper-level undergraduates to one of the most important issues in Asian historiography: the uses of biography and autobiography. Both in the Confucian and Islamic traditions the writing of the lives of virtuous men has been central to the establishment of State legitimacy and the transmission of cultural values. (Only rarely have women been included in the pantheon of heroes.) We will examine traditional approaches to biography and autobiography, and then look at how the tradition has evolved and been adapted to the needs of modern states, as well as by civil society. Special attention will be paid to the way in which communist states have modified traditions of biography.
Repeatability: This course may not be repeated for additional credits.

HIST 4628. Running Black: Race to Empire. 3 Credit Hours.
This course examines the interconnected histories of race- and empire-making since the modern period. From 15th century European explorations in Africa to 20th century U.S. invasions in the circum-Caribbean, we analyze how notions of physical, cultural and psychological difference have shaped and been shaped by unequal struggles over rule, authority and self-determination. In the process, we will assess various theoretical approaches pertaining to our topics, from the Marxism of a C.L.R. James to the 'Postcolonial' perspective of an Aime Cesaire.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
HIST 3000 to 3999 | Required Courses: 1|Minimum Grade of C-|May not be taken concurrently.

HIST 4670. Special Topics: African History. 3 Credit Hours.
Arranged each semester; please consult with the instructor for a specific course description. The history department web site (www.temple.edu/history) provides a listing of the specific topics offered each term.
Repeatability: This course may be repeated for additional credit.
HIST 4680. Special Topics: Asian History. 3 Credit Hours.
Arranged each semester; please consult with the instructor for a specific course description. The history department web site (www.temple.edu/history) provides a listing of the specific topics offered each term.

Repeatability: This course may be repeated for additional credit.

HIST 4696. Writing Seminar in Asian, African, or Latin American History. 3 Credit Hours.
This course will focus on a special topic in Third World history and assist students in the development of advanced level skills in historical writing, argumentation, and research. Students will complete a research project during the semester.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

HIST 4697. Modern Japan: Empire, War, Society. 3 Credit Hours.
Was early modern Japan (1600-1867) static or dynamic? Do the roots of Japan's modern achievements (1868-1945) lie in her early modern culture? What happened to Japan after the 1868 Meiji Restoration, and why? Was modernity a blessing or a curse? We'll find answers to questions like these as we survey Japanese society, culture, and events and trends at home and abroad from the Tokugawa shogunate to the Pacific War. Assignments focus on writing a comparative review.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

HIST 4698. Revolutionary Mexico. 3 Credit Hours.
Early in the twentieth century, Mexico experienced a powerful upheaval that left its imprint upon the country for generations, bringing to the fore questions of constitutionalism, land tenure, worker rights, indigenous culture, and national sovereignty. The Mexican Revolution restructured society, the state, and the country's relationship with the United States and the world. Revolutionary Mexico examines the classic years of the Revolution, 1910-1940, engaging students in primary document research and in examination of the historical controversies that the Revolution has engendered. Instruction takes place through discussion, lecture, film, reading, and computer projection.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

HIST 4880. Special Topics: World/Comparative History. 3 Credit Hours.
Arranged each semester; please consult with the instructor for a specific course description. The history department web site (www.temple.edu/history) provides a listing of the specific topics offered each term.

Repeatability: This course may be repeated for additional credit.

HIST 4896. Jews, Judaism, and the Modern World. 3 Credit Hours.
This course considers the impact of modernity on Jews and Judaism in Eastern Europe, Western Europe, the United States, and the Middle East. We will discuss the process of emancipation and assimilation; religious reform movements and modern Orthodoxy; the emergence of the Jewish "New Woman"; the involvement of Jews in liberalism, socialism and communism; the evolution of Zionism and the State of Israel; modern anti-Semitism and the Holocaust; and the complex issues relating to modern Jewish identity.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

HIST 4897. Contemporary Theory and Practice of History. 3 Credit Hours.
Students who enroll in this course will be given an opportunity to reflect on the achievements, and also the shortcomings, of the academic discipline of history. Special attention will be paid to the history of the discipline in the nineteenth and twentieth centuries, to the discipline's relationship to other forms of scholarship, and to the various controversies that are currently roiling within the historical profession.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

HIST 4934. Honors Historiography and Research Methods. 3 Credit Hours.
This course is designed for upper-level history Honors majors, and for upper-level students more generally who are working on research projects that involve historical inquiry. The course has as a starting point three fundamental questions: 1) How do historians frame meaningful research problems? 2) What kinds of basic tools do historians use to carry out archival research? 3) How do they craft persuasive arguments? The precise topic of the course varies from year to year, but students will be able to pursue research topics of their own design. History Honors majors will use this course to develop the topic of their Honors Thesis.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.
HIST 4968. Honors Hitler's Europe: War, Genocide, Resistance. 3 Credit Hours.
What was it like to live in Europe during World War II? This course will examine the history of Europe between 1939 and 1945 with a particular emphasis on the consequences of military occupation by Germany of various European countries, including France, the Netherlands, Poland, Greece, Yugoslavia and Italy. It will focus in depth on the structures of authority and power the Germans imposed in occupied lands; it will examine the genocidal project of the German occupation; and it will explore the various forms of resistance that local peoples organized in opposition to German occupation. We will read a wide range of original sources, autobiographies, and recent historical scholarship. NOTE: This is an Honors course. Special authorization required for non-majors.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.

HIST 4982. Honors Independent Study. 3 Credit Hours.
The Honors Independent Study is open to History majors pursuing Honors. It consists of an intensive research project, guided by a History Department faculty member, that will result in a significant piece of scholarship.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.

HIST 4997. Honors Thesis Seminar. 3 Credit Hours.
This course is the second part of the year-long thesis writing sequence for honors scholars. It will culminate in the completion of a major research paper. The seminar consists of workshops designed to help students organize their research material and draft and revise their thesis. Students will further refine their writing skills through presentations, peer critiques, and individual consultations with the instructor. The course fulfills the writing seminar requirement for history majors. It is open to honors scholars and history majors.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO, WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
HIST 4934|Minimum Grade of C-|May not be taken concurrently.

Horticulture (HORT)

Courses
HORT 1001. Fundamentals of Horticulture. 2 Credit Hours.
Principles of horticultural science; basic techniques of horticulture, including soil management, plant propagation, selection and maintenance of plant materials, and landscape design. NOTE: Horticulture 1001 (0015), unless it is the student's first Landscape Architecture/ Horticulture course or part of a successful credit certificate, is not applicable toward degree credit.
Repeatability: This course may not be repeated for additional credits.

HORT 1211. Woody Plants I. 3 Credit Hours.
The study of native and introduced trees, shrubs, and vines that are the foundation of our natural and designed landscapes with emphasis on identification, culture, association in plant communities, and appropriate use.
Repeatability: This course may not be repeated for additional credits.

HORT 1212. Woody Plants II. 3 Credit Hours.
Continuation of the study of native and introduced trees, shrubs, and vines that are the foundation of our natural and designed landscapes with emphasis on identification, culture, association in plant communities, and appropriate use.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
HORT 1211|Minimum Grade of D-|May not be taken concurrently.

HORT 1555. Equipment Maintenance. 3 Credit Hours.
This course covers proper operation, repair, and normal maintenance procedures for motorized equipment, including tractors, mowers, tillers, shredders, sprayers, chain saws, and hand-held trimmers and blowers.
Repeatability: This course may not be repeated for additional credits.
HORT 1566. Horticulture Business Management. 3 Credit Hours.
Emphasis on managerial philosophies and responsibilities including: ethics; development of staff; problem solving; scheduling; budgets; tax laws; personnel recruiting and networking; public relations and marketing; reading specifications and blueprints; estimating and bidding; and writing business plans.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 0701|Minimum Grade of C-|May not be taken concurrently
OR MATH 0702 to 4999| Required Courses:1|Minimum Grade of D-|May be taken concurrently
OR MC3 Y|May not be taken concurrently
OR MC4 Y|May not be taken concurrently
OR MC5 Y|May not be taken concurrently
OR MC6 Y|May not be taken concurrently.

HORT 1651. Art of Floral Design I. 3 Credit Hours.
A lecture-studio course in which students learn the aesthetic principles of design firsthand as they create a series of floral compositions from natural and artificial materials. Development of a critical eye by analyzing and critiquing their own and each other's work. Also considers traditions of floral design as it has been practiced in Eastern and Western cultures. NOTE: This course can be used to satisfy the university Core Arts (AR) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: AR
Repeatability: This course may not be repeated for additional credits.

HORT 1652. Art of Floral Design II. 3 Credit Hours.
Applies the philosophy of the relationships of nature and creativity to commercial design and compositions for home and exhibition. Also engages students in further study and experimentation in assembling plant materials and found objects indigenous to classical styles as well as considering the influences of avant-garde design from the art world.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
HORT 1651|Minimum Grade of D-|May not be taken concurrently.

HORT 2114. Soils. 3 Credit Hours.
The physical, chemical, and biological properties of soils are examined, considering water/mineral, organism/air relationships. Soil morphology, classification, genesis, and geographic distribution are studied. An understanding of soil horizon from textbook to actual site soil pits is developed.
NOTE: This course can be used to satisfy the university Core Science & Technology Second Level (SB) requirement. To determine if this course in combination with another course can satisfy the GenEd Science & Technology requirement, see your advisor.
Course Attributes: SB
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(CHEM 1021|Minimum Grade of D-|May not be taken concurrently
AND CHEM 1023|Minimum Grade of D-|May not be taken concurrently)
OR EES 1001|Minimum Grade of D-|May not be taken concurrently
OR BOT 1111|Minimum Grade of D-|May not be taken concurrently.

HORT 2221. Herbaceous Plants I. 3 Credit Hours.
The identification, culture, and appropriate designs for native and cultivated annuals, perennials, bulbs, and wildflowers; collaboration with nature in designing and maintaining ecologically sound gardens.
Repeatability: This course may not be repeated for additional credits.

HORT 2222. Herbaceous Plants II. 3 Credit Hours.
Topics include: identification, culture, and creation of environmentally appropriate designs for native and cultivated annuals, perennials, herbs, and roses; cost analysis; designing and maintaining ecologically sound gardens.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
HORT 2221|Minimum Grade of D-|May not be taken concurrently.

HORT 2256. Interior Plantscaping. 3 Credit Hours.
Explores the culture and use of foliage and flowering plants indoors, management of the interior environment for plants, plant identification, and business practices for interior landscapers.
Repeatability: This course may not be repeated for additional credits.
HORT 2323. Greenhouse Management. 3 Credit Hours.
Introduces the basic concepts and principles utilized in greenhouse operation and management. Centers on topics such as greenhouse structure, environmental control, substrate, fertilization, watering, light and temperature, pest and disease control, growth control, and post production management. Focuses on managing the greenhouse environment to maximize the productivity of crops and examines the latest trends in the greenhouse industry.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
BOT 1111|Minimum Grade of D-|May not be taken concurrently.

HORT 2334. Plant Propagation. 3 Credit Hours.
Principles and practices of sexual and asexual methods of propagation, including micropropagation.
Repeatability: This course may not be repeated for additional credits.

HORT 2334. Food Crops I. 3 Credit Hours.
An introductory hands-on course in sustainable food production, handling, and distribution of crops. Food tasting is an integral part of this course.
Repeatability: This course may not be repeated for additional credits.

HORT 2335. Food Crops II. 3 Credit Hours.
A continuation of Food Crops I with special emphasis on Community Supported (Sustainable) Agriculture (CSAs), food co-ops, farmers' markets, and restaurants.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
HORT 2334|Minimum Grade of D-|May not be taken concurrently.

HORT 2356. Greenhouse Production. 3 Credit Hours.
Considers scheduling greenhouse crop production and cultural requirements of several major floricultural plants, finished plants, liners and plugs, including the latest cultivars used in urban nursery/garden centers. Identification of greenhouse grown plant material and field trips to innovative growers are also components of the course.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
HORT 2323|Minimum Grade of D-|May not be taken concurrently.

HORT 2366. Nursery Operation, Management, and Production Techniques. 3 Credit Hours.
Includes an overview of the nursery industry and examines the management and operation of wholesale and retail nurseries, and the production of plants in both container and field-grown conditions.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
HORT 1211|Minimum Grade of D-|May not be taken concurrently.

HORT 2355. Arboriculture. 3 Credit Hours.
Basic biology and care of trees; diagnosis of common pests, diseases, mechanical, nutritional, and environmental problems. Types and use of proper equipment for climbing, pruning, maintenance, and structural requirements. Professional training includes insurance, liability, tree evaluation, job estimates, tree inventories, record keeping, and working with municipalities and community groups.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
HORT 1211|Minimum Grade of D-|May not be taken concurrently.

HORT 2365. Turf Management. 3 Credit Hours.
The establishment and maintenance of turf grasses under varying soil and environmental conditions, particularly urban conditions. The identification of species and newer strains of grasses and their appropriate uses. An environmental approach to lawn maintenance and the responsible use of fertilizers, pesticides, and herbicides is stressed.
Repeatability: This course may not be repeated for additional credits.

HORT 2375. Introduction to Public Horticulture. 3 Credit Hours.
Introduction to principles of horticultural management and administration in the public realm. Examines the activities of botanic gardens and societies, arboreta, zoos, community garden groups, and parks departments. Covers the basic principles of botanic garden management, plant curatorship, collection care, public education, facility design, business management, and long-range planning. NOTE: Designed for students considering a career in public horticulture and those already associated with non-profit institutions who would like to learn more about the field.
Repeatability: This course may not be repeated for additional credits.
HORT 2653. Art of Floral Design III. 3 Credit Hours.
Deeper exploration of the principles of composition and the study of symbolism, periods, and movements of design, as well as construction with plant materials, found objects, lighting, and other media.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: HORT 1652|Minimum Grade of D-|May not be taken concurrently.

HORT 2655. Flower Shop Management. 3 Credit Hours.
The business management of the retail flower shop; design of unusual floral displays; handling flowers, plants, and accessories; and making corsages, sprays, bouquets, and wedding decorations.
Repeatability: This course may not be repeated for additional credits.

HORT 2668. Designing with Perennials. 3 Credit Hours.
Perennial designs involve an understanding of the site, respect for adjacent areas, maintenance concerns, and client desires. Student's knowledge of herbaceous plants is used as a basis for developing creative, ecologically sensitive design solutions.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: HORT 2221|Minimum Grade of D-|May not be taken concurrently.

HORT 2753. Introduction to Horticultural Therapy. 3 Credit Hours.
Definition and history of Horticultural Therapy (HT). Presentation of HT programs, such as social, therapeutic and vocational. HT population types are discussed including physically and developmentally disabled, older adults, children, visually impaired, incarcerated populations, and those in healthcare settings. Design of therapeutic spaces, garden design characteristics, universal design and site assessment. Overview of the profession.
Repeatability: This course may not be repeated for additional credits.

HORT 2754. Horticultural Therapy Skills. 3 Credit Hours.
Developing horticulture skills and techniques for use in therapy programs for diverse client populations. HT programming to include: setting goals and objectives; assessment and evaluation; use of adaptive tools and devices; use of plant materials and supplies for HT programs.
Repeatability: This course may not be repeated for additional credits.

HORT 2755. Horticultural Therapy Program Management. 3 Credit Hours.
Examines Horticultural Therapy programs and the impact of gardening, plants, and nature on diverse client populations. Site visits to local facilities. Research into funding sources, writing proposals for programs, developing program budgets, and grant writing.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: HORT 2753|Minimum Grade of D-|May not be taken concurrently OR HORT 2754|Minimum Grade of D-|May not be taken concurrently.

HORT 2850. Special Topics in Horticulture/Landscape Architecture I. 1 Credit Hour.
Study of topics and problems in horticulture, landscape architecture, and related disciplines. NOTE: Students may obtain a description of the current version at the department office and in the schedule of classes. This course may be repeated for credit.
Repeatability: This course may be repeated for additional credit.

HORT 2881. Cooperative Education. 3 Credit Hours.
A program of full-time summer work in horticulture or landscape design for a minimum of seven weeks. Cooperative Education gives the student the opportunity to integrate academic learning with practical work experience, thereby broadening his or her skills and perspectives.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Horticulture, Landscape Architecture
Degree Restrictions: Must be enrolled in one of the following Degrees: Associate in Science, Bachelor of Science
Repeatability: This course may be repeated for additional credit.

HORT 2883. Directed Studies in Horticulture. 1 to 3 Credit Hour.
Specialized topics from various areas of horticulture in which individuals will work independently and be supervised by a faculty member.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Horticulture, Landscape Architecture
Degree Restrictions: Must be enrolled in one of the following Degrees: Associate in Science, Bachelor of Science
Repeatability: This course may be repeated for additional credit.
HORT 2982. Honors Projects in Horticulture. 1 to 3 Credit Hour.
For exceptional students interested in pursuing independent, in-depth study. Credits based on the quantity and quality of work fulfilling the established course outline.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Horticulture
Degree Restrictions: Must be enrolled in one of the following Degrees: Associate in Science, Bachelor of Science
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.

HORT 3256. Advanced Plant Materials. 3 Credit Hours.
Advanced studies in woody and herbaceous plants, including identification of less commonly used material, late spring and summer aspects of garden design, maintenance, and restoration. Practical aspects of this course include weekly field trips, actual garden seed sowing, and garden maintenance.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: (HORT 1212|Minimum Grade of D-|May not be taken concurrently AND HORT 2221|Minimum Grade of D-|May not be taken concurrently).

HORT 3423. Applied Entomology. 3 Credit Hours.
In lecture and laboratory, students learn the basic diagnostic skills for identifying pest problems. Integrated Pest Management (IPM) is emphasized as the approach for managing pests of plants grown in stressful environments.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: HORT 1212|Minimum Grade of D-|May not be taken concurrently.

HORT 3424. Applied Plant Pathology. 3 Credit Hours.
Explores plant pathological theories and practices. The causes of plant diseases, such as fungi, bacteria, virus, nematodes, plant parasites, as well as environmental stresses, also are examined. Diagnostic skills for determining causes and current management measures are highlighted through lectures and laboratory work. Prepares students to solve horticultural pathology problems.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: BOT 1111|Minimum Grade of D-|May not be taken concurrently.

HORT 3456. Tree Pathology. 3 Credit Hours.
A study of tree health and management. Infectious and noninfectious diseases of shade trees are studied in lectures and in-depth field trips. Emphasizes the effects of urban stress, economically important diseases, and complex tree declines.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: BOT 1111|Minimum Grade of D-|May not be taken concurrently.

HORT 3514. Landscape Restoration. 3 Credit Hours.
Develops an ecologically based understanding of how to establish, restore, and manage meadows, forest, and wetland systems. Emphasizes natural processes and integrating the built landscape with our natural systems, and also explores plant communities and wildlife habitats of Southeastern Pennsylvania. Students participate in the management of natural landscapes on the Ambler campus and nearby parkland.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: HORT 1212|Minimum Grade of D-|May not be taken concurrently.

HORT 3523. Landscape Management. 3 Credit Hours.
Develops an understanding of issues of professional, innovative, and appropriate landscape management. Major focus is given to site analysis, pruning, nutrition, water management, and other maintenance techniques. Also stresses business management, pricing, bidding, specifications, and contracts.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: HORT 1212|Minimum Grade of D-|May not be taken concurrently.

HORT 3882. Independent Study. 1 to 3 Credit Hour.
Explorative study or research not met in any established course. Initiated by the student, the project must be sponsored by a faculty member with an approved agreement outlining the content and requirements, including readings, meetings, and papers. NOTE: Special authorization required for all students. Students must have the agreement of a faculty sponsor and must submit a formal proposal to this faculty member and Department before registering for the course.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Horticulture
Degree Restrictions: Must be enrolled in one of the following Degrees: Associate in Science, Bachelor of Science
Repeatability: This course may be repeated for additional credit.
Human Resource Management (HRM)

Courses

HRM 0838. Identity & Crisis. 3 Credit Hours.
As we go through life there will be natural changes that we must deal with. For college students this involves for many being on their own for the first time, picking a major, trying to figure out a work career, dealing with a roommate and other known challenges. There will also be unplanned changes or crises that each of us will face at different times over our lives, such as the sickness/death of loved ones, broken relationships, work problems, as well as our own mortality. One goal is to face each crisis in as healthy a way as possible, without physically or emotionally hurting others or ourselves. The recent Northern Illinois and Virginia Tech University tragedies are an extreme example of how someone can lash out violently. We also attack ourselves, if not physically then mentally. Often a crisis forces conflict and then leads to self-reflection, e.g., did I contribute to this crisis through how I

HRM 1101. Leadership and Organizational Management. 3 Credit Hours.
This course prepares students to address the challenges of leading high performing organizations. Students will examine the enablers of principled organizational leadership and performance. Course topics include leadership, change management, decision-making, culture, team building, organizational structure and control, communication, social responsibility and sustainability, motivation, human resource management, and globalization.

Repeatability: This course may not be repeated for additional credits.

Disclaimers:
- Repeatability: This course may not be repeated for additional credits.
- Degree Restrictions: Must be enrolled in one of the following Majors: Horticulture
- Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
- Field of Study Restrictions: Must be enrolled in one of the following Degrees: Associate in Science, Bachelor of Science

NOTES:
- Course Attributes: GB
- Repeatability: This course may not be repeated for additional credits.
- Degree Restrictions: Must be enrolled in one of the following Majors: Horticulture
- Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
- Field of Study Restrictions: Must be enrolled in one of the following Degrees: Associate in Science, Bachelor of Science

NOTES:
- Course Attributes: WI
- Repeatability: This course may be repeated for additional credit.

NOTES:
- Course Attributes: GB
- Repeatability: This course may not be repeated for additional credits.
- Degree Restrictions: Must be enrolled in one of the following Majors: Horticulture
- Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
- Field of Study Restrictions: Must be enrolled in one of the following Degrees: Associate in Science, Bachelor of Science

NOTES:
- Course Attributes: WI
- Repeatability: This course may be repeated for additional credit.

NOTES:
- Course Attributes: GB
- Repeatability: This course may not be repeated for additional credits.
- Degree Restrictions: Must be enrolled in one of the following Majors: Horticulture
- Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
- Field of Study Restrictions: Must be enrolled in one of the following Degrees: Associate in Science, Bachelor of Science

NOTES:
- Course Attributes: WI
- Repeatability: This course may be repeated for additional credit.

NOTES:
- Course Attributes: GB
- Repeatability: This course may not be repeated for additional credits.
- Degree Restrictions: Must be enrolled in one of the following Majors: Horticulture
- Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
- Field of Study Restrictions: Must be enrolled in one of the following Degrees: Associate in Science, Bachelor of Science

NOTES:
- Course Attributes: WI
- Repeatability: This course may be repeated for additional credit.

NOTES:
- Course Attributes: GB
- Repeatability: This course may not be repeated for additional credits.
- Degree Restrictions: Must be enrolled in one of the following Majors: Horticulture
- Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
- Field of Study Restrictions: Must be enrolled in one of the following Degrees: Associate in Science, Bachelor of Science

NOTES:
- Course Attributes: WI
- Repeatability: This course may be repeated for additional credit.
HRM 1901. Honors Leadership and Organizational Management. 3 Credit Hours.
Open only to business designated Honors students or with special permission. This course prepares students to address the challenges of leading high performing organizations. Students will examine the enablers of principled organizational leadership and performance. Course topics include leadership, change management, decision-making, culture, team building, organizational structure and control, communication, social responsibility and sustainability, motivation, human resource management, and globalization.


Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

HRM 2501. Introduction to Human Resource Management. 3 Credit Hours.
What role do human resources play in organizations? How can human resources strategically add value to organizations? In this course you will survey pertinent topics related to human resource management to better understand the essential function of HRM. For instance, you will learn processes and methods to recruit and select top talent and give your organization a competitive advantage; how to train employees, conduct performance appraisals, retain employees, and motivate employees with pay and benefits. HR processes and policies will be discussed with an appreciation for the legal environment dictating the practice of HRM.


Repeatability: This course may not be repeated for additional credits.

Pre-requisites:
HRM 1101|Minimum Grade of C-|May not be taken concurrently
OR HRM 1901|Minimum Grade of C-|May not be taken concurrently.

HRM 2511. Corporate Sustainability: People, Profits & Planet. 3 Credit Hours.
After completing this course, you should have a grasp of the nature and extent of the current global environmental crisis, an understanding of the concept of sustainability, an appreciation of how organizations can take action toward sustainability through the pursuit of the "triple bottom line," and a sense of how you can contribute to the emerging "green collar workforce." The course will feature short lectures, discussions, case analyses, team debates, guest experts, opinion papers and experiential exercises.


Repeatability: This course may not be repeated for additional credits.

HRM 3501. Power, Influence and Negotiation. 3 Credit Hours.
Examines how influence, power, and politics are related to effective negotiation and leadership; practical and ethical issues related to negotiating tactics and conflict management are addressed. Experiential and applied exercises facilitate learning effective supervisor and negotiator strategies.


Repeatability: This course may not be repeated for additional credits.

Pre-requisites:
HRM 1101|Minimum Grade of C-|May not be taken concurrently
OR HRM 1901|Minimum Grade of C-|May not be taken concurrently.
HRM 3502. Leading People at Work. 3 Credit Hours.
This course uses Emotional Intelligence (EI) as a foundation for exploring critical leadership and management skills needed in the workplace. EI consists of self-awareness, self-management, relationship awareness and relationship management. Topics of study include: dealing with difficult people, time management, motivation, performance appraisal, and managing down and up the hierarchy.


Repeatability: This course may not be repeated for additional credits

Pre-requisites:
HRM 1101|Minimum Grade of C-|May not be taken concurrently
OR HRM 1901|Minimum Grade of C-|May not be taken concurrently.

HRM 3503. Communicating in Organizations. 3 Credit Hours.
Explores interpersonal and managerial communication strategies in an organizational setting. Emphasis is on understanding communication practices and structures consistent with prominent approaches to management. Students also examine the conceptual underpinnings of effective communication, enhance their presentation and writing skills, and conduct a communication audit in a local business.


Repeatability: This course may not be repeated for additional credits

Pre-requisites:
HRM 1101|Minimum Grade of C-|May not be taken concurrently
OR HRM 1901|Minimum Grade of C-|May not be taken concurrently.

HRM 3504. Leadership in the 21st Century. 3 Credit Hours.
This course helps guide students towards becoming effective and ethical leaders. Development will occur through self-assessments, experiential exercises, and critical examination of effective and ineffective approaches to leadership in the modern business environment and society at large. Major topics of study include: authentic leadership behavior, ethical leadership, abusive leadership, and cross-cultural considerations.


Repeatability: This course may not be repeated for additional credits

Pre-requisites:
HRM 1101|Minimum Grade of C-|May not be taken concurrently
OR HRM 1901|Minimum Grade of C-|May not be taken concurrently.

HRM 3505. Sustainable Organizational Leadership. 3 Credit Hours.
This course will help students understand and appreciate the dynamics of sustainable organizational leadership that engages with the human, financial, social, and natural environments to promote collective and individual prosperity.


Repeatability: This course may not be repeated for additional credits

Pre-requisites:
HRM 1101|Minimum Grade of C-|May not be taken concurrently
OR HRM 1901|Minimum Grade of C-|May not be taken concurrently.

HRM 3506. HR Metrics: Using Data, Scorecards and Dashboards to Drive Business Performance. 3 Credit Hours.
This course is primarily designed to prepare individuals desiring to work in a corporate human resource function, especially those individuals responsible for recruiting, compensation, training and development, employee relations, HRIS (Human Resource Information Systems), or interaction with other corporate staff functions. It may also be of interest to students preparing for general management positions with responsibilities for managing human resources, and/or reliance on reporting metrics.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
HRM 2501|Minimum Grade of C-|May not be taken concurrently.
HRM 3511. Compensation Management. 3 Credit Hours.
An applied examination of total reward systems in organizations in the context of relevant theoretical and legal perspectives. Topics include employee engagement, job analysis, job evaluation, performance evaluation, pay surveys, incentives, pay equity, benefits, and compensation strategy.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
HRM 2501|Minimum Grade of D-|May not be taken concurrently.

HRM 3512. Human Resource Management and Public Policy. 3 Credit Hours.
Investigates the nature and impact of government and other external forces on human resource management. Specifically addresses the development, intent, and implications of a range of employment laws and regulations which affect corporate human resource policy.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
HRM 2501|Minimum Grade of D-|May not be taken concurrently.

HRM 3513. Labor Relations: Strategy and Practice. 3 Credit Hours.
Examines the development and current operations of labor unions, the process and outcomes of collective bargaining and the impact of these institutions on management and society. Practical insights from National Labor Relations Board and grievance cases.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
HRM 2501|Minimum Grade of D-|May not be taken concurrently.

HRM 3531. HR on the Ground. 3 Credit Hours.
Explores how good HR practices influence an organization's success by working in teams on a real project at a real company. Topics covered include: consulting skills, communication, presentation skills, employee engagement, employee research techniques, leadership development, project management and more based on the consulting opportunity provided by the company. Part of the final grade comes from the company.


Repeatability: This course may not be repeated for additional credits.

HRM 3565. International Human Resource Management. 3 Credit Hours.
Focuses on the role of the manager in international organizations and creates awareness of differing legal environments and societal attitudes. Relates national differences to functional areas of human resource administration, including staffing, compensation, training, and labor relations.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
HRM 1101|Minimum Grade of C-|May not be taken concurrently
OR HRM 1901|Minimum Grade of C-|May not be taken concurrently.

HRM 3580. Special Topics - Human Resource Management. 3 Credit Hours.
Special topics in current developments in the field of human resource management.


Repeatability: This course may be repeated for additional credit.

Pre-requisites:
HRM 1101|Minimum Grade of C-|May not be taken concurrently
OR HRM 1901|Minimum Grade of C-|May not be taken concurrently.
HRM 3581. Co-op Experience in Human Resource Management. 3 Credit Hours.
This is an academic course intended to give students experience applying HRM concepts in a real world work environment. In a typical assignment, students work under the mentorship of an HR professional on HRM related project(s). As part of the class, students complete an evidence-based management paper based on their work experience, complete an interview with their mentor, and participate in weekly discussion boards. Students who have identified their own internships and would like to receive course credit can also register for HRM 3581. In these instances the student should first visit CSPD to learn about the "Credit for Internship Process." Once CSPD approval is give, the student will meet with the HRM 3581 professor for permission to register. Students must be prepared to work on-site at the organization for 8-9 hours/week, have a minimum 2.5 GPA, and be a Human Resource Management major. HRM 2501 is the prerequisite for this course. For more detailed information on the course, please visit the course web site at www.fox.temple.edu/HRMindustryExperience.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
HRM 2501|Minimum Grade of D-|May not be taken concurrently.

HRM 3582. Independent Study. 1 to 6 Credit Hour.
Readings and/or papers under the supervision of a faculty member. Arranged each semester.
College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
HRM 1101|Minimum Grade of C-|May not be taken concurrently
OR HRM 1901|Minimum Grade of C-|May not be taken concurrently.

HRM 3682. Independent Study. 1 to 6 Credit Hour.
Readings and/or papers under the supervision of a faculty member. Arranged each semester.
College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
HRM 1101|Minimum Grade of C-|May not be taken concurrently
OR HRM 1901|Minimum Grade of C-|May not be taken concurrently.

HRM 3902. Honors Managing People at Work. 3 Credit Hours.
Honors version of HRM 3502 (0320).
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
HRM 1101|Minimum Grade of C-|May not be taken concurrently
OR HRM 1901|Minimum Grade of C-|May not be taken concurrently.

HRM 3903. Honors - Management, Theory & Practice: From the Locker Room to the Board Room. 3 Credit Hours.
Whether a pick-up game at the local rec. center or a nationally-televised Final Four dream match-up, the game of basketball provides an ideal context for examining group dynamics, ethics, and motivation in organizations. For example, in basketball, the number one draft pick is only as dominant as the teammates (s)he elects. Think Michael Jordan and the notorious Chicago Bulls of the 1990s. Likewise, in a corporation, the CEO is only as effective as the top management team (s)he hand-selects and mentors to success. Ball hogs, showboaters, and cheap foulers can disrupt a basketball team’s rhythm in much the same way that crooks, arbitrageurs, and balance sheet cheats can impact the bottom line. In this course students will explore - directly and metaphorically - some of the tenets of basketball as they relate to the theory and practice of management in organizations.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
HRM 1101|Minimum Grade of C-|May not be taken concurrently
OR HRM 1901|Minimum Grade of C-|May not be taken concurrently.

HRM 3904. Honors, The Leadership Experience: Leading Yourself, Leading Change, Leading Communities. 3 Credit Hours.
Leadership is a hot topic in social sciences, management, and popular culture. Ask ten people "what makes a good leader?" and you might get ten different answers. Our subject is to explore leadership as a discipline, or as scholars. More specifically, as current Honors students, you represent our future leadership. To effectively lead, having a basic understanding of the core tenets and theoretical foundations is important, but insight into your strengths and capabilities as a potential leader is essential. Thus, this course will provide you with foundational knowledge on core principles of leadership. More importantly, this course will focus on reflection, assessment, and development on the core skill sets required of effective leaders. Finally, you will be challenged to leverage your unique strengths in a team setting to enact and inspire change within your community.
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.
HRM 3999. Honors Thesis I. 1 to 3 Credit Hour.
The first of a two-part sequence of courses in which independent research is conducted under the supervision of a thesis advisor from the Human Resource Management department resulting in a substantial piece of original research, roughly 30 to 50 pages in length upon completion of Human Resource Management 4999. The student must publicly present his/her findings at a Temple University Research Forum session or the equivalent during one of the two semesters during which these courses are undertaken.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Human Resource Management
College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.

HRM 4596. Organizational Staffing and Career Management. 3 Credit Hours.
Acquisition and development of human resources in organizations and career management for individuals. Emphasis on using computers to perform human resource planning, job analysis, recruitment, selection, training, socialization, career development, and withdrawal from work. Students must earn a grade of C- in this course if they are using it to fill the writing intensive course requirement for their degree.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Human Resource Management
College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(HRM 2501|Minimum Grade of D-|May not be taken concurrently)
AND (HRM 3511|Minimum Grade of D-|May not be taken concurrently)
OR HRM 3512|Minimum Grade of D-|May not be taken concurrently).

HRM 4597. Critical Skills for Effective Managers. 3 Credit Hours.
The purpose of this course is to bring together Human Resource Management (HRM) knowledge and skills learned in a final, capstone experience to make the student a more effective manager. Students will take a hands-on approach to assessing and improving their self-awareness, interpersonal and teamwork skills. The course will also test skills learned in other core business school courses such as your ability to identify problems, gather and analyze data to understand the problem, to develop alternative courses of action, and implement it. Because this is a writing intensive course, there will be several individual writing assignments that you will have the opportunity to draft, receive feedback and re-draft to improve your writing skills, as well as a group project. NOTE: Students cannot receive credit for this course if they have passed HRM 3502. Students must earn a grade of C- in this course if they are using it to fill the writing intensive course requirement for their degree.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(HRM 3501|Minimum Grade of D-|May not be taken concurrently)
AND (HRM 3503|Minimum Grade of D-|May not be taken concurrently).

HRM 4999. Honors Senior Thesis II. 1 to 3 Credit Hour.
Independent research conducted under the supervision of a thesis advisor from the Human Resource Management Department resulting in a substantial piece of original research, roughly 30 to 50 pages in length. Student must publicly present his/her findings at a Temple University Research Forum session or the equivalent if this was not done in Human Resource Management 3999.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Human Resource Management
College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
HRM 3999|Minimum Grade of C-|May not be taken concurrently.

Intellectual Heritage (IH)
Courses

IH 0851. Mosaic: Humanities Seminar I. 3 Credit Hours.
Through the analysis, synthesis and evaluation of challenging primary texts and their contexts, students are introduced to core humanities concepts. This theme-based course, the first of a two-course sequence, presents texts across cultures, histories and disciplines. Students investigate the nature of the individual in human society through the examination of psychological, social and political texts in dialogue with examples from art and literature. Duplicate Credit Warning: All students are required to take a two-semester sequence of Intellectual Heritage (unless they transferred 45 credits or more or an approved Associate's Degree). Intellectual Heritage/Mosaic Humanities Seminar I is currently numbered 0851 or 0951 for Honors and was previously known as 1196, 1996, X051, and X091. Intellectual Heritage/Mosaic Humanities Seminar I is currently numbered 0851 or 0951 for Honors and was previously known as 1196, 1996, X051, and X091. Intellectual Heritage/Mosaic Humanities Seminar II is currently numbered 0852 or 0952 for Honors, and was previously known as 1297, 1997, X052, and X092. Students who have completed the first semester of Intellectual Heritage (1196, 1996, X051, or X091) are permitted to take either IH 0851 or 0852 to complete their requirements. Students will not receive additional credits if two courses are taken from the second semester options (0852, 0952, 1297, 1997, X052, and X092); only one course of these options will carry graduation credit.

Course Attributes: GY
Repeatability: This course may not be repeated for additional credits.

IH 0852. Mosaic: Humanities Seminar II. 3 Credit Hours.
In the second course of a two-course sequence, students continue to work with texts across cultures, histories and disciplines. Students extend their investigation of human society to the cosmos, and move from in-depth textual analysis to broader considerations of scientific discourse, philosophy and ethical understanding. Duplicate Credit Warning: All students are required to take a two-semester sequence of Intellectual Heritage (unless they transferred 45 credits or more or an approved Associate's Degree). Intellectual Heritage/Mosaic Humanities Seminar I is currently numbered 0851 or 0951 for Honors and was previously known as 1196, 1996, X051, and X091. Intellectual Heritage/Mosaic Humanities Seminar II is currently numbered 0852 or 0952 for Honors, and was previously known as 1297, 1997, X052, and X092. Students who have completed the first semester of Intellectual Heritage (1196, 1996, X051, or X091) are permitted to take either IH 0851 or 0852 to complete their requirements. Students will not receive additional credits if two courses are taken from the second semester options (0852, 0952, 1297, 1997, X052, and X092); only one course of these options will carry graduation credit.

Course Attributes: GZ
Repeatability: This course may not be repeated for additional credits.

IH 0951. Honors Mosaic: Humanities Seminar I. 3 Credit Hours.
Through the analysis, synthesis and evaluation of challenging primary texts and their contexts, students are introduced to core humanities concepts. This theme-based course, the first of a two-course sequence, presents texts across cultures, histories and disciplines. Students investigate the nature of the individual in human society through the examination of psychological, social and political texts in dialogue with examples from art and literature. Duplicate Credit Warning: All students are required to take a two-semester sequence of Intellectual Heritage (unless they transferred 45 credits or more or an approved Associate's Degree). Intellectual Heritage/Mosaic Humanities Seminar I is currently numbered 0851 or 0951 for Honors and was previously known as 1196, 1996, X051, and X091. Intellectual Heritage/Mosaic Humanities Seminar II is currently numbered 0852 or 0952 for Honors, and was previously known as 1297, 1997, X052, and X092. Students who have completed the first semester of Intellectual Heritage (1196, 1996, X051, or X091) are permitted to take either IH 0851 or 0852 to complete their requirements. Students will not receive additional credits if two courses are taken from the second semester options (0852, 0952, 1297, 1997, X052, and X092) only one course of these options will carry graduation credit.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GY, HO
Repeatability: This course may not be repeated for additional credits.

IH 0952. Honors Mosaic: Humanities Seminar II. 3 Credit Hours.
In the second course of a two-course sequence, students continue to work with texts across cultures, histories and disciplines. Students extend their investigation of human society to the cosmos, and move from in-depth textual analysis to broader considerations of scientific discourse, philosophy and ethical understanding. Duplicate Credit Warning: All students are required to take a two-semester sequence of Intellectual Heritage (unless they transferred 45 credits or more or an approved Associate's Degree). Intellectual Heritage/Mosaic Humanities Seminar I is currently numbered 0851 or 0951 for Honors and was previously known as 1196, 1996, X051, and X091. Intellectual Heritage/Mosaic Humanities Seminar II is currently numbered 0852 or 0952 for Honors, and was previously known as 1297, 1997, X052, and X092. Students who have completed the first semester of Intellectual Heritage (1196, 1996, X051, or X091) are permitted to take either IH 0851 or 0852 to complete their requirements. Students will not receive additional credits if two courses are taken from the second semester options (0852, 0952, 1297, 1997, X052, and X092) only one course of these options will carry graduation credit.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GZ, HO
Repeatability: This course may not be repeated for additional credits.

IH 1061. Intellectual Heritage I Lab. 1 Credit Hour.
An intensive series of guided reading exercises for the assigned texts of Intellectual Heritage I. Emphasis is on comprehending important ideas contained in the texts through self-paced reading and comparison with paraphrased versions. The course includes a discussion of ideas for essay assignments and an opportunity to draft and redraft with advice from the lab instructor before submitting essays to the IH instructor. The course offers focused preparation for IH examinations. NOTE: Offered at Temple University Japan only.

Repeatability: This course may not be repeated for additional credits.
IH 1062. Intellectual Heritage II Lab. 1 Credit Hour.
An intensive series of guided reading exercises for the assigned texts of Intellectual Heritage II. Emphasis is on comprehending important ideas contained in the texts through self-paced reading and comparison with paraphrased versions. The course includes a discussion of ideas for essay assignments and an opportunity to draft and redraft with advice from the lab instructor before submitting essays to the IH instructor. The course offers focused preparation for IH examinations. NOTE: Offered at Temple University Japan only.
Repeatability: This course may not be repeated for additional credits.

IH 1196. Intellectual Heritage I. 3 Credit Hours.
The first course of a required two-course sequence covering key readings in the western and other intellectual traditions. Readings in Intellectual Heritage I extend from the Bible and ancient Greece through the Renaissance, covering topics as varied as literature, religion, political thought, and the history of science.
Course Attributes: IA
Repeatability: This course may not be repeated for additional credits.

IH 1297. Intellectual Heritage II. 3 Credit Hours.
Second course in the Intellectual Heritage sequence, extending from John Locke through the modern era, and again including the history of science, political science, and literature.
Course Attributes: IB
Repeatability: This course may not be repeated for additional credits.

IH 1996. Honors Intellectual Heritage I. 3 Credit Hours.
The first course of a required two-course sequence covering key readings in the western and other intellectual traditions. Readings in Honors Intellectual Heritage I extend from the Bible and ancient Greece through the Renaissance, covering topics as varied as literature, religion, political thought, and the history of science.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO, IA
Repeatability: This course may not be repeated for additional credits.

 IH 1997. Honors Intellectual Heritage II. 3 Credit Hours.
Second course in the Intellectual Heritage sequence, extending from John Locke through the modern era, and again including the history of science, political science, and literature.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO, IB
Repeatability: This course may not be repeated for additional credits.

International Business Admn (IB)

Courses

IB 2501. Fundamentals of Asian Business. 3 Credit Hours.
This course is designed to enable students to grasp broad knowledge on Asian business practices. The semester will begin by surveying the wide array of national characteristics that corporate decision-makers must consider prior to making economic decisions on foreign investment. During this section of the course, we will also analyze economic, social, and political conditions in India in order to provide practical examples of how the national characteristics impact the decision-making process. It will then examine the similarities and dissimilarities among Japanese, Chinese, and Korean businesses and the special features of Japanese business, such as the network relationships among companies and groups called keiretsu. Given our understanding of the above issues, we will examine how American companies should compete in Asia.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ECON 1001|Minimum Grade of C-|May not be taken concurrently
OR ECON 1101|Minimum Grade of C-|May not be taken concurrently
OR ECON 1901|Minimum Grade of C-|May not be taken concurrently
OR ECON 1102|Minimum Grade of C-|May not be taken concurrently
OR ECON 1902|Minimum Grade of C-|May not be taken concurrently
OR ECON 1103|Minimum Grade of C-|May not be taken concurrently.
IB 2502. Fundamentals of Latin American Business. 3 Credit Hours.
This course is designed to give students a solid basis to face a job assignment related to business in a Latin American country and to develop your ability to perceive the importance of cultural diversity and how it influences business activities across Latin American countries. Specifically, this course will help you understand the specific challenges of doing business in Latin America and enable you to perceive and understand the differences in the business environment, business customs, and business practices between countries of Latin America and of the rest of the world.


Repeatability: This course may not be repeated for additional credits

Pre-requisites:
ECON 1001|Minimum Grade of C-|May not be taken concurrently
OR ECON 1101|Minimum Grade of C-|May not be taken concurrently
OR ECON 1901|Minimum Grade of C-|May not be taken concurrently
OR ECON 1102|Minimum Grade of C-|May not be taken concurrently
OR ECON 1902|Minimum Grade of C-|May not be taken concurrently
OR ECON 1103|Minimum Grade of C-|May not be taken concurrently.

IB 2503. Fundamentals of European Business. 3 Credit Hours.
This course offers an overview of the European business environment, highlighting its specific challenges and business opportunities. This course analyzes the dual process of European integration and enlargement of the European Union, and the tensions between the two. While mostly focusing on the European Union country members, this course will also examine non-EU countries in Europe. You will understand when and how multinational firms must adapt their business policies and organizations to the specific needs of national environments in Europe. In-depth cases and recent articles from the business press serve as the basis for many class discussions.


Repeatability: This course may not be repeated for additional credits

Pre-requisites:
ECON 1001|Minimum Grade of C-|May not be taken concurrently
OR ECON 1101|Minimum Grade of C-|May not be taken concurrently
OR ECON 1901|Minimum Grade of C-|May not be taken concurrently
OR ECON 1102|Minimum Grade of C-|May not be taken concurrently
OR ECON 1902|Minimum Grade of C-|May not be taken concurrently
OR ECON 1103|Minimum Grade of C-|May not be taken concurrently.

IB 2509. Short Study Trip Abroad: Doing Business in a Foreign Country. 1 to 3 Credit Hour.
This is a for-credit course paired with a trip to a foreign country, in order to study in depth this country’s environment for doing business (cultural, social, economic, legal, political aspects), and how to navigate it successfully, both as a firm and as an individual. The in-country portion of the program will include mostly visits of companies and local organizations, as well as some touristic visits. The course aims to put the foreign country in the broader context of globalization, regional economic integration, and the mutual influence and relationships the country entertains with the rest of the world.

Repeatability: This course may be repeated for additional credit.
IB 3101. Fundamentals of International Business. 3 Credit Hours.
This course offers an introduction to the basic concepts and practices in international business. Topics to be covered include the economic, social, cultural, legal, and political environments of international trade and multinational corporations (MNCs), international institutions and agencies that impact on international business, the nature and characteristics of international business, strategy and structure of MNCs, problems of foreign direct investments, and conflicts between host countries and MNCs, and effects of MNCs on the economy. NOTE: Students taking this course at Temple Rome who do not have all of the prerequisites can seek permission of the instructor to take this course. Permission will be based on criteria set by the instructor at Temple Rome.

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(ECON 1101|Minimum Grade of C-|May not be taken concurrently
OR ECON 1901|Minimum Grade of C-|May not be taken concurrently)
AND (ECON 1102|Minimum Grade of C-|May not be taken concurrently
OR ECON 1902|Minimum Grade of C-|May not be taken concurrently)
AND (HRM 1101|Minimum Grade of C-|May not be taken concurrently
OR HRM 1901|Minimum Grade of C-|May not be taken concurrently)
AND (MKTG 2101|Minimum Grade of C-|May not be taken concurrently
OR MKTG 2901|Minimum Grade of C-|May not be taken concurrently).

IB 3551. International Finance. 3 Credit Hours.
The course surveys the theory and practice of international finance, as it relates to both markets and firms. Topics include issues in international financial systems, currency market and risk management, and international corporate finance.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
FIN 3101|Minimum Grade of D-|May not be taken concurrently
OR FIN 3901|Minimum Grade of D-|May not be taken concurrently
OR FIN 3503|Minimum Grade of C|May not be taken concurrently
OR FIN3 Y|May not be taken concurrently.

IB 3552. International Financial Management. 3 Credit Hours.
The course provides a theoretical and practical analysis of the financing and investment decisions of multinational firms operating in international financial markets. Topics include: international asset valuation, international financing and investments, foreign exchange risk exposure, and country risk management.

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
FIN 3503|Minimum Grade of C|May not be taken concurrently
OR FIN3 Y|May not be taken concurrently.

IB 3553. International Marketing. 3 Credit Hours.
Problems of marketing and analysis of the internal marketing system of countries with various types of political-economic structures. The strategic impact of economic, cultural, political, and legal differences on marketing is emphasized. International product, price, promotion, and distribution issues are also considered. NOTE: A minimum grade of C in Marketing 2101 or 2901 is required for Marketing majors.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MKTG 2101|Minimum Grade of C-|May not be taken concurrently
OR MKTG 2901|Minimum Grade of C-|May not be taken concurrently.

IB 3562. International Law. 3 Credit Hours.
Fifty percent of the net profits of most large corporations are generated through international transactions. This course will explore the legal considerations that apply to U.S. businesses abroad and will explore issues of contract negotiations, enforcement of judgments, international conventions, sovereign immunity, and current multinational business issues such as dumping, products liability, and patents and copyrights.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatability: This course may not be repeated for additional credits

IB 3563. International Trade. 3 Credit Hours.
An examination of the basic theories of international trade, commercial policy, and factor movements. Topics may include the relation between trade and economic growth, global aspects of U.S. trade policy, international trade agreements, and protectionism.

Repeatability: This course may not be repeated for additional credits.
IB 3564. International Monetary Economics. 3 Credit Hours.
The analysis of the balance of payments and foreign currency markets. Topics include the international payments system, foreign investment and debt, and exchange rate regimes.
Repeatability: This course may not be repeated for additional credits.

IB 3565. International Human Resource Management. 3 Credit Hours.
Focuses on the role of the manager in international organizations and creates awareness of differing legal environments and societal attitudes. Relates national differences to functional areas of human resource management - staffing, compensation, training, and labor relations.
College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatability: This course may not be repeated for additional credits
Pre-requisites: 
HRM 1101|Minimum Grade of C-|May not be taken concurrently
OR HRM 1901|Minimum Grade of C-|May not be taken concurrently.

IB 3560. Special Topics in International Business. 1 to 6 Credit Hour.
Special topics in current developments in the field of international business.
College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatability: This course may be repeated for additional credit.

IB 3580. Special Topics in International Business. 1 to 6 Credit Hour.
Special topics in current developments in the field of international business.
College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatability: This course may be repeated for additional credit.

IB 3581. International Business Internship. 3 Credit Hours.
The International Business internship is designed to provide experiential learning to students enrolled in the course. Students will apply what they have learned in the classroom to a project to be implemented within an international business environment. Students will engage a business owner or manager in defining and developing a project for mutual benefit and learning. This project will include an objective, a goal, and a work plan to implement work towards achieving that goal. Further, the project will be supervised by the business owner/manager and will be implemented by the student. The project will acquaint the students with a global business mindset and international business operations.
Repeatability: This course may be repeated for additional credit.
Pre-requisites: 
IB 3101|Minimum Grade of C|May not be taken concurrently
OR IB 3901|Minimum Grade of C|May not be taken concurrently
OR FIN 3551|Minimum Grade of C|May not be taken concurrently
OR IB 3551|Minimum Grade of C|May not be taken concurrently
OR MKTG 3553|Minimum Grade of C|May not be taken concurrently
OR IB 3553|Minimum Grade of C|May not be taken concurrently
OR RMI 3567|Minimum Grade of C|May not be taken concurrently
OR ECON 3563|Minimum Grade of C|May not be taken concurrently
OR ECON 3564|Minimum Grade of C|May not be taken concurrently.

IB 3582. Independent Study. 1 to 6 Credit Hour.
Readings and/or papers under supervision of a faculty member. The student should pursue a topic of interest by getting a faculty member to agree to supervise the student's study. Possible topics of interest to the faculty in the department include: cross-border mergers and acquisitions, foreign direct investment, and global sourcing, among others.
College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatability: This course may be repeated for additional credit.

IB 3585. International Business Internship. 3 Credit Hours.
The course objective is to enable students to gain practical work experience on a project of relevance to their academic program, while providing the latest best practices and international business concepts on projects for employers. Course consists of an internship with a company involved in international business either in the U.S. or abroad. Students are encouraged to apply for currently developed programs as well as select from a reputable organization of their interest. The result is a project paper based on student assignments within the organization. NOTE: Arrangements are made through the Institute of Global Management Studies. A minimum of a 2.5 GPA and final approval by Dr. Arvind Phatak required.
College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatability: This course may be repeated for additional credit.

IB 3596. Global Entrepreneurship. 3 Credit Hours.
This course is based on a hands-on semester-long global entrepreneurship project that will require you to work through the whole process of setting up an import/export venture, from identifying a trade lead and foreign country to conduct business in, all the way to organizing the delivery of your imported or exported good to the final customer and choosing an appropriate payment method. This course will help you develop practical knowledge in the areas of international market research, cross-cultural negotiations, customs and trade regulations, global logistics, international pricing and payment methods in a foreign country. The course consists of lectures and videos, class discussions and exercises, as well as a group project.
College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites: 
IB 3101|Minimum Grade of C-|May not be taken concurrently
OR IB 3901|Minimum Grade of C-|May not be taken concurrently.
IB 3682. Independent Study. 1 to 6 Credit Hour.
Readings and/or papers under supervision of a faculty member. The student should pursue a topic of interest by getting a faculty member to agree to supervise the student's study. Possible topics of interest to the faculty in the department include: cross-border mergers and acquisitions, foreign direct investment, and global sourcing, among others.

**College Restrictions:** Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School

**Repeatability:** This course may be repeated for additional credit.

IB 3901. Honors Fundamentals of International Business. 3 Credit Hours.
This course offers an introduction to the basic concepts and practices in international business. Topics to be covered include the economic, social, cultural, legal, and political environments of international trade and multinational corporations (MNCs), international institutions and agencies that impact on international business, the nature and characteristics of international business, strategy and structure of MNCs, problems of foreign direct investments, and conflicts between host countries and MNCs, and effects of MNCs on the economy. NOTE: Honors section of International Business Administration 3101.

**College Restrictions:** Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School

**Cohort Restrictions:** Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR

**Course Attributes:** HO

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
- (ECON 1101|Minimum Grade of C-|May not be taken concurrently)
- OR ECON 1901|Minimum Grade of C-|May not be taken concurrently)
- AND (ECON 1102|Minimum Grade of C-|May not be taken concurrently)
- OR ECON 1902|Minimum Grade of C-|May not be taken concurrently)
- AND (HRM 1101|Minimum Grade of C-|May not be taken concurrently)
- OR HRM 1901|Minimum Grade of C-|May not be taken concurrently)
- AND (MKTG 2101|Minimum Grade of C-|May not be taken concurrently)
- OR MKTG 2901|Minimum Grade of C-|May not be taken concurrently).

IB 3999. Honors Thesis I. 1.5 Credit Hour.
The first of a two-part sequence of courses in which independent research is conducted under the supervision of a thesis advisor from the International Business Administration department resulting in a substantial piece of original research, roughly 30 to 50 pages in length upon completion of International Business Administration 4999. The student must publicly present his/her findings at a Temple University Research Forum session or the equivalent during one of the two semesters during which these courses are undertaken.

**College Restrictions:** Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School

**Cohort Restrictions:** Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR

**Course Attributes:** HO

**Repeatability:** This course may be repeated for additional credit.

IB 4587. International Business Practicum. 3 Credit Hours.
This is the capstone senior course for the IBA major. This course covers strategic-level international business issues, such as choosing between local adaptation and international standardization of operations, HOs-subsidiaries relationships, design and coordination of an international supply chain. This course offers opportunities for practical applications of IB knowledge and techniques acquired across the IBA curriculum through two main assignments: an online international business simulation running a multinational corporation; as well as a consulting project requiring an in-depth analysis of an international business situation and practical recommendations. NOTE: This course is open only to IBA majors and must be taken by Senior students in their graduating semester.

**Field of Study Restrictions:** Must be enrolled in one of the following Majors: International Business

**College Restrictions:** Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
- (MKTG 3553|Minimum Grade of D-|May not be taken concurrently)
- OR IB 3553|Minimum Grade of D-|May not be taken concurrently)
- AND (IB 3596|Minimum Grade of C-|May not be taken concurrently).

IB 4999. Honors Thesis II. 1.5 Credit Hour.
Independent research conducted under the supervision of a thesis advisor from the International Business Department resulting in a substantial piece of original research, roughly 30 to 50 pages in length. Student must publicly present his/her findings at a Temple University Research Forum session or the equivalent if this was not done in International Business 3999.

**College Restrictions:** Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School

**Cohort Restrictions:** Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR

**Course Attributes:** HO

**Repeatability:** This course may be repeated for additional credit.

**Pre-requisites:**
- IB 3999|Minimum Grade of C-|May not be taken concurrently.
Italian (ITAL)

Courses

ITAL 0815. Language in Society. 3 Credit Hours.
How did language come about? How many languages are there in the world? How do people co-exist in countries where there are two or more languages? How do babies develop language? Should all immigrants take a language test when applying for citizenship? Should English become an official language of the United States? In this course we will address these and many other questions, taking linguistic facts as a point of departure and considering their implications for our society. Through discussions and hands-on projects, students will learn how to collect, analyze, and interpret language data and how to make informed decisions about language and education policies as voters and community members. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: ANTH 0815/0915, Asian Studies 0815, Chinese 0815, CSCD 0815, EDUC 0815/0915, English 0815, PSY 0815, Russian 0815, or Spanish 0815.
Course Attributes: GB
Repeatability: This course may not be repeated for additional credits.

ITAL 0831. Immigration and the American Dream. 3 Credit Hours.
As a Temple student, you go to school and live in a city full of immigrants. Perhaps your own relatives were immigrants to the United States. But have you ever listened to their stories? With an historical and sociological framework as a basis, we will take an in-depth and more personal look at the immigrant experience as expressed through the immigrants' own voices in literature and film, and oral interviews. Topics explored include: assimilation, cultural identity and Americanization, exploitation and the American Dream, ethnic communities, gender, discrimination and stereotyping. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: ANTH 0831, CRIT 0831, History 0831, Italian 0931, Russian 0831, SOC 0831, or SPAN 0831/0931.
Course Attributes: GD
Repeatability: This course may not be repeated for additional credits.

ITAL 0868. World Society in Literature & Film. 3 Credit Hours.
Learn about a particular national culture - Russian, Indian, French, Japanese, Italian, for example, each focused upon in separate sections of this course - by taking a guided tour of its literature and film. You don't need to speak Russian, Hindi, French or Japanese to take one of these exciting courses, and you will gain the fresh, subtle understanding that comes from integrating across different forms of human expression. Some of the issues that will be illuminated by looking at culture through the lens of literature and film: Family structures and how they are changing, national self-perceptions, pivotal moments in history, economic issues, social change and diversity. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: Arabic 0868/0968, Asian Studies 0868, Chinese 0868/0968, English 0868/0968, French 0868/0968, German 0868/0968, Hebrew 0868, Italian 0968, Japanese 0868/0968, Jewish Studies 0868, Korean 0868, LAS 0868/0968, Political Science 0868/0968, Russian 0868/0968, or Spanish 0868/0968.
Course Attributes: GG
Repeatability: This course may not be repeated for additional credits.

ITAL 0931. Honors Immigration and the American Dream. 3 Credit Hours.
As a Temple student, you go to school and live in a city full of immigrants. Perhaps your own relatives were immigrants to the United States. But have you ever listened to their stories? With an historical and sociological framework as a basis, we will take an in-depth and more personal look at the immigrant experience as expressed through the immigrants' own voices in literature and film, and oral interviews. Topics explored include: assimilation, cultural identity and Americanization, exploitation and the American Dream, ethnic communities, gender, discrimination and stereotyping. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: ANTH 0831, CRIT 0831, History 0831, Italian 0931, Russian 0831, SOC 0831, or SPAN 0831/0931.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GD, HO
Repeatability: This course may not be repeated for additional credits.
ITAL 0968. Honors World Society in Literature & Film. 3 Credit Hours.
Learn about a particular national culture - Russian, Indian, French, Japanese, Italian, for example, each focused upon in separate sections of this course - by taking a guided tour of its literature and film. You don't need to speak Russian, Hindu, French or Japanese to take one of these exciting courses, and you will gain the fresh, subtle understanding that comes from integrating across different forms of human expression. Some of the issues that will be illuminated by looking at culture through the lens of literature and film: Family structures and how they are changing, national self-perceptions, pivotal moments in history, economic issues, social change and diversity. (This is an Honors course.) NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: Arabic 0868/0968, Asian Studies 0868, Chinese 0868/0968, English 0868/0968, French 0868/0968, German 0868/0968, Hebrew 0868, Italian 0868, Japanese 0868/0968, Jewish Studies 0868, Korean 0868, LAS 0868/0968, Political Science 0868/0968, Russian 0868/0968, or Spanish 0868/0968.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GG, HO
Repeatability: This course may not be repeated for additional credits.

ITAL 1001. Italian Language I. 4 Credit Hours.
Introduction to the use of Italian as a spoken language. Fundamentals of grammar, basic patterns of oral communication, writing and reading, introduction to Italian culture.
Course Attributes: LA
Repeatability: This course may not be repeated for additional credits.

ITAL 1002. Italian Language II. 4 Credit Hours.
A continuation of the activities of Italian 1001. The basics already learned are practiced, and new patterns of oral communication, reading, and writing are introduced. Additional fundamentals of grammar.
Course Attributes: LA
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ITAL 1001|Minimum Grade of C-|May not be taken concurrently
OR ITAL 1901|Minimum Grade of C-|May not be taken concurrently
OR LCIT C1002|May not be taken concurrently
OR LCIT B1002|May not be taken concurrently
OR LCIT C1003|May not be taken concurrently
OR LCIT B1003|May not be taken concurrently
OR LCIT EXMPT|May not be taken concurrently.

ITAL 1003. Italian Language III. 3 Credit Hours.
A continuation of the activities designed to achieve communicative competence. Review of material covered in first year Italian, and a study of more sophisticated structures and grammar. Emphasis on vocabulary building, on the practical use of communicative patterns in speaking and writing, and on reading comprehension. Additional cultural content.
Course Attributes: LB
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ITAL 1002|Minimum Grade of C-|May not be taken concurrently
OR ITAL 1902|Minimum Grade of C-|May not be taken concurrently
OR LCIT C1003|May not be taken concurrently
OR LCIT B1003|May not be taken concurrently
OR LCIT EXMPT|May not be taken concurrently.

ITAL 1011. Fundamentals - Intensive Basic Language. 6 Credit Hours.
This course meets four times per week and covers the equivalent of a full year of language study (Introductory Italian I and Introductory Italian II). The course is designed for highly motivated students who wish to develop communicative ability in Italian in a relatively short time. The course is conducted mainly in Italian.
Repeatability: This course may not be repeated for additional credits.

ITAL 1901. Honors Italian Language I. 4 Credit Hours.
Introduction to the use of Italian as a spoken language. Fundamentals of grammar, basic patterns of oral communication, writing and reading, introduction to Italian culture.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Italian
Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.
ITAL 1902. Honors Italian Language II. 4 Credit Hours.
A continuation of the activities of Italian 1901. The basics already learned are practiced, and new patterns of oral communication, reading, and writing are introduced. Additional fundamentals of grammar.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO, LA
Repeatability: This course may not be repeated for additional credits.

ITAL 2000. Special Topics. 3 Credit Hours.
Topics vary each semester. See advisor for more information.
Repeatability: This course may be repeated for additional credit.

ITAL 2001. Intermediate Italian. 3 Credit Hours.
Using a variety of texts, the students will gradually broaden their vocabulary and understanding of culture, learn to organize ideas both in speaking and writing, and begin to appreciate the written text. Since the class will be conducted entirely in Italian, the students' communicative skill in speaking and writing will continue to expand. Grammatical points are reviewed as needed.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ITAL 1003|Minimum Grade of C-|May not be taken concurrently
OR LCIT EXMPT|May not be taken concurrently.

ITAL 2041. Readings in Italian. 3 Credit Hours.
This course provides students with strategies designed to improve their reading skills. Students will also develop their ability to more effectively communicate ideas explored in the reading through discussion of problems of grammar, style, and composition. Elements of Italian culture, past and present, will also be examined in the context of this course.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ITAL 2001|Minimum Grade of C-|May not be taken concurrently.

ITAL 2096. Composition I: Italian Composition and Conversation. 3 Credit Hours.
Intensive work on communicative skills in speaking and writing. Students will expand their ability to express themselves conversationally both by building vocabulary used for debating, discussing, expressing a point of view, and obtaining information, and by engaging in role-playing and extemporaneous conversational situations. Formal and informal writing to improve written fluency in basic narrative prose.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ITAL 2001|Minimum Grade of C-|May not be taken concurrently.

ITAL 2100. Special Topics in Italian Culture. 3 or 4 Credit Hours.
Unique topics arranged each term; subtitle and course description is added to each section for students to review. For more information, consult with the instructor.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
ITAL 2001|Minimum Grade of C-|May not be taken concurrently.

ITAL 2221. Italian Culture through Film. 3 Credit Hours.
This course will provide students with a study of Italian cinema from the time of Neorealism, which began in 1945, to the present. Through the vision of movies, students will be introduced to Italian culture, socio-economic conditions, political philosophies, history, and the transformation of the Italian society throughout the years. Taught in English.
Repeatability: This course may not be repeated for additional credits.

ITAL 2501. Italian for Business. 3 Credit Hours.
This course is designed for students who wish to develop language and professional skills in the context of an international business environment focused on Italy. Attention is also given to Italian culture, manners, and customs as they relate to business practices.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ITAL 2001|Minimum Grade of C-|May not be taken concurrently.

ITAL 3000. Special Topics in Italian Studies (Taught in English). 3 Credit Hours.
Topics vary each semester. See advisor for more information.
Repeatability: This course may be repeated for additional credit.
ITAL 3096. Composition II: Advanced Writing Skills. 3 Credit Hours.
This course has been designed to develop writing skills and reading comprehension, gradually and consistently. The emphasis of the course is practice in writing short essays, and in translating different types of language. Introduction to literary analysis. Attention to grammar, syntax and orthography.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites: ITAL 2096|Minimum Grade of C-|May not be taken concurrently.

ITAL 3101. Survey of Italian Literature I. 3 Credit Hours.
Reading and discussion of representative works of Italian literature from the origins through the Renaissance. The course will cover such authors as Dante, Petrarch, Boccaccio, Machiavelli and Ariosto.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: ITAL 2096|Minimum Grade of C-|May not be taken concurrently
OR ITAL 2041|Minimum Grade of C-|May not be taken concurrently
OR ITAL 2501|Minimum Grade of C-|May not be taken concurrently.

ITAL 3102. Survey of Italian Literature II. 3 Credit Hours.
Reading and discussion of representative works of Italian Literature from the Renaissance to modern times. The course will cover such authors as Marino, Metastasio, Alfieri, Goldoni, Leopardi, Manzoni, Ungaretti, Saba and Montale.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: ITAL 2096|Minimum Grade of C-|May not be taken concurrently
OR ITAL 2041|Minimum Grade of C-|May not be taken concurrently
OR ITAL 2501|Minimum Grade of C-|May not be taken concurrently.

ITAL 3182. Independent Study I. 3 Credit Hours.
Arranged each semester, please consult with the instructor. NOTE: Considered only for extraordinary reasons. Does not replace required courses, unless specified and approved by the Italian Advisor.
Repeatability: This course may be repeated for additional credit.

ITAL 3201. Italian Culture and Civilization. 3 Credit Hours.
Depending on the expertise(s) of the teacher and the interests of the students, this multi-disciplinary course will cover major historical and cultural periods and phenomena. Examples: the emergence of Italian language and dialects; medieval, Renaissance, and baroque art and architecture; folk literature and music; opera; the history of the Risorgimento and the Unification; women and feminism; modern Italian culture and politics; and cinema.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: ITAL 2001|Minimum Grade of C-|May not be taken concurrently.

ITAL 3240. Topics in Italian Cinema and Literature. 3 Credit Hours.
This course is designed to deepen understanding of Italian culture, ethnicity, and universal themes as they are portrayed in Italian film and literature. It explores commonality and difference between two different forms of creative expression, in particular novels that were then adapted for film, as well as works of authors and filmmakers that are not directly linked. Topics vary. Viewing of films, readings. Taught in English. Can be taken as a cognate course for the Italian major.
Repeatability: This course may be repeated for additional credit.

ITAL 3282. Independent Study II. 3 Credit Hours.
Arranged each semester; please consult with the instructor. NOTE: Considered only for extraordinary reasons. Does not replace required courses, unless specified and approved by the Italian Advisor.
Repeatability: This course may be repeated for additional credit.

ITAL 4096. Creative Writing Through Reading. 3 Credit Hours.
The course is designed to enhance the student's creative use of the Italian language and to contribute to an understanding of literature through the study of a range of styles and genres in the Italian tradition. Readings of short stories, essays, fables, poetry, journalism, novellas and excerpts from novels. Creative writing assignments based on imitation or on the appropriation of strategies and procedures deployed in the production of these texts.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites: ITAL 2096|Minimum Grade of C-|May not be taken concurrently
OR ITAL 2041|Minimum Grade of C-|May not be taken concurrently
OR ITAL 2501|Minimum Grade of C-|May not be taken concurrently.
ITAL 4120. Special Topics. 3 Credit Hours.
Various topics in Italian studies. Arranged each semester. Please consult with the instructor. NOTE: Course offered to cover topics not currently available in the regular course inventory.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
ITAL 2096|Minimum Grade of C-|May not be taken concurrently
OR ITAL 2041|Minimum Grade of C-|May not be taken concurrently
OR ITAL 2501|Minimum Grade of C-|May not be taken concurrently.

ITAL 4121. Nobel Prize Winners in Italian Literature. 3 Credit Hours.
Close reading and discussion of a selection of poetry and prose written by Italian authors who received the Nobel Prize in Literature.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ITAL 3101|Minimum Grade of C-|May not be taken concurrently
OR ITAL 3102|Minimum Grade of C-|May not be taken concurrently
OR ITAL 3096|Minimum Grade of C-|May not be taken concurrently.

ITAL 4122. Italian Theater and Performance. 3 Credit Hours.
Readings and discussion of the works of major Italian playwrights from Machiavelli to Goldoni, Pirandello and Eduardo De Filippo. The course culminates in the performance of Italian theater works.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ITAL 2096|Minimum Grade of C-|May not be taken concurrently
OR ITAL 2041|Minimum Grade of C-|May not be taken concurrently
OR ITAL 2501|Minimum Grade of C-|May not be taken concurrently.

ITAL 4130. Topics in Italian Literature. 3 Credit Hours.
This course is designed for students of Italian to concentrate on one period of literature or a particular topic in Italian literature. Topics vary. Taught in Italian.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
ITAL 2096|Minimum Grade of C-|May not be taken concurrently
OR ITAL 2041|Minimum Grade of C-|May not be taken concurrently
OR ITAL 2501|Minimum Grade of C-|May not be taken concurrently.

ITAL 4161. Italian American Literature and Culture. 3 Credit Hours.
The focus of this course is the evolution of narrative and lyrical forms and contents of Italian American literature and film over the generations; the first, that wrote in various dialects of Italian and in nascent English with traces of Old World rhetoric; the semi-Americanized second that honored fathers and mothers in style and substance; the third and fourth that, now American, have embraced innumerable tendencies and modes of imagining and writing. Taught in English.
Repeatability: This course may not be repeated for additional credits.

ITAL 4240. Topics in Italian Cinema & Literature (in Italian). 4 Credit Hours.
This course is designed to deepen understanding of Italian culture, ethnicity, and universal themes as they are portrayed in Italian film and literature. It explores commonality and difference between two different forms of creative expression, in particular novels that were then adapted for film, as well as works of authors and filmmakers that are not directly linked. Topics vary. Viewing of films, readings. Three hours taught in English, with the fourth hour taught in Italian. Written work and readings in Italian for Majors, Minors, Certificate Students.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
ITAL 2096|Minimum Grade of C-|May not be taken concurrently
OR ITAL 2041|Minimum Grade of C-|May not be taken concurrently
OR ITAL 2501|Minimum Grade of C-|May not be taken concurrently.

ITAL 4401. Techniques of Translation. 3 Credit Hours.
An immersion in the theory and practice of translation with a focus on translating into English. The Italian texts, chosen in consultation with the instructor, can be drawn from not only prose fiction, poetry, and drama, but also such other genres as memoir, travel writing, and film soundtracks, as well as the gamut of text types in the human sciences, including cultural theory, philosophy, history, and ethnography. The aim is not just to translate, but to think deeply about translating, to develop writing practices by drawing on the resources of theory, past and present, and by examining translations written by professionals.
Repeatability: This course may not be repeated for additional credits.
ITAL 4920. Honors Special Topics. 3 Credit Hours.
Various topics in Italian studies. Arranged each semester. Please consult with the instructor.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.

Japanese (JPNS)

Courses

JPNS 0811. Asian Behavior & Thought. 3 Credit Hours.
We incessantly engage ourselves in doing things. We are beings-at-doing. We define ourselves by the kind of actions we perform. How we act or conduct ourselves is shaped by the kind of self we construct for ourselves. And that self is shaped by the society into which we happen to be born. Self-identity, which is socially and culturally constructed by our experiences and interactions with others, carries a personal as well as an interpersonal meaning. Learn the four Asian paradigmatic cases of self-identity and examine your self in light of them. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: ASST 0811, Chinese 0811, CRIT 0811, PHIL 0811, or REL 0811/0911.
Course Attributes: GB
Repeatability: This course may not be repeated for additional credits.

JPNS 0868. World Society in Literature & Film. 3 Credit Hours.
Learn about a particular national culture - Russian, Indian, French, Japanese, Italian, for example, each focused upon in separate sections of this course - by taking a guided tour of its literature and film. You don't need to speak Russian, Hindu, French or Japanese to take one of these exciting courses, and you will gain the fresh, subtle understanding that comes from integrating across different forms of human expression. Some of the issues that will be illuminated by looking at culture through the lens of literature and film: Family structures and how they are changing, national self-perceptions, pivotal moments in history, economic issues, social change and diversity. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: Arabic 0868/0968, Asian Studies 0868, Chinese 0868/0968, English 0868/0968, French 0868/0968, German 0868/0968, Hebrew 0868, Italian 0868/0968, Japanese 0968, Jewish Studies 0868, Korean 0868, LAS 0868/0968, Political Science 0868/0968, Russian 0868/0968, or Spanish 0868/0968.
Course Attributes: GG
Repeatability: This course may not be repeated for additional credits.

JPNS 0968. Honors World Society in Literature & Film. 3 Credit Hours.
Learn about a particular national culture - Russian, Indian, French, Japanese, Italian, for example, each focused upon in separate sections of this course - by taking a guided tour of its literature and film. You don't need to speak Russian, Hindu, French or Japanese to take one of these exciting courses, and you will gain the fresh, subtle understanding that comes from integrating across different forms of human expression. Some of the issues that will be illuminated by looking at culture through the lens of literature and film: Family structures and how they are changing, national self-perceptions, pivotal moments in history, economic issues, social change and diversity. (This is an Honors course.) NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) under Core. Students cannot receive credit for this course if they have successfully completed any of the following: Arabic 0868/0968, Asian Studies 0868, Chinese 0868/0968, English 0868/0968, French 0868/0968, German 0868/0968, Hebrew 0868, Italian 0868/0968, Japanese 0868, Jewish Studies 0868, Korean 0868, LAS 0868/0968, Political Science 0868/0968, Russian 0868/0968, or Spanish 0868/0968.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GG, HO
Repeatability: This course may not be repeated for additional credits.

JPNS 1001. Japanese Elements I. 4 Credit Hours.
First semester level of Japanese. Assumes no prior knowledge.
Course Attributes: LC
Repeatability: This course may not be repeated for additional credits.

JPNS 1002. Japanese Elements II. 4 Credit Hours.
Second semester level of Japanese.
Course Attributes: LC
Repeatability: This course may not be repeated for additional credits
Pre-requisites: JPNS 1001|Minimum Grade of C-|May not be taken concurrently.
JPNS 1003. Oral Intensive Japanese I. 2 to 6 Credit Hours.
A bridge between beginning and intermediate Japanese levels, this course emphasizes vocabulary building and the use of spoken Japanese through situational conversational practice. Tests will be in the forms of listening and reading comprehension and structured interviews. An ability to read and write hiragana and katakana is required, as is a mastery of most basic grammatical rules. NOTE: Arranged each semester. Please consult with the instructor.

Repeatability: This course may not be repeated for additional credits
Pre-requisites: JPNS 1002|Minimum Grade of C-|May not be taken concurrently.

JPNS 1301. Kanji I. 3 Credit Hours.
Kanji or Chinese characters are an integral part of Japanese orthography system, which is considered as a key factor to learners' reading comprehension and vocabulary building. However, Kanji is considered to be difficult and rather time-consuming to acquire, especially for learners from alphabetic orthography systems such as English speakers. This course is thus designed to promote students' understanding and mastery of 300 basic Kanji and to help them establish a solid foundation to learn novel and complex Kanji in the course of their learning Japanese. By mastering 300 basic Kanji, students will acquire the Kanji proficiency equivalent to JLPT (Japanese Language Proficiency Test) N4, and also improve their reading and writing skills in addition to vocabulary building. More important, students will learn how to "learn" novel Kanji.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Japanese
Repeatability: This course may not be repeated for additional credits
Pre-requisites: JPNS 1001|Minimum Grade of C-|May not be taken concurrently.

JPNS 2000. Special Topics I. 3 Credit Hours.
Arranged each semester. Please consult with the instructor and/or check the course schedule for specific topic.
Repeatability: This course may be repeated for additional credit.

Third semester level of Japanese.
Course Attributes: LC
Repeatability: This course may not be repeated for additional credits
Pre-requisites: JPNS 1002|Minimum Grade of C-|May not be taken concurrently.

JPNS 2002. Intermediate Japanese II. 3 Credit Hours.
Fourth semester level of Japanese.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: JPNS 2001|Minimum Grade of C-|May not be taken concurrently.

JPNS 2003. Oral Intensive Japanese II. 2 to 4 Credit Hours.
A bridge between intermediate and advanced Japanese levels, this course focuses on vocabulary acquisition in a variety of conversational situations. Throughout the semester, several vocabulary quizzes and structure tests will be given, while the final exam will be in the form of interviews. Students are required to complete one project involving various communication activities outside the classroom. NOTE: The course uses different materials and works on different topics every semester and thus is repeatable. Students need prior written permission from the instructor to repeat. Arranged each semester. Please consult with the instructor.

Repeatability: This course may be repeated for additional credit.
Pre-requisites: JPNS 1003|Minimum Grade of C-|May not be taken concurrently.

JPNS 2010. Special Topics II. 3 Credit Hours.
Arranged each semester. Please consult with the instructor and/or check the course schedule for specific topic.
Repeatability: This course may be repeated for additional credit.

JPNS 2011. Survey of Japanese Literature: Pre-Modern. 3 Credit Hours.
A study of memoirs, poetry, novels, and other genres is included in this survey of classical Japanese literature. Note that knowledge of Japanese language is not required.
Repeatability: This course may not be repeated for additional credits.

JPNS 2012. Modern and Contemporary Japanese Literature in Translation. 3 Credit Hours.
A survey of modern Japanese literature focusing on novels and short stories. Authors include Tanizaki, Kawabata, and Mishima. Note that knowledge of Japanese language is not required. NOTE: Prior to fall 2009, the course title was "Survey of Japanese Literature: Modern."
Repeatability: This course may not be repeated for additional credits.
JPNS 2015. Tokyo in Literature and Film. 3 Credit Hours.
Like all great cities, Tokyo simultaneously fascinates and frightens us. The course explores this fascination and fear through the work of leading writers and directors who have responded to and shaped the city in their work. Readings will include essays, short stories, and novels by authors such as Yasunari Kawabata, Fumiko Hayashi, Banana Yoshimoto, and Haruki Murakami. Films by directors such as Yasujiro Ozu, Satoshi Kon, and Shosuke Murakami will be reviewed and discussed.

Repeatability: This course may not be repeated for additional credits.

JPNS 2016. Mystery and Crime Fiction in Japan. 3 Credit Hours.
This course examines mystery and crime fiction in Japan through the work of writers such as Edogawa Rampo, Matsumoto Seicho, and Kirino Natsuo. Through critical analysis of novels and short stories, we’ll seek insights into the anxieties and tensions of life in modern and contemporary Japan. We'll explore a range of socio-cultural issues in areas such as family life, education, careers, and gender relations. All readings and discussions are in English.

Repeatability: This course may not be repeated for additional credits.

JPNS 2021. Japanese Literature in Film. 3 Credit Hours.
A look at cinematic adaptations of Japanese novels and short stories. Discussions and assignments develop analytical and critical skills in reading literary and cinematic texts selected from the works of the principal figures of Japanese literature and film, such as Tanizaki, Mishima, and Kurosawa.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Japanese

Repeatability: This course may not be repeated for additional credits.

JPNS 2096. Japanese Popular Culture and Literature. 3 Credit Hours.
A look at the culture and literature of Japan. Note that knowledge of Japanese language is not required.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

JPNS 2301. Kanji II. 3 Credit Hours.
This course is a continuation of Kanji I and designed to promote students’ understanding and mastery of an additional 300 (or more) Kanji at the intermediate level. By mastering the additional 300 Kanji, students will acquire the Kanji proficiency equivalent to JLPT N3, and also improve their reading and writing skills in addition to vocabulary building.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Japanese

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
JPNS 1301|Minimum Grade of C-|May not be taken concurrently.

JPNS 2522. Basic Writing in Japanese. 3 Credit Hours.
Japanese 2522 is designed to introduce students whose native language is not Japanese to basic-level writing skills that go beyond mere sentence manipulation drills. With a focus on paragraph development, students will learn, step by step, the organizational principles that will help them express themselves effectively in Japanese on familiar topics, such as family, daily activities, personal possessions and experiences. Students will also learn to incorporate newly learned vocabulary and structures effectively into their writing to further enhance their overall Japanese language skills.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Japanese

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
JPNS 2001|Minimum Grade of C-|May not be taken concurrently.

JPNS 2631. Structure of Japanese Language I. 3 Credit Hours.
This course is designed to accomplish three major objectives to further develop students’ Japanese language proficiency. First, it will help students have a strong command of the basic and more complicated rules of Japanese grammar already introduced in Japanese 1001, 1002, 2001, & 2002. Second, it will also help students further improve their fluency in both comprehension and production. Lastly, it will also help students pass N4 of JLPT.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Japanese

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
JPNS 2002|Minimum Grade of C-|May not be taken concurrently.

JPNS 2701. TUJ - Japanese Intermediate I. 4 Credit Hours.
This is a TUJ unique 2nd year, Intermediate Japanese course, and the first half of the intermediate Japanese language courses. It adopts an integrated approach to develop students’ communicative competence for everyday communication. Upon successful completion of the intermediate courses, students will be able to demonstrate the proficiency level equivalent to N4 of JLPT. In addition to the course work and assignment, students are strongly recommended to spend at least one hour per week at the language lab.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Japanese

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
JPNS 1002|Minimum Grade of C-|May not be taken concurrently.
JPNS 2702. TUJ - Japanese Intermediate II. 4 Credit Hours.
This is a TUJ unique 2nd year Intermediate Japanese course. This is the second half of the intermediate Japanese language courses. It adopts an integrated approach to develop students' communicative competence for everyday communication. Upon successful completion of the intermediate courses, students will be able to demonstrate the proficiency level equivalent to N4 of JLPT. In addition to the course work and assignments, students are strongly recommended to spend at least one hour per week at the language lab.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Japanese
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
JPNS 2701|Minimum Grade of C-|May not be taken concurrently.

JPNS 2782. Independent Study in Japanese. 1 to 6 Credit Hour.
Independent study in Japanese.
Repeatability: This course may be repeated for additional credit.

JPNS 2921. Honors Japanese Literature in Film. 3 Credit Hours.
A look at cinematic adaptations of Japanese novels and short stories. Discussions and assignments develop analytical and critical skills in reading literary and cinematic texts selected from the works of the principal figures of Japanese literature and film, such as Tanizaki, Mishima, and Kurosawa. Note that knowledge of Japanese language is not required.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.

JPNS 2996. Honors Japanese Popular Culture and Literature. 3 Credit Hours.
A look at the culture and literature of Japan. Note that knowledge of Japanese language is not required. This is an Honors course.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO, WI
Repeatability: This course may not be repeated for additional credits.

JPNS 3000. Special Topics in Japanese I. 3 Credit Hours.
Topics will focus on aspects of the language, literature, or culture of Japan.
Repeatability: This course may be repeated for additional credit.

JPNS 3001. Advanced Japanese I. 3 Credit Hours.
Fifth semester level of Japanese.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
JPNS 2002|Minimum Grade of C-|May not be taken concurrently.

JPNS 3002. Advanced Japanese II. 3 Credit Hours.
Sixth semester level of Japanese.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
JPNS 3001|Minimum Grade of C-|May not be taken concurrently.

JPNS 3003. Advanced Japanese Writing. 3 Credit Hours.
A course for students who feel secure in the fundamentals of writing in the Japanese language but who want additional instruction beyond the introductory composition courses to improve their writing. This course focuses on one of two writing styles depending on the semester: formal and academic essays (ronbun) and personal and impressionistic essays (zuihitsu). Ask the instructor which style will be focused on during the semester for which you are going to register. There will be a lot of speed writing in class for students to prepare for a company essay test. Note that this course may be taken by native speakers of Japanese.
Repeatability: This course may be repeated for additional credit.

JPNS 3010. Special Topics in Japanese II. 3 Credit Hours.
A continuation of Japanese 3000 (Critical Languages 0222). Topics will focus on aspects of the language, literature, or culture of Japan.
Repeatability: This course may be repeated for additional credit.

JPNS 3096. Intermediate Writing in Japanese. 3 Credit Hours.
Students will learn intermediate-level writing skills in Japanese built on their basic writing skills. They will learn to write multiple-paragraph essays appropriate for various Japanese writing styles. For many Japanese learners, not being able to write effectively in Japanese is a major concern, especially for college students. To this end, the course deals with elements that help improve the quality of a written product, including grammar, structure, logic, and most importantly, organization. In the intermediate writing course, students are required to write insightful essays incorporating their experiences and reading/researched materials using appropriate cohesive devices.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.
JPNS 3631. Structure of Japanese Language II. 3 Credit Hours.
This course is designed to accomplish four major objectives. First, it will help students have a strong command of the advanced rules of Japanese grammar already learned in Japanese 3001 and 3002 to practice with complete control. Second, it will help students further improve their fluency both in comprehension and production in academic discourse. Third, it will also help students further develop their communicative competence, focusing on sociolinguistic and pragmatic aspects of Japanese language. Students will learn how to appropriately deal with social dominance, the social distance, and a variety of situations in advanced discourse. Lastly, it will help students pass N3 of JLPT.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: JPNS 3002|Minimum Grade of C-|May not be taken concurrently.

JPNS 3900. Honors Special Topics: Japanese. 3 Credit Hours.
Topics vary from semester to semester. This is an Honors course.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.

JPNS 4001. Japanese Advanced III. 3 Credit Hours.
This course has 5 major goals. First, it will help students develop a higher level of reading and writing skills, and familiarize with socio-cultural topics. Second, it will help students improve their levels of formality in speaking in different situations of their everyday conversation and academic discourse. Third, it will also help students develop critical thinking and manners for discussion in Japanese. Fourth, it will help students learn idiomatic expressions and more involved syntactical forms. Lastly, it will help students pass N2 of the JLPT.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: JPNS 3002|Minimum Grade of C-|May not be taken concurrently.

JPNS 4002. Japanese Advanced IV. 3 Credit Hours.
This is the last one of four courses in a series of Advanced Japanese courses which focuses on the levels of formality or politeness in conversation as well as on fifteen socio-cultural topics in the Japanese speaking community. This course covers chapters 13, 14, and 15 of the textbook. The course is designed to accomplish four major objectives. First, it will help students develop a higher level of reading and writing skills, and familiarize with haiku as well as socio-cultural topics. Second, it will also help students develop critical thinking, interview and debate skills in Japanese. Third, it will help students learn more involved idiomatic expressions and syntactical forms. Lastly, it will help students pass N2 of Japanese Language Proficiency Test (JLPT).
To achieve these goals, this course will provide students with three reading topics: Japanese people and Nature, Politics in Japan, and the Future of World and Japan, in a variety of forms (i.e., reading and speaking based discussion). Each topic has its own focus in the speaking section such as interviewing, debating academic and social issues, and agreeing and disagreeing with others' opinions, to appropriately deal with the issues of politeness. Students are expected to use integrated skills to deal with each task presented in each chapter and also to build up their vocabulary and learn Chinese characters (Kanji) while completing reading, speaking, and grammar tasks. Moreover, students are required to conduct interviews with three people about a socio-cultural issue selected and to make a report on the results in two forms: an oral report in class and a written short paper.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: JPNS 4001|Minimum Grade of C-|May not be taken concurrently.

JPNS 4003. Advanced Oral Japanese. 3 Credit Hours.
This course provides both oral and aural practice in Japanese by introducing theoretical and practical aspects of oral/aural skills. It is designed and intended for students who have successfully completed three years of Japanese language learning (Japanese Advanced II), and requires students' advanced reading/writing skills in order to prepare their speech scripts.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: JPNS 3002|Minimum Grade of C-|May not be taken concurrently.

JPNS 4031. Introduction to Japanese Linguistics I. 3 Credit Hours.
An introduction to some important findings and theories in linguistics and to the description of the sound stratum of Japanese contrastive analysis with English sounds. This is the first of three courses in a series under the course title "Introduction to Japanese Linguistics." The course does not provide any actual teaching training, but it does include essential information that Japanese-language teachers ought to have. Classes and examinations will be conducted in Japanese. Students are required to write a term paper in Japanese. Note that this course may be taken by native speakers of Japanese.
Repeatability: This course may not be repeated for additional credits.

JPNS 4032. Introduction to Japanese Linguistics II. 3 Credit Hours.
An introduction to the problems of orthographical rules and to the contrastive studies of Japanese and English grammar (syntax and morphology). This is the second of three courses in a series under the course title "Introduction to Japanese Linguistics." The course does not provide any actual teaching training, but does include essential information that Japanese-language teachers ought to have. Classes and examinations will be conducted in Japanese. Students are required to make some oral presentations and to write a term paper in Japanese. Note that this course may be taken by native speakers of Japanese.
Repeatability: This course may not be repeated for additional credits.
JPNS 4033. Introduction to Japanese Linguistics III. 3 Credit Hours.
An introduction to the application of linguistic principles to the learning and teaching of the Japanese language. This is the third of three courses in a series under the course title "Introduction to Japanese Linguistics." Students are expected to actively participate in class discussions and to complete various projects of their own development whose results they then present orally and in writing as term papers. Classes and examinations will be conducted in Japanese. Note that this course may be taken by native speakers of Japanese.
Repeatability: This course may not be repeated for additional credits.

JPNS 4182. Japanese Independent Study I. 3 Credit Hours.
An independent-study course arranged each semester. Please consult with the instructor.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
JPNS 3002|Minimum Grade of C-|May not be taken concurrently.

JPNS 4196. Seminar in Japanese and Japan: Japanese Society and Culture through Newspaper. 3 Credit Hours.
Seminar in Japanese and Japan is a capstone course that builds on the solid foundation of advanced linguistics skills, socio-cultural knowledge, and critical thinking that students have acquired. It also marks their final stage of Japanese language learning. Three topics (Topic I: Socio-cultural, Topic II: Business, Topic III: Literature) are offered alternately and designed to allow students to select and pursue a topic of their interest. In the courses, students will learn to read critically and properly appreciate the original texts of a selected topic. While reading about socio-cultural aspects, topics/issues in business, or literature, students will further their understanding of Japanese language. This course focuses on reading on socio-cultural aspects of Japan by reading newspapers. Newspapers are one of the main sources of information to learn about the society's present status, social and political problems, and perspectives for future. In this course, students will learn the most up-to-date information of Japanese society and develop their reading skills and comprehension by reading newspapers. To achieve those goals, the course is divided into two parts. The first half of the course will be devoted to developing reading skills and building lexicon necessary to understand newspaper articles as well as the stylistics and format characteristic of newspapers (e.g., the use of abbreviations and technical terms in the headlines and leads). In order to increase readiness for reading newspapers, students will read 5-7 short passages a day (with a complete vocabulary list) on a variety of topics. Students' acquisition of new vocabulary and expressions will be tested on a daily basis. In the second half of the semester, students will read Japanese newspaper articles weekly. Each week, two articles will be chosen for a class reading followed by discussions. In addition, each student will choose an article for a weekly oral report. Through reading and class discussions, students are expected to gain in-depth understanding and analytical views of contemporary Japanese society and culture.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
JPNS 4001|Minimum Grade of C-|May not be taken concurrently.

JPNS 4282. Japanese Independent Study II. 3 Credit Hours.
An independent-study course arranged each semester. Please consult with the instructor.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
JPNS 3002|Minimum Grade of C-|May not be taken concurrently.

JPNS 4296. Seminar in Japanese and Japan: Business. 3 Credit Hours.
Seminar in Japanese and Japan is a capstone course that builds on the solid foundation of advanced linguistics skills, socio-cultural knowledge, and critical thinking that students have acquired. It also marks their final stage of Japanese language learning. Three topics (Topic I: Socio-cultural, Topic II: Business, Topic III: Literature) are offered alternately and designed to allow students to select and pursue a topic of their interest. In the courses, students will learn to read critically and properly appreciate the original texts of a selected topic. While reading about socio-cultural aspects, topics/issues in business, or literature, students will further their understanding of Japanese language. Topic II has a special focus on business, and is designed to introduce students to basic concepts and current issues of business both in the domestic and international markets. Students will explore basic concepts of business, building up new vocabulary items, examining major and important terms used in discussing business and reading short articles on current topics. Moreover, students will explore a variety of short articles concerning current topics in economics, politics, and business law as well, for business is tightly connected with these three topics. Lastly, students will also learn how to conduct, write, and present a simple version of secondary research paper on one of the topics in business.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
JPNS 4001|Minimum Grade of C-|May not be taken concurrently.
JPNS 4396. Seminar in Japanese and Japan: Literature. 3 Credit Hours.
Seminar in Japanese and Japan is a capstone course that builds on the solid foundation of advanced linguistics skills, socio-cultural knowledge, and critical thinking that students have acquired. It also marks their final stage of Japanese language learning. Three topics (Topic I: Socio-cultural, Topic II: Business, Topic III: Literature) are offered alternately and designed to allow students to select and pursue a topic of their interest. In the courses, students will learn to read critically and properly appreciate the original texts of a selected topic. While reading about socio-cultural aspects, topics/issues in business, or literature, students will further their understanding of Japanese language. This course has a special focus on the Japanese literature, and is designed to introduce students to representative short stories by contemporary writers in the original Japanese texts. Reading literature requires one's critical thinking and in-depth understanding of historical, social, cultural and linguistic background in addition to rhetoric and stylistics. In this course, short stories are selected for their readability and manageable length so that students will be able to sample different styles and genres by different writers.

Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
JPNS 4001|Minimum Grade of C-|May not be taken concurrently.

Jewish Studies (JST)

Courses

JST 0802. Race & Identity in Judaism. 3 Credit Hours.
Investigate the relationship between race and Judaism from Judaism's early period through today, looking both at how Jews have understood their own racial identity and how others have understood Jews' racial identity. You will explore the idea of racial identity in Judaism in order to examine the complex network of connections between racism and anti-Semitism, as you read primary and secondary texts in Jewish philosophy and history and in the study of race and racism. We hope to illuminate these complex issues as well as to engage with them on a personal and political level, examining the relationship between issues of race, religion, identity, and social justice and injustice, and inquiring into how we, as informed citizens in a global society, can affect change for the better. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: Jewish Studies 0902 or Religion 0802/0902.

Course Attributes: GD
Repeatability: This course may not be repeated for additional credits.

JST 0825. Jewish Diaspora in Latin America. 3 Credit Hours.
The coupling of the terms "Jew" and "Latino" or "Jewish" and "Latin American" still elicits surprise and disbelief, especially among those who grew accustomed to identifying "Jewish" with "Eastern European." In this course we will study the presence of Jews in Latin America, and the relationships between Jews and non-Jews in different Latin American countries. Using a variety of written sources, mainly literary and historical narratives, as well as music and cinema, we will discuss issues of identity, immigration, assimilation, Diaspora and nationalism. Class materials and discussions will be in English translation.

Course Attributes: GG
Repeatability: This course may not be repeated for additional credits.

JST 0868. World Society in Literature & Film. 3 Credit Hours.
Learn about Israeli culture by taking a guided tour of its literature and film. You don't need to speak a language other than English to take this exciting course, and you will gain the fresh, subtle understanding that comes from integrating across different forms of human expression. Some of the issues that will be illuminated by looking at culture through the lens of literature and film include family structures and how they are changing, national self-perceptions, pivotal moments in history, economic issues, social change and diversity. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: Arabic 0868/0968, Asian Studies 0868, Chinese 0868/0968, English 0868/0968, French 0868/0968, German 0868/0968, Hebrew 0868, Italian 0868/0968, Japanese 0868/0968, Korean 0868, LAS 0868/0968, Political Science 0868/0968, Russian 0868/0968, or Spanish 0868/0968.

Course Attributes: GG
Repeatability: This course may not be repeated for additional credits.
JST 0902. Honors Race & Identity in Judaism. 3 Credit Hours.
Investigate the relationship between race and Judaism from Judaism's early period through today, looking both at how Jews have understood their own racial identity and how others have understood Jews' racial identity. You will explore the idea of racial identity in Judaism in order to examine the complex network of connections between racism and anti-Semitism, as you read primary and secondary texts in Jewish philosophy and history and in the study of race and racism. We hope to illuminate these complex issues as well as to engage with them on a personal and political level, examining the relationship between issues of race, religion, identity, and social justice and injustice, and inquiring into how we, as informed citizens in a global society, can affect change for the better. (This is an Honors course.) NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: Jewish Studies 0802 or Religion 0802/0902.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GD, HO
Repeatability: This course may not be repeated for additional credits.

JST 2000. Special Topics in Jewish Studies. 3 Credit Hours.
The specific topic of this course varies from term to term. Please contact the Jewish Studies advisor or the instructor for more information.
Repeatability: This course may be repeated for additional credit.

JST 2109. Jewish Voices in Russian Culture. 3 Credit Hours.
In this course we will study the Jewish experience in the Russian Empire, the Soviet Union, and Post-Soviet Russia, with an emphasis on the 20th century, debunking many of the myths with which many students may have been familiar from the film "Fiddler on the Roof." We will read, in translation, excerpts from memoirs, works of literature and history, and view films, with subtitles by Jewish and non-Jewish scholars, authors, poets, and filmmakers about what Russians have called "The Jewish Question" for more than two centuries. We will also take up issues of anti-Semitism and xenophobia and consider them in the context of European and American history.
Repeatability: This course may not be repeated for additional credits.

JST 2403. What is Judaism?. 3 Credit Hours.
This course introduces students to the beliefs, rituals, customs, and practices of the Jewish people in a historical context through an analysis of a variety of religious, cultural, and political texts and artifacts.
Repeatability: This course may not be repeated for additional credits.

JST 2405. Introduction to Afro-Jewish Studies. 3 Credit Hours.
This course will introduce students to the study of African and African-Diaspora Jews. Students will examine and critically assess the various past and present methods used to study Africana Jewish communities. The research and readings will provide students with a basic introduction to Afro-Jewish history, culture and religion. It will also analyze the effects of race and racism on the construction of Afro-Jewish identities.
Repeatability: This course may not be repeated for additional credits.

JST 2406. Introduction to the Bible. 3 Credit Hours.
Introduction to the Hebrew Bible (Old Testament). What is the Bible? Where did it come from? How can there be so many different interpretations of the Bible? This course provides an examination of the historical, archeological, literary, and religious backgrounds of the Old Testament. Note: This course is not designated Writing Intensive. Cross-Listed with Religion 2406.
Repeatability: This course may not be repeated for additional credits.

JST 2408. Jewish Secular Thought and Culture from Spinoza to Seinfeld: A History of Jewish Secularism. 3 Credit Hours.
Non-religious Jews come in all shapes and sizes: political radicals, philosophers, scientists, psychoanalysts, feminists, stand-up comics. Secular Jews helped establish the modern age, gave voice to the critique of religion, pushed for separation of Church and State, developed a vibrant Yiddish culture and founded the State of Israel. This course is a survey of issues in modern Jewish history from the philosophical critique of the Bible to tensions between religious and secular Jews in Israel. We will pay close attention to the thinkers who helped frame the transformations of Jewish self-understanding in the West: Spinoza, Mendelsohn, Marx, Freud, Einstein, Arendt…and Seinfeld. [Duplicate Credit Warning: The prior title for this course was "Jewish Secularism/Jewish Civilization I"; students who successfully completed that version of the course will not earn additional credits for this course.]
Repeatability: This course may not be repeated for additional credits.

JST 2409. Secular Jewish Utopian Politics / Jewtopias: The Jewish Romance with Communism, Zionism, and America. 3 Credit Hours.
What is Jewish politics? Jews were involved with three grand political cultures in the 20th century: The Zionist Movement, Communism, and Liberal Democracy. The new "Promised Lands" for Jews in Europe, Russia, Israel, and America were secular and utopian. Through literature, manifesto, fiction and film this course will examine each of these movements and explore the dark side of the attempts to create perfect social justice—how those visionary dreams were tempered if not shattered. Readings will include: Theodor Herzl, Arthur Koestler, Michael Chabon, Michael Walzer, and Tony Kushner's Angels in America. [Duplicate Credit Warning: The prior title for this course was "Jewish Secularism/Jewish Civilization II"; students who successfully completed that version of the course will not earn additional credits for this course.]
Repeatability: This course may not be repeated for additional credits.

JST 2447. Kabbalah and Mysticism. 3 Credit Hours.
Introduction to the basic concepts, worldview and psychology of the Kabbalah. Mystical experiences and spiritual practices of the Kabbalists are situated within the context of comparative mysticism.
Repeatability: This course may not be repeated for additional credits.
JST 2496. Introduction to the Bible. 3 Credit Hours.
Introduction to the Hebrew Scriptures. What is the Bible? Where did it come from? How can there be so many different interpretations of the Bible? An examination of the historical and religious background of the Hebrew Scriptures and the various kinds of literature in the Bible.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

JST 2705. Anti-Semitism/Holocaust/Racism. 3 Credit Hours.
A history of anti-Semitism with a focus on the Holocaust and racism. This course will investigate the development and implementation of racial anti-Semitism in Germany and compare Nazi anti-Semitism with other forms of racism and anti-Semitism in Europe and America. It will also explore the connection between anti-Semitism and anti-Zionism, the growth of neo-Nazism, and the complex relationship between American Jews and African Americans. NOTE: This course can be used to satisfy the university Core Studies in Race (RS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: RS
Repeatability: This course may not be repeated for additional credits.

JST 2706. Jewish Diaspora/Survey of Jewish History. 3 Credit Hours.
Jewish history from the destruction of the Second Jewish Commonwealth to the creation of the State of Israel. The course will examine minority status, migration, persecution, economic adaptation, gender roles in different environments, acculturation and identity. The survey includes: the medieval Jewish experience under both Christian and Islamic rule; the development of Jewish communities in Eastern Europe, Western Europe, and the United States; the changing role of Jewish women; the rise of Zionism; and the Holocaust.
Repeatability: This course may not be repeated for additional credits.

JST 2779. Love Themes in Hebrew Literature. 3 Credit Hours.
The development of the different love themes from the "Song of Songs," through the golden age of Spain, Hebrew poetry in Italy, the Enlightenment, revival period, and Israeli literature. Among the themes will be great expectations, happiness and unity, and the happy hell of withered love. Changes in style, form, and content will be emphasized and recurring symbols will be discussed.
Repeatability: This course may not be repeated for additional credits.

JST 2797. Jewish Humor Past and Present. 3 Credit Hours.
The development of Jewish humor from the medieval period to the present. The course will focus on the different literary forms of wit and humor.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

JST 2900. Honors Special Topics. 3 Credit Hours.
Course content varies each semester. Honors students can obtain a description of the current version at the Jewish Studies office, Anderson Hall, Room 641.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.

JST 3000. Topics in Jewish Studies. 3 Credit Hours.
Course content varies each semester. Students can obtain a description of the current version at the Jewish Studies office, Anderson Hall, Room 641.
Repeatability: This course may be repeated for additional credit.

JST 3082. Independent Jewish Studies. 3 Credit Hours.
This is a course for advanced undergraduates to do sustained work with a professor they have already worked with in the program. The content and scope of the course is determined by the individual professor and the student with the approval of the director of Jewish Studies.
Repeatability: This course may be repeated for additional credit.

JST 3085. Jewish Studies Internship. 3 Credit Hours.
The Jewish Studies internship course is designed to enable Temple students to work in the Jewish community both to do hands-on work in a Jewish cultural, historical, communal or religious organization in Philadelphia's vibrant Jewish community and do a research project on some aspect of their work. With the director of Jewish Studies, the students will work out a set of readings appropriate to their individual research project.
Repeatability: This course may be repeated for additional credit.

JST 3182. Independent Study. 1 to 4 Credit Hour.
Students make arrangements with faculty in their departments to take an individual program of study. Course is by arrangement. Contact department chair for information.
Repeatability: This course may be repeated for additional credit.

JST 3221. Jewish Experience in America. 3 Credit Hours.
This course considers the evolution of the Jewish community in the United States from its colonial beginnings to the present day. Topics include: the immigrant experiences of various waves of migration; the development of the major religious movements within Judaism: Reform, Conservative, Orthodox and Reconstructionist; the role of Jews in American life and politics; the changing roles of American Jewish women; American anti-Semitism; Black-Jewish relations; relationship between American Jews and Israel; assimilation and identity.
Repeatability: This course may not be repeated for additional credits.
JST 3250. Topics: Jews & Film. 3 Credit Hours.
This course will vary by semester offering various approaches to issues of Jews and film. It will include topics such as: Eastern and Central European Jewish films; American Jews and Hollywood; films about Jews, Israeli film, and selected Jewish filmmakers and their works. NOTE: Sometimes, depending on the topic, this course will be cross-listed with Hebrew or Religion.
Repeatability: This course may be repeated for additional credit.

JST 3404. Dead Sea Scrolls. 3 Credit Hours.
This class will introduce the students to the texts found in Qumran and their implications for the fields of Biblical studies and New Testament studies. In addition to reading the texts, the students will be introduced to archeology and the technological innovations that science has brought to bear in the reconstruction of the texts and in their publication.
Repeatability: This course may not be repeated for additional credits.

JST 3406. Women in Judaism. 3 Credit Hours.
This interdisciplinary course will explore issues of gender in various Jewish texts and practices. Using feminist theory it will ask questions about how normative notions of Jewish masculinity and femininity have been constructed in different texts from different historical periods. Students will engage in close readings of contemporary and ancient texts.
Repeatability: This course may not be repeated for additional credits.

JST 3407. Jews, America and Sports. 3 Credit Hours.
While Jews are often seen as “the people of the book,” they are also a “people of the body.” This course will locate sports in the history and sociology of American Jewish life. The first section will look at the history of Jews in relationship to athletics and body image. The course will then focus on the American experience to understand sports in the American context, looking not only at the major sports that Jews have been involved with (baseball, boxing, basketball and track), but also how immigration, urbanization, gambling, assimilation, and anti-Semitism have played roles in how Jews have been involved in sports. We will examine questions about ethnicity and race, gender (both masculinity and women’s participation) and class, and the business of sport. A third section will examine the arena of international affairs, especially the 1936 Olympics, and the role of sports in Israel, and the Israel-America relations as experienced through U.S. participation in the Maccabiah games. We will end by looking at sports in the Jewish imagination and the life of contemporary Jews through a study of business, literature and life experience. The course will encourage students to think in new ways about the Jewish connection to sports. It will require weekly writing assignments and several projects in the Philadelphia Jewish community.
Repeatability: This course may not be repeated for additional credits.

JST 3408. Israel in the Middle East. 3 Credit Hours.
Law, geography, education, religion, politics, eastern and western communities, and culture examined by experts in three fields. NOTE: This course will be offered in English.
Repeatability: This course may not be repeated for additional credits.

JST 3411. The Philosophies of Judaism. 3 Credit Hours.
Close study of works by one or more Jewish and political philosophers, stressing their relevance to an understanding of contemporary politics and issues of Jewish identity, culture, and religion.
Repeatability: This course may not be repeated for additional credits.

JST 3571. Israel, History, Politics and Society. 3 Credit Hours.
Development of Israel and its relationship with its Arab neighbors. Includes a discussion of the evolution of Zionism, the growth of Arab nationalism, the creation of the Jewish State, the plight of the Palestinian refugees, and an evaluation of peace prospects in the Middle East.
Repeatability: This course may not be repeated for additional credits.

JST 3711. Israelis and Palestinians. 3 Credit Hours.
The course explores the Israeli/Palestinian relationship, beliefs and feelings from the beginning of the 20th century till today, as it is represented in both Israeli and Palestinian literature and art. A strong emphasis is on the development of the image of the other in each group and its connection to self identity. NOTE: The course will be conducted in English. Previously titled “Mideast Literature in Translation.”
Repeatability: This course may not be repeated for additional credits.

JST 3720. Topics in Hebrew Culture. 3 Credit Hours.
Topics from Hebrew culture, which are of general and current interest based on reading Hebrew texts in translation. Lectures, audiovisual presentations, and large and small group work used to explore the significance of the texts.
Repeatability: This course may be repeated for additional credit.

JST 3797. Literature and Art of the Holocaust. 3 Credit Hours.
One of the main assumptions of the course is that the Holocaust, which was considered to be a Jewish catastrophe, is humanity’s catastrophe and affirmation of the bankruptcy and failing of western civilization. The literature of the Holocaust transmits the horrors and terrors in concentration camps, on the trains and in the snowy fields. NOTE: The course will be offered in English.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.
JST 3900. Honors Special Topics. 3 Credit Hours.
Course content varies each semester. Honors students can obtain a description of the current version at the Jewish Studies office, Anderson Hall, Room 641.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.

JST 4096. Independent Study in Jewish Studies. 3 Credit Hours.
Intensive study under individual guidance in a specific area suggested by the student and approved by the faculty advisor from the Jewish Studies faculty. NOTE: Capstone course. This course is required for all Jewish Studies majors.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

JST 4406. Secular Study of Ancient Jewish History: Between the Torah and the Talmud. 3 Credit Hours.
This course will look at the processes and stages involved in the formation of the Torah/Pentateuch (the books of Genesis-Deuteronomy), the formation of the Talmud (the anthology of Rabbinic thought), and the historical, social, and intellectual forces that shaped both. While the Jewish religious tradition typically sees the Torah as written by Moses, the critical perspective adopted by the course will look at how different scribal and priestly groups in ancient Israel contributed to a work that would only later be regarded as authored by Moses. Likewise, while traditional Judaic religion views the Talmud as a direct outgrowth of the Torah, this course will explore the diverse factions, debates, and battles between groups that either accepted or rejected the Torah in various forms, leading up to the emergence of the Rabbinic movement and the preservation of different views within their literature.
Repeatability: This course may not be repeated for additional credits.

JST 4411. Secularism: Jewish and Muslim Women. 3 Credit Hours.
In its three-hundred-year history as a Western concept, secularism is often defined as the opposite of religion. Religious women have alternately found western secularism to be a source of liberation (as it grants them greater civil rights) and a source of oppression (as it putatively shrinks the religious sphere). In creating feminisms through Jewish and Muslim experience, feminisms that are both secular and religious, these religious women have complicated the meanings of secularism. They have also challenged the notion that feminism is necessarily secular. This course looks at examples of Jewish and Muslim women’s lives and feminist thought in the US, Europe, and the Middle East. The course will compare and contrast the feminism of these two groups of religious women, in order to more fully understand the role of concepts like secularism, feminism, and religion.
Repeatability: This course may not be repeated for additional credits.

JST 4896. Modern Jewish History. 3 Credit Hours.
This course considers the impact of modernity on Jews and Judaism in Eastern Europe, Western Europe, the United States, and the Middle East. We will discuss the process of emancipation and assimilation; religious reform movements and modern Orthodoxy; the emergence of the Jewish New Woman; the involvement of Jews in liberalism, socialism and communism; the evolution of Zionism and the State of Israel; modern anti-Semitism and the Holocaust; and the complex issues relating to modern Jewish identity.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

Journalism (JRN)

Courses

JRN 1101. Elements of Writing. 2 Credit Hours.
This course focuses on the fundamentals of style and language usage necessary for effective writing.
Repeatability: This course may not be repeated for additional credits.

JRN 1111. Journalism and Society. 3 Credit Hours.
The purpose of this course is to acquaint students with concepts and functions of journalism and the related industries of advertising and public relations in American society. Students will gain knowledge about the history, economics and industry structure of these industries, focusing on how mass media content is determined and disseminated. We will explore underlying values associated with journalism, relationships between journalism and other social institutions, and current issues facing journalists. NOTE: (1) Departmental core course. Normally taken as the first Journalism course. A grade of C or higher is required in order to take higher-level Journalism courses. (2) This course can be used to satisfy the university Core Individual and Society (IN) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: IN
Repeatability: This course may not be repeated for additional credits.
JRN 1113. Audio/Visual Newsgathering. 3 Credit Hours.

This course will present students with additional story-telling tools by introducing them to basic techniques of reporting with and editing sound and video. The emphasis of this course will be on the use of digital audio and video recorders in the field to produce news stories for radio, television and the web. This course requires that students use the computer software that is used in the industry. NOTE: Special authorization required for non-majors.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(JRN 1111|Minimum Grade of C|May not be taken concurrently
OR JRN1 Y|May not be taken concurrently)
AND (JRN 1196|Minimum Grade of C|May not be taken concurrently).

JRN 1114. Design for Journalists. 3 Credit Hours.

This course introduces students to the fundamental elements of visual design and their application in various types of journalistic publications both in print and online. Students will learn and use a variety of tools that will allow them to think and create journalistic elements visually. NOTE: Special authorization required for non-majors.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(JRN 1111|Minimum Grade of C|May not be taken concurrently
OR JRN1 Y|May not be taken concurrently)
AND (JRN 1196|Minimum Grade of C|May not be taken concurrently).

JRN 1196. Writing for Journalism. 3 Credit Hours.

Introduction to and practice in writing stories for various mass media. Effective writing, journalistic style and language skills are emphasized. NOTE: Departmental core course. This course is the prerequisite for all department writing courses. A grade of C or higher is required in order to take upper level Journalism courses.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
JRN 1101|Minimum Grade of C|May be taken concurrently.

JRN 2101. Journalism Research. 3 Credit Hours.

Introduction to research used in journalism, including library materials, the World Wide Web, and electronic databases. Course includes retrieval, analysis, and presentation of data with final projects. NOTE: Departmental advanced core course.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(JRN 1111|Minimum Grade of C|May not be taken concurrently
OR JRN1 Y|May not be taken concurrently)
AND (JRN 1196|Minimum Grade of C|May not be taken concurrently).

JRN 2201. Public Affairs Reporting. 3 Credit Hours.

Reporting and writing public affairs news stories. NOTE: News-Editorial sequence requirement.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
CMST 2111|Minimum Grade of C|May not be taken concurrently.

JRN 2202. Editing the News. 3 Credit Hours.

Editing copy, writing headlines and picture captions. Some layout, coordinating news values with space limitations. Consideration of management and ethical problems. NOTE: News-Editorial sequence requirement.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(JRN 1111|Minimum Grade of C|May not be taken concurrently
OR JRN1 Y|May not be taken concurrently)
AND (JRN 1196|Minimum Grade of C|May not be taken concurrently).

JRN 2301. Introduction to Magazines. 3 Credit Hours.

Overview of industry structure; magazine markets and audiences; and what professionals do: editing, writing, design, and advertising, circulation, concept development. NOTE: Strongly recommended as preparation for Journalism 3304 (0381).

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
JRN 1111|Minimum Grade of C|May not be taken concurrently
OR JRN1 Y|May not be taken concurrently
OR CMST 2111|Minimum Grade of C|May not be taken concurrently.
JRN 2396. Magazine Article Writing. 3 Credit Hours.
Writing, analyzing, and marketing factual articles for general and specialized magazines. Subject research, investigation of editorial needs, ethical and legal problems, and manuscript preparation.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(JRN 1111|Minimum Grade of C|May not be taken concurrently
OR JRN1 Y|May not be taken concurrently)
AND (JRN 1196|Minimum Grade of C|May not be taken concurrently).

JRN 2501. Broadcast Newswriting. 3 Credit Hours.
Students learn skills necessary to write for radio and television under deadline pressure, analyze how broadcast news is presented, develop interview skills, and write newscasts and editorials.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(JRN 1111|Minimum Grade of C|May not be taken concurrently
OR JRN1 Y|May not be taken concurrently)
AND (JRN 1196|Minimum Grade of C|May not be taken concurrently).

JRN 2551. Broadcast Performance. 4 Credit Hours.
Explores the variety of skills required to communicate effectively through radio and television. Emphasis on performance techniques, creativity, writing and analytical skills needed to communicate effectively using various formats, such as interviews, editorials, commercials, and newscasts.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
JRN 1113|Minimum Grade of C|May not be taken concurrently.

JRN 2800. Special Topics in Journalism. 3 Credit Hours.
Subject matter varies each semester. Please consult the Course Schedule for further information.

Repeatability: This course may be repeated for additional credit.

JRN 2810. Special Topics in Journalism. 1 Credit Hour.
Subject matter varies each semester. Please consult the Course Schedule for further information.

Repeatability: This course may be repeated for additional credit.

JRN 3101. Journalism and the Law. 3 Credit Hours.
This course should improve students' writing and critical-thinking skills and help them understand the legal foundation for freedom of speech and press in America. Students will discuss First Amendment cases, and their ethical implications, to better understand how judicial values are linked to the professional lives of journalists and the free-expression rights of citizens.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
CMST 2111|Minimum Grade of C|May not be taken concurrently.

JRN 3201. Investigative Reporting. 3 Credit Hours.
Advanced instruction and practice in writing news stories with emphasis on investigative and other in-depth reporting techniques. NOTE: Special authorization required for non-majors.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
JRN 2201|Minimum Grade of C|May not be taken concurrently.

JRN 3251. Business Writing. 3 Credit Hours.
This course focuses on news reporting and writing about business and finance. Topics of coverage may include reporting on personal finance issues, banking, government economic and regulatory policies, and corporations and other forms of business.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
JRN 1196|Minimum Grade of C|May not be taken concurrently.

JRN 3252. Editorial Writing. 3 Credit Hours.
Conceptualizing, researching, and writing effective editorials for the mass media.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
JRN 1196|Minimum Grade of C|May not be taken concurrently.
JRN 3253. Health and Environmental Writing. 3 Credit Hours.
Instruction and practice in writing popular science articles for newspapers and magazines. Translation of scientific language, familiarization with science literature, and interviewing scientists.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
JRN 1196|Minimum Grade of C|May not be taken concurrently.

JRN 3254. International Reporting. 3 Credit Hours.
This course focuses on interpreting and reporting about governments, politics, and cultures outside of the United States and ethnic groups within the United States.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
JRN 1196|Minimum Grade of C|May not be taken concurrently.

JRN 3255. Sports Writing. 3 Credit Hours.
Instruction and practice in reporting and writing stories on a variety of sports topics. Traditional play-by-play reporting and locker room interviewing; less traditional sports activities. Students attend sports events and write outside of class.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
JRN 1196|Minimum Grade of C|May not be taken concurrently.

JRN 3256. Writing Humor. 3 Credit Hours.
Understanding various forms of humor: wit, satire, parody, and irony. Practical assignments in writing humor.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
JRN 1196|Minimum Grade of C|May not be taken concurrently.

JRN 3257. Advanced Sports Reporting. 3 Credit Hours.
The goal of this course is to produce off-the-beaten path sports stories in a variety of formats, honing your sports reporting and writing skills. You'll be heading into the surrounding communities and the city to unearth and report on under-reported sports stories. You'll improve your multi-media skills in terms of putting together both audio and video packages, and you'll learn more about writing sports features and longer format pieces.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
JRN 3255|Minimum Grade of C|May not be taken concurrently.

JRN 3296. Travel Writing. 3 Credit Hours.
This course explores international communication, intercultural competence, and the nature of travel (why and how we travel, and what we can learn from it) through a travel writing curriculum.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
JRN 1196|Minimum Grade of C|May not be taken concurrently.

JRN 3297. Writing Arts Criticism. 3 Credit Hours.
The mission of the course is to explore critical reviewing in many areas, which may include theater, dance, music, film, art, museum exhibitions, books and food. In addition to reading the works of reviewers, students will consider the different dynamics at play in reviewing in each art or discipline, and will go on assignment to write reviews. Students will present their reviews in a writing-workshop setting led by the instructor. By the end of the course students should be able to think about arts and entertainment in ways that lead to solid assessments, and should be able to write clear and organized arts criticism.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
JRN 1196|Minimum Grade of C|May not be taken concurrently.

JRN 3301. Magazine Editing. 3 Credit Hours.
This class will cover not only "macro" aspects of the magazine industry, but also the "micro" processes of article acquisitions and editing - how to evaluate query letters, shape a manuscript, work with designers - because those skills constitute the core of what all good editors must be able to do, issue after issue.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(JRN 2301|Minimum Grade of C|May not be taken concurrently)
AND JRN 2396|Minimum Grade of C|May not be taken concurrently).
JRN 3302. Advanced Magazine Writing. 3 Credit Hours.
This class will help students develop story ideas, match those ideas with appropriate markets, write professional query letters and deliver publishable magazine articles.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
JRN 2396|Minimum Grade of C|May not be taken concurrently.

JRN 3303. Magazine Design. 3 Credit Hours.
Advanced design class building on the concepts and skills acquired in JRN 1114 (0152) (Design for Journalists) to introduce students to the specifics of magazine design. Emphasis on creating portfolio pieces including table of contents, features, departments, and cover designs. Current trends and historical, cultural, and ethical dimensions of magazine design are also explored. Extensive use of desktop publishing and image manipulation software.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
JRN 1114|Minimum Grade of C|May not be taken concurrently.

JRN 3304. Philadelphia People. 4 Credit Hours.
Experiential class in the editorial and business aspects of magazine production and distribution. Students write, edit, photograph, and design both print and online versions of a magazine; they also conduct reader research and sell advertising space.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(JRN 2301|Minimum Grade of C|May not be taken concurrently
AND JRN 2396|Minimum Grade of C|May not be taken concurrently).

JRN 3351. Magazine Fiction Workshop. 3 Credit Hours.
Fiction has been an integral part of magazine publishing since the medium's earliest days. This course teaches students how to write with power both within and beyond the short story form. Emphasis is given to a hands-on, working application of narrative forms and techniques central to both fiction and new literary journalism. Publication of worthy student stories is encouraged. NOTE: Previously titled "Short Story Writing."
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
JRN 1196|Minimum Grade of C|May not be taken concurrently.

JRN 3401. Photography. 4 Credit Hours.
An introductory course in digital photography where each student produces a portfolio of photographs based on weekly assignments covering a variety of topics. The course includes small-group field trips, weekly lab sessions focusing on digital darkroom applications and in-class critiques of student work. Historic, contemporary, legal and ethical considerations are also explored. Digital SLR cameras are available for semester-long checkout.
Repeatability: This course may not be repeated for additional credits

JRN 3402. Photojournalism. 2 Credit Hours.
The practical side of working as a photographer for newspapers, magazines, and wire services as well as freelance. Picture editing and handling.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(JRN 1196|Minimum Grade of C|May not be taken concurrently
AND JRN 3401|Minimum Grade of C|May not be taken concurrently).

JRN 3403. Documentary Photography. 3 Credit Hours.
This course will expose students to both the history and practice of documentary photography. This course offers students the opportunity to hone their research, shooting and editing skills and refine their portfolio through documentary projects.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(JRN 1196|Minimum Grade of C|May not be taken concurrently
AND JRN 3401|Minimum Grade of C|May not be taken concurrently)
OR CMST 2111|Minimum Grade of C|May not be taken concurrently.

JRN 3404. Photography Seminar I. 2 Credit Hours.
First of two seminar courses in the Photography for the Mass Media sequence. Current topics in photography. Participation in a long-term project documenting and presenting the works of various photographers representing a variety of genre. Start-to-finish production of a book, CD version of same, or both. NOTE: Generally taken in the junior year.
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(JRN 1196|Minimum Grade of C|May not be taken concurrently
AND JRN 3401|Minimum Grade of C|May not be taken concurrently).
JRN 3405. Photography Seminar II. 2 Credit Hours.
Second of two seminar courses in the Photography for the Mass Media sequence. Current topics in photography. Participation in a long-term web-based effort presenting the works of various photographers from earliest times to the present. Start-to-finish production of a book, CD version of same, or both.
NOTE: Generally taken in the senior year.
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(JRN 1196|Minimum Grade of C|May not be taken concurrently
AND JRN 3401|Minimum Grade of C|May not be taken concurrently).

JRN 3451. Photographic Portfolio. 2 Credit Hours.
Production, organization, and presentation of a photographic portfolio.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
JRN 3401|Minimum Grade of C|May not be taken concurrently.

JRN 3482. Photography Special Projects. 1 to 4 Credit Hour.
Individual work in areas of special interest including, but not limited to, formal and informal portraiture, nature of photography, underwater photography, medical or scientific photography, or special research in photography.
Repeatability: This course may be repeated for additional credit.

JRN 3501. Radio News Reporting. 3 Credit Hours.
The overall goal of this course is to help develop the technical skills and journalistic acumen necessary for reporting, writing, interviewing, recording, and editing news and news related audio stories. Students will work on storytelling techniques such as voicers, wraps, readers, sound portraits, and audio documentaries.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(JRN 1113|Minimum Grade of C|May not be taken concurrently
AND JRN 2501|Minimum Grade of C|May not be taken concurrently).

JRN 3502. TV News Reporting. 3 Credit Hours.
The overall goal of this course is to help develop the journalistic acumen and technical skills necessary for reporting, writing, shooting/recording, field producing and editing news and news-related stories for television.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
JRN 3501|Minimum Grade of C|May not be taken concurrently.

JRN 3504. Broadcast News Documentary. 3 Credit Hours.
This course focuses on longer-term journalistic documentaries for broadcast outlets. Students will have the opportunity to develop several enterprise stories over the course of the semester.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
JRN 3502|Minimum Grade of C|May not be taken concurrently.

JRN 3505. Experimental Journalism. 3 Credit Hours.
This course focuses on the evolving forms of broadcast journalism coverage, including blogs, podcasts and mobile media. Students will also create multimedia stories, and explore social media and its journalistic uses.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
JRN 3502|Minimum Grade of C|May not be taken concurrently
OR CMST 2111|Minimum Grade of C|May not be taken concurrently.

JRN 3506. Broadcast News Producing. 3 Credit Hours.
This course focuses on the behind-the-scenes aspects of pulling a broadcast newscast together. Students will produce several newscasts during the semester. Topics will include stories assignments, newscast structure and pacing, and interaction with reporters and anchors.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
JRN 3502|Minimum Grade of C|May not be taken concurrently.

JRN 3551. Advanced Video Newsgathering. 3 Credit Hours.
This course is designed to teach you advanced video news reporting techniques. You will research, produce, write, shoot, and edit video news stories. You will gain further understanding of field lighting and audio recording, and strengthen your abilities to produce journalistic video narrative.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
JRN 1113|Minimum Grade of C|May not be taken concurrently.
JRN 3552. Crossroads: TUTV News Magazine. 3 Credit Hours.
Crossroads is a TV news magazine program for TUTV. Students will produce story packages for multiple episodes of this program on topics which may include profiles of interesting people, political pieces, stories about arts, media and entertainment, or developments in medicine, law or social justice.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: JRN 3502|Minimum Grade of C|May not be taken concurrently.

JRN 3587. WRTI Radio News Workshop. 3 Credit Hours.
In this course designed for majors focused on radio as a career area, students work in the newsroom at WRTI-FM, Temple's public radio station. Students hold positions as producers, reporters, and anchors, and cover stories alongside local journalists in the nation's fourth largest broadcast market.
Repeatability: This course may be repeated for additional credit.
Pre-requisites: JRN 3502|Minimum Grade of C|May not be taken concurrently.

JRN 3601. Multimedia Storytelling. 3 Credit Hours.
An advanced multi-media course examining the production and design of online journalistic content. Topics will include online storytelling, web site planning, organization and production. Students will produce a comprehensive multi-media news web site, taking advantage of the convergence of print and broadcast media. Additionally, conceptual issues related to publishing on the Internet will be discussed. NOTE: Prior to Fall 2010, the course title was "Publishing to the Web."
Repeatability: This course may not be repeated for additional credits
Pre-requisites: (JRN 1113|Minimum Grade of C|May not be taken concurrently) AND JRN 1114|Minimum Grade of C|May not be taken concurrently).

JRN 3605. Data Journalism. 3 Credit Hours.
In this class, students will learn the skills needed to create visually exciting and thought-provoking online journalism. Topics include data journalism, data analysis, computer-assisted reporting, [painless] coding for journalists, and data visualization. The class is designed for an interdisciplinary group of students interested in writing, editing, visual design, or technology. Student-created projects will influence the path of the class: in a given semester, we may create infographics, investigate current political or economic issues, or develop innovative news apps.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: (JRN 1111|Minimum Grade of C|May not be taken concurrently) AND (JRN 1196|Minimum Grade of C|May not be taken concurrently).

JRN 3700. Journalism Studies Special Topics. 3 Credit Hours.
Subject matter varies each semester. Please consult the Course Schedule for further information.
Repeatability: This course may be repeated for additional credit.
Pre-requisites: JRN 1111|Minimum Grade of C|May not be taken concurrently OR JRN1 Y|May not be taken concurrently OR CMST 2111|Minimum Grade of C|May not be taken concurrently.

JRN 3701. Contemporary Media Issues. 3 Credit Hours.
Discussion, research, and analysis of issues of current interest and importance in journalism, public relations, and advertising areas. Examples of topics include coverage of elections by news and advertising, First Amendment issues, and media and the courts. NOTE: Topics announced in advance.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: JRN 1111|Minimum Grade of C|May not be taken concurrently OR JRN1 Y|May not be taken concurrently OR CMST 2111|Minimum Grade of C|May not be taken concurrently.

JRN 3702. Race and Racism in the News. 3 Credit Hours.
This online course explores how the media address issues of race and class. Students will develop critical skills and perspectives necessary for journalists and others to understand and report the news in our culturally diverse society. Students will examine the power of the media, how editorial decisions are made and by whom, and will begin to define the roles they can play as consumers or managers of media. Class discussions will take place through various online venues. NOTE: Special authorization required for non-majors.
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may not be repeated for additional credits
Pre-requisites: JRN 1111|Minimum Grade of C|May not be taken concurrently OR JRN1 Y|May not be taken concurrently OR CMST 2111|Minimum Grade of C|May not be taken concurrently.
JRN 3703. History of Journalism. 3 Credit Hours.
Development of American media with emphasis on newspapers; the struggle for freedom of the press; the relationship of newspapers to social and political history; the growth of magazines, book publishing, radio, and television.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: CMST 2111|Minimum Grade of C|May not be taken concurrently.

JRN 3704. Ethical Issues in Journalism. 3 Credit Hours.
This study of journalism ethics should give students a better understanding of ethical issues confronting journalists and systematic, well-reasoned ways to address those issues. Focus in this course is not on what journalists legally can and cannot do, but instead on how they decide what they should and should not do.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: JRN 1111|Minimum Grade of C|May not be taken concurrently
OR JRN1 Y|May not be taken concurrently
OR CMST 2111|Minimum Grade of C|May not be taken concurrently.

JRN 3705. Gender and American Mass Media. 3 Credit Hours.
This course explores the role of gender in both media reception and media practice. While it focuses primarily on cultural and professional notions about women's roles in American society, it also considers masculine stereotypes in the media world. The course examines the history and current practice of various media, including newspapers, magazines, broadcast news and entertainment shows, advertising, online media, film, and music.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: JRN 1111|Minimum Grade of C|May not be taken concurrently
OR JRN1 Y|May not be taken concurrently
OR CMST 2111|Minimum Grade of C|May not be taken concurrently.

JRN 3706. International News Communication. 3 Credit Hours.
An interdisciplinary and comparative approach to mass media systems of the world and their structures and functions. Topics include cultural exchange or invasion, international news flow, freedom of the press, socialist and developing nations' theories of press, mass media, and modernization.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: JRN 1111|Minimum Grade of C|May not be taken concurrently
OR JRN1 Y|May not be taken concurrently
OR CMST 2111|Minimum Grade of C|May not be taken concurrently.

JRN 3707. Visual Communication. 3 Credit Hours.
This course requires students to examine the many roles that photographs, both still and motion images, play in society. Through the analytic study of visual expression (mainly journalistic, advertising and documentary) students will be introduced to the tools necessary to understand all forms of visual communication.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: JRN 1111|Minimum Grade of C|May not be taken concurrently
OR JRN1 Y|May not be taken concurrently
OR CMST 2111|Minimum Grade of C|May not be taken concurrently.

JRN 3708. Newsroom Management. 3 Credit Hours.
This course enables students to develop their critical-thinking and problem-solving skills by working through key supervision and leadership issues facing managers in a typical newsroom setting. Students are provided with case studies, techniques and strategies for addressing team-building issues and the ethical and other concerns surrounding newsroom leadership, whatever the newsroom platform, print, broadcast, or online.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: JRN 1111|Minimum Grade of C|May not be taken concurrently
OR JRN1 Y|May not be taken concurrently
OR CMST 2111|Minimum Grade of C|May not be taken concurrently.

JRN 3709. The Entrepreneurial Journalist. 3 Credit Hours.
New opportunities exist for aggressive journalists. In this course, we'll discuss the various ways to be a content generator - from freelancing to blogging, from starting magazines and newspapers to creating multimedia web sites.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: JRN 1111|Minimum Grade of C|May not be taken concurrently
OR JRN1 Y|May not be taken concurrently
OR CMST 2111|Minimum Grade of C|May not be taken concurrently.
JRN 3710. Journalism Studies Special Topics. 3 Credit Hours.
Subject matter varies each semester. Please consult the Course Schedule for further information.

Repeatability: This course may be repeated for additional credit.

Pre-requisites:
JRN 1111|Minimum Grade of C|May not be taken concurrently
OR JRN1 Y|May not be taken concurrently.

JRN 3711. Ethnic and Alternative News Media. 3 Credit Hours.
This course focuses on ethnic, immigrant, and alternative media organizations and the communities and audiences they serve. Topics include: an overview of the cultural histories of ethnic, immigrant and alternative communities; the creation and development of media organizations that serve these communities; the functions of these media organizations; analyses of the ownership, culture, organizational structures, and newsroom operations.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites:
JRN 1111|Minimum Grade of C|May not be taken concurrently
OR JRN1 Y|May not be taken concurrently.

JRN 3720. Journalism Studies Special Topics. 3 Credit Hours.
Subject matter varies each semester. Please consult the Course Schedule for further information.

Repeatability: This course may be repeated for additional credit.

Pre-requisites:
JRN 1111|Minimum Grade of C|May not be taken concurrently
OR JRN1 Y|May not be taken concurrently.

JRN 3730. Journalism Studies Special Topics. 3 Credit Hours.
Subject matter varies each semester. Please consult the Course Schedule for further information.

Repeatability: This course may be repeated for additional credit.

Pre-requisites:
JRN 1111|Minimum Grade of C|May not be taken concurrently
OR JRN1 Y|May not be taken concurrently.

JRN 3751. Foreign Studies in Journalism. 3 or 6 Credit Hours.
Written report of research in journalism and mass communication by a student during a trip of at least two weeks abroad. NOTE: Paper must be presented by end of semester following return from trip.

Repeatability: This course may be repeated for additional credit.

JRN 3790. Special Topics in Journalism. 1 Credit Hour.
Subject matter varies each semester. Please consult the Course Schedule for further information. <p>The course may be taken more than once for credit.

Repeatability: This course may be repeated for additional credit.

JRN 3800. Special Topics in Journalism. 3 Credit Hours.
Subject matter varies each semester. Please consult the Course Schedule for further information.

Repeatability: This course may be repeated for additional credit.

JRN 3801. Business Practices for Writers and Editors. 1 Credit Hour.
This course will introduce students to a number of areas relevant to freelancing as a writer and/or editor. Issues to be covered will include marketing and branding, contracts, taxes, pricing, copyright and more.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites:
JRN 1111|Minimum Grade of C|May not be taken concurrently
OR JRN1 Y|May not be taken concurrently.

The goal of this course is to introduce students to the best business practices for running a freelance media business. Topics will include marketing and branding, insurance, taxes, pricing, intellectual property rights and licensing, contracts and more.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites:
JRN 1111|Minimum Grade of C|May not be taken concurrently
OR JRN1 Y|May not be taken concurrently.

JRN 3810. Special Topics in Journalism. 3 Credit Hours.
Subject matter varies each semester. Please consult the Course Schedule for further information.

Repeatability: This course may be repeated for additional credit.

JRN 3820. Special Topics in Journalism. 3 Credit Hours.
Subject matter varies each semester. Please consult the Course Schedule for further information.

Repeatability: This course may be repeated for additional credit.
JRN 3830. Special Topics in Journalism. 3 Credit Hours.
Subject matter varies each semester. Please consult the Course Schedule for further information.
Repeatability: This course may be repeated for additional credit.

JRN 3840. Special Topics in Journalism. 2 Credit Hours.
Subject matter not covered by regular departmental course offerings. Courses are sometimes taught by distinguished professionals or visiting faculty.
NOTE: Topics announced in advance.
Repeatability: This course may be repeated for additional credit.

JRN 3850. Special Topics in Journalism. 3 Credit Hours.
Subject matter not covered by regular departmental course offerings. Courses are sometimes taught by distinguished professionals or visiting faculty.
NOTE: Topics announced in advance.
Repeatability: This course may be repeated for additional credit.

JRN 3860. Special Topics in Journalism. 4 Credit Hours.
Subject matter not covered by regular departmental course offerings. Courses are sometimes taught by distinguished professionals or visiting faculty.
NOTE: Topics announced in advance.
Repeatability: This course may be repeated for additional credit.

JRN 3870. Special Topics in Journalism. 3 Credit Hours.
Subject matter varies each semester. Please consult the Course Schedule for further information.
Repeatability: This course may be repeated for additional credit.

JRN 3880. Special Topics in Journalism. 1 Credit Hour.
Subject matter not covered by regular departmental course offerings.
Repeatability: This course may be repeated for additional credit.

JRN 3882. Special Projects. 1 to 4 Credit Hour.
A special course of study in a particular area of Journalism. NOTE: Candidates should submit a detailed project outline prior to registration.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Journalism
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may be repeated for additional credit.

JRN 3885. Internship. 1 to 3 Credit Hour.
Organized professional work, under supervision, on selected media or news organizations. NOTE: Candidates should have a 3.0 GPA. For Journalism majors only.
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may be repeated for additional credit.

JRN 3887. High School Journalism Workshop. 3 Credit Hours.
This course allows Temple students to work directly in Philadelphia high schools, helping students there develop their own journalistic products. Students will work with a high school teacher and local journalists in leading a journalism club. The course will meet once a week at Temple, and twice a week in an area high school. Students will examine issues facing public education, as well as media coverage of education issues.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(JRN 1111|Minimum Grade of C|May not be taken concurrently
OR JRN1 Y|May not be taken concurrently)
AND (JRN 1196|Minimum Grade of C|May not be taken concurrently).

JRN 3890. Special Topics in Journalism. 1 Credit Hour.
Subject matter not covered by regular departmental course offerings.
Repeatability: This course may be repeated for additional credit.

JRN 3900. Honors Special Topics in Journalism. 3 Credit Hours.
Subject matter not covered by regular departmental course offerings. Courses are sometimes taught by distinguished professionals or visiting faculty.
NOTE: Topics announced in advance. This is an Honors course.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.

JRN 3901. Honors: Comics Journalism. 3 Credit Hours.
This course examines a new form of journalism that is quickly edging its way into broader awareness: comics journalism. This form marries nonfiction narratives (a genre pioneered by magazines) with sequential art to deliver important stories in a compelling way, a way that uniquely engages the reader's imagination. The new form is a natural fit for intensely personal stories.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.
JRN 4196. PhiladelphiaNeighborhoods.com. 4 Credit Hours.
PhiladelphiaNeighborhoods.com is the capstone course for the Department of Journalism in which students report about the neighborhoods of Philadelphia. Students will report stories on all forms of journalism: broadcast, photography, print and digital media. NOTE: For Journalism majors only. Special authorization required for all. Prior to Fall 2010, the course title was “Multimedia Urban Reporting Lab.”
Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(JRN 2101|Minimum Grade of C|May not be taken concurrently
AND JRN 3601|Minimum Grade of C|May not be taken concurrently).

JRN 4596. Broadcast Journalism Practicum. 4 Credit Hours.
This practicum exposes students to the skills and protocols required to conceptualize, produce and deliver television news. It is an intensive, hands-on production course simulating a newsroom operation in which students will learn to research and propose story ideas, conduct interviews, write, report and edit news stories and fill control room and studio positions including producer, director, audio, computer graphics, floor manager, studio camera operator and web producer. Students produce a weekly broadcast news show, Temple Update, created in cooperation with student volunteers. Note: Digital video editing is a skill students should know prior to taking this course. They should also be familiar with digital video cameras, tripods, and microphones for field production. Prior volunteer experience with Temple Update is strongly recommended.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
JRN 3502|Minimum Grade of C|May not be taken concurrently.

JRN 4597. Sports Production Practicum. 4 Credit Hours.
This Sports Update capstone class is a specialized, intensive hands-on production course for students interested in a career in the writing, producing, and directing of sports programming. Students will experience the real-world feel of a real sports programming environment that includes researching, writing and reporting, shooting, editing, producing and directing. By creating a weekly sports newscast aimed at informing viewers of important sports news, with an emphasis on the local college teams, including Temple, students learn, firsthand, the realities of enterprise their own stories, working postgame interviews, handling deadline pressure and writing in the clear and unique style specifically required to communicate effectively in the sports world.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
JRN 3502|Minimum Grade of C|May not be taken concurrently.

Kinesiology (KINS)

Courses
KINS 1001. Aerobics I. 2 Credit Hours.
This course leads to the development and maintenance of aerobic capacity of the circulatory and respiratory systems primarily through various aerobic activities. The course includes information on the values and means of developing and assessing aerobic fitness.
Repeatability: This course may not be repeated for additional credits.

KINS 1002. Aerobics II. 2 Credit Hours.
This course introduces advanced theory and training in aerobic fitness. Advanced practical knowledge on class planning, choreography, skill building, physical assessment, and the physiological and psychological benefits of aerobic fitness training are included. Physical and psychological preparation and values of the activity are included.
Repeatability: This course may not be repeated for additional credits.

KINS 1003. Adventure Climbing I. 2 Credit Hours.
This course focuses on the physical, cognitive, and social skills necessary to safely participate in climbing at ropes courses and related settings for a lifetime. Particular areas of emphasis include: safety and spotting, climbing equipment, knot tying, Prusik climbing, rappelling, and belaying. Psychological skills training and values of the activity are included.
Repeatability: This course may not be repeated for additional credits.

KINS 1005. Aikido I. 2 Credit Hours.
This course introduces the art of self-defense based on non-resistance rather than strength. No attempt is made to stop attacks in Aikido; they are met and guided in a way that causes attackers to be thrown by the directional force of their own attack. Physical and psychological preparation and values of the activity are included.
Repeatability: This course may not be repeated for additional credits.
KINS 1006. Aikido II. 2 Credit Hours.
This course advances the basic skills learned in beginning Aikido to include the use of weapons and the history and philosophy of self-defense. Physical and psychological preparation and values of the activity are included.
Repeatability: This course may not be repeated for additional credits.

KINS 1007. Aqua Aerobics I. 2 Credit Hours.
This course deals with the theory and practice of aerobics using the water as the exercise environment. The course leads to the improvement of cardio-respiratory fitness and the knowledge and skills for developing and maintaining fitness using the water as the exercise medium.
Repeatability: This course may not be repeated for additional credits.

KINS 1009. Backpacking and Camping I. 2 Credit Hours.
This course introduces the techniques of low impact, all-weather backpacking and camping, including choosing equipment, planning trips, finding the way, cooking, and survival. Class meetings are rescheduled into weekend trips after initial instruction and planning meetings on campus. Physical and psychological preparation and values of the activity are included.
Repeatability: This course may not be repeated for additional credits.

KINS 1012. Badminton I. 2 Credit Hours.
This course introduces the skills, strategies, etiquette, knowledge of the rules and how to select proper equipment, as well as opportunities for participation in badminton. Physical and psychological preparation and values of the activity are included.
Repeatability: This course may not be repeated for additional credits.

KINS 1014. Cycling I. 2 Credit Hours.
This course introduces the knowledge, skills, and abilities necessary to bicycle for fun and for fitness. Selection and maintenance of equipment, training techniques and racing strategies will be covered. Students will increase bicycle training progressively throughout the semester. NOTE: Students must supply their own equipment.
Repeatability: This course may not be repeated for additional credits.

KINS 1016. Fencing I. 2 Credit Hours.
This course introduces fencing for form and/or competition. It includes defensive and offensive strategies; care and selection of proper equipment; rules, officiating, injury prevention, and chivalry. Physical and psychological preparation and values of the activity are included.
Repeatability: This course may not be repeated for additional credits.

KINS 1017. Fencing II. 2 Credit Hours.
This course advances the skills learned in beginning foil fencing through the refinement of skills and techniques. Students will also have the opportunity to gain a more thorough understanding of the different aspects of fencing, namely tactics, rules, refereeing, fitness, safety, discipline, and etiquette. Physical and psychological preparation and values of participation in the activity are included.
Repeatability: This course may not be repeated for additional credits.

KINS 1018. Fitness for Life. 2 Credit Hours.
This course introduces the principles and activities for the development of optimal levels of cardiovascular endurance, muscular strength and endurance, flexibility, body weight, and body composition. Assessment of fitness level, development of an individual activity program commensurate with personal goals, and current research findings concerning exercise and nutrition are included. Physical and psychological preparation and values of the activity are included.
Repeatability: This course may not be repeated for additional credits.

KINS 1019. Golf I. 2 Credit Hours.
This course introduces the skills, strategies, etiquette, knowledge of the rules, and how to select proper equipment, as well as opportunities for participation in golf. Physical and psychological preparation and values of the sport are included. NOTE: Transport costs and greens fees are the responsibility of the student.
Repeatability: This course may not be repeated for additional credits.

KINS 1021. Golf II. 2 Credit Hours.
This course advances the skills learned in Golf I and is intended for the intermediate golfer wishing to enhance their knowledge, skills, and abilities on the golf course. Physical training and psychological skills training will also be included. NOTE: Transportation and greens fees must be supplied by the student.
Repeatability: This course may not be repeated for additional credits.

KINS 1022. Gymnastics I. 2 Credit Hours.
This course introduces the skills of floor exercise, tumbling, trampoline, and vaulting (for men and women); rings, horizontal bar, parallel bars, and side horse (for men); balance beam and uneven bars (for women). Physical and psychological preparation and values of the sport are included.
Repeatability: This course may not be repeated for additional credits.

KINS 1024. Judo I. 2 Credit Hours.
This course introduces the principles and techniques of falling, throwing, grappling, and the rules and customs of judo as a sport. Physical and psychological preparation and values of the activity are included.
Repeatability: This course may not be repeated for additional credits.
KINS 1026. Karate I. 2 Credit Hours.
This course introduces the principles and techniques of striking, kicking, punching, blocking, the code of ethics of karate, and the rules of competition. Physical and psychological preparation and values of the activity are included.

Repeatability: This course may not be repeated for additional credits.

KINS 1027. Karate II. 2 Credit Hours.
This course advances the basic skills learned in beginning karate. New striking and kicking techniques are introduced and more advanced kata (forms) are taught. Emphasis includes: concentrating focus and power; proper distancing in partner drills; moving, shifting and pivoting the body; and combining techniques smoothly and powerfully. Physical and psychological preparation and values of the activity are included.

Repeatability: This course may not be repeated for additional credits.

KINS 1028. Lifeguard Training. 3 Credit Hours.
This course introduces the skills and knowledge in water safety, rescue skills, and pool operation and management skills. Physical and psychological preparation and values of participation in the activity are included. NOTE: This course can lead to ARC Lifeguard Certification. Certification fee required.

Repeatability: This course may not be repeated for additional credits.

KINS 1029. Martial Arts I. 2 Credit Hours.
This course introduces the student to a wide variety of martial art forms. Physical and psychological preparation and values of the martial arts to life and health are included.

Repeatability: This course may not be repeated for additional credits.

KINS 1031. Aquatics Workshop I. 1 Credit Hour.
This workshop is designed to enable students to develop the knowledge and skills needed to participate at a beginning level in aquatic activities: water safety, skin diving, swimming, synchronized swimming, etc. NOTE: For a list of activities offered each semester, contact the workshop coordinator in the Department of Kinesiology in Pearson Hall. Kinesiology 1031 begins on the first Tuesday of each semester and runs for the first seven weeks of the semester.

Department restrictions: Must be enrolled in one of the following Departments: CPH:Kinesiology

Repeatability: This course may be repeated for additional credit.

KINS 1032. Fitness Workshop I. 1 Credit Hour.
This workshop is designed to enable students to develop the knowledge and skills needed to participate at a beginning level in fitness activities: weight training, aerobics, walking, etc. NOTE: For a list of activities offered each semester, contact the workshop coordinator in the Department of Kinesiology in Pearson Hall. Kinesiology 1032 begins on the first Tuesday of each semester and runs for the first seven weeks of the semester.

Department restrictions: Must be enrolled in one of the following Departments: CPH:Kinesiology

Repeatability: This course may be repeated for additional credit.

KINS 1033. Lifestyle Workshop I. 1 Credit Hour.
This workshop is designed to enable students to develop the knowledge and skills needed to participate at a beginning level in lifestyle activities: volleyball, badminton, tennis, yoga, etc. NOTE: For a list of activities offered each semester, contact the workshop coordinator in the Department of Kinesiology in Pearson Hall. Kinesiology 1033 begins on the first Tuesday of each semester and runs for the first seven weeks of the semester.

Department restrictions: Must be enrolled in one of the following Departments: CPH:Kinesiology

Repeatability: This course may be repeated for additional credit.

KINS 1034. Survival Workshop I. 1 Credit Hour.
This workshop is designed to enable students to develop the knowledge and skills needed to participate at a beginning level in survival activities: adventure climbing, personal defense, fencing, etc. NOTE: For a list of activities offered each semester, contact the workshop coordinator in the Department of Kinesiology in Pearson Hall. Kinesiology 1034 begins on the first Tuesday of each semester and runs for the first seven weeks of the semester.

Department restrictions: Must be enrolled in one of the following Departments: CPH:Kinesiology

Repeatability: This course may be repeated for additional credit.

KINS 1036. Personal Defense for Women. 2 Credit Hours.
This course introduces a five-stage approach to personal protection (awareness, avoidance, prevention, physical action, and follow up). Physical defensive skills involve "live" simulations while focusing on the concerns and needs of women. Physical and psychological preparation and values of the activity are included.

Repeatability: This course may not be repeated for additional credits.

KINS 1039. Racquetball I. 2 Credit Hours.
This course introduces the skills, strategies, etiquette, knowledge of the rules and how to select proper equipment, as well as opportunities for participation in racquetball. The three-wall game is taught with modifications for four and one wall play. Physical and psychological preparation and values of the activity are included.

Repeatability: This course may not be repeated for additional credits.
KINS 1041. Aquatics Workshop II. 1 Credit Hour.
This workshop is designed to enable students to develop the knowledge and skills needed to participate at a beginning level in aquatic activities: water safety, skin diving, swimming, synchronized swimming, etc. NOTE: For a list of activities offered each semester, contact the workshop coordinator in the Department of Kinesiology in Pearson Hall. Kinesiology 1041 begins on the eighth Tuesday of each semester and runs for the second seven weeks of the semester.
Department restrictions: Must be enrolled in one of the following Departments: CPH:Kinesiology
Repeatability: This course may be repeated for additional credit.

KINS 1042. Fitness Workshop II. 1 Credit Hour.
This workshop is designed to enable students to develop the knowledge and skills needed to participate at a beginning level in fitness activities: weight training, aerobics, walking, etc. NOTE: For a list of activities offered each semester, contact the workshop coordinator in the Department of Kinesiology in Pearson Hall. Kinesiology 1042 begins on the eighth Tuesday of each semester and runs for the second seven weeks of the semester.
Department restrictions: Must be enrolled in one of the following Departments: CPH:Kinesiology
Repeatability: This course may be repeated for additional credit.

KINS 1043. Lifestyle Workshop II. 1 Credit Hour.
This workshop is designed to enable students to develop the knowledge and skills needed to participate at a beginning level in lifestyle activities: volleyball, badminton, tennis, yoga, etc. NOTE: For a list of activities offered each semester, contact the workshop coordinator in the Department of Kinesiology in Pearson Hall. Kinesiology 1043 begins on the eighth Tuesday of each semester and runs for the second seven weeks of the semester.
Department restrictions: Must be enrolled in one of the following Departments: CPH:Kinesiology
Repeatability: This course may be repeated for additional credit.

KINS 1044. Survival Workshop II. 1 Credit Hour.
This workshop is designed to enable students to develop the knowledge and skills needed to participate at a beginning level in survival activities: adventure climbing, personal defense, fencing, etc. NOTE: For a list of activities offered each semester, contact the workshop coordinator in the Department of Kinesiology in Pearson Hall. Kinesiology 1044 begins on the eighth Tuesday of each semester and runs for the second seven weeks of the semester.
Department restrictions: Must be enrolled in one of the following Departments: CPH:Kinesiology
Repeatability: This course may be repeated for additional credit.

KINS 1046. SCUBA Diving I. 3 Credit Hours.
This course introduces the skills and knowledge necessary to develop into a competent, safe, and responsible scuba diver capable of making independent decisions. Specifically, students will develop the ability to recognize and implement alternative solutions for coping with stressful problems. Equipment is provided for campus coursework. Physical and psychological preparation and values of participation in the activity are included. NOTE: Lab fee required. Students can earn NAUI Certification by signing up for an open water trip. (The student at the end of the course must rent SCUBA equipment.)
Repeatability: This course may not be repeated for additional credits.

KINS 1047. SCUBA Diving II. 2 Credit Hours.
This course will prepare the novice SCUBA diver to learn about advanced diving equipment and to perform skill activities safely and proficiently without in-water supervision. Areas of study will include, but are not limited to, search and recovery, underwater communications, navigation, limited visibility diving, and/or Nitrox theory. Certification is not required at the end of the course; however, any student wishing to get certified will be presented with such opportunities. Any and/or all costs associated with this optional certification will need to be paid by the student directly to the independent dive shop and/or instructor leading the certification dives.
Repeatability: This course may not be repeated for additional credits.

KINS 1048. Swimming for the Non-Swimmer. 2 Credit Hours.
This course introduces students to basic personal aquatic safety skills for the purpose of developing confidence in the water. Physical and psychological preparation and values of participation in the activity are included. NOTE: For students who are not comfortable in shallow water or with their faces in the water.
Repeatability: This course may not be repeated for additional credits.

KINS 1049. Swimming I. 2 Credit Hours.
This course introduces students to basic aquatic skills to assure confidence and mobility in aquatic activities as well as the development of confidence in deep water. Physical and psychological preparation and values of participation in the activity are included. NOTE: For students with little or no swimming ability.
Repeatability: This course may not be repeated for additional credits.

KINS 1051. Swimming II. 2 Credit Hours.
This course advances the skills learned in Swimming I and focuses on stroke improvement and swimming endurance. Physical and psychological preparation and values of participation in the activity are included.
Repeatability: This course may not be repeated for additional credits.
KINS 1052. Tae Kwon Do I. 2 Credit Hours.
This course introduces the skills and knowledge for using the hands, arms, legs, and feet to attack and defend oneself; breathing and muscle control; competitive rules; the ranking system; safety; fitness; and history, values, and etiquette. Tae Kwon Do is a Korean form of martial arts and is taught from a traditional perspective and supplemented by modern scientific principles. Physical and psychological preparation and values of participation in the activity are included.
Repeatability: This course may not be repeated for additional credits.

KINS 1053. Tae Kwon Do II. 2 Credit Hours.
This course advances the skills learned in Tae Kwon Do I and applies them in two areas. First, students will learn how to design and teach a complete martial arts class that will focus the material in a manner easily understood by students while at the same time keeping students stimulated, interested, and challenged. Second, students will be able to design a training regimen for martial arts students interested in competing in Olympic-style sport martial arts. Physical and psychological preparation and values of participation in the activity are included.
Repeatability: This course may not be repeated for additional credits.

KINS 1054. Tennis I. 2 Credit Hours.
This course provides opportunities to develop the skills, strategies, etiquette, knowledge of the rules and how to select proper equipment, as well as opportunities for participation in tennis. Physical and psychological preparation and values of the sport are included. Emphasis is on preparing students to be lifelong participants in tennis.
Repeatability: This course may not be repeated for additional credits.

KINS 1055. Tennis II. 2 Credit Hours.
This course advances the skills learned in Tennis I through the refinement of skills and techniques and by developing more sophisticated skills and strategies in tennis. Physical and psychological preparation and values of participation in the activity are included.
Repeatability: This course may not be repeated for additional credits.

KINS 1056. Volleyball I. 2 Credit Hours.
This course introduces the skills, strategies, etiquette, knowledge of the rules, and how to select proper equipment, as well as opportunities for participation in volleyball. Physical and psychological preparation and values of participation in the activity are included.
Repeatability: This course may not be repeated for additional credits.

KINS 1057. Volleyball II. 2 Credit Hours.
This course advances the skills learned in Volleyball I. Skill foci include mastery of passing and serving while improving setting, spiking and blocking. Traditional court positioning is reviewed and new offensive and defensive rotations and team configurations and transitions are explored. Knowledge and demonstrations of skills mechanics, rules, regulations, safety and etiquette are reviewed and enhanced. Mental aspects of the game are also included.
Repeatability: This course may not be repeated for additional credits.

KINS 1058. Walking/Jogging/Running I. 2 Credit Hours.
This course focuses on the physical, cognitive, and social skills necessary to safely participate in walking and jogging for a lifetime. Areas of emphasis include, but are not limited to, site selection, safety, equipment, heart rate and perceived exertion, different methods of training, fitness principles, and/or record keeping.
Repeatability: This course may not be repeated for additional credits.

KINS 1059. Water Safety Instructor. 3 Credit Hours.
This course introduces skills in teaching aquatics through formal training in the American Red Cross methods of teaching the following types of aquatic programs: Adapted, Preschool, Competitive, Springboard Diving, Learn to Swim, and Water Safety. Physical and psychological preparation and values of participation in the activity are included.
Repeatability: This course may not be repeated for additional credits.

KINS 1060. Weight Training I. 2 Credit Hours.
This course introduces the knowledge and skills needed to train with weights for sport, recreation, health, and fitness. Muscular contraction, overload, specificity of training, progression, and various types of exercise and programs are taught. Students learn to develop and participate in personal weight training programs. Physical and psychological preparation and values of the activity are included.
Repeatability: This course may not be repeated for additional credits.

KINS 1061. Weight Training II. 2 Credit Hours.
This course furthers the knowledge and skills needed to train with weights for sport, recreation, health and fitness. Advanced forms of muscular contraction, overload, specificity of training, progression, and various types of exercise and programs are taught. Students further develop their ability to participate in personal weight training programs at more advanced levels. Psychological preparation and values of activity are included.
Repeatability: This course may not be repeated for additional credits.

KINS 1062. Yoga I. 2 Credit Hours.
This course introduces the principles of yoga for developing fitness in the individual as a whole and for the reduction of stress. The concept of body image and developing the fundamental skills for making yoga a safe, daily practice is included. Physical and psychological preparation and values of the activity are included.
Repeatability: This course may not be repeated for additional credits.
KINS 1201. Introduction to Kinesiology. 3 Credit Hours.
This course is designed for entry-level Kinesiology majors as well as students considering transferring into Kinesiology. Theories, principles, and professional applications of Kinesiology and its subdisciplines while integrating technology and writing enhancement are included.
Repeatability: This course may not be repeated for additional credits.

KINS 1202. Concepts in Health-Related Fitness. 2 Credit Hours.
This course introduces Kinesiology majors to the principles, components, and values of physical fitness and the means of improving the level of fitness of each component. A balanced emphasis will be placed on personal development and application of teaching fitness to low fitness people. Physical and psychological preparation and values of participation in the activity are included. NOTE: This course is for majors only.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Kinesiology
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(KINS 1223|Minimum Grade of C|May not be taken concurrently
OR KIN 1 Y|May not be taken concurrently)
AND (KINS 1224|Minimum Grade of C|May not be taken concurrently
OR KIN 2 Y|May not be taken concurrently).

KINS 1221. Principles of Anatomy and Physiology I. 3 Credit Hours.
Kinesiology 1221 is the first in a two course sequence dealing with the structure and functional systems of the human body. Emphasis is placed upon systems integration as well as the manner in which organ systems undergo homeostatic regulation. This course considers general body organization and the skeletal, muscular, nervous, and endocrine systems. NOTE: To determine if this course in combination with another course can satisfy the GenEd Science & Technology requirement, see your advisor. This course is not equivalent to Kinesiology 1223 (Anatomy and Physiology with Lab) and cannot be used to replace the grade earned in Kinesiology 1223.
Repeatability: This course may not be repeated for additional credits.

KINS 1222. Principles of Anatomy and Physiology II. 3 Credit Hours.
Kinesiology 1222 is the second in a two course sequence dealing with the structure and functional systems of the human body. Emphasis is placed upon systems integration as well as the manner in which organ systems undergo homeostatic regulation. This course considers the cardiovascular, respiratory, lymphatic, and reproductive systems to include nutrition, metabolism, and electrolyte balance. NOTE: To determine if this course in combination with another course can satisfy the GenEd Science & Technology requirement, see your advisor. This course is not equivalent to Kinesiology 1224 (Anatomy and Physiology with Lab II) and cannot be used to replace the grade earned in Kinesiology 1224.
Repeatability: This course may not be repeated for additional credits.
Pre-requisites:
KINS 1221|Minimum Grade of C-|May not be taken concurrently.

KINS 1223. Human Anatomy and Physiology I. 4 Credit Hours.
This course is the first of a two-course sequence dealing with the anatomical and functional relationships of the human body. Emphasis is placed on systems integration leading to an understanding of the functions of the human organism. Kinesiology 1223 covers basic structure and function of the body (cells and tissues, organs, systems) through detailed investigations of the skeletal, muscular, and nervous systems. NOTE: To determine if this course in combination with another course can satisfy the GenEd Science & Technology requirement, see your advisor. This course is not equivalent to Kinesiology 1221 (Principles of Anatomy and Physiology I) and cannot be used to replace the grade earned in Kinesiology 1221.
Course Attributes: SA
Repeatability: This course may not be repeated for additional credits.

KINS 1224. Human Anatomy and Physiology II. 4 Credit Hours.
This course is the second in a two-course sequence dealing with the anatomical and functional relationships of the human body. Emphasis is placed on systems integration leading to an understanding of the functions of the human organism through detailed investigations of the endocrine, circulatory, digestive, urinary, and reproductive systems. NOTE: (1) Lab fee required. (2) To determine if this course in combination with another course can satisfy the GenEd Science & Technology requirement, see your advisor. This course is not equivalent to Kinesiology 1222 (Principles of Anatomy and Physiology II) and cannot be used to replace the grade earned in Kinesiology 1222.
Course Attributes: SB
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
KINS 1223|Minimum Grade of C-|May not be taken concurrently.

KINS 1225. General Human Anatomy & Physiology. 3 Credit Hours.
The purpose of this course is to provide an overview of the human body’s general organization; and integumentary, skeletal, muscular, nervous, endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary and reproductive systems. NOTE: This course is for Social Work majors only.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Social Work, Social Work - Undergraduate
Repeatability: This course may not be repeated for additional credits.
KINS 1442. Basic Techniques in Athletic Training. 2 Credit Hours.
This course introduces students to basic taping and wrapping techniques that are commonly used in the prevention of joint injury in the athletic training profession. Students will obtain both didactic information and practical application of basic taping and wrapping techniques, splinting and ambulatory devices, as well as the guidelines for fitting protective equipment. NOTE: Lab fee required. Athletic Training majors only. Spring only.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Athletic Training
Repeatability: This course may not be repeated for additional credits.

KINS 1444. Movement Injuries: Prevention and Care. 3 Credit Hours.
This lecture course introduces students to the care and prevention of movement injuries. The content includes a review of pertinent anatomical structures and their relationship to injuries. The course also covers mechanisms, extrinsic and intrinsic factors, as well as basic preventative and treatment measures for common sports-related injuries. Lastly, an overview of legal issues related to sports health care is also discussed.
Repeatability: This course may not be repeated for additional credits.

KINS 2203. Physiology of Physical Activity. 4 Credit Hours.
This course focuses on the functional changes brought about by single or repeated exercise sessions with the intent to improve the exercise response and promote health-related fitness. Laboratories include the measurement of muscular function, metabolism, respiration, cardiovascular function, body composition, work in the heat, and other aspects of human performance. NOTE: Lab fee required.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Athletic Training, Kinesiology
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(KINS 1224|Minimum Grade of C|May not be taken concurrently
OR KIN2 Y|May not be taken concurrently.

KINS 2204. Motor Behavior. 3 Credit Hours.
This course provides an overview of the psychology of human movement behavior to include motor development, motor learning, perceptual motor behavior, and individual differences. Laboratory experiences are used to enhance the lectures.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Athletic Training, Kinesiology, Therapeutic Recreation
Repeatability: This course may not be repeated for additional credits.

KINS 2362. Introduction to Exercise and Sport Science. 3 Credit Hours.
The course explores in detail the relationship between physical activity and health. It also examines roles and responsibilities of the health-fitness specialist and the exercise specialist as defined by the American College of Sports Medicine. This course serves as an introduction of the professional applications in Exercise and Sport Science to include fitness promotion, preventative (wellness), and rehabilitative (clinical) exercise programming. The student will be encouraged to investigate the nature and scope of the health-fitness professional, to define applications of the physiology of exercise, and to integrate the concepts into their personal health-fitness, or exercise programs.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(KINS 1201|Minimum Grade of C|May not be taken concurrently
OR KIN3 Y|May not be taken concurrently)
AND (KINS 1224|Minimum Grade of C|May not be taken concurrently
OR KIN2 Y|May not be taken concurrently).

KINS 2364. Applied Technologies in Kinesiology. 3 Credit Hours.
This course introduces students to recent technological advances in computer software and hardware and their application to Exercise and Sport Science. The course includes, but is not limited to, web page design, word processing, spreadsheets, databases, and presentation software.
Repeatability: This course may not be repeated for additional credits.

KINS 2389. Field Work in Exercise and Sport Science I. 3 to 6 Credit Hours.
This course affords students academic credit for field work in exercise and sport science. Students gain practical real-life experience in a variety of settings, health-fitness and therapeutic exercise settings. Students work under the supervision of a seasoned professional and attend weekly on-campus meetings with an instructor. Three academic credits are equal to 150 on-site hours of practical experience.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
KINS 2362|Minimum Grade of C|May not be taken concurrently.

KINS 2421. Emergency Medical Care for Health Professionals. 3 Credit Hours.
This course will provide an introduction to emergency care procedures for the health professional. Students will have the opportunity to learn about and demonstrate the skills necessary to manage acute injuries and illnesses. This will include surveying the scene, conducting initial assessments, utilizing universal precautions, activating an emergency action plan, implementing appropriate emergency techniques and procedures, conducting a secondary assessment and implementing appropriate first aid techniques and procedures for non-life-threatening situations.
Repeatability: This course may not be repeated for additional credits.
KINS 2424. Functional Anatomy for Kinesiology. 3 Credit Hours.
This course is designed to introduce the student to the basic principles of kinesiology and functional anatomy as they relate to normal movement. Basic neuromusculoskeletal assessment techniques such as identification and palpation will be emphasized in the course.
**Repeatability:** This course may not be repeated for additional credits
**Pre-requisites:**
KINS 1223|Minimum Grade of C|May not be taken concurrently
OR KIN1 Y|May not be taken concurrently.

KINS 2441. Lower Extremity: Assessment and Treatment of Injuries. 3 Credit Hours.
Study of athletic injury assessment principles and techniques at the advanced level. Specific areas include assessment and treatment of emergency medical situations, as well as orthopedic injuries of the lower extremity. First of five supervised clinical experiences in the application of athletic training techniques. Successful completion of 200 hours and a maximum of 225 hours of clinical experience is required. Background checks, CPR Certification, and medical requirements must be completed prior to the first day of class. Athletic training majors only. Spring only.
**Field of Study Restrictions:** Must be enrolled in one of the following Majors: Athletic Training
**Repeatability:** This course may not be repeated for additional credits
**Pre-requisites:**
(KINS 1223|Minimum Grade of C|May not be taken concurrently
OR KIN1 Y|May not be taken concurrently)
AND (KINS 2421|Minimum Grade of C|May not be taken concurrently)
AND (KINS 2424|Minimum Grade of C|May not be taken concurrently)
AND (KINS 3441|Minimum Grade of C|May not be taken concurrently).

KINS 2442. Upper Extremity: Assessment and Treatment of Injuries. 3 Credit Hours.
Study of athletic injury assessment principles and techniques at the advanced level. Specific areas include assessment and treatment of injuries and conditions involving the upper extremities. Fall only.
**Field of Study Restrictions:** Must be enrolled in one of the following Majors: Athletic Training
**Repeatability:** This course may not be repeated for additional credits
**Pre-requisites:**
KINS 2441|Minimum Grade of C|May not be taken concurrently.

KINS 3202. Biomechanics of Physical Activity. 4 Credit Hours.
This course focuses on the anatomical and functional relationships among the skeletal and muscular systems and the basic mechanical principles involved in physical activity.
**Field of Study Restrictions:** Must be enrolled in one of the following Majors: Athletic Training, Kinesiology
**Repeatability:** This course may not be repeated for additional credits
**Pre-requisites:**
KINS 1223|Minimum Grade of C|May not be taken concurrently
OR KIN1 Y|May not be taken concurrently.

KINS 3213. Physical Growth, Development & Aging. 3 Credit Hours.
This course is an advanced course in motor development. The course examines in detail the development of motor skills across the lifespan. Laboratory experiences are used to enhance the lectures.
**Repeatability:** This course may not be repeated for additional credits
**Pre-requisites:**
KINS 2204|Minimum Grade of C|May not be taken concurrently
OR KIN4 Y|May not be taken concurrently.

KINS 3296. The Social-Psychology of Physical Activity. 3 Credit Hours.
This course provides an overview of the study of Kinesiology from a psychosocial perspective. It focuses on the interactions of selected social institutions and social processes as related to physical activity as well as the role of exercise and sport psychology within Kinesiology.
**Field of Study Restrictions:** Must be enrolled in one of the following Majors: Athletic Training, Kinesiology
**Course Attributes:** WI
**Repeatability:** This course may not be repeated for additional credits
**Pre-requisites:**
KINS 1201|Minimum Grade of C|May not be taken concurrently
OR KIN3 Y|May not be taken concurrently.
KINS 3363. Basic Electrocardiography. 3 Credit Hours.
Basic Electrocardiography (EKG) presents the fundamentals of electrocardiography. Structure and function of the heart and circulatory system, the electrical and mechanical events of the cardiac cycle, and normal and abnormal EKG responses at rest and during exercise will serve as the primary course content. The course is designed to provide the Exercise and Sport Science student with both a theoretical knowledge base about the heart and circulatory system and a practical working understanding of the resting and stress electrocardiogram. The student will develop the necessary skills to administer and interpret a 12-lead resting electrocardiogram as well as an exercise EKG as part of graded exercise testing. NOTE: Lab fee required.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(KINS 2203|Minimum Grade of C|May not be taken concurrently
AND KINS 2362|Minimum Grade of C|May not be taken concurrently).

KINS 3364. The Science of Health-Related Fitness. 4 Credit Hours.
The focus of this course is the scientific evidence linking physical activity and or exercise programming to optimal health and well-being. The epidemiology of physical activity will be investigated thoroughly. Methods and means of developing individual and group health-related fitness programs will be explored. Students will be expected to develop and maintain a personalized health-fitness program. NOTE: Laboratory activities are integrated into the course schedule.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
KINS 2203|Minimum Grade of C|May not be taken concurrently.

KINS 3368. Principles of Health Fitness Program Management. 3 Credit Hours.
This course deals with the economics of health-fitness programs on personal, commercial, community, and corporate levels. Topics include: health care cost containment, absenteeism, productivity, and the public/personal relations value of corporate and community programs, along with financial and managerial considerations in successful commercial ventures. Students will study various models based upon specific objectives as well as investigate strategies for the implementation of the various models. Practical and theoretical aspects of designing and managing a health-fitness facility, along with techniques of marketing and promotion to ensure long term adherence and program success are also covered.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
KINS 2362|Minimum Grade of C|May not be taken concurrently.

KINS 3389. Field Work in Exercise and Sport Science II. 3 to 6 Credit Hours.
This course affords students academic credit for field work in exercise and sport science. Students gain practical real-life experience in a variety of fitness, health-fitness and therapeutic exercise settings. Students will work under the supervision of a seasoned professional and attend weekly on-campus meetings with an instructor. Three academic credits are equal to 150 on-site hours of practical experience.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
KINS 2389|Minimum Grade of C|May not be taken concurrently.

KINS 3441. Therapeutic Modalities in Athletic Training. 4 Credit Hours.
This course provides baseline knowledge regarding the indications, principles of application, and clinical decision making for thermal, electrical, and mechanical agents used in the management of athletic injuries. Fall only.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(KINS 1223|Minimum Grade of C|May not be taken concurrently
OR KIN1 Y|May not be taken concurrently)
AND (KINS 1444|Minimum Grade of C|May not be taken concurrently).

KINS 3442. Therapeutic Exercises in Athletic Training. 4 Credit Hours.
This course introduces the concepts and principles of a comprehensive rehabilitation program for managing athletic injuries. Spring only.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Athletic Training
Co-requisites: KINS 3443, KINS 3687
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(KINS 1444|Minimum Grade of C|May not be taken concurrently)
AND (KINS 2442|Minimum Grade of C|May not be taken concurrently)
AND (KINS 3441|Minimum Grade of C|May not be taken concurrently).

KINS 3443. Head, Neck, and Spine: Assessment and Treatment of Injuries. 3 Credit Hours.
Study of athletic injury assessment principles and techniques at the advanced level. Specific areas include assessment and treatment of injuries and conditions to the head, neck, and spine. Spring only.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Athletic Training
Co-requisites: KINS 3442, KINS 3687
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
KINS 2442|Minimum Grade of C|May not be taken concurrently.
KINS 3444. General Medical Conditions in Athletic Training. 3 Credit Hours.
This course examines current issues in athletic training and sports medicine not previously presented in the undergraduate athletic training curriculum to include conditions of the thorax and abdomen, and systemic diseases. Fall only.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Athletic Training
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
KINS 1224|Minimum Grade of C|May not be taken concurrently.

KINS 3487. Practicum in Athletic Training I. 3 Credit Hours.
Course is designed to teach the athletic training student the knowledge and application of clinical skills necessary for the development of competency in athletic training. Focus is on lower extremity evaluation skills. Second of five supervised clinical experiences in the application of athletic training techniques. Successful completion of 200 hours and a maximum of 225 hours of clinical experience is required. In addition to clinical experience/practicum hours, students also attend review sessions to assist with performance during the practicum experience. Background checks, CPR certification, and medical requirements must be completed prior to the first day of class. Athletic training majors only. Fall only.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Athletic Training
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
KINS 2441|Minimum Grade of C|May not be taken concurrently.

KINS 3687. Practicum in Athletic Training II. 3 Credit Hours.
Course is designed to teach the Athletic Training student the knowledge and application of clinical skills necessary for the development of competency in athletic training. Focus is on upper extremity evaluation skills. Third of five supervised clinical experiences in the application of athletic training techniques. Successful completion of 200 hours and a maximum of 225 hours of clinical experience is required. In addition to clinical experience/practicum hours, students also attend review sessions to assist with performance during the practicum experience. Background checks, CPR certification, and medical requirements must be completed prior to the first day of class. Athletic Training majors only. Spring only.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Athletic Training
Co-requisites: KINS 3442, KINS 3443
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
KINS 3487|Minimum Grade of C|May not be taken concurrently.

KINS 4202. Advanced Biomechanics and Movement Analysis. 3 Credit Hours.
This course in an advanced course in biomechanics. It includes advanced knowledge, skills and abilities in the mechanical analysis of human physical activities. High-speed film, video and computer analysis techniques will be employed to better understand the mechanics of movement. Laboratory experiences are used to enhance the lectures.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
KINS 3202|Minimum Grade of C|May not be taken concurrently.

KINS 4227. The Acquisition of Motor Skills. 3 Credit Hours.
This course is an advanced course in motor learning. It includes the knowledge, skills, and abilities to better understand how humans learn skills. Conditions of practice, feedback, and motivation will be investigated. Laboratory activities will be employed to enhance the lectures.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
KINS 2204|Minimum Grade of C|May not be taken concurrently
OR KIN4 Y|May not be taken concurrently.

KINS 4228. Perceptual Motor Development. 3 Credit Hours.
The focus of this course is the advanced study of motor development to include the perceptual integration or the use of visual and other sensory information in the control of movement. Dynamic systems theory will be emphasized. Laboratory experiences will be used to enhance the lecture.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
KINS 3213|Minimum Grade of C|May not be taken concurrently.

KINS 4237. Minorities in Sport and Physical Activity. 3 Credit Hours.
The focus of this course is the differing perspectives and unique contributions minorities and minority groups have in regard to physical activity. The course examines physical activity participation from both a sociocultural and a political perspective. It examines the mores, traditions, and practices of minority groups in the various spheres of physical activity and looks at the impact minorities have made on society through their involvement in physical activity. NOTE: This course can be used to satisfy the university Core Studies in Race (RS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: RS
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
KINS 3296|Minimum Grade of C|May not be taken concurrently.
KINS 4238. Sports in American Society. 3 Credit Hours.
The focus of this course is the unique role sports play in American society. The course deals with advanced theory in the sociology of physical activity. Topics include, but are not limited to, sexuality and sports, youth sports, violence in sports, mass media and sports, nationalism, and aging and physical activity.

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
KINS 3296|Minimum Grade of C|May not be taken concurrently.

KINS 4239. Self-Development Through Physical Activity. 3 Credit Hours.
This course engages a group process-based experience in which students explore the impact of physical activity upon their lives. Emphasis is placed on interpreting past movement experiences from the present context and planning for a fit and active life.

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
KINS 3296|Minimum Grade of C|May not be taken concurrently.

KINS 4242. Exercise, Nutrition and Behavior. 3 Credit Hours.
This course will provide an overview of the interaction among exercise, nutrition and behavior, specifically from a psychosocial approach. Students will learn about psychological factors, health behavior change, assessment and intervention strategies for exercise and nutrition. Course content is particularly relevant for undergraduate students in the social science and bioscience aspects of kinesiology, psychology, public health, and other health professions.

Repeatability: This course may not be repeated for additional credits.

KINS 4282. Independent Study in Kinesiology. 1 to 6 Credit Hour.
This course provides an opportunity for independent investigation and analysis of the intellectual, physical, social, psychological, and ethical bases of human movement.

Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(KINS 1201|Minimum Grade of C|May not be taken concurrently
OR KIN3 Y|May not be taken concurrently)
AND (KINS 3296|Minimum Grade of C|May not be taken concurrently).

KINS 4283. Directed Readings and Study in Kinesiology. 1 to 6 Credit Hour.
This course provides an opportunity to participate in a variety of independent experiences (readings and study) in Kinesiology as directed by a faculty mentor.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may be repeated for additional credit.

KINS 4290. Special Topics in Kinesiology. 3 Credit Hours.
The focus of this course is a topic important to the discipline of Kinesiology or one of its subdisciplines. Different topics will be covered in different semesters. The emphasis will be on current trends and new knowledge as it relates to one or more of the critical areas of investigation in Kinesiology.

Repeatability: This course may be repeated for additional credit.

KINS 4296. History and Philosophy of Kinesiology. 3 Credit Hours.
This is a capstone course in the Kinesiology major. The course is designed to examine the history and philosophy of kinesiology and how these subjects interact to influence the physical activity experience. The focus is on the development of one's personal philosophy of physical activity as well as the development of fundamental knowledge of the process of philosophy and how both process and product can influence the physical activity of self and others. Historically, people, places, events, and movements will be examined in relationship to how they helped to shape the philosophy of kinesiology.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Athletic Training, Kinesiology
Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
KINS 3296|Minimum Grade of C|May not be taken concurrently.

KINS 4311. Advanced Physiology of Exercise. 3 Credit Hours.
This course examines the interactive mechanisms of regulation of the metabolic, cardiovascular, pulmonary, and muscular/skeletal systems in response to an acute bout of exercise and as chronic adaptation to various types of exercise training regimens. Training principles for human performance and health/fitness promotion are derived based on these interactive physiological mechanisms and responses.

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
KINS 2203|Minimum Grade of C|May not be taken concurrently.
KINS 4312. Exercise and Nutrient Metabolism. 3 Credit Hours.
This course applies the physiological principles controlling the relationship between exercise and nutrition to metabolism, weight control/management, human performance, and disease processes. The mechanisms whereby exercise can be used in the prevention and treatment of various disease processes are discussed.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
KINS 4311|Minimum Grade of C|May not be taken concurrently.

KINS 4313. Exercise and Aging. 3 Credit Hours.
This course examines the influence of exercise interventions on the aging process as indicated in current research. An examination of the scientific principles that govern aging and the influences of various modalities on these processes are also discussed.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
KINS 2203|Minimum Grade of C|May not be taken concurrently.

KINS 4314. Neuromuscular Principles of Strength and Conditioning with Application to Special Populations. 4 Credit Hours.
The course involves an in-depth study of neuromuscular anatomy and physiology with special attention to the acquisition and expression of muscular strength. The scientific basis of muscle performance will be thoroughly investigated. Contemporary training theories for the modification of strength, endurance, speed, and power of human skeletal muscle will be reviewed and the results applied to special populations across the movement spectrum. This course is designed to help students integrate and synthesize a large body of knowledge in regard to the role of strength in people's lives and how to best construct exercise-training programs whose outcomes aim to improve neuromuscular function. Via the laboratory component of this course, the students will develop expertise in exercise testing of muscular performance and exercise programming for optimal strength, endurance, speed, and power. This course is predicated upon guidelines established by the National Strength and Conditioning Association (NSCA). NOTE: Lab fee required.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
KINS 2203|Minimum Grade of C|May not be taken concurrently.

KINS 4315. Applied Performance Nutrition. 3 Credit Hours.
Applied Performance Nutrition seeks to address the unique nutritional demands of highly active and athletic populations. The course will provide undergraduate students who have an interest in working with a variety of athlete based populations the knowledge, skills, and abilities to perform a nutritional needs analysis for sport, develop a periodized nutrition plan, and differentiate the magnitude of factors leading to dietary success.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Kinesiology
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(KINS 4311|Minimum Grade of C|May not be taken concurrently)
AND (KINS 4242|Minimum Grade of C|May not be taken concurrently)
OR SBS 1104|Minimum Grade of C|May not be taken concurrently
OR PBHL 1104|Minimum Grade of C|May not be taken concurrently).

KINS 4316. Principles of Strength and Conditioning II. 3 Credit Hours.
The course involves an in-depth study of how to achieve high levels of human performance through evidence based training practices. The course is designed to outline how the fitness characteristics needed for success in sport, including endurance, strength, power, and speed can be achieved through a systematic periodized approach. The course will provide undergraduate students with an interest in coaching, sport, strength and conditioning, and athletic training specific programming knowledge and practice to increase physical preparation for success in sport performance.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Kinesiology
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
KINS 4314|Minimum Grade of C|May not be taken concurrently.

KINS 4334. Principles and Practices of Graded Exercise Testing and Exercise Program Development. 4 Credit Hours.
The course explores the role of exercise and wellness programming in health and disease. Techniques of functional capacity determination through exercise testing will be studied and practiced. Methods of quantifying the energy cost of activity and the development of exercise and wellness programs for people with known disease, those at high risk, and the apparently healthy individual will be emphasized. As the penultimate class in the student's program of study in Exercise and Sport Science, this class is designed to help students integrate and synthesize a large body of knowledge. The students will develop a strong rationale for the role of exercise and physical activity in the lives and health of all people. They will learn how to perform risk stratification and determine the necessity, if any, for closely supervised exercise programs. Specifically the students will develop expertise in exercise testing and exercise programming for one group or special population. They will demonstrate this expert knowledge through written as well as oral communication. NOTE: Lab fee required.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(KINS 3363|Minimum Grade of C|May not be taken concurrently)
AND KINS 4311|Minimum Grade of C|May not be taken concurrently).
KINS 4335. Clinical Exercise Physiology. 3 Credit Hours.
This course explores the roles and responsibilities of the clinical exercise professional in performing clinical exercise test procedures and prescribing exercise programs with specific known chronic diseases. Accordingly, the student will apply their knowledge, skills, and abilities from KINS 4334, Exercise Testing and Prescription for apparently healthy populations to diseased populations in mostly lecture and a few isolated laboratory experiences. The course will cover the basic pathophysiology of a wide variety of chronic diseases and disorders, the effect on the exercise response, and common management and medications. A review of the effects of exercise training will be conducted and recommendations regarding exercise testing and programming will be discussed for each disease/disorder. Diseases/disorders covered include cardiovascular disease, pulmonary disease, metabolic disease, immunological and hematological disorders, orthopedic diseases/disabilities, and neuromuscular disorders. Also, students will learn to conduct a complete clinical evaluation according to the American College of Sports Medicine (ACSM) guidelines and conduct a clinical graded exercise test with an appropriate protocol.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Kinesiology

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
KINS 4334|Minimum Grade of C|May be taken concurrently.

KINS 4385. Internship in Exercise and Sport Science. 3 to 12 Credit Hours.
This course is an internship experience designed to provide a practical, real life education for the student in the Exercise and Sport Science program. Under the supervision of a Temple University faculty member and a trained professional in the field, the students will have an opportunity to enhance their knowledge and skills in functional fitness, community health, preventive health-fitness, and/or therapeutic exercise programming. NOTE: Minimum of 360 clock hours over the length of the semester.

Repeatability: This course may be repeated for additional credit.

Pre-requisites:
(KINS 2203|Minimum Grade of C|May not be taken concurrently)
AND (KINS 2204|Minimum Grade of C|May not be taken concurrently)
OR KIN4 Y|May not be taken concurrently)
AND (KINS 3202|Minimum Grade of C|May not be taken concurrently)
AND (KINS 4279|Minimum Grade of C|May not be taken concurrently)
OR KINS 4296|Minimum Grade of C|May not be taken concurrently)
AND (KINS 4311 to 4334|Minimum Grade of C|May not be taken concurrently).

KINS 4443. Organization and Administration in Athletic Training. 3 Credit Hours.
This course focuses on all administrative aspects of the athletic training profession and includes, but is not limited to, risk management, budget development, policies and procedures as well as identifying facility hazards. This course will also cover contemporary guidelines of the prescreening and physical examination of athletes in addition to record-keeping policies, injury, and progress documentation. Lastly, students will learn to develop a safe and efficient athletic training facility incorporating federal and state guidelines. Athletic Training majors only. Fall only.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Athletic Training

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
KINS 3687|Minimum Grade of C|May not be taken concurrently.

KINS 4445. Special Topics in Athletic Training. 3 Credit Hours.
This course will provide advanced information about current techniques in orthopaedic surgery, functional rehabilitation, psychosocial intervention, strength and conditioning, and research. Contemporary topics such as pharmacology and nutrition as related to physically active populations will also be discussed. This course will provide opportunities to observe surgical procedures as well as participate in all aspects of current research in athletic training. Athletic Training majors only. Spring only.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Athletic Training

Repeatability: This course may be repeated for additional credit.

Pre-requisites:
KINS 4487|Minimum Grade of C|May not be taken concurrently.

KINS 4485. Practicum in Athletic Training III. 3 Credit Hours.
Course is designed to teach the Athletic Training student the knowledge and application of clinical skills necessary for the development of competency in athletic training. Focus is on rehabilitation skills. Fourth of five supervised clinical experiences in the application of athletic training techniques. Successful completion of 200 hours and a maximum of 225 hours of clinical experience is required. In addition to clinical experience/practicum hours, students also attend review sessions to assist with performance during the practicum experience. Background checks, CPR certification, and medical requirements must be completed prior to the first day of class. Athletic Training majors only. Fall only.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Athletic Training

Repeatability: This course may be repeated for additional credit.

Pre-requisites:
(KINS 3687|Minimum Grade of C|May not be taken concurrently)
AND (KINS 3442|Minimum Grade of C|May not be taken concurrently)
AND (KINS 3443|Minimum Grade of C|May not be taken concurrently).
KINS 4687. Practicum in Athletic Training IV. 3 Credit Hours.
Course is designed to teach the Athletic Training student the knowledge and application of clinical skills necessary for the development of competency in athletic training. Serves as the capstone experience. Fifth of five supervised clinical experiences in the application of athletic training techniques. Successful completion of 200 hours and a maximum of 225 hours of clinical experience is required. In addition to clinical experience/practicum hours, students also attend review sessions to assist with performance during the practicum experience. Background checks, CPR certification, and medical requirements must be completed prior to the first day of class. Athletic Training majors only. Spring only.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Athletic Training
Repeatability: This course may be repeated for additional credit.
Pre-requisites: KINS 4487|Minimum Grade of C|May not be taken concurrently.

KINS 4808. Sport Concussion. 3 Credit Hours.
This online course is designed to provide students information about sport concussion. It is designed for undergraduate and graduate students seeking to augment their sport concussion education. Students will receive targeted course lectures, readings, and online resources on topics such as concussion pathomechanics, pathophysiology, recognition, assessment, management, and return to play guidelines.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: KINS 1223|Minimum Grade of C|May not be taken concurrently
OR KIN1 Y|May not be taken concurrently.

Korean (KRN)

Courses
KRN 0868. World Society in Literature and Film. 3 Credit Hours.
Learn about a particular national culture by taking a guided tour of its literature and film. You don't need to speak a language other than English to take this exciting course, and you will gain the fresh, subtle understanding that comes from integrating across different forms of human expression. Some of the issues that will be illuminated by looking at culture through the lens of literature and film include family structures and how they are changing, national self-perceptions, pivotal moments in history, economic issues, social change and diversity. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: Arabic 0868/0968, Asian Studies 0868, Chinese 0868/0968, English 0868/0968, French 0868/0968, German 0868/0968, Hebrew 0868, Italian 0868/0968, Japanese 0868/0968, Jewish Studies 0868, LAS 0868/0968, Political Science 0868/0968, Russian 0868/0968, or Spanish 0868/0968.
Course Attributes: GG
Repeatability: This course may not be repeated for additional credits.

KRN 1001. Korean Elements I. 4 Credit Hours.
First semester level.
Repeatability: This course may not be repeated for additional credits.

KRN 1002. Korean Elements II. 4 Credit Hours.
Second semester level.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: KRN 1001|Minimum Grade of C-|May not be taken concurrently.

Third semester of Korean.
Course Attributes: LC
Repeatability: This course may not be repeated for additional credits
Pre-requisites: KRN 1002|Minimum Grade of C-|May not be taken concurrently.

KRN 2002. Korean Intermediate II. 3 Credit Hours.
Fourth semester of Korean.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: KRN 2001|Minimum Grade of C-|May not be taken concurrently.

KRN 3000. Korean Special Topics I. 3 Credit Hours.
Arranged each semester. Please consult with the instructor and/or check the course schedule for specific topic.
Repeatability: This course may be repeated for additional credit.
KRN 3001. Korean Advanced I. 3 Credit Hours.
Fifth semester of Korean.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: KRN 2002|Minimum Grade of C-|May not be taken concurrently.

KRN 3002. Korean Advanced II. 3 Credit Hours.
Sixth semester of Korean.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: KRN 3001|Minimum Grade of C-|May not be taken concurrently.

KRN 3010. Korean Special Topics II. 3 Credit Hours.
Arranged each semester. Please consult with the instructor and/or check the course schedule for specific topic.
Repeatability: This course may be repeated for additional credit.

KRN 3183. Korean Directed Readings I. 3 Credit Hours.
Mentored reading/study between a faculty member and student.
Repeatability: This course may be repeated for additional credit.
Pre-requisites: KRN 3002|Minimum Grade of C-|May not be taken concurrently.

KRN 3283. Korean Directed Readings II. 3 Credit Hours.
Mentored reading/study between a faculty member and a student.
Repeatability: This course may be repeated for additional credit.
Pre-requisites: KRN 3002|Minimum Grade of C-|May not be taken concurrently.

Landscape Architecture (LARC)

Courses

LARC 0841. Sustainable Design. 3 Credit Hours.
What's the big deal about global warming and how should we respond to it? Explore the issues and underlying causes. See how contemporary designers from Germany, Netherlands, UK and Japan are responding to scientific knowledge with sustainable designs for buildings, cars, towns and parks. Develop your own creative project to reduce the greenhouse effect. Have you ever wondered about what happens to local abandoned factories and degraded streams and rivers? Philadelphia is a national hotbed for sustainable design. Visit local restoration sites, modern "green" buildings, parks that reclaim waste water and transformed industrial parks to see firsthand what is happening in our area. Learn how design is transforming to propel us toward a low waste, energy conserving society in the 21st century. NOTE: This course fulfills a Science & Technology (GS) requirement for students under GenEd and Science & Technology Second Level (SB) for students under Core. This course should not be taken by students who have successfully completed LARC 1013.
Course Attributes: GS
Repeatability: This course may not be repeated for additional credits.

LARC 0852. Green vs. Gray: Improving and Sustaining Urban Ecosystems. 3 Credit Hours.
Explores urban ecosystems and methods of improving and sustaining urban environments using the City of Philadelphia as a living laboratory. Students learn about urban ecology, urban field experiments, and the work required to sustain green infrastructure within a city landscape. As a Community-Based Learning (CBL) course, students engage in ten hours of field work and environmental stewardship which can range from the Pennsylvania Horticultural Society's Tree Tender training, tree planting, restoring urban ecological systems and vacant lots, working in sustainable urban agriculture and/or greening school rooftops. NOTE: This course fulfills a Science & Technology (GS) requirement for students under GenEd and Science & Technology Second Level (SB) for students under Core.
Course Attributes: GS
Repeatability: This course may not be repeated for additional credits.

LARC 1013. Natural and the Built Environment. 3 Credit Hours.
An introduction to the interrelated disciplines of Landscape Architecture, Horticulture, Planning, and Architecture. Explores existing and natural site conditions and their impact on influencing and shaping the built environment. Also examines key issues in the interrelationships and applications of these allied professions. NOTE: This course should not be taken by students who have successfully completed LARC 0841.
Repeatability: This course may not be repeated for additional credits.

LARC 1142. Design Communications. 3 Credit Hours.
This studio course explores the development of graphic techniques and introduces students to the landscape design process commonly used in landscape architecture and horticulture. Students explore spatial composition and develop a basic small scale design project using a variety of graphic skills.
Repeatability: This course may not be repeated for additional credits.
LARC 1244. Surveying. 3 Credit Hours.
Focuses on the fundamentals of plane surveying: basic measurement of distance, angle and elevation; use of basic surveying equipment: total station, levels and tapes, field notes; and basic computations: traverse closure and determination of areas.
Repeatability: This course may not be repeated for additional credits.

LARC 1544. Introduction to CAD. 3 Credit Hours.
An introduction to Computer Aided Drafting using AutoCAD. Focuses on learning the basic commands for drawing in two dimensions including: absolute and relative coordinates, working in layers, paper and model space, manipulation of text, and plotting.
Repeatability: This course may not be repeated for additional credits.

LARC 1982. Honors Projects. 1 to 3 Credit Hour.
For exceptional students interested in pursuing independent, in-depth study. Credits are based on the quantity and quality of work fulfilling the established course outline.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.

LARC 2124. Design Process. 3 Credit Hours.
An introduction to the design process: inventory, analysis, program development, and conceptual design. Students apply the design process to spatial composition of small scale site design projects.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
LARC 1142|Minimum Grade of D-|May not be taken concurrently.

LARC 2143. Landscape Architecture Design Studio I. 6 Credit Hours.
Development of the student's comprehension of important elements in the ecologically based landscape design process. Projects lead students through typical design processes that include inventory and analysis, case studies, evaluation of opportunities and constraints, development of conceptual ideas, and detailed landscape designs. The design process is applied to a variety of small scale, urban and suburban site design projects. Using a combination of computer, mechanical and free hand presentation techniques, studio work typically includes: site inventory and research and analysis; program development; concept alternatives; master planning; and detail design studies.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
LARC 1142|Minimum Grade of D-|May not be taken concurrently
AND LARC 2241|Minimum Grade of D-|May be taken concurrently.

LARC 2144. Landscape Architecture Design Studio II. 6 Credit Hours.
The development of mixed use and sustainable communities within the natural, social, cultural and economic context of development or redevelopment. Investigations of large-scale land use and community planning projects in the urban or rural context. Real world projects range from preparing community based revitalization plans and designs for inner city neighborhoods or redeveloping a rural or suburban area.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
LARC 2143|Minimum Grade of D-|May not be taken concurrently.

LARC 2241. Landscape Engineering I. 3 Credit Hours.
Emphasizes the basic concepts, ideas, and techniques that deal with the visual, functional, and ecological aspects of grading and landform manipulation.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Horticulture, Landscape Architecture
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Science
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
LARC 1142|Minimum Grade of D-|May not be taken concurrently
AND LARC 1244|Minimum Grade of D-|May not be taken concurrently.

LARC 2242. Landscape Engineering II. 3 Credit Hours.
Introduction to the principles, processes, and techniques of site engineering for "soft" elements of landscape architecture. Based on the understanding and appreciation of ecological principles, functional requirements, and aesthetic considerations, students learn elements of design/engineering such as advanced grading, storm water management, and road alignment.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
LARC 2241|Minimum Grade of D-|May not be taken concurrently.

LARC 2457. American Traditions of Landscape Architecture. 3 Credit Hours.
Examination of ideas, needs, visions, and values that have shaped both the designed and the common landscapes of America from the colonial period until the early 1900s.
Repeatability: This course may not be repeated for additional credits.
LARC 2496. Landscape Traditions. 3 Credit Hours.
Presents a comprehensive overview of western civilization's efforts to create useful, beautiful, and symbolic spaces from ancient times until the modern
day. NOTE: This is a writing intensive class. Students are urged to complete English 0802 or equivalent prior to registering for this class.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

LARC 2553. Landscape Architectural Computer Graphics. 3 Credit Hours.
Focuses on the use of digital media for visual presentation. Exposes students to image editing, publishing, and/or computer-aided design programs.
Students learn how to create illustrative and technical drawings and/or portfolio work. NOTE: Course may be repeated once for a maximum of six
credits.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
LARC 1544|Minimum Grade of D-|May not be taken concurrently.

LARC 2564. Advanced CAD. 3 Credit Hours.
Addresses more advanced concepts in two-dimensional AutoCAD and introduces CAD applications as three-dimensional tools in the generation
of perspective drawings. Includes plotting in color and integration with other graphic applications.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
LARC 1544|Minimum Grade of D-|May not be taken concurrently.

LARC 2754. Water Design in the City. 2 Credit Hours.
Cities throughout history have thrived or failed because of water. Every society's ability to secure its water supply, clean stormwater, and address
flooding issues impacts the quality of life of its citizens and the aesthetic dimension of the urban landscape. Learn about artistic strategies for dealing
with urban stormwater and how cities throughout the U.S. and the world are redesigning their streets, parks, and buildings to more effectively manage
urban water resources. Discover aspects of green infrastructure that address strategies for water filtration, conveyance, and storage. The City of
Philadelphia is the laboratory for the case studies and for building an understanding of artful stormwater management strategies.
Repeatability: This course may not be repeated for additional credits.

LARC 2758. Summer Field Ecology. 3 Credit Hours.
Students learn to "read" the landscape through the exploration of the landscape provinces of the Delaware River Basin. Through visiting natural
landscapes in each of the sub-regions, students see how the relationship of geology, soils, hydrology, plant communities, and land use history reveals
an understanding of the visual characteristics, opportunities, and constraints of development inherent in the natural environment.
Repeatability: This course may not be repeated for additional credits.
Pre-requisites:
BOT 1112|Minimum Grade of D-|May not be taken concurrently.

LARC 2870. Special Topics. 1 to 3 Credit Hour.
Variable offerings from semester to semester of selected topics not part of the regular listing of courses. The topic can be in an area of specialization
of a faculty member or an examination of a current development in the field. NOTE: Students may obtain a description of the current version at the
department office and in the schedule of classes. This course may be repeated for credit.
Repeatability: This course may be repeated for additional credit.

LARC 2885. Internship. 1 Credit Hour.
This internship requires a minimum of one semester or 350 hours of employment with a landscape architecture firm, landscape contractor, or in a related
field. During the internship, students should test concepts developed in class with real work experience. NOTE: Work should be completed between
sophomore and junior years.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Landscape Architecture
Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Science
Repeatability: This course may be repeated for additional credit.

LARC 3145. Landscape Architecture Design Studio III. 6 Credit Hours.
Addresses issues pertinent to the design of parks and open space. Students analyze the site context in terms of open space and recreational
opportunities, study and discuss comparable park systems and park designs. and may work closely with community groups and elected officials
in developing an appropriate design program. The goal is to apply an ecological design process to the design of a park appropriate for a particular
neighborhood context.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
LARC 2144|Minimum Grade of D-|May not be taken concurrently.
LARC 3146. Landscape Architecture Design Studio IV: Design/Build. 6 Credit Hours.
Provides individuals the opportunity to build and implement elements of their own design. Students prepare the necessary construction documentation and then actually construct their designs. Working with construction materials enables the student to learn the opportunities and limitations of these materials. This hands-on approach is vital to understanding the relationship between design and implementation processes.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(LARC 2242|Minimum Grade of D-|May not be taken concurrently
AND LARC 3145|Minimum Grade of D-|May not be taken concurrently).

LARC 3243. Landscape Engineering III. 3 Credit Hours.
Includes the principles, processes, and techniques of site engineering for the "hard" elements of landscape architecture such as walls, paving, steps, decks, etc. Based on the understanding and appreciation of ecological principles, functional requirements, and aesthetic considerations. Includes elements of design/engineering such as siting buildings, grading design of simple structures, understanding the nature of construction materials, and the preparation of working drawings.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
LARC 2242|Minimum Grade of D-|May not be taken concurrently.

LARC 3345. Planting Design. 3 Credit Hours.
Considers the integration of plants into the design process and emphasizes scale, development density, natural site characteristics, natural plant associations, and individual plant characteristics. Planting design studies in a variety of contexts are included.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(HORT 1212|Minimum Grade of D-|May not be taken concurrently
AND LARC 1142|Minimum Grade of D-|May not be taken concurrently).

LARC 3644. Professional Practice. 3 Credit Hours.
Study of ethics, current business practices, contract documentation, bids, cost estimates, specifications, and interdisciplinary relationships. Seeks to teach the student how to set priorities, manage people, and execute landscape projects.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Landscape Architecture
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Science
Repeatability: This course may not be repeated for additional credits.

LARC 3665. Grant Writing. 3 Credit Hours.
Develop skills in researching grant funding possibilities, identifying and developing appropriate restoration projects with potential for grant funding, and writing grant proposals.
Repeatability: This course may not be repeated for additional credits.

LARC 3789. Landscape Restoration Workshop. 3 Credit Hours.
Students learn principles and practices of ecological restoration through hands-on experience. They visit restored landscapes, conduct field measurements in an old growth forest, and contribute to a restoration project on the Ambler Campus. An overnight camping trip is required. By the end of the course, students understand various technical strategies involved in restoration through drawing and writing their field observations, assessing proper techniques for restoration, and then implementing those techniques on a real site.
Repeatability: This course may not be repeated for additional credits.

LARC 3882. Independent Study. 1 to 3 Credit Hour.
Explorative study or research not met in any established course. Initiated by the student, the project must be sponsored by a faculty member with an approved agreement outlining the content and requirements, including readings, meetings, and papers. NOTE: Special authorization required for all students. Students must have the agreement of a faculty sponsor and must submit a formal proposal to this faculty member and Department before registering for the course.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Landscape Architecture
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Science
Repeatability: This course may be repeated for additional credit.
LARC 3886. Edinburgh Exchange Program. 1 to 18 Credit Hour.
This exchange program is available to undergraduate students at Temple University majoring in Landscape Architecture, Horticulture, Architecture, or Art and to undergraduate students enrolled in the five-year Landscape Architecture degree program in the School of Landscape Architecture at Edinburgh College of Art (ECA)/Heriot-Watt University, Scotland. One to two students participate each period (ECA students attend Temple for one semester and Temple students attend ECA for one quarter), and the exchange is on a one-student-for-one-student basis. NOTE: Temple students must apply by September 30 for Spring semester and March 31 for Fall semester. Temple exchange participants must follow the normal procedure for study abroad approvals and pre-approvals of courses. All students must be enrolled for at least 12 s.h. and must pay tuition and any applicable fees to their home institution.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Landscape Architecture
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Science
Repeatability: This course may not be repeated for additional credits.

LARC 4147. Landscape Architecture Design Studio V: Fall Senior Studio. 6 Credit Hours.
Focuses on large-scale, complex planning projects dealing with growth management issues and an understanding of all phases of the planning process. The scope of the project includes analysis and evaluation of existing conditions, programming, and creation of conceptual plans, master plans, and detail designs.

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
LARC 3146|Minimum Grade of D-|May not be taken concurrently.

LARC 4198. Landscape Architecture Design Studio VI: Spring Senior Studio. 6 Credit Hours.
The final senior studio deals with a variety of projects that may include landscape design projects involving fine arts, urban design, and town planning. Students are challenged to achieve a comprehensive understanding of the ideas, processes, and concepts. NOTE: Fulfills the capstone writing intensive requirement for the Landscape Architecture major.

Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
LARC 4147|Minimum Grade of D-|May not be taken concurrently.

Latin (LAT)

Courses
LAT 1001. Latin 1. 4 Credit Hours.
Beginning courses in Latin, with basic grammar and readings.

Course Attributes: LA
Repeatability: This course may not be repeated for additional credits.

LAT 1002. Latin 2. 4 Credit Hours.
Beginning courses in Latin, with basic grammar and readings.

Course Attributes: LA
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
LAT 1001|Minimum Grade of C-|May not be taken concurrently
OR LCLA C1002|May not be taken concurrently
OR LCLA B1002|May not be taken concurrently
OR LCLA EXMPT|May not be taken concurrently.

LAT 2001. Latin 3. 3 Credit Hours.
Readings in Latin prose and poetry.

Course Attributes: LB
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
LAT 1002|Minimum Grade of C-|May not be taken concurrently
OR LCLA EXMPT|May not be taken concurrently.

LAT 2002. Latin 4. 3 Credit Hours.
Readings in Latin prose and poetry.

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
LAT 2001|Minimum Grade of C-|May not be taken concurrently.
LAT 3002. Readings in Latin Literature II. 3 Credit Hours.
Arranged each semester. Please consult with the instructor.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
LAT 2002 [Minimum Grade of C-] May not be taken concurrently.

LAT 3096. Readings in Latin Literature I. 3 Credit Hours.
Arranged each semester. Please consult with the instructor.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
LAT 2002 [Minimum Grade of C-] May not be taken concurrently.

LAT 4000. Special Topics. 3 Credit Hours.
Selected readings in Latin literature.
Repeatability: This course may be repeated for additional credit.

LAT 4001. Cicero: Selections. 3 Credit Hours.
Readings in a range of the works of Cicero.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
LAT 3002 [Minimum Grade of C-] May not be taken concurrently.

LAT 4002. Cicero: Philosophical Works. 3 Credit Hours.
Readings in the philosophical works of Cicero, including De Natura Deorum.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
LAT 3002 [Minimum Grade of C-] May not be taken concurrently.

LAT 4003. Seneca. 3 Credit Hours.
Readings in the dramas and philosophical works of Seneca
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
LAT 3002 [Minimum Grade of C-] May not be taken concurrently.

LAT 4004. Roman Historians. 3 Credit Hours.
Readings from the works of Livy, Sallust and Tacitus.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
LAT 3002 [Minimum Grade of C-] May not be taken concurrently.

LAT 4005. Roman Lyric Poets. 3 Credit Hours.
Readings of the poetry of Catullus and Horace.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
LAT 3002 [Minimum Grade of C-] May not be taken concurrently.

LAT 4006. Medieval Latin. 3 Credit Hours.
A study of the nature of Latin in the Middle Ages and a survey of representative works from that time.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
LAT 3002 [Minimum Grade of C-] May not be taken concurrently.

LAT 4007. Vergil: Aeneid. 3 Credit Hours.
Readings from Virgil's Aeneid.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
LAT 3002 [Minimum Grade of C-] May not be taken concurrently.

LAT 4008. Ovid: Selections. 3 Credit Hours.
Readings in a range of the works of Ovid.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
LAT 3002 [Minimum Grade of C-] May not be taken concurrently.
LAT 4009. Roman Epic Poets. 3 Credit Hours.
Readings from the works of various Roman epic poets.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
LAT 3002|Minimum Grade of C-|May not be taken concurrently.

LAT 4011. Prose Composition. 3 Credit Hours.
The course is intended to be an introduction to Latin prose composition. Since the exercises in our text are based on readings from original Latin sources, skills in reading will be improved as we practice writing. The exercises will teach us how to manipulate the language, using grammatical rules we have already learned in earlier courses. Some work with recitation and oral composition will be done, so that by the end of the semester, we should also have increased our ability to communicate orally in Latin.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
LAT 3002|Minimum Grade of C-|May not be taken concurrently.

LAT 4082. Independent Study. 1 to 6 Credit Hour.
Concentrated work at an advanced level on a topic chosen by student and teacher. Weekly sessions.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
LAT 2002|Minimum Grade of C-|May not be taken concurrently.

Latin American Studies (LAS)

Courses

LAS 0825. Jewish Diaspora in Latin America. 3 Credit Hours.
The coupling of the terms "Jew" and "Latino" or "Jewish" and "Latin American" still elicits surprise and disbelief, especially among those who grew accustomed to identifying "Jewish" with "Eastern European." In this course we will study the presence of Jews in Latin America, and the relationships between Jews and non-Jews in different Latin American countries. Using a variety of written sources, mainly literary and historical narratives, as well as music and cinema, we will discuss issues of identity, immigration, assimilation, Diaspora and nationalism. Class materials and discussions will be in English translation.
Course Attributes: GG
Repeatability: This course may not be repeated for additional credits.

LAS 0854. Latino Immigration. 3 Credit Hours.
Every year between 200,000 and 400,000 immigrants attempt to cross the US-Mexican border illegally. An estimated 11 million undocumented migrants live in the United States already. Does this influx of Mexicans, Central Americans and South Americans amount to a serious threat? Through close examination of how diverse towns, cities, and states throughout the United States have dealt with this influx of people we will explore global immigration issues. Case studies include Hazelton, PA; Kennett Square, PA; and the state of Arizona.
Course Attributes: GG
Repeatability: This course may not be repeated for additional credits.

LAS 0868. World Society in Literature & Film. 3 Credit Hours.
Learn about a particular national culture - Russian, Indian, French, Japanese, Italian, for example, each focused upon in separate sections of this course - by taking a guided tour of its literature and film. You don't need to speak Russian, Hindu, French or Japanese to take one of these exciting courses, and you will gain the fresh, subtle understanding that comes from integrating across different forms of human expression. Some of the issues that will be illuminated by looking at culture through the lens of literature and film: Family structures and how they are changing, national self-perceptions, pivotal moments in history, economic issues, social change and diversity. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under the Core. Students cannot receive credit for this course if they have successfully completed any of the following: Arabic 0868/0968, Asian Studies 0868, Chinese 0868/0968, English 0868/0968, French 0868/0968, German 0868/0968, Hebrew 0868, Italian 0868/0968, Japanese 0868/0968, Jewish Studies 0868, Korean 0868, LAS 0968, Political Science 0868/0968, Russian 0868/0968, or Spanish 0868/0968.
Course Attributes: GG
Repeatability: This course may not be repeated for additional credits.
LAS 0968. Honors World Society in Literature & Film. 3 Credit Hours.
Learn about a particular national culture - Russian, Indian, French, Japanese, Italian, for example, each focused upon in separate sections of this course - by taking a guided tour of its literature and film. You don't need to speak Russian, Hindu, French or Japanese to take one of these exciting courses, and you will gain the fresh, subtle understanding that comes from integrating across different forms of human expression. Some of the issues that will be illuminated by looking at culture through the lens of literature and film: Family structures and how they are changing, national self-perceptions, pivotal moments in history, economic issues, social change and diversity. (This is an Honors course.) NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: Arabic 0868/0968, Asian Studies 0868, Chinese 0868/0968, English 0868/0968, French 0868/0968, German 0868/0968, Hebrew 0868, Italian 0868/0968, Japanese 0868/0968, Jewish Studies 0868, Korean 0868, LAS 0868, Political Science 0868/0968, Russian 0868/0968, or Spanish 0868/0968.
Course Attributes: GG, HO
Repeatability: This course may not be repeated for additional credits.

LAS 1001. Perspectives on Latin America. 3 Credit Hours.
Interdisciplinary examination of social change in Latin American societies. Provides historical context and includes changing approaches to economic development, class and ethnic issues, religious traditions, art, music, and literature. NOTE: This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. In addition to meeting the university Core International Studies requirement, this course meets the Non-Western/Third World IS requirement for Communication Sciences majors. Please note the recent update to the Core IS requirement at www.temple.edu/vpus/resources/coreupdates.htm#coreisupdate.
Course Attributes: IS
Repeatability: This course may not be repeated for additional credits.

LAS 1022. Latin American Social Struggles. 3 Credit Hours.
An examination of Latin America's contemporary history from the Cuban Revolution in 1959 through the end of the Cold War to the present. The course explores such matters as revolution and counter-revolution; human rights and institutional accountability; city life and social change; the movement of people, narcotics, goods; and new forms of political and cultural conflict. Methods of instruction include paperback readings, the internet, and video clips.
Repeatability: This course may not be repeated for additional credits.

LAS 1051. Che Guevara and the Question of Revolution. 3 Credit Hours.
Between the coming to power of the Cuban Revolution in 1959 and the early 1990s, Latin America found itself convulsed by revolution and counter-revolution. For many around the world, Che Guevara symbolized heroic revolutionary struggle. Through the prism of Che's life and image, this course will examine Latin America's conflicts during this era and discuss the urgent issues that still remain from the question of revolution.
Repeatability: This course may not be repeated for additional credits.

LAS 2010. Topics in Latin American Studies I. 3 Credit Hours.
Course topics vary each semester and may include the media in Latin America, Latin American music, race and ethnicity, and social movements. NOTE: Students can obtain a description of the current version at the Latin American Studies Center.
Repeatability: This course may be repeated for additional credit.

LAS 2020. Topics in Latino Studies. 3 Credit Hours.
Course topics vary and may include the study of Latino migration to the United States, Latino communities in the United States, and Latino political and cultural movements. NOTE: Students can obtain a description of the current version at the Latin American Studies Center.
Repeatability: This course may be repeated for additional credit.

LAS 2030. Topics in Caribbean Studies. 3 Credit Hours.
Course topics vary each semester and may include the history of Puerto Rico, the history of the Hispanic Caribbean, culture and music of the Caribbean. NOTE: Students can obtain a description of the current version at the Latin American Studies Center.
Repeatability: This course may be repeated for additional credit.

LAS 2040. Special Topics. 4 Credit Hours.
Topics vary each semester. Please consult with the instructor and/or check the course schedule for specific topic.
Repeatability: This course may be repeated for additional credit.

LAS 2072. Puerto Ricans in Philadelphia. 3 Credit Hours.
This course looks at the migration of Puerto Ricans to the United States in the 20th century, a group that is the second largest Hispanic group in the country. It examines the specific community of Puerto Ricans in Philadelphia and its relationship with other racial and ethnic groups and the social, political, and economic situation of Puerto Ricans in the city.
Repeatability: This course may not be repeated for additional credits.

LAS 2097. Writing Seminar I. 3 Credit Hours.
Course topics vary each semester and may include the media in Latin America, Latin American music, race and ethnicity, and social movements. NOTE: Students can obtain a description of the current version at the Latin American Studies Center.
Course Attributes: WI
Repeatability: This course may be repeated for additional credit.
LAS 2098. The Legacy of Mesoamerica. 3 Credit Hours.
The course briefly reviews the nature of Prehispanic Mexico and Central America by examining its earliest manifestations in the Pre-Classic Period through the Late Post-Classic Period, right before European contact. Cultures examined will include the Maya, Nahua, Tarascan, and Mixtec among others. We will then study the Spanish Conquest of the region and how the indigenous peoples adapted to Spanish rule during the Colonial period. Following independence from Spain, indigenous peoples of Mesoamerica dealt with a new sort of adaptation. Specifically, that of integration into the new nation-states of Mexico and Guatemala will be examined. Modern Mesoamerica will also be discussed, particularly in terms of how the indigenous peoples have adapted to a new "globalized" world.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

LAS 2101. Latin America through Film and Fiction. 3 Credit Hours.
Economic and political change; role of institutional forces including the military and church. Cultural and intellectual traditions and trends, past and present. Multi-media approach. NOTE: Given in Spanish as part of the LASS program.

Repeatability: This course may not be repeated for additional credits.

LAS 2169. Archaeology of South America. 3 Credit Hours.
A survey of prehistoric cultures of South America. Concentrates on (1) the initial entry and spread of human populations into South America and the West Indies, (2) origins of tropical and highland agriculture, (3) the rise of urbanism, civilization, and the state in the Andes, and (4) the impact of prehistoric cultures on the environment.

Repeatability: This course may not be repeated for additional credits.

LAS 2173. Ancient Mesoamerica. 3 Credit Hours.
Ancient Mesoamerica is a general survey of the pre-Columbian cultures of Mexico and Middle America before the Spanish Conquest of the Aztec Empire in A.D. 1521. In this course we will examine the long history of Mesoamerica beginning with the first peopling of the Americas at least 15,000 years ago and ending with the Spanish Conquest and the creation of "Latin America."

Repeatability: This course may not be repeated for additional credits.

LAS 2220. Special Topics - LASS Seminar. 2 Credit Hours.
Arranged each semester. Please consult with the instructor and/or check the course schedule for specific topic. NOTE: Given in Spanish as part of the LASS program.

Repeatability: This course may be repeated for additional credit.

LAS 2231. Democracy in Latin America. 3 Credit Hours.
An examination of the structure and culture of Latin American democracies organized around three major themes: (1) a discussion of theories of democracy; (2) the formation and development of democratic institutions in Latin America; and (3) the political culture of Latin American democracy. Uses a social problems approach to look at two controversial Latin American issues since the late 1960's: the tension between adopting a procedural vs. a substantive definition of democracy, and the emphasis on political vs. socioeconomic factors in explaining democratization.

Repeatability: This course may not be repeated for additional credits.

LAS 2232. Politics of Development in Latin America. 3 Credit Hours.
An examination of Latin America's struggle for economic development. Emphasis on the relationships that have prevailed over the last few decades between developmental theories and the everyday lives of Latin American peoples. Discussion of the political and ideological questions involved in Latin American development. Exploration of how Latin American developmental issues affect the United States through matters such as job relocations and trade pacts.

Repeatability: This course may not be repeated for additional credits.

LAS 2361. Peoples of Latin America. 3 Credit Hours.
Starting in 1492, Native American isolation from Europe and Africa ended in the region of the Americas that became Latin America. Despite five hundred years of colonial and nation-state domination, indigenous peoples in Latin America continue to assert their basic human right to resist cultural hegemony. Not only have indigenous populations survived, they are also growing. Today they constitute a majority in Bolivia, Ecuador, Guatemala, and Peru and a substantial plurality in Brazil, Mexico, and Colombia. The focus here is on this remarkable struggle for physical and cultural survival. Attention will be given to the lived experiences of people struggling for human dignity on the lowest strata of regional class structures. Issues of land rights, environmental, health, political, and economic self-determination will be examined.

Repeatability: This course may not be repeated for additional credits.
LAS 2362. Peoples and Cultures of the Caribbean. 3 Credit Hours.
Shaped by conquest and colonial transnational desires, first of sugar and then of tourism, the Caribbean has been wrought since its very inception by the displacement of people, goods and ideas from Africa, Asia, Europe, and Latin America, presenting a challenge for the anthropological study of socio-cultural change through time and space. In this introductory course on the Caribbean we will critically examine "creolization" processes at social, religious, political, economic, and artistic levels as they were driven by various groups, from pirates, privateers, maroons, exiles, to tourists, in the context of colonialism, nation building, and globalization. Examining specific sites such as music, display events, folklore, and religion we will ponder about, for instance, the effects of European revolutions on the creation of elites in the Caribbean, and the impact of slave cultures and peasantries on the formation of creole religions. How has the image of the sensuous/threatening mulatta evolved since the plantation? On what kind of histories and emotions do "zombies" feed upon? Why did Reggae and Merenge succeed on the global stage? How does the display of national icons in Trinidadian carnival reflect on their socio-political conflicts? How is the colonial past re-packaged for global consumption? Format: Seminar with short lectures, class presentations, video screenings and class discussions.
Repeatability: This course may not be repeated for additional credits.

LAS 2502. Fundamentals of Latin American Business. 3 Credit Hours.
This course is designed to give students a solid basis to face a job assignment related to business in a Latin American country and to develop your ability to perceive the importance of cultural diversity and how it influences business activities across Latin American countries. Specifically, this course will help you understand the specific challenges of doing business in Latin America and enable you to perceive and understand the differences in the business environment, business customs, and business practices between countries of Latin America and of the rest of the world.
Repeatability: This course may not be repeated for additional credits.

LAS 2512. Mexican Migration to the United States. 3 Credit Hours.
Illegal immigration remains a volatile and divisive question for the United States. Most discussions in the political system and in the mass media ignore the extensive history of Mexican migration to the United States. We will examine the pervasive influence of that history upon the present as well as the tight connections that exist between Mexican labor migration and phenomena that most US citizens prize— the spread of American culture and influence abroad, international political stability, reliable domestic economic growth, and the availability of inexpensive goods and services. Instruction takes place through discussion, lecture, film, and computer projection. Readings include both primary documents stemming from historical events themselves as well as secondary academic studies.
Repeatability: This course may not be repeated for additional credits.

LAS 2514. Historical Continuity and Social Change in Latin America. 3 Credit Hours.
Overview of Latin American history from a social change/social problems perspective. Some of the historical themes addressed include: social inequality and unequal exchange, cultural domination and resistance, racial minorities and indigenism, the role of women in Latin American societies, political imposition and democracy, and national independence.
Repeatability: This course may not be repeated for additional credits.

LAS 2515. Civilization and Modernity in the Caribbean. 3 Credit Hours.
This course surveys post-Emancipation Caribbean history, regarding it as a complex process dominated by notions of "civilizing" and "modernizing." We will address the significance of both terms, exploring what they have meant for the diverse peoples inhabiting the region. What did civilization mean for the labor practices and religious expressions of free blacks and indentured Indians in the late 19th century? What did modernizing mean for concepts of peoplehood, cultural production and representation in the 20th century? Who have been the primary agents of "civility" and "modernity"? And how have others responded to - resisted, embraced, negotiated - their efforts and ambitions? In answering these questions, we will turn to a range of disciplines including history, anthropology, literature and political science.
Repeatability: This course may not be repeated for additional credits.

LAS 3010. Topics in Latin American Studies II. 3 Credit Hours.
Course topics vary each semester and may include the media in Latin America, Latin American music, race and ethnicity, and social movements. NOTE: Students can obtain a description of the current version at the Latin American Studies Center.
Repeatability: This course may be repeated for additional credit.

LAS 3020. Topics in Latino Studies. 3 Credit Hours.
Course topics vary and may include the study of Latino migration to the United States, Latino communities in the United States, and Latino political and cultural movements. NOTE: (1) Students can obtain a description of the current version at the Latin American Studies Center. (2) This course can be used to satisfy the university Core Studies in Race (RS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: RS
Repeatability: This course may be repeated for additional credit.

LAS 3101. Latino Identity in the U.S.. 3 Credit Hours.
Latino Identity in the U.S. is a general survey of the cultural-historical experiences of Latinos in the United States from pre-colonization to the present with concentration on the time period of the civil rights movement to the present. The course will explore the impact of Latinos in U.S. cultural-history and artistic expressions, across all disciplines; specifically on how this impact has reflected itself in the development of Latino identity formation and how Latinos fit within race/ethnic/gender cultural politics in the United States.
Repeatability: This course may not be repeated for additional credits.
LAS 3201. California Dreams, California Nightmares. 3 Credit Hours.
Over the century and a half since California was forcibly incorporated into the United States, it has exercised a powerful role upon the imagination and reality of every generation. California has been, at once, the golden gate of opportunity and the grapes of wrath of the downtrodden; social mobility and the policy of incarceration, the glamour of Hollywood and monotony of tract housing, the high-tech of Silicon Valley and the high-sweat of agricultural labor, the Eden of natural bounty and the ecological disaster of sprawl and smog. This course concentrates on the historical role that categories of race have played in defining by whose means, to whose benefit, and in whose image California’s wealth would be produced and consumed. As an intermediate-level history course, this course offers a mix of primary and secondary sources, emphasizes the interaction of multiple causal factors, and encourages students to interpret and to write analytical historical arguments. In addition to discussion, lecture, and common readings, methods of instruction in the course include use of a computer-assisted classroom to provide image and text projections, video clips, and internet linkages. NOTE: This course can be used to satisfy the university Core Studies in Race (RS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: RS
Repeatability: This course may not be repeated for additional credits.

LAS 3267. Sociology of Music: Nation, Race, Class and Gender in Argentina and Brazil. 3 Credit Hours.
The initial developments of the sociology of music were linked to the work of scholars who played pivotal roles in the history of sociology, such as Max Weber and Theodor Adorno. The sociology of Latin American music usually followed the theoretical developments occurring in the industrialized countries of the West, but, at the same time, it was characterized by a peculiar twist in the way it understood the complex relationship between music and society. In this course we delve into this important literature and grapple with the social and cultural foundations of music, with particular emphasis on the relationship between music and society in Brazil and Argentina. Due to the complex social organization of these two countries in terms of race, ethnicity, regionalisms, class, gender and religion, the course will explore the articulation of that complexity in the way people use music in their everyday life to understand who they are and what to do in the context of an ever changing social reality.
Repeatability: This course may not be repeated for additional credits.

LAS 3561. History of Brazil. 3 Credit Hours.
Modern and contemporary Brazilian themes including democracy, globalization, and nationalism, cultural and ideological dissent, and popular social movements. Course materials include Brazilian writings, documents, and films. NOTE: Course title prior to fall 2009: "Contemporary Brazilian Scene."
Repeatability: This course may not be repeated for additional credits.

LAS 3562. Contemporary Mexico. 3 Credit Hours.
Over the past several years, Mexico has become increasingly integrated with the United States economically, socially, and culturally; a phenomenon that has presented new challenges to both countries to organize this irreversible process constructively. We will look at the present-day questions between the United States and Mexico through the experience of Mexico’s history since 1940. This period includes decades of industrialization, city growth, labor migration to the United States, cultural flourishing, political restlessness, the emergence of narcotics trafficking, and incorporation into the North American Free Trade Agreement (NAFTA). This course concludes with some speculative considerations about the future. Instruction takes place through discussion, lecture, film, computer projection, and readings from the new historical scholarship that has emerged on post-1940 Mexico.
Repeatability: This course may not be repeated for additional credits.

LAS 3563. Puerto Rican History. 3 Credit Hours.
This course explores particular issues related to the political, economic, and social development of Puerto Rico with special emphasis given to the 19th and 20th centuries. The course will not only address historical paragons but also questions of interpretations. In each class a combination of readings, discussion, lectures, and videos will be used to view the various issues in a comprehensive manner.
Repeatability: This course may not be repeated for additional credits.

LAS 3601. "Other Voices" in Latin American Literature. 3 Credit Hours.
This course looks at race, color, and gender in Latin American creative literature. The literature explores key cultural dimensions of the Latin American society and psyche. Focus is on the presence of Afro-Latinos, the role of Indigenous peoples, and feminist perspectives in the different Latin American societies.
Repeatability: This course may not be repeated for additional credits.

LAS 3602. Caribbean Literature and Culture. 3 Credit Hours.
The Caribbean is an immensely rich, virtually untapped cultural matrix for most North American students. This confluence of many old world cultures really is the brave new world, home of four Nobel laureates and a vast multi-lingual literature that runs in deep currents through our own national psyche. This course will focus on Caribbean artists and social movements that have had a major impact on modern culture, especially in the United States.
Repeatability: This course may not be repeated for additional credits.

LAS 3702. African Religions and New World Culture. 3 Credit Hours.
African religion and culture continues to exist in the religious and cultural life of African Americans. Using an interdisciplinary approach, we will examine African American religion, folklore, literature, music, and communication in order to assess the continuation and transformation of African culture in the world-view of African Americans.
Repeatability: This course may not be repeated for additional credits.
LAS 3801. African Culture in Brazil. 3 Credit Hours.
This course is an interdisciplinary examination of the cultural history of Africans and their descendents in Brazil. Particular attention will be paid to the northeastern state of Bahia - the earliest and most important point of entry for Africans transported to Brazil during the Atlantic slave trade. Special focus will be paid to Bantu-Kongo culture of West Central Africa and to the Yoruba and Fon cultures of Western Africa transferred to Brazil from the late 16th through the 19th centuries.
Repeatability: This course may not be repeated for additional credits.

LAS 4082. Independent Study. 1 to 9 Credit Hour.
Independent research on a specific topic related to Latin America. This course will enable undergraduate students the option of taking an independent study through the Latin American Studies Center.
Repeatability: This course may be repeated for additional credit.

LAS 4097. Latin American Studies Seminar. 3 Credit Hours.
This course serves as the capstone for the Latin American Studies major. Students write a substantial research paper (20-25 pages) dealing with the general theme selected for the semester. This course is open to non-LAS majors with permission of the Director of Latin American Studies. Should be taken in the fall of the senior year. NOTE: Fulfills the Capstone writing course requirement for the Latin American Studies major. Special Authorization required for all students.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Latin American Studies
Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

LAS 4698. Revolutionary Mexico. 3 Credit Hours.
Early in the twentieth century, Mexico experienced a powerful upheaval that left its imprint upon the country for generations, bringing to the fore questions of constitutionalism, land tenure, worker rights, indigenous culture, and national sovereignty. The Mexican Revolution restructured society, the state, and the country's relationship with the United States and the world. Revolutionary Mexico examines the classic years of the Revolution, 1910-1940, engaging students in primary document research and in examination of the historical controversies that the Revolution has engendered. Instruction takes place through discussion, lecture, film, reading, and computer projection.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

Law - Undergraduate Courses (LAWU)

Courses

LAWU 0801. Border Crossings: Gendered Dimensions of Globalization. 3 Credit Hours.
Explore the ways in which gender "works" in different cultural and national contexts, and the impact globalization has on gender relations. "Gender" indicates the ways in which our social lives are organized around categories of male and female - in relation to work, family, sexuality, culture, and nation. "Globalization" describes the transfer of economic and cultural goods between nations and peoples. Questions we will ask include: What is globalization and how do women and men experience it differently? Do women and men work the same jobs in the global labor market, and do they get paid the same wages? How does immigration affect families? Does a growing connectedness between cultures and nations change traditional gender roles? How different are experiences of women in the "Third World" from those of women in the "First World," and why? NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed WMST 0801.
Course Attributes: GG
Repeatability: This course may not be repeated for additional credits.

LAWU 0825. The United States Constitution and Popular Culture. 3 Credit Hours.
What does popular culture have to do with the U.S. Constitution? The relationship between them is a two-way street: constitutional law regulates and inspires popular culture, while popular culture parodies, dilutes, and reinforces constitutional law. We will discover how websites, internet mash-ups, comics, films, music, and comedy television intersect with constitutional principles. In class, students will watch and hear popular culture works, including full-length films, video parodies, cartoons, and music. We will identify parts of popular culture restricted by the Constitution as well as those parts the Constitution celebrates. Using the lens of popular culture, we will explore how the U.S. Supreme Court operates and how the Constitution protects rights such as free speech, criminal procedure protections, and other freedoms. The course will trace popular culture references to court decisions about medical marijuana, love triangles, violent video games, cross burning, abortion, homosexual conduct, interracial marriage, obscenity, gun rights, women's rights, and school desegregation.
Course Attributes: GU
Repeatability: This course may not be repeated for additional credits.
LAWU 0833. Law and Literature, Law in Fact. 3 Credit Hours.
Of what does fairness consist? One important component is, of course, decision according to rule, rendered by a neutral, impartial decision maker. But the rule of law ideal does not exhaust our conceptions of what is fair. Where strict application of rules seems unduly harsh, it may seem more fair to show mercy. Or sometimes we may prefer a decision maker who is not strictly impartial, but who can empathize with the person being judged. And sometimes it is important to focus on results rather than on procedure. This interdisciplinary course will use short stories (including Susan Glaspell’s famous tale, A Jury of Her Peers), novels (including Herman Melville’s Billy Budd), and a Shakespeare play (Measure for Measure) to examine different visions of fairness in the law. These materials present questions of enormous social and ethical relevance, such as whether and when we might “excuse” murder or whether and when it is permissible to lie in the service of truth. Through in-class discussions, a mock trial, and writing exercises, students will be asked to bring differing images of fairness to bear on an actual legal problem that arose right here in Philadelphia, in order to see how alternative ideas of fairness might affect the way in which we understand how to behave in morally complicated situations. Students will learn to think critically about ideas such as blame, responsibility and authority, to communicate those ideas both orally and in writing, and to consider how works of fiction can show us what is true about the world in which we live.

Course Attributes: GB
Repeatability: This course may not be repeated for additional credits.

LAWU 0834. Understanding Justice. 3 Credit Hours.
This course will explore the idea of justice, with particular emphasis on how justice might be achieved through law. That exploration will incorporate conceptualizations of justice in political philosophy (Aristotle, Hobbes, Hume, Mill, and Rawls), as well as presentations of themes of justice in literature (Bible stories, Greek tragedy, and modern fiction). In the core portion of the course we will use these philosophical and literary materials, together with distinctively legal materials (cases, statutes, constitutional provisions), to probe the relationship between justice and law by examining the idea of legal rights (What are they? Who has them? Where do they come from? How are they related to notions of liberty and equality?), by considering how justice can be achieved through the way law is administered (What are “due process” and “equal protection”? ), and by identifying the responsibilities of judges and lawyers with respect to the realization of justice through the legal system (What does it mean for a judge to be impartial? What is the responsibility of lawyers for the impact of their advocacy and counseling on third parties and on the larger society?). We will do all this by focusing on specific contemporary legal issues that raise vital questions of justice, including affirmative action, same-sex marriage, vaccination of children, workers protection laws, access to contraception, and abortion, among others.

Course Attributes: GB
Repeatability: This course may not be repeated for additional credits.

LAWU 0854. Education in the Global City. 3 Credit Hours.
We are in the midst of vast global change. How does it impact cities like Philadelphia and the people who live here? In this course we focus mainly on education in the city, but this doesn’t mean we look only at schools. Globalization is creating new possibilities for learning: we have instant access to vast networks of information, migration is bringing rich cultural diversity to our doorsteps, and we learn in many different types of schools and communities. But globalization is also creating new problems that education must address: new kinds of poverty, increasingly separate lives, mounting intolerance, a digital divide. This course explores what education in all its forms can do to support the American dream for people in the city, nation, and the world. Our exploration goes beyond the classroom, linking academic and community-based learning. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed URBE 0854.

Course Attributes: GU
Repeatability: This course may not be repeated for additional credits.

LAWU 0875. Law Beyond Borders. 3 Credit Hours.
Law Beyond Borders examines how law impacts world affairs and, in turn, how world affairs impact our understanding of law. We will examine high-profile and controversial current events ranging from U.S. cyber-operations in Iran to the Syrian civil war, asking what international law is, how it works, and how well it does so. We ask what makes a nation State and what powers it has. We’ll explore why and how states collaborate on issues of mutual concern and resolve their differences. We will survey the human rights revolution and the international responses to globalization, including efforts to regulate international environmental issues and international trade. The course will be taught using law school teaching methods plus three experiential exercises where students will debate Palestinian Statehood, argue a case before the International Court of Justice that arises out of war-time atrocities, and discuss potential responses to ISIS. The class will give students the tools to know what international law “is” and to assess its ability to promote justice in an increasingly globalized world. Just as importantly, this course will enhance students’ critical reasoning and writing skills, and their ability to create—and critique—different styles of argument.

Course Attributes: GG
Repeatability: This course may not be repeated for additional credits.

Legal Studies (LGLS)
Courses

LGLS 0803. African Americans, Equality and the Law: Weapon or Tool?. 3 Credit Hours.
Learn about the experience of African Americans through the lens of the U.S. legal system. U.S. law, which first defined African Americans as less than human, eventually declared discrimination illegal, and remains both an expression and an instrument of change at the intersection of race and equality. As you study this evolution, you will reflect on relevant current events, and explore your own responses to the kind of everyday encounters that continually arise in our pluralistic society. Can race be used as a factor in hiring, in college admissions? Is race a factor for you in dating, marriage, adoption? We explore issues like these on both broad social and personal dimensions. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students who have already successfully completed LGLS 0903 or LGLS 1002 (R050) cannot earn credit for this course. Students who are under Core and take this course in fall 2008 or after will ONLY fulfill the Race requirement for Core. This course will NOT fulfill the American Culture Core requirement.
Course Attributes: GD
Repeatability: This course may not be repeated for additional credits.

LGLS 0805. Sexual Orientation, Gender Identity and the Law. 3 Credit Hours.
Same-sex marriage. Gays in the military. Hate crimes. Chaz Bono and "Dancing with the Stars." From the decriminalization of sodomy to the legalization of same-sex marriage to the implications of gender reassignment, sexual orientation and gender identity are some of the most rapidly changing subjects in society today. The progression (and regression) of societal attitudes toward differences based on sexual orientation and gender identity have led to legal developments that affect the lives of individuals in larger communities (LGBT and otherwise). This course will look at the intersections of law, psychology, sexual orientation, and gender identity to develop your understandings of the relationships between individuals and communities. It aims to teach you how to interpret human behavior and articulate your own point of view by examining the social and legal regulation of sexual orientation and gender identity. This course will look at issues involving sexual orientation, gender identity, social skills to evaluate social and legal responses to gender identity and sexual orientation. This course will address specific topics including employment discrimination, same-sex marriage, family formation, LGBT youth (identity formation, bullying), military service, immigration, and cross-national comparisons. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd. Students who have already successfully completed LGLS 0905 cannot earn credit for this course.
Course Attributes: GB
Repeatability: This course may not be repeated for additional credits.

LGLS 0856. Law and American Society. 3 Credit Hours.
An intruder rushes into class, hits the professor in the face with a pie, and runs out. You are asked to provide a description of the assailant--and now you realize this was a demonstration of the faultiness of human memory in making eyewitness identification. Develop your understanding of the historical, socio-political and ethical context of the U.S. legal system as you follow the misadventures of a fictional family that gets caught up in various legal problems. Current events inform every assignment; you might analyze, for example, the case against McDonalds brought on behalf of obese children, and then research legislation known as the "Cheeseburger Bill," prohibiting such lawsuits. An exciting, multimedia environment makes learning vivid. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students who have already successfully completed LGLS 0956 or LGLS 1001 (C001) cannot earn credit for this course.
Course Attributes: GU
Repeatability: This course may not be repeated for additional credits.

LGLS 0903. Honors African Americans, Equality and the Law: Weapon or Tool?. 3 Credit Hours.
Learn about the experience of African Americans through the lens of the U.S. legal system. U.S. law, which first defined African Americans as less than human, eventually declared discrimination illegal, and remains both an expression and an instrument of change at the intersection of race and equality. As you study this evolution, you will reflect on relevant current events, and explore your own responses to the kind of everyday encounters that continually arise in our pluralistic society. Can race be used as a factor in hiring, in college admissions? Is race a factor for you in dating, marriage, adoption? We explore issues like these on both broad social and personal dimensions. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students who have already successfully completed LGLS 0803 or LGLS 1002 (R050) cannot earn credit for this course. Students who are under Core and take this course in fall 2008 or after will ONLY fulfill the Race requirement for Core. This course will NOT fulfill the American Culture Core requirement.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GD, HO
Repeatability: This course may not be repeated for additional credits.
LGLS 0905. Honors Sexual Orientation, Gender Identity and the Law. 3 Credit Hours.
Same-sex marriage. Gays in the military. Hate crimes. Chaz Bono and "Dancing with the Stars." From the decriminalization of sodomy to the legalization of same-sex marriage to the implications of gender reassignment, sexual orientation and gender identity are some of the most rapidly changing subjects in society today. The progression (and regression) of societal attitudes toward differences based on sexual orientation and gender identity have led to legal developments that affect the lives of individuals in larger communities (LGBT and otherwise). This course will look at the intersections of law, psychology, sexual orientation, and gender identity to develop your understandings of the relationships between individuals and communities. It aims to teach you how to interpret human behavior and articulate your own point of view by examining the social and legal regulation of sexual orientation and gender identity. This course will look at issues involving sexual orientation, gender identity, social stigma, discrimination and injustice from legal and psychological perspectives. You will develop your critical thinking skills to evaluate social and legal responses to gender identity and sexual orientation. This course will address specific topics including employment discrimination, same sex marriage, family formation, LGBT youth (identity formation, bullying), military service, immigration and cross-national comparisons. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd. Students who have already successfully completed LGLS 0805 cannot earn credit for this course.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR

Course Attributes: GU, HO

Repeatability: This course may not be repeated for additional credits.

LGLS 0956. Honors Law and American Society. 3 Credit Hours.
An intruder rushes into class, hits the professor in the face with a pie, and runs out. You are asked to provide a description of the assailant--and now you realize this was a demonstration of the fallibility of human memory in making eyewitness identification. Develop your understanding of the historical, socio-political and ethical context of the U.S. legal system as you follow the misadventures of a fictional family that gets caught up in various legal problems. Current events inform every assignment; you might analyze, for example, the case against McDonalds brought on behalf of obese children, and then research legislation known as the "Cheeseburger Bill," prohibiting such lawsuits. An exciting, multimedia environment makes learning vivid.

NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and the American Culture (AC) requirement for students under Core. Students who have already successfully completed LGLS 0856, LGLS 1001 (C001) or LGLS 1996 (X091) cannot earn credit for this course.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR

Course Attributes: GU, HO

Repeatability: This course may not be repeated for additional credits.

LGLS 1001. Law in Society. 3 Credit Hours.
The American legal system affects each of us on a daily basis. Educated citizens, no matter what career path they may choose, should be aware of the ways in which the law can impact their lives. This survey course introduces students to the essential aspects of law: its sources, organization, and evolution. They will learn the basic elements of constitutional, contract, criminal, tort, and administrative law. The political, social, and economic forces that affect change are also discussed thereby providing guidance as to the future direction of the law. NOTE: This course can be used to satisfy the university Core Individual and Society (IN) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: IN

Repeatability: This course may not be repeated for additional credits.

LGLS 1101. Legal Environment of Business. 3 Credit Hours.
The legal system affects each of us on a daily basis. Educated citizens, no matter what career path they may choose, should be aware of the ways in which the law impacts their lives in a personal and business setting. This course will introduce students to the essential aspects of law with an emphasis on the legal environment of business. Students will learn the basics of contract, tort, property, and administrative law as well as international law. The law involving business would include a discussion of the types of legal entities, as well as employer and employee relations. The political, social and economic forces that affect change are also discussed thereby providing guidance as to the future direction of the law in both the United States and around the world. NOTE: This course is required for all Fox School freshmen admitted fall 2008 or later and transfers admitted fall 2010 or later.


Repeatability: This course may not be repeated for additional credits.

LGLS 1102. Law of Contracts. 3 Credit Hours.
When you buy a car, rent an apartment, or take out insurance, you are entering into a contract. Whether as consumers or business professionals, our lives are frequently affected by our agreements with others. In this course, students will learn the basics of contract law including how contracts are negotiated and created, how they are enforced, and what happens when contractual promises are broken. Using the case method, students will also become familiar with the relevant portions of the Uniform Commercial Code that deal with the sale of goods, products, and services.


Repeatability: This course may not be repeated for additional credits.
LGLS 1112. Law for Business. 3 Credit Hours.
Whether you plan to start a business or join one, this course provides practical legal basics. Using the case method, you will become familiar with the relevant portions of the Uniform Commercial Code dealing with the sale of goods, products, and services. Hands-on exercises will improve your understanding of how contracts are negotiated and drafted. You will learn about the advantages and disadvantages of different business entities in terms of taxation, liability, capitalization, licensing and dissolution. You will also become familiar with recent securities regulation. NOTE: Transfer students who come in with the equivalent of LGLS 1102 will receive credit and be waived from the LGLS 1112 course.

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
LGLS 1101|Minimum Grade of C-|May not be taken concurrently
OR LGLS 1901|Minimum Grade of C-|May not be taken concurrently.

LGLS 1901. Honors Legal Environment of Business. 3 Credit Hours.
The legal system affects each of us on a daily basis. Educated citizens, no matter what career path they may choose, should be aware of the ways in which the law impacts their lives in a personal and business setting. This course will introduce students to the essential aspects of law with an emphasis on the legal environment of business. Students will learn the basics of contract, tort, property, and administrative law as well as international law. The law involving business would include a discussion of the types of legal entities, as well as employer and employee relations. The political, social and economic forces that affect change are also discussed thereby providing guidance as to the future direction of the law in both the United States and around the world.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.

LGLS 3502. Law for the Entrepreneur. 3 Credit Hours.
Whether you plan to start a business or to join one, this course will provide the basics of what you need to know. It will explore the legal issues involved in starting and operating a business and will cover how to form, operate and dissolve such entities as a sole proprietorship, partnership, and corporation. The course will also deal with agency and creditor rights providing the entrepreneur with a basic understanding of the legal environment in which businesses operate.

Repeatability: This course may not be repeated for additional credits.

LGLS 3503. The Consumer and the Law. 3 Credit Hours.
Good people can suffer bad credit, traffic accidents, problems with a landlord, the pain of a divorce, or the death of a family member. This practical course will explore the legal issues that an individual may encounter in everyday life and will offer real solutions to those problems. Topics will include the consumer protection laws dealing with collection practices, loans and credit cards, landlord-tenant relationships, the purchase of a home, traffic law issues, bankruptcy, wills, divorce and insurance.

Repeatability: This course may not be repeated for additional credits.

LGLS 3504. Sports and the Law. 3 Credit Hours.
The sports industry is a multi-billion dollar enterprise where athletes command millions of dollars in salaries and sports enthusiasts spend countless hours following their favorite teams. This course will explore the landmark decisions and social environment, which has transformed these games of fun into a very powerful industry enjoying special protection under the law. Topics will include sports franchise rights, league issues, antitrust laws, sports agents, injuries to athletes, intercollegiate sports, collective bargaining issues, the powers of the Commissioner and gender equity.

Repeatability: This course may not be repeated for additional credits.

LGLS 3505. Constitutional Law. 3 Credit Hours.
The United States Constitution is the supreme law of the land and establishes our fundamental rights against unreasonable government intrusion. This course will explore how the constitution and the various court decisions interpreting this historic document have affected the political, social, and economic factors that shape our lives and business development.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatability: This course may not be repeated for additional credits.
LGLS 3506. Law, Technology and E-Commerce. 3 Credit Hours.
New technology has revolutionized the way we do business - from electronic banking to Internet commerce - and has raised a host of new legal issues. This course will increase students' awareness of the rights and problems that arise with the development of new products and services. Topics include trade secrets, patents, copyrights, and trademarks. Special attention will be devoted to the legal protection and unique problems faced by the computer industry in the development of new products and online services.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatability: This course may not be repeated for additional credits.

LGLS 3507. Business Law for Accountants. 3 Credit Hours.
The legal environment in which businesses operate requires the accounting professional to possess a basic understanding of the law. The course is designed to provide an overview of the legal topics that Certified Public Accountants and other accounting professionals need in their practices. The course will also satisfy the requirements of the Pennsylvania CPA statute, which requires a course in business law. Topics will include the law of Contracts, Business Organizations, the Uniform Commercial Code, Government Regulations, and Debtor/Creditor relationships.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatability: This course may not be repeated for additional credits.

LGLS 3508. The Litigation Process. 3 Credit Hours.
We live in a litigious society in which lawsuits have become the accepted way of resolving conflicts in both a business and personal setting. This course will provide an overview of the litigation process and the types of remedies available to those who sue. Topics include the federal and state court systems, the art of negotiation, the Rules of Civil Procedure and the Rules of Evidence. Problems involving the law of contracts and torts will be applied to various fact patterns demonstrating how a case progresses through the pleadings, discovery, and trial itself. Attention will also be devoted to alternative ways of resolving disputes such as mediation and arbitration.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatability: This course may not be repeated for additional credits.

LGLS 3509. Entertainment Law. 3 Credit Hours.
This course is a survey of music copyright as it relates to music licensing and music publishing. The class builds upon the foundations of general copyright law and the music industry. Upon completion of this course, students will have developed a comprehensive understanding of the historical contexts and real-life applications of various legal and ethical issues in the music industry related to copyright, music publishing and music licensing agreements, payment of royalties and the terms of art in the music industry.

Repeatability: This course may not be repeated for additional credits.

LGLS 3510. Environmental Law and Sustainability. 3 Credit Hours.
Water and air pollution. Hazardous waste. Loss of species. Climate change. This course begins with an historical overview of the legal response to environmental harm, looking at the transition from a common law approach to the creation, since the 1970’s, of a network of federal statutes and regulations. It looks at questions like these: What are the different regulatory strategies for controlling pollution, and how do they compare? To what extent can market forces be harnessed to improve environmental outcomes? Can the law effectively provide incentives to prevent pollution from happening? What is environmental justice? What should be the response of environmental law to scientific uncertainty? You will learn about the interactions among the courts, Congress, the executive branch and industry interests as environmental law and policy have developed. You will also learn about efforts to address global climate change, and examine the role the U.S. has played in these negotiations.

Repeatability: This course may not be repeated for additional credits.

LGLS 3511. Law of Nonprofits. 3 Credit Hours.
According to the National Center for Charitable Statistics, more than 1.5 million nonprofit organizations are registered in the United States. This number includes public charities, private foundations, and other types of nonprofit organizations, including chambers of commerce, fraternal organizations and civic leagues. In addition, some of the largest employers in Philadelphia are nonprofit organizations, in addition to the multi-million dollar nonprofit organizations (including The Red Cross, and most hospitals and universities) that hire new employees every year. Over time, the nonprofit sector has emerged as a pillar of American society, and is often referred to as the “third sector.” The importance of this third sector - even within a business context - is greater than ever before. In Law of Nonprofits, you will learn about how these important organizations are created, governed, and operated, as well as some of the pitfalls and obstacles that can affect these organizations.

Repeatability: This course may not be repeated for additional credits.
LGLS 3513. Public Policy. 3 Credit Hours.
Product safety. Financial accountability. Environmental preservation. Protection from workplace discrimination. Government regulations—expressions of "public policy," are everywhere in the world of business. This course will introduce you to the way in which these laws are created. You will learn how administrative agencies, legislatures, the courts, interest groups, political parties, lobbyists, and the media all interact, shaping the policy-making process. As we explore these issues we will be addressing questions like these: Why do we need public policies? What kinds of problems are not likely to be solved in the private marketplace, and more appropriate for government intervention? How are public policy priorities decided? How can we determine whether public policies accomplish their goals? This course is designed to hone your writing, research and analytical skills.
Repeatability: This course may not be repeated for additional credits.

LGLS 3519. Tax, Estate and Trust Planning. 3 Credit Hours.
This course shows you how to properly inventory assets, tax and estate planning techniques such as how to properly plan for funding a college education, retirement, the future distribution of your assets, the requirements to establish a power of attorney, a Last Will and Testament, various Trust Instruments and an advanced Health Care Directive. This course will also cover life insurance funds, gifts and charitable donations. We will also examine the fiduciary duties of personal representatives of estates, lawyers and accountants and financial advisors.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
FIN 3519|Minimum Grade of C|May not be taken concurrently.

LGLS 3521. Corporate Governance. 3 Credit Hours.
The modern corporation operates within an ever-expanding framework of federal, state and local laws and regulations. Governed by its board of directors, the corporation must ensure that it adheres to the law while it simultaneously ensures that it sets and implements strategies for short and long term success. In order to thrive in a rigorous marketplace, corporate boards, executive management, and business units must achieve a balance and alignment among external and internal controls, risk management and competitive behavior. This course will inform students' understanding of the fundamental corporate governance principles and the responsibilities of the board of directors and other corporate actors, and it will develop the skills and strategic insight needed to become a more effective leader. Students will also learn frameworks that can move boards and executives beyond simple compliance to the creation of opportunities for long-term value.
Repeatability: This course may not be repeated for additional credits.

LGLS 3522. Technology, Privacy and Intellectual Property Law. 3 Credit Hours.
Who owns your genes? Who owns your memes? Is ownership affected by the fact that you express your ideas publicly on a social network that sells your personal data, or via private emails through an online service that you get for free? If your creative collaborators are around the world, working with you through an Internet service that resides in the "cloud," what does the law say about who owns the results? Which law should apply? This course explores the different mechanisms for protecting intellectual property in the U.S.—patents, copyrights, trade secrets, and trademarks—and the policy and ethical concerns as technological progress generates tectonic shifts in the global marketplace. It traces the evolution of privacy as expressed in philosophy, common law, Constitutional law, government policy, and modern practice in the digital age. We will look specifically at cyber-security and hacking, personal health and financial information, and surveillance, as well as the implications of international law upon your privacy rights.
Repeatability: This course may not be repeated for additional credits.

LGLS 3523. Detecting Financial Crimes. 3 Credit Hours.
From cuff-links to handcuffs, business executives face potentially harsh prison sentences for conducting business that violates federal and state laws. This course investigates white-collar crimes, their perpetrators, their punishment, and their impact upon business sectors and the larger community. White-collar crime refers to financially motivated nonviolent crime committed by business and government professionals. This course explores a vast array of these types of criminal offenses while examining government and judicial regulations of financial institutions, commercial entities, and their agents and employees in relation to economic and business crimes. The course will also address constitutional issues pertaining to investigations conducted by governmental and corporate entities.
Repeatability: This course may not be repeated for additional credits.

LGLS 3524. Legal and Policy Issues in the Workplace. 3 Credit Hours.
Social media and privacy rights. Trade secrets. Pay equity. Family-work conflict. Non-Compete Agreements. This course will explore the rights and responsibilities of workers and managers alike by examining the laws, regulations, court cases, and policies that govern the employer-employee relationship. It aims to teach you the basic principles of workplace law and policy while challenging you to question existing approaches to the employment relationship. The course will use cases and questions currently in the news and in the courts to examine the U.S. approach to the workplace: Should employers control employees' access to birth control or other medical care? Can a company perform criminal background or credit checks on applicants without violating race discrimination prohibitions? How would a mandate of paid time off to care for a new child or ill family member impact a business's bottom line? What role should the government play in setting a minimum wage and how does it affect workers and their employers? This course will ask questions like these to help you understand the way in which workplace laws and policy impact society in general and to help you articulate your own view of the employer-employee relationship. Note: Students who have taken HRM 3512 should not take this course.
Repeatability: This course may not be repeated for additional credits.
LGLS 3562. Legal Aspects of Global Business. 3 Credit Hours.
Today's economy is more globally connected than at any time in history. Transportation costs are a fraction of what they were in the recent past. Communication through email, chat services, and social networks has become seamless across borders. And of course, commerce has opened doors to products and services from all corners of the Earth. Businesses large and small are taking advantage of the cost savings of "going global" by outsourcing manufacturing, importing components, and exporting finished goods. Companies that fail to go global may instead go out of business. But going global is risky. And the risks that a company faces in concluding international contracts, export agreements, or joint ventures with foreign partners are unlike most risks faced in domestic transactions. This course introduces students to the world of global commerce, covering essential topics such as international sales, import and export regulations, dispute resolution on a global scale, and the public policy aspects of international trade, including multilateral institutions such as the World Trade Organization.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatability: This course may not be repeated for additional credits.

LGLS 3580. Special Topics - Law. 3 Credit Hours.
Special topics in current developments in the field of legal studies.
Repeatability: This course may be repeated for additional credit.

LGLS 3581. Pre-Law Internship and Seminar. 2 to 3 Credit Hours.
Sit in on a trial, help prepare legal documents or observe a real estate closing. The first part of this course will provide classroom instruction on the practical side of the law. This internship will then provide students with the opportunity to see the law in action by providing an opportunity of working in a law firm, governmental agency or nonprofit entity offering counseling and legal advice.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Legal Studies
College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatability: This course may be repeated for additional credit.

LGLS 3582. Independent Study. 1 to 6 Credit Hour.
This course is limited to Legal Studies majors and requires the approval of the department chair with the sponsorship of a faculty member from the department. The course requires a comprehensive legal analysis of a legal topic that culminates in the writing of a substantial research paper.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Legal Studies
College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatability: This course may be repeated for additional credit.

LGLS 3582. Independent Study. 1 to 6 Credit Hour.
This course is limited to Legal Studies majors and requires the approval of the department chair with the sponsorship of a faculty member from the department. The course requires a comprehensive legal analysis of a legal topic that culminates in the writing of a substantial research paper.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Legal Studies
College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatability: This course may be repeated for additional credit.

LGLS 3900. Honors Special Topics. 3 Credit Hours.
This Honors course covers special topics in current developments in the field of legal studies.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.

LGLS 3999. Honors Thesis I. 1.5 Credit Hour.
The first of a two-part sequence of courses in which independent research is conducted under the supervision of a thesis advisor from the Legal Studies department resulting in a substantial piece of original research, roughly 30 to 50 pages in length upon completion of Legal Studies 4999. The student must publicly present his/her findings at a Temple University Research Forum session or the equivalent during one of the two semesters during which these courses are undertaken.
College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.
LGLS 4596. Legal Reasoning in Action. 3 Credit Hours.
A corporate employee is fired after speaking up about what she thought were accounting irregularities. A big-box store must decide how to respond to reports that its subsidiary in Mexico has been paying bribes to hasten expansion. The religious beliefs of a company’s CEO are violated by a federal law requiring that company to pay for employee birth control. As we discuss, research, and critically examine business law case scenarios like these, you will have several opportunities to practice legal discourse in both written and spoken form. Building on the knowledge and skills you have gained in prior Legal Studies courses, this capstone delivers hands-on learning at a deeper level. It is "Writing Intensive;" you will complete a series of assignments of increasing complexity involving case and statutory analysis. In addition, as part of a team, you will be actively involved in mock trials.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Legal Studies
College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

LGLS 4999. Honors Thesis II. 1.5 Credit Hour.
Independent research conducted under the supervision of a thesis advisor from the Legal Studies Department resulting in a substantial piece of original research, roughly 30 to 50 pages in length. Student must publicly present his/her findings at a Temple University Research Forum session or the equivalent if this was not done in Legal Studies 3999.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Legal Studies
College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.
Pre-requisites: LGLS 3999|Minimum Grade of C-|May not be taken concurrently.

Lesbian Gay Bi Trans Gender St (LGBT)

Courses

LGBT 2002. Religion and Human Sexuality East & West. 3 Credit Hours.
The goal of this course is to examine the attitudes and practices of the major world religions regarding human sexuality. Topics to be covered will include marriage and procreation, and such controversial issues as abortion, homosexuality and sexual activity outside of marriage. Note: Religion and Human Sexuality is taught as a cross-listed course in Religion, Women's Studies, and LGBT Studies. Students may receive credit for only one of the following courses: REL 2002, LGBT 2002, WMST 2202.

Repeatability: This course may not be repeated for additional credits.

LGBT 2400. Topics in LGBT Studies. 3 Credit Hours.
Specific cultural or social studies in LGBT issues with an emphasis on interdisciplinary analysis.

Repeatability: This course may be repeated for additional credit.

LGBT 2405. Gay and Lesbian Lives. 3 Credit Hours.
In this course we will read autobiographical accounts (memoirs, essays, diaries, and poems) in which a significant portion of the narrative focuses on same-sex erotic attraction and/or gender difference, identified in contemporary society by the label Lesbian/Gay/Bisexual/Transgender/Intersex or the generic (and contested) Queer. The works were selected both to examine how gay and lesbian lives have been defined and altered over the course of the last sixty years and to provide a perspective of national, ethnic, religious, and racial diversity. Our main focus in the classroom will be discussion of these texts and their contexts. The classroom will be augmented by a research assignment focused on a gay or lesbian life we have not examined together in class.

Repeatability: This course may not be repeated for additional credits.

LGBT 3400. Topics in LGBT Studies. 3 Credit Hours.
Specific cultural or social studies in LGBT issues with an emphasis on interdisciplinary analysis.

Repeatability: This course may be repeated for additional credit.

LGBT 4489. Field Work in LGBT Studies. 3 Credit Hours.
The opportunity to work in a public or private agency whose mission includes advocacy for the LGBT community. Available to students minoring in LGBT Studies and throughout the College of Liberal Arts. A paper or project related to the area of the field study is also required. NOTE: Placement and faculty advisors arranged prior to registration (call 215-204-6953). Requires a designated supervisor at the field placement (minimum of 7 1/2 hours per week) and a faculty advisor within the College.

Repeatability: This course may be repeated for additional credit.

Management Information Systems (MIS)
Courses

MIS 0855. Data Science. 3 Credit Hours.
We are all drowning in data, and so is your future employer. Data pour in from sources as diverse as social media, customer loyalty programs, weather stations, smartphones, and credit card purchases. How can you make sense of it all? Those that can turn raw data into insight will be tomorrow’s decision-makers; those that can solve problems and communicate using data will be tomorrow’s leaders. This course will teach you how to harness the power of data by mastering the ways it is stored, organized, and analyzed to enable better decisions. You will get hands-on experience by solving problems using a variety of powerful, computer-based data tools virtually every organization uses. You will also learn to make more impactful and persuasive presentations by learning the key principles of presenting data visually. NOTE: This course fulfills a Science & Technology (GS) requirement for students under GenEd.

Course Attributes: GS
Repeatability: This course may not be repeated for additional credits.

MIS 2101. Information Systems in Organizations. 3 Credit Hours.
Explain the role of information technology as a business enabler and identify and explain management information systems applications including customer relationship management systems, enterprise systems, e-commerce applications, transaction processing systems, business analytics, and emerging technologies. Evaluate the organizational fit and suitability of business applications and interpret the interaction between information technology, customers, processes, data, infrastructure, participants, and environment in an organization. Understand the ethical challenges of information technology and explain the evolving role of management information systems in the organization, and the role and careers of MIS professionals. NOTE: Students pursuing the MIS major or minor need a C grade or better in this class to register for MIS 2501 and 2502. “BCP PASS” is a passing score in the Fox Computer Literacy Test, a prerequisite that needs to be completed prior to registering for MIS 2101. More info: http://sbm.temple.edu/foxclt


Repeatability: This course may not be repeated for additional credits

Pre-requisites:
BCP PASS|May not be taken concurrently
OR CIS 0001 to 4999| Required Courses:1|Minimum Grade of C-|May not be taken concurrently
OR MIS 0001 to 4999| Required Courses:1|Minimum Grade of C-|May not be taken concurrently
OR CIS L000 to L999| Required Courses:1|Minimum Grade of TR|May not be taken concurrently
OR CIST T000 to T999| Required Courses:1|Minimum Grade of TR|May not be taken concurrently
OR CIS U000 to U999| Required Courses:1|Minimum Grade of TR|May not be taken concurrently.

MIS 2501. Enterprise IT Architecture. 3 Credit Hours.
Specify the IT architecture for the enterprise. Explain and assess information technology such as computer hardware, software, systems, and networking. Identify management, usage, security, and consumer issues related to laptops, desktops, operating systems, servers, media, smartphones, gaming, cloud computing, and other new and evolving technologies. Learn about new computing platforms and how they create business value. Explore the technologies and business models of the ecosystems for new digital products and services. A grade of a C or better is required in this course to register for MIS 3501.


Repeatability: This course may not be repeated for additional credits

Pre-requisites:
MIS 2101|Minimum Grade of C|May not be taken concurrently
OR MIS 2901|Minimum Grade of C|May not be taken concurrently.

MIS 2502. Data Analytics. 3 Credit Hours.
Analyze data and learn how to present insights from business data. Analyze, model, and design database centric solutions for organizations. Create data models and data warehouses based on business rules. Learn how to operate and manage a database system and structured query language (SQL). Source traditional and new data types and apply data mining and visualization to generate business intelligence. A grade of C or better is required in this course to register for MIS 3504.


Repeatability: This course may not be repeated for additional credits

Pre-requisites:
MIS 2101|Minimum Grade of C|May not be taken concurrently
OR MIS 2901|Minimum Grade of C|May not be taken concurrently.
MIS 2502. Honors: Information Systems in Organizations. 3 Credit Hours.
Explain the role of information technology as a business enabler and identify and explain management information systems applications including
customer relationship management systems, enterprise systems, e-commerce applications, transaction processing systems, business analytics,
and emerging technologies. Evaluate the organizational fit and suitability of business applications and interpret the interaction between information
technology, customers, processes, data, infrastructure, participants, and environment in an organization. Understand the ethical challenges of
information technology and explain the evolving role of management information systems in the organization, and the role and careers of MIS
professionals. NOTE: Students pursuing the MIS major or minor need a C grade or better in this class to register for MIS 2501 and 2502. "BCP PASS"
is a passing score in the Fox Computer Literacy Test, a prerequisite that needs to be completed prior to registering for MIS 2101. More info: http://
sm.temple.edu/foxclt
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Career
Management and Insurance, Supply Chain Management, Undeclared-Business & Mngt
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits
Pre-requisites: BCP PASS|May not be taken concurrently
OR CIS 0001 to 4999| Required Courses:1|Minimum Grade of C|MAY not be taken concurrently
OR MIS 0001 to 4999| Required Courses:1|Minimum Grade of C|MAY not be taken concurrently
OR CIS L000 to L999| Required Courses:1|Minimum Grade of TR|MAY not be taken concurrently
OR CIS T000 to T999| Required Courses:1|Minimum Grade of TR|MAY not be taken concurrently
OR CIS U000 to U999| Required Courses:1|Minimum Grade of TR|MAY not be taken concurrently.

MIS 3501. Data-Centric Application Development. 3 Credit Hours.
Develop web-based data-centric applications using high level programming language. Use debugging techniques to identify errors and make
improvements. Interpret system requirement specifications and explain technical components including the use of systems development lifecycles in
creating software applications. Create simple data driven applications that connect with a database. A grade of C or better is required in this course to
register for MIS 4596.
College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatability: This course may not be repeated for additional credits
Pre-requisites: 
MIS 2502|Minimum Grade of C|May be taken concurrently.

MIS 3502. Application Integration and Evaluation. 3 Credit Hours.
Use concepts of application integration to develop data driven software applications. Design the system architecture for an n-tier application. Learn how
to integrate existing applications to produce new capabilities. Identify the technical and process issues of integrating a new application into the existing
application structure. Relate software components such as middleware to the overall information architecture and apply software components to create
client and server based applications.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: 
MIS 3501|Minimum Grade of C|Not be taken concurrently.

MIS 3503. User Interface Design. 3 Credit Hours.
This course presents basic principles of human-computer interaction and user-centered design as related to interface design for software applications.
Topics include managing the design process, usability testing and assessment techniques, and the application of guidelines for window, menu and other
dialogue techniques including single user and collaborative applications.
College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatability: This course may not be repeated for additional credits
Pre-requisites: 
(MIS 3596)|Minimum Grade of C|May not be taken concurrently
OR MIS 3504|Minimum Grade of C|May not be taken concurrently)
AND (MIS 2501|Minimum Grade of C|May not be taken concurrently).

MIS 3504. Digital Design and Innovation. 3 Credit Hours.
Learn business process analysis including requirements analysis, feasibility, and data and process modeling. Develop the skills required to create
innovative, technology enabled, corporate and consumer products and services. Apply information gathering techniques to elicit requirements. Compose
business and technical requirements. Work in teams to design and recommend information systems solutions to improve or transform business
processes. Lead the "make vs. buy" decisions. Justify proposed process improvements and proposed information systems solutions. Learn how to
implement and negotiate changes to requirements. NOTE: A grade of a C or better is required in this course to register for MIS 3535.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: 
MIS 2502|Minimum Grade of C|May not be taken concurrently.
MIS 3505. Applied Predictive Analytics. 3 Credit Hours.
This course gives students the applied, hands-on experience necessary to derive patterns and insight from large data sets. Students will learn how to select relevant variables for analysis, apply the appropriate analytic technique, and interpret the practical implications of the results. Topics also include unstructured "big" data, sentiment analysis, and articulating results to a business audience. Students will have hands-on experience with current, cutting-edge tools such as SAS Enterprise Miner.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MIS 2502|Minimum Grade of C|May not be taken concurrently.

MIS 3533. Electronic Commerce Site Design. 3 Credit Hours.
Learn web application development including requirements analysis, usability evaluation, specification, and implementation. Focus on both traditional transaction based systems and new applications for advertising, ordering, payment, and communication. Learn specific skills and tools for the development and management of electronic commerce initiatives. Understand the distinguishing features of front ends, server side code, and third party systems.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(MIS 3501|Minimum Grade of C|May not be taken concurrently)
AND (MIS 2502|Minimum Grade of C|May not be taken concurrently).

MIS 3534. Strategic Management of Information Technology. 3 Credit Hours.
This course prepares students to be effective exploiters and managers of information technology. The management of information technology is addressed by considering the contemporary issues faced by general managers, e.g., globalization, time compression, and technology integration. Strategic approaches for dealing with these issues are explored. An integrative class project is used to pull together operational concepts from lower level information system and business courses as they apply to the management of information technology.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MIS 2101|Minimum Grade of C|May not be taken concurrently
OR MIS 2901|Minimum Grade of C|May not be taken concurrently.

MIS 3535. Lead Global Digital Projects. 3 Credit Hours.
Learn how to lead, plan and manage global technology-enabled, process-centric information systems projects by focusing on initiating, planning, executing, controlling and closing projects in the context of topics such as integration, scope, timing, cost, quality, human resource, technology, communications, and risk and procurement. Explore the impact of the human element as it relates to the success and failure of information systems projects. Learn how to monitor project plans and communicate status reports to clients, and create and respond to request for proposals. A grade of a C or better is required in this course to register for MIS 4596.
College Restrictions: Must be enrolled in one of the following Colleges: Business & Mgmt, Fox School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(MIS 2502|Minimum Grade of C|May not be taken concurrently)
AND (MIS 3504|Minimum Grade of C|May not be taken concurrently)
OR MIS 3596|Minimum Grade of C|May not be taken concurrently).
MIS 3536. Information Systems Innovation. 3 Credit Hours.
This course provides the knowledge and skills to leverage emerging and innovative information technology to create business opportunities for both new entrepreneurial ventures and traditional firms. As we move into the digital world, the ways by which companies create value is fundamentally shifting from products to experiences. The rapid convergence to digital technology opens new opportunities to offer novel products and services that did not exist before. In this course, students will be asked to think how entrepreneurs and companies produce radically new products and services in the increasingly digital world. The course focuses on how organizations can design novel and desirable products and services. Through applied projects, student teams will learn how to evaluate and apply new innovative technologies to create new digital experiences, products, and services.


Repeatability: This course may not be repeated for additional credits

Pre-requisites:
MIS 2101|Minimum Grade of C|May not be taken concurrently
OR MIS 2901|Minimum Grade of C|May not be taken concurrently.

MIS 3537. Internet Enabled Supply Chains. 3 Credit Hours.
This course provides an understanding of how smart companies are revolutionizing their supply chains through the use of the Internet. Topics include e-business models, network-ready businesses, information hubs, collaboration in supply chains, eMarketplaces and eAuctions, supply chain visibility and security. The course draws from a host of real-world case studies and computer simulations to reinforce learning and understanding of Internet-enabled supply chains.


Repeatability: This course may not be repeated for additional credits

Pre-requisites:
MIS 2101|Minimum Grade of C|May not be taken concurrently
OR MIS 2901|Minimum Grade of C|May not be taken concurrently.

MIS 3538. Social Media Innovation. 3 Credit Hours.
In this course we review concepts and principles related to new business models supported by innovative use of Web 2.0 and social media. Through a combination of readings, discussion, presentations, and hands-on projects we examine (i) the organizational use of key media technologies such as web sites, blogs, web analytics, and search engine optimization, (ii) the business models underlying successful innovative new media organizations including Wikipedia, Craigslist, YouTube, and Facebook, and (iii) the role of centralized, decentralized, and crowd-sourced information resources in online media innovation.


Repeatability: This course may not be repeated for additional credits

Pre-requisites:
MIS 2101|Minimum Grade of C|May not be taken concurrently
OR MIS 2901|Minimum Grade of C|May not be taken concurrently.

MIS 3580. Special Topics. 3 Credit Hours.
Special topics in current developments in the field of information systems.


Repeatability: This course may be repeated for additional credit.

Pre-requisites:
MIS 2101|Minimum Grade of C|May not be taken concurrently
OR MIS 2901|Minimum Grade of C|May not be taken concurrently.
MIS 3581. Co-operative Experience in Management Information Systems. 3 Credit Hours.
Students undertake a research project that integrates their current work experience with their classroom experience at Temple University. The results are reported in a series of status reports, blogs and a PowerPoint presentation prepared under the supervision of a faculty member. NOTE: Arrangements are made through the Management Information Systems Department and this course is open to ALL Fox business students. A 2.7 cumulative GPA or higher is recommended. http://ibit.temple.edu/industryexperience/
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
MIS 2101|Minimum Grade of C|May not be taken concurrently
OR MIS 2901|Minimum Grade of C|May not be taken concurrently.

MIS 3582. Independent Study. 1 to 6 Credit Hour.
Students will prepare research papers under supervision of a faculty member. NOTE: None of the required MIS courses can be taken as an independent study.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Management Information Systems
College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatability: This course may be repeated for additional credit.

MIS 3682. Independent Study. 1 to 6 Credit Hour.
Students will prepare research papers under supervision of a faculty member. NOTE: None of the required MIS courses can be taken as an independent study.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Management Information Systems
Repeatability: This course may be repeated for additional credit.

MIS 3999. Honors Thesis I. 1 to 3 Credit Hour.
The first of a two-part sequence of courses in which independent research is conducted under the supervision of a thesis advisor from the MIS department resulting in a substantial piece of original research, roughly 30 to 50 pages in length upon completion of MIS 4999. The student must publicly present his/her findings at a Temple University Research Forum session or the equivalent during one of the two semesters during which these courses are undertaken.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Management Information Systems
College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.

MIS 4596. Information Systems Integration. 3 Credit Hours.
This is a capstone course that will apply previous course material to a comprehensive project. Learn how to leverage enterprise information technology assets and capabilities. Justify and prioritize project portfolios within a department and across the enterprise. Evaluate and compare proposed projects based on requirements, vendors, technology, and architectural fit with the organization. Work in teams to participate in a real-world project. Learn how IT organizations are structured and the role of the MIS professional and prepare to enter job marketplace. Students must earn a grade of C in this course if they are using it to fill the writing intensive course requirement for their degree.
College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(MIS 2501|Minimum Grade of C|May not be taken concurrently)
AND (MIS 3501|Minimum Grade of C|May not be taken concurrently)
AND (MIS 3535|Minimum Grade of C|May not be taken concurrently).

MIS 4999. Honors Senior Thesis II. 1 to 3 Credit Hour.
Independent research conducted under the supervision of a thesis advisor from the MIS Department resulting in a substantial piece of original research, roughly 30 to 50 pages in length. Student must publicly present his/her findings at a Temple University Research Forum session or the equivalent if this was not done in MIS 3999.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Management Information Systems
College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.

Management Science/Op Mgmt (MSOM)
Courses

MSOM 3101. Operations Management. 3 Credit Hours.
An examination of the activities necessary for the provision of the organization's product or service. Planning and scheduling of operations, allocation of resources, including staffing requirements and equipment decisions, inventory control and production planning, waiting line problems, and quality.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
STAT 2103|Minimum Grade of C-|May not be taken concurrently
OR STAT 2903|Minimum Grade of C-|May not be taken concurrently
OR STAT 2104|Minimum Grade of C-|May not be taken concurrently
OR STAT 2102|Minimum Grade of C-|May not be taken concurrently
OR STAT 2902|Minimum Grade of C-|May not be taken concurrently
OR STAT 2512|Minimum Grade of C-|May be taken concurrently.

MSOM 3682. Independent Study. 3 Credit Hours.
Readings and/or papers under supervision of a faculty member.
Repeatability: This course may be repeated for additional credit.

MSOM 3901. Honors Operations Management. 3 Credit Hours.
An examination of the activities necessary for the provision of the organization's product or service. Planning and scheduling of operations, allocation of resources, including staffing requirements and equipment decisions, inventory control and production planning, waiting line problems, and quality. Open only to business designated Honors students (or with special permission). May be used to fulfill the operations management requirement of the Fox School of Business and Management. NOTE: The Honors version of MSOM 3101 (0105).
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
STAT 2103|Minimum Grade of C-|May not be taken concurrently
OR STAT 2903|Minimum Grade of C-|May not be taken concurrently
OR STAT 2104|Minimum Grade of C-|May not be taken concurrently
OR STAT 2102|Minimum Grade of C-|May not be taken concurrently
OR STAT 2902|Minimum Grade of C-|May not be taken concurrently
OR STAT 2512|Minimum Grade of C-|May be taken concurrently.

Marketing (MKTG)

Courses

MKTG 2101. Marketing Management. 3 Credit Hours.
Introduction to the role of marketing in the U.S. economy and within the firm. The interaction of marketing with other business functions and with society. The course focuses on the components of marketing strategy including analyzing what markets and needs the firm will serve; deciding when, where, and how the firm will meet these needs; and understanding why (i.e., a compelling business reason) the firm should implement a strategy. Includes the study of marketing mix development issues, including product development and management; pricing; integrated communications and promotion; distribution, logistics, and supply-chain management; as well as other decisions involved in this process. NOTE: Students who intend to take Marketing 3511, 3553, or 3596 are required to earn a grade of C in this course.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ECON 1101|Minimum Grade of C-|May not be taken concurrently
OR ECON 1901|Minimum Grade of C-|May not be taken concurrently.
MKTG 2511. Marketing for the Sustainable Enterprise. 3 Credit Hours.
Sustainable marketing is a paradigm which extends the boundaries of traditional marketing. This course focuses on how both for-profit and not-for-profit organizations learn to innovate, develop, produce, promote, distribute, and reclaim products and services in new ways that reduce waste and pollution and benefit all stakeholders. In addition to modifications of marketing activities to reduce environmental impact, the course considers marketing's role in corporate social responsibility (including ethical considerations) and social marketing agendas (such as health and community issues).
Repeatability: This course may not be repeated for additional credits.

MKTG 2901. Honors Marketing Management. 3 Credit Hours.
Introduction to the discipline of marketing. The nature of marketing activities in contemporary society and the firm. Study of marketing mix variables and decision processes involved in corporations and public agencies. Concepts from economics, behavioral sciences, and modern systems theory are incorporated. NOTE: Open only to business designated honors students or with special permission. May be used to meet the marketing requirement of the Fox School of Business and Management. Students who intend to take Marketing 3511, 3553, or 3596 are required to earn a grade of C in this course.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ECON 1101 Minimum Grade of C-|May not be taken concurrently
OR ECON 1901 Minimum Grade of C-|May not be taken concurrently.

MKTG 3501. Integrated Marketing Communications. 3 Credit Hours.
Marketing 3501 is an intermediate level undergraduate marketing course which introduces students to the field of advertising by taking an integrated marketing communications (IMC) perspective. While advertising is the major focus of the course, IMC also plays a critical role as the course develops perspectives on the process of advertising, promotions, and media working together as a part of the overall marketing strategy. Topics include setting advertising objectives and budgets, client-agency-media relations, demand stimulation, media selection and evaluation, and the social responsibilities and regulation of advertising at the level of the firm and of the industry. NOTE: Prior to Spring 2009, this course was titled "Advertising."
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MKTG 2101 Minimum Grade of C-|May not be taken concurrently
OR MKTG 2901 Minimum Grade of C-|May not be taken concurrently.
MKTG 3502. Information Management for Marketing Strategies. 3 Credit Hours.
Information has become a valuable strategic asset and successful management of market information is essential for a firm’s sustained profitability; this information allows marketers to not only know who their customers are, what they are buying, but also what they want to buy. This course provides an introduction to the principles of data management that underlie organizations in the digital information age. The course analyzes the strategic role played by information and allows students to develop the skills required to manage information by using databases. The course considers marketing applications to illustrate the multiple uses of information stored in databases. Particularly, the course considers how to organize and manage available information assets to address specific strategic objectives and needs. Note: Marketing Majors must earn a grade of C or better for this course to count towards the major requirement.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(MKTG 2101|Minimum Grade of C|May not be taken concurrently
OR MKTG 2901|Minimum Grade of C|May not be taken concurrently
OR MK01 Y|May not be taken concurrently)
AND (STAT 2103|Minimum Grade of C|May not be taken concurrently
OR STAT 2903|Minimum Grade of C|May not be taken concurrently
OR STAT 2104|Minimum Grade of C|May not be taken concurrently
OR (STAT 2101|Minimum Grade of C|May not be taken concurrently
AND STAT 2102|Minimum Grade of C|May not be taken concurrently)
OR (STAT 2901|Minimum Grade of C|May not be taken concurrently
AND STAT 2902|Minimum Grade of C|May not be taken concurrently)
OR STAT 2512|Minimum Grade of C|May not be taken concurrently).

MKTG 3503. Promotion Management. 3 Credit Hours.
This course focuses on the strategic management of the entire promotion blend; particularly the relationship of advertising, personal selling, sales promotion, and publicity to meet the information needs of the pre-selected market segments. The interaction of promotion with the rest of the marketing mix and the transaction process is also covered. NOTE: Marketing Majors must earn a grade of C or better for this course to count towards the major requirement.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
MKTG 3596|Minimum Grade of C|May not be taken concurrently.

MKTG 3504. Sales and Sales Management. 3 Credit Hours.
This course provides a brief introduction to the behavioral aspects of personal selling and a discussion of sales management. Course topics include: recruiting, selection, training, motivation, compensation, control, and the strategy of matching the sales effort to the sales task.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
MKTG 2101|Minimum Grade of C|May not be taken concurrently
OR MKTG 2901|Minimum Grade of C|May not be taken concurrently.

MKTG 3505. Entrepreneurial Marketing. 3 Credit Hours.
This course provides entrepreneurs, and aspiring entrepreneurs, with an understanding of marketing for new and small enterprises; it addresses marketing strategies particularly relevant for such enterprises. Students apply marketing concepts to new and small enterprises, such as creating and nurturing relationships with new customers, suppliers, distributors, employees and investors; and learn about the special challenges and opportunities involved in developing marketing strategies from the ground up. This course requires students to blend theory with practice to develop a comprehensive entrepreneurial marketing plan.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
MKTG 2101|Minimum Grade of C|May not be taken concurrently
OR MKTG 2901|Minimum Grade of C|May not be taken concurrently.
MKTG 3506. Value Delivery Networks in Marketing. 3 Credit Hours.
This course provides a critical analysis of Value Delivery Networks in marketing; there is a focus on retailing strategies as well as how firms use the Internet and other digital platforms to expand markets, service customers, and increase sales. The course explores critical supply chain issues involved in commerce including inventory management, transportation, procurement (including outsourcing) and warehousing issues which occur in marketing management. Marketing Majors must earn a grade of C or better for this course to count towards the major requirements.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School

Repeatability: This course may not be repeated for additional credits.

MKTG 3507. Direct Marketing. 3 Credit Hours.
This course introduces students to the scope of direct marketing including mail order, lead generation, circulation, relationship/loyalty programs, store traffic/site traffic building, fund raising, pre-selling, selling (cross-selling as well as selling-up), post-selling and research. The course addresses how direct marketing varies from other forms of marketing and where its practice is most appropriate. Additionally, the course covers the practical challenges firms face as they seek to develop direct marketing programs for direct sale, lead generation or traffic generation using various direct marketing media such as: direct mail, broadcast, print advertising, catalogs, co-ops, telemarketing, Internet, inserts, videos, e-mail and trade shows. Various approaches for stimulating action and the measurability and accountability of direct marketing and its relationship to the total marketing mix are stressed. NOTE: Prior to Spring 2009, this course was titled "Direct Marketing & E-Commerce Channels." Marketing Majors must earn a grade of C or better for this course to count towards the major requirements.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
MKTG 3596|Minimum Grade of C|May not be taken concurrently.

MKTG 3508. Digital Marketing. 3 Credit Hours.
Digital technologies have become an integral component of daily life for many firms and consumers. Although digital marketing is an important part of business strategy, the dynamic nature of technology and consumer culture raises many strategic and social challenges. This course examines the theories and concepts underlying the use of information and communication technology by firms and consumers, and challenges students to critique and utilize digital tools and social media, including Twitter, Facebook, online reviews, blogs, paid search, digital advertising, and online promotions. The identification of critical success factors and best practices are central to the course, as are methods for analyzing marketing effectiveness. The course examines the theory and realities of digital marketing in both business-to-consumer (B2C) and business-to-business (B2B) markets.


Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(MKTG 2101|Minimum Grade of C|May not be taken concurrently
OR MKTG 2901|Minimum Grade of C|May not be taken concurrently)

MKTG 3509. Customer Data Analytics. 3 Credit Hours.
This course teaches students how to make use of Marketing Metrics: the collection, analysis, and utilization of data for the development of marketing strategies. The course includes the study of data collection, warehousing technologies, marketing information systems, data mining, and customer relationship management. Particular attention is paid to interpretation of quantitative data (Marketing dashboards).

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(MKTG 2101|Minimum Grade of C|May not be taken concurrently
OR MKTG 2901|Minimum Grade of C|May not be taken concurrently
OR MK01 Y|May not be taken concurrently)
AND (STAT 2103|Minimum Grade of C|May not be taken concurrently
OR STAT 2903|Minimum Grade of C|May not be taken concurrently
OR STAT 2104|Minimum Grade of C|May not be taken concurrently
OR (STAT 2101|Minimum Grade of C|May not be taken concurrently
AND STAT 2102|Minimum Grade of C|May not be taken concurrently
OR (STAT 2901|Minimum Grade of C|May not be taken concurrently
AND STAT 2902|Minimum Grade of C|May not be taken concurrently
OR STAT 2512|Minimum Grade of C|May not be taken concurrently).
MKTG 3511. Marketing Research. 3 Credit Hours.
This course covers methods for collecting, analyzing, and interpreting data relevant to the marketing decision-making process. The course focuses on structuring marketing problems in terms of specific research questions, understanding primary and secondary sources of marketing research data (including issues in data collection), using specific techniques for analyzing marketing research data, and using these analyses to make better marketing management decisions. NOTE: Marketing Majors must earn a grade of C or better in this course to be eligible to take the capstone Marketing course 4501.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(MKTG 2101|Minimum Grade of C|May not be taken concurrently)
OR MKTG 2901|Minimum Grade of C|May not be taken concurrently
OR MK01 Y|May not be taken concurrently
AND (STAT 2103|Minimum Grade of C|May not be taken concurrently)
OR STAT 2903|Minimum Grade of C|May not be taken concurrently
OR STAT 2104|Minimum Grade of C|May not be taken concurrently
OR (STAT 2101|Minimum Grade of C|May not be taken concurrently)
AND STAT 2102|Minimum Grade of C|May not be taken concurrently
OR (STAT 2901|Minimum Grade of C|May not be taken concurrently)
AND STAT 2902|Minimum Grade of C|May not be taken concurrently
OR STAT 2512|Minimum Grade of C|May not be taken concurrently).

MKTG 3553. International Marketing. 3 Credit Hours.
This course identifies and addresses the challenges of marketing and analysis of the internal marketing system of countries with various types of political-economic structures. The strategic impact of economic, cultural, political, and legal differences on marketing are emphasized while issues of international product, price, promotion, and distribution issues are also considered. NOTE: Marketing Majors must earn a grade of C or better in this course to be eligible to take the capstone Marketing course 4501.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MKTG 2101|Minimum Grade of C|May not be taken concurrently
OR MKTG 2901|Minimum Grade of C|May not be taken concurrently
OR MK01 Y|May not be taken concurrently.

MKTG 3580. Special Topics - Marketing. 3 Credit Hours.
Special topics in current developments in the field of marketing.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
MKTG 2101|Minimum Grade of C|May not be taken concurrently
OR MKTG 2901|Minimum Grade of C|May not be taken concurrently
OR MK01 Y|May not be taken concurrently.

MKTG 3581. Marketing Internship/Co-Operative Experience. 3 Credit Hours.
The course is designed for students who have a Marketing Internship or Co-op Experience which has been reviewed and approved by the department. NOTE: Arrangements must be made through the Marketing Department; this course is for Marketing majors only. Students must have completed the Marketing Core (MKTG 3511, 3596) prior to this course. Students must earn a grade of C or better for this course to count towards the major requirements.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Marketing
College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(MKTG 3596|Minimum Grade of C|May not be taken concurrently)
AND (MKTG 3511|Minimum Grade of C|May be taken concurrently).
MKTG 3582. Independent Study. 1 to 6 Credit Hour.
Readings and/or papers under supervision of a faculty member. NOTE: Arrangements must be made through the Marketing Department; this course is for Marketing majors only. Students must have completed the Marketing Core (MKTG 3511, 3596) prior to this course. Students must earn a grade of C or better for this course to count towards the major requirements.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School

Repeatability: This course may be repeated for additional credit.

Pre-requisites:
MKTG 2101\Minimum Grade of C\May not be taken concurrently
OR MKTG 2901\Minimum Grade of C\May not be taken concurrently
OR MK01 Y\May not be taken concurrently.

MKTG 3596. Consumer and Buyer Behavior. 3 Credit Hours.
This course provides a survey and integration of concepts, theories, and frameworks that help explain the behavior of consumers. Topics include: perception, product knowledge and involvement, decision making, learning, conditioning, and social influences such as culture, micro-culture, and social class. The course emphasizes the use of these concepts in developing marketing strategies. NOTE: Marketing Majors must earn a grade of C or better in this course to be eligible to take the capstone Marketing course 4501. Students must earn a grade of C in this course if they are using it to fill the writing intensive course requirement for their degree.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
MKTG 2101\Minimum Grade of C\May not be taken concurrently
OR MKTG 2901\Minimum Grade of C\May not be taken concurrently
OR MK01 Y\May not be taken concurrently.

MKTG 3682. Independent Study. 1 to 6 Credit Hour.
Readings and/or papers under supervision of a faculty member. NOTE: Arrangements must be made through the Marketing Department; this course is for Marketing majors only. Students must have completed the Marketing Core (MKTG 3511, 3596) prior to this course. Students must earn a grade of C or better for this course to count towards the major requirements.

Repeatability: This course may be repeated for additional credit.

Pre-requisites:
MKTG 2101\Minimum Grade of C\May not be taken concurrently
OR MKTG 2901\Minimum Grade of C\May not be taken concurrently
OR MK01 Y\May not be taken concurrently.

MKTG 3999. Honors Thesis I. 1 to 3 Credit Hour.
The first of a two-part sequence of courses in which independent research is conducted under the supervision of a thesis advisor from the Marketing department resulting in a substantial piece of original research, roughly 30 to 50 pages in length upon completion of Marketing 4999. The student must publicly present his/her findings at a Temple University Research Forum session or the equivalent during one of the two semesters during which these courses are undertaken.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Marketing

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

MKTG 4501. Marketing Strategy. 3 Credit Hours.
This course is designed to provide an opportunity for students to integrate material introduced, reinforced and applied in Marketing and other business courses. This course explores how firms develop and implement marketing strategies to ensure their long-term survival and growth; in essence, this is an applications course and active student participation is required to demonstrate ability to understand and solve marketing problems. NOTE: This is the capstone course for Marketing majors who were admitted as freshmen in fall 2008 or after and transfer students admitted fall 2010 or after. It is strongly recommended for students in their senior year. As suggested by the curriculum path, students should take MKTG 4501 in their final semester; ideally after (or with) BA 4101 as it makes heavy use of core management strategy theories and tools. This course MAY NOT be taken in the same semester as any Marketing CORE (3509, 3511, 3596, 3553) course.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Marketing

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(MKTG 3596\Minimum Grade of C\May not be taken concurrently)
AND (MKTG 3511\Minimum Grade of C\May not be taken concurrently)
AND (MKTG 3553\Minimum Grade of C\May not be taken concurrently)
OR IB 3553\Minimum Grade of C\May not be taken concurrently).
MKTG 4999. Honors Senior Thesis II. 1 to 3 Credit Hour.
Independent research conducted under the supervision of a thesis advisor from the Marketing Department resulting in a substantial piece of original research, roughly 30 to 50 pages in length. Student must publicly present his/her findings at a Temple University Research Forum session or the equivalent if this was not done in Marketing 3999.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Marketing
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.
Pre-requisites: MKTG 3999|Minimum Grade of C-|May not be taken concurrently.

Math Education (Elementary) (MAEE)

Courses
MAEE 3141. Teaching of Mathematics N-6. 3 Credit Hours.
The purpose of this course is to prepare prospective teachers to teach reform-based mathematics in elementary and middle school settings as suggested in the Principles and Standards for School Mathematics (NCTM, 2000). The objectives of the course include integration of mathematics concepts and methods in order to focus on misconceptions in mathematics among preservice teachers as well as learning theories and standards-based instruction. The intent of the course is to enable students to enhance their mathematical skills and develop pedagogical knowledge. Furthermore, issues of equity and social justice will be discussed. Throughout the term, we will explore classroom materials, models, and technologies appropriate for teaching mathematics to all children, including those with learning disabilities.

Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY
Co-requisites: ELED 3387, SCEE 3151
Repeatability: This course may not be repeated for additional credits.

Math Education (Secondary) (MAES)

Courses
MAES 2189. Classroom Interactions. 3 Credit Hours.
This course continues the process of preparing students to teach mathematics and science in upper elementary and secondary settings. The specific objectives of this course are to: 1) demonstrate to students how learning theories (from the "Knowing and Learning" course) manifest themselves in instructional settings (usually classrooms), allow students to design and implement instructional activities from their own understanding of knowing and learning mathematics and science, and evaluate the outcomes of those activities based on evidence from student artifacts, and 2) provide students with frameworks for thinking about equity issues in the classroom and larger school setting and their effects on learning and provide students with strategies for teaching diverse students equitably. The culminating activities of the course are the opportunities for students to teach in a high school and to learn whether they enjoy and are good at it. While in "Knowing and Learning" students study the meaning behind understanding a particular content area from an individual perspective, in "Classroom Interactions" the perspective shifts to studying how classroom events might promote or discourage learning mathematics and science and student equity. A major component of the "Classroom Interactions" course is the opportunity for students to reflect on and evaluate their own work as teachers.

Repeatability: This course may be repeated for additional credit.
Pre-requisites: (EDUC 2179|Minimum Grade of C-|May be taken concurrently)
AND (SCTC 1289|Minimum Grade of C-|May not be taken concurrently
OR SCTC 1389|Minimum Grade of C-|May not be taken concurrently).

MAES 3145. Teaching & Learning Mathematics in the Middle Grades. 3 Credit Hours.
This course examines methods of teaching and assessing mathematics in the middle grades. Special attention is paid to understanding the conceptual difficulties students have in moving from whole numbers to rational numbers, additive thinking to multiplicative thinking, and arithmetic to algebra. Problem-solving, connections, and concrete models are emphasized.

College Restrictions: Must be enrolled in one of the following Colleges: Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY
Co-requisites: EDUC 4389
Repeatability: This course may not be repeated for additional credits.
MAES 3146. Methods and Materials in Secondary Mathematics. 3 Credit Hours.
This course will explore problems in algebra, trigonometry, analytic geometry, calculus, Euclidean geometry, probability, statistics, and discrete mathematics. This course is intended as a capstone study for prospective secondary mathematics teachers. The objectives of this course are as follows: (1) connect ideas within and between mathematical concepts, (2) develop mathematical thinking and reasoning, and (3) develop problem solving skills. Technology will be a vital part of this course. Technology will be used to demonstrate and encourage conjecturing and problem solving with an emphasis on applications. The goals of this course are to help you as prospective or beginning secondary mathematics teachers to: (1) develop a deep understanding of the mathematics you will be teaching by connecting mathematical concepts to instruction and (2) acquire the skills, knowledge, and reflective practice necessary for successful teaching.

College Restrictions: Must be enrolled in one of the following Colleges: Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education

Repeatability: This course may not be repeated for additional credits.

MAES 3147. Geometry and its Classroom Implications. 3 Credit Hours.
The class stresses the topics found in a standard high school geometry course from an advanced point of view. In addition, important plane geometry theorems such as Ceva's Theorem, and Menelaus' Theorem are examined. Special attention is paid to the concept of proof, and different kinds of proofs are examined. Non-Euclidean geometry is investigated, as are the constructions of college geometry.

Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: TUteach

Repeatability: This course may not be repeated for additional credits.

MAES 3278. Professional Subject Matter: Statistics. 1 to 3 Credit Hour.
This course addresses the statistics curriculum found in most high school advanced placement courses. In addition, students will test hypotheses using appropriate sampling strategies, and interpret the results in terms of confidence intervals and significance. The course will also examine interpreting the results of statistical tests, (including z-test, t-test, paired t-test, matched t-test). In addition, special consideration will be given to developing strategies for modeling data, making predictions from these models, and considering issues relating to population, random samples, and proportions.

Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: TUteach

Repeatability: This course may not be repeated for additional credits.

MAES 4146. Teaching and Learning Mathematics in High School. 3 Credit Hours.
This course will explore problems in algebra, trigonometry, analytic geometry, calculus, Euclidean geometry, probability, statistics, and discrete mathematics. This course is intended as a capstone study for prospective secondary mathematics teachers. The objectives of this course are as follows: (1) connect ideas within and between mathematical concepts, (2) develop mathematical thinking and reasoning, and (3) develop problem solving skills. Technology will be a vital part of this course. Technology will be used to demonstrate and encourage conjecturing and problem solving with an emphasis on applications. The goals of this course are to help you as prospective or beginning secondary mathematics teachers to: (1) develop a deep understanding of the mathematics you will be teaching by connecting mathematical concepts to instruction and (2) acquire the skills, knowledge, and reflective practice necessary for successful teaching.

College Restrictions: Must be enrolled in one of the following Colleges: Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education

Co-requisites: EDUC 4389

Repeatability: This course may not be repeated for additional credits.

MAES 4189. Project-Based Instruction. 3 Credit Hours.
"Project-Based Instruction" (PBI) is the capstone course in the sequence of required education courses and is required before TUteach students take Education 4688: "Student Teaching in Secondary Education." PBI is the course in which the major themes of the TUteach program - integrated content of mathematics and science learning, infusion of technology in representation, analysis, modeling, assessment and contextualization of the content, field-based experiences, and equity - converge into an exciting and intellectually challenging culminating experience. When students complete PBI, they are fully prepared for Student Teaching. Whereas in "Classroom Interactions," students gain experience designing a sequence of several lessons that they teach to a high school class, in PBI, students design full units of connected lessons - a skill that is required in Student Teaching. PBI also provides students with the experience of managing lessons and students outside a classroom, in a field setting. Despite its name, PBI emphasizes choosing from a variety of appropriate teaching styles, depending on the type of material and the learning objective, with project-based instruction being just one possible alternative. In addition, PBI requires students to incorporate various technologies into the units they plan.

Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: TUteach

Repeatability: This course may be repeated for additional credit.

Pre-requisites:
(MAES 2189)(Minimum Grade of C-)(May not be taken concurrently
AND PRAX 100999)(May not be taken concurrently).
MAES 4366. The Teaching of Problem Solving. 3 Credit Hours.
This course is designed for the in-service as well as the pre-service teacher. Topics to be discussed will be the role of problem solving and reasoning in
the mathematics curriculum, developing techniques for improving problem solving and reasoning abilities of students on mathematics. Emphasis will be
on how to teach problem solving as opposed to merely solving problems.
College Restrictions: Must be enrolled in one of the following Colleges: Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY
Co-requisites: MAES 2189
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MAES 2189|Minimum Grade of C-|May be taken concurrently.

MAES 4371. History of Mathematics. 3 Credit Hours.
The course will consider the mathematical ideas of particular significance in elementary and secondary school curricula: the development and
introduction of Hindu-Arabic numerals, early computing devices, Euclidean and non-Euclidean geometries, etc. Ways in which the history of
mathematics may be used to enhance the learning of mathematical concepts by students in the schools will also be examined.
College Restrictions: Must be enrolled in one of the following Colleges: Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY
Repeatability: This course may not be repeated for additional credits.

Mathematics (MATH)

Courses

MATH 0701. Elementary Algebra. 4 Credit Hours.
This course is typically offered in Fall, Spring, Summer I and Summer II.<p>This course covers a basic treatment of algebraic expressions, linear
equations and inequalities, polynomial operations, factoring, systems of linear equations, radical and rational expressions, quadratic equations, and
various application problems. NOTE: This course does not count towards the number of credits required for graduation in the College of Science and
Technology.
Repeatability: This course may not be repeated for additional credits.

MATH 0702. Intermediate Algebra. 4 Credit Hours.
This course is typically offered in Fall and Spring.<p>This course is designed as an intermediate algebra course that bridges the topics covered in Math
0701 and Math 1021. This course covers the real number system, basic properties of real numbers, operations with fractional expressions, simplifying
complex fractions, powers and roots, operations with radicals, graphing linear equations and inequalities, and factoring of polynomials.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 0701 to 1021| Required Courses:1|Minimum Grade of C-|May not be taken concurrently
OR MC2 Y|May not be taken concurrently
OR MC3 Y|May not be taken concurrently
OR MC4 Y|May not be taken concurrently
OR MC5 Y|May not be taken concurrently
OR MC6 Y|May not be taken concurrently
OR STAT 1001|Minimum Grade of C-|May be taken concurrently
OR STT2 Y|May not be taken concurrently
OR STAT 1102|Minimum Grade of C-|May be taken concurrently
OR STAT 1902|Minimum Grade of C-|May be taken concurrently.
MATH 0823. Math for a Digital World. 4 Credit Hours.
This course is not offered every year. How can I tell if an e-mail message is really from my bank? If I do online banking, can other people see the information? Does playing the lottery make sense? Does it make sense to draw for an inside straight? How can polling results differ so much from the election --- or do they? Sometimes the winner of an election in the U.S. gets much less than 50% of the vote. Would it make sense to have a run-off in such cases? How long will the world's oil last, assuming that we use more each year? How long will a million dollars last you, assuming it earns interest until you spend it? If you bought your text online, could someone tap into the Internet and get your credit card number when it's transmitted? Why does the VIN on your car have so many digits? NOTE: This course fulfills the Quantitative Literacy (GQ) requirement for students under GenEd and a Quantitative Reasoning (QA or QB) requirement for students under Core. Students cannot receive credit for MATH 0823/0923 if they have successfully completed CIS 0823/0923.

Course Attributes: GQ
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 0701 to 0702| Minimum Grade of C-| May not be taken concurrently
OR MATH 0800 to 1041| Minimum Grade of C-| May be taken concurrently
OR MC3 Y| May not be taken concurrently
OR MC4 Y| May not be taken concurrently
OR MC5 Y| May not be taken concurrently
OR MC6 Y| May not be taken concurrently
OR STAT 1001| Minimum Grade of C-| May be taken concurrently
OR STT2 Y| May not be taken concurrently
OR STAT 1102| Minimum Grade of C-| May be taken concurrently
OR STAT 1902| Minimum Grade of C-| May be taken concurrently.

MATH 0824. Mathematical Patterns. 4 Credit Hours.
News stories, everyday situations, and puzzling vignettes will be used to illuminate basic math concepts. Learn probability, for example, by discussing the gambler's fallacy and gambler's ruin, the drunkard's random walks, the Monty Hall problem, the St. Petersburg paradox, the hot hand, monkeys randomly typing on a typewriter, and many others. A similar approach involving estimation problems and puzzles will be taken in the units on basic numeracy and logic. Throughout the course, lectures and readings will examine the mathematical angles of stories in the news, suggesting fresh perspectives, questions, and ideas on current issues from google searches to the randomness of the iPod shuffle. NOTE: This course fulfills the Quantitative Literacy (GQ) requirement for students under GenEd and a Quantitative Reasoning (QA or QB) requirement for students under Core. Students cannot receive credit for MATH 0824 if they have successfully completed MATH 0924.

Course Attributes: GQ
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 0701 to 0702| Minimum Grade of C-| May not be taken concurrently
OR MATH 0800 to 1041| Minimum Grade of C-| May be taken concurrently
OR MC3 Y| May not be taken concurrently
OR MC4 Y| May not be taken concurrently
OR MC5 Y| May not be taken concurrently
OR MC6 Y| May not be taken concurrently
OR STAT 1001| Minimum Grade of C-| May be taken concurrently
OR STT2 Y| May not be taken concurrently
OR STAT 1102| Minimum Grade of C-| May be taken concurrently
OR STAT 1902| Minimum Grade of C-| May be taken concurrently.
MATH 0828. Critical Reasoning and Problem Solving. 4 Credit Hours.
The course teaches students how to deal with and solve complex problems by confronting them with critical analysis. We look at these problems both from an historical perspective and the practical view of how and when these types of problems affect the students' everyday lives. The course takes students through several key mathematical disciplines, including probability and statistics, including the hallmark of probability - reasoning under uncertainty - as well as set theory and counting techniques and graphing, especially with Venn diagrams, a skill they will find beneficial as the world turns to technology and graphics. For example, when we cover the first dramatic application of the discipline, Mendel's discovery of the centuries-old problem of explaining the scientific laws of heredity as he gives birth to genetics. We also cover Mendel's use of statistics. This leads us to study modern uses of the same concepts in areas such as medicine - how to evaluate statistical studies and how to analyze topics such as false positives - as well as the application of DNA in areas such as how it has significantly changed our justice system.

Course Attributes: GQ
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 0701 to 0702| Required Courses:1|Minimum Grade of C-|May not be taken concurrently
OR MATH 0800 to 1041| Required Courses:1|Minimum Grade of C-|May be taken concurrently
OR MC3 Y|May not be taken concurrently
OR MC4 Y|May not be taken concurrently
OR MC5 Y|May not be taken concurrently
OR MC6 Y|May not be taken concurrently
OR STAT 1001|Minimum Grade of C-|May be taken concurrently
OR STT2 Y|May not be taken concurrently
OR STAT 1102|Minimum Grade of C-|May be taken concurrently
OR STAT 1902|Minimum Grade of C-|May be taken concurrently.

MATH 0923. Honors Math for a Digital World. 4 Credit Hours.
This course is not offered every year.<p>How can I tell if an e-mail message is really from my bank? If I do online banking, can other people see the information? Does playing the lottery make sense? Does it make sense to draw for an inside straight? How can polling results differ so much from the election --- or do they? Sometimes the winner of an election in the U.S. gets much less than 50% of the vote. Would it make sense to have a run-off in such cases? How long will the world's oil last, assuming that we use more each year? How long will a million dollars last you, assuming it earns interest until you spend it? If you bought your text online, could someone tap into the Internet and get your credit card number when it's transmitted? Why does the VIN on your car have so many digits? (This is an Honors course.) NOTE: This course fulfills the Quantitative Literacy (GQ) requirement for students under GenEd and a Quantitative Reasoning (QA or QB) requirement for students under Core. Students cannot receive credit for this course if they have successfully completed MATH 0823 or CIS 0823/0923.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GQ, HO
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 0701 to 0702| Required Courses:1|Minimum Grade of C-|May not be taken concurrently
OR MATH 0800 to 1041| Required Courses:1|Minimum Grade of C-|May be taken concurrently
OR MC3 Y|May not be taken concurrently
OR MC4 Y|May not be taken concurrently
OR MC5 Y|May not be taken concurrently
OR MC6 Y|May not be taken concurrently
OR STAT 1001|Minimum Grade of C-|May be taken concurrently
OR STT2 Y|May not be taken concurrently
OR STAT 1102|Minimum Grade of C-|May be taken concurrently
OR STAT 1902|Minimum Grade of C-|May be taken concurrently.
MATH 0924. Honors Mathematical Patterns. 4 Credit Hours.
This course is typically offered in Fall and Spring. News stories, everyday situations, and puzzling vignettes will be used to illuminate basic math concepts. Learn probability, for example, by discussing the gambler's fallacy and gambler's ruin, the drunkard's random walks, the Monty Hall problem, the St. Petersburg paradox, the hot hand, monkeys randomly typing on a typewriter, and many others. A similar approach involving estimation problems and puzzles will be taken in the units on basic numeracy and logic. Throughout the course, lectures and readings will examine the mathematical angles of stories in the news, suggesting fresh perspectives, questions, and ideas on current issues from google searches to the randomness of the iPod shuffle. (This is an Honors course.) NOTE: This course fulfills the Quantitative Literacy (GQ) requirement for students under GenEd and a Quantitative Reasoning (QA or QB) requirement for students under Core. Students cannot receive credit for MATH 0924 if they have successfully completed MATH 0824.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GQ, HO
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 0701 to 0702| Required Courses:1|Minimum Grade of C-|May not be taken concurrently
OR MATH 0800 to 1041| Required Courses:1|Minimum Grade of C-|May be taken concurrently
OR MC3 Y|May not be taken concurrently
OR MC4 Y|May not be taken concurrently
OR MC5 Y|May not be taken concurrently
OR MC6 Y|May not be taken concurrently
OR STAT 1001|Minimum Grade of C-|May be taken concurrently
OR STT2 Y|May not be taken concurrently
OR STAT 1102|Minimum Grade of C-|May be taken concurrently
OR STAT 1902|Minimum Grade of C-|May be taken concurrently.

MATH 1013. Elements of Statistics. 3 Credit Hours.
This course is typically offered in Fall, Spring, Summer I and Summer II. This course provides a firm foundation for the study of statistics in other fields. Although no one field is emphasized to the exclusion of others, applications are drawn from psychology, political science, exercise science, and other areas. NOTE: This course can be used to satisfy the university Core Quantitative Reasoning B (QB) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: QB
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 0701 to 0702| Required Courses:1|Minimum Grade of C|May not be taken concurrently
OR MATH 0800 to 1021| Required Courses:1|Minimum Grade of C-|May be taken concurrently
OR MC3 Y|May not be taken concurrently
OR MC4 Y|May not be taken concurrently
OR MC5 Y|May not be taken concurrently
OR MC6 Y|May not be taken concurrently
OR MA01 Y|May not be taken concurrently
OR STAT 1001|Minimum Grade of C-|May be taken concurrently
OR STT2 Y|May not be taken concurrently
OR STAT 1102|Minimum Grade of C-|May be taken concurrently
OR STAT 1902|Minimum Grade of C-|May be taken concurrently.

MATH 1015. Introduction to Numbers & Figures. 4 Credit Hours.
This course is typically offered in Fall, Spring, and Summer I. This is a course intended for students wishing to familiarize themselves with basic arithmetic and geometric concepts. Subjects include the real numbers, the decimal system, and fractions, elementary number theory (primes, gcd, lcm, rational and irrational numbers), and geometry (angles, triangles, polygons, polyhedra, circles, spheres, symmetry, congruence, and similarity).
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 0701 to 0702| Required Courses:1|Minimum Grade of C-|May not be taken concurrently
OR MATH 1021|Minimum Grade of C-|May be taken concurrently
OR MC3 Y|May not be taken concurrently
OR MC4 Y|May not be taken concurrently
OR MC5 Y|May not be taken concurrently
OR MC6 Y|May not be taken concurrently
OR STAT 1001|Minimum Grade of C-|May be taken concurrently
OR STT2 Y|May not be taken concurrently
OR STAT 1102|Minimum Grade of C-|May be taken concurrently
OR STAT 1902|Minimum Grade of C-|May be taken concurrently.
MATH 1018. Mathematics for Business. 3 Credit Hours.
This course is not offered every year.<p>Fundamentals of finite mathematics necessary for a business student to pursue statistics and other quantitatively oriented business courses. Topics and illustrations are specifically directed to applications in business and economics. Topics include algebraic concepts; linear, quadratic, polynomial and rational functions; logarithm and exponential functions; elementary matrix manipulations. Fitting of curves, interest rate calculations, present and future values of annuities are some of the specific applications. Use of a graphing calculator. NOTE: (1) Duplicate Course: Students cannot receive credit for Math 1018 if they have successfully completed Statistics 1001. (2) This course can be used to satisfy the university Core Quantitative Reasoning A (QA) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: QA
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 0701 to 0702| Required Courses:1|Minimum Grade of C|May not be taken concurrently
OR MATH 1021 to 1022| Required Courses:1|Minimum Grade of D|May be taken concurrently
OR MC3 Y|May not be taken concurrently
OR MC4 Y|May not be taken concurrently
OR MC5 Y|May not be taken concurrently
OR MC6 Y|May not be taken concurrently
OR MA01 Y|May not be taken concurrently
OR STAT 1001|Minimum Grade of C-|May be taken concurrently
OR STT2 Y|May not be taken concurrently
OR STAT 1102|Minimum Grade of C-|May be taken concurrently
OR STAT 1902|Minimum Grade of C-|May be taken concurrently.

MATH 1021. College Algebra. 4 Credit Hours.
This course covers polynomial, rational and algebraic expressions, equations and inequalities. It also includes some topics in graphing, an introduction to the concept of a function, and a brief introduction to the exponential and logarithmic functions. NOTE: This course can be used to satisfy the university Core Quantitative Reasoning A (QA) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: QA
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 0701 to 0702| Required Courses:1|Minimum Grade of C|May not be taken concurrently
OR MATH 1041|Minimum Grade of D|May not be taken concurrently
OR MATH 1038|Minimum Grade of D|May not be taken concurrently
OR MC5 Y|May not be taken concurrently
OR MC6 Y|May not be taken concurrently
OR MA02 Y|May not be taken concurrently
OR STAT 1001|Minimum Grade of C-|May be taken concurrently
OR STT2 Y|May not be taken concurrently
OR STAT 1102|Minimum Grade of C-|May be taken concurrently
OR STAT 1902|Minimum Grade of C-|May be taken concurrently.

MATH 1022. Precalculus. 4 Credit Hours.
This course is designed to prepare students for the calculus courses. Topics include functions and function operations, one-to-one and inverse functions, exponential and logarithmic functions, trigonometric functions, inverse trigonometric functions, basic trigonometric identities, polar coordinates, and an introduction to vectors. The course also contains a brief review of basic algebra. NOTE: This course can be used to satisfy the university Core Quantitative Reasoning A (QA) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: QA
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 1021|Minimum Grade of C|May not be taken concurrently
OR MATH 1041|Minimum Grade of D|May not be taken concurrently
OR MATH 1038|Minimum Grade of D|May not be taken concurrently
OR MC5 Y|May not be taken concurrently
OR MC6 Y|May not be taken concurrently
OR MA03 Y|May not be taken concurrently.
**MATH 1031. Differential and Integral Calculus. 4 Credit Hours.**

This course is typically offered in Fall and Spring. This is a calculus course in the reform style that will introduce students to the basic concepts of differential and integral calculus. The emphasis of the course will be on understanding the concepts (intuitively rather than rigorously). However, the course will also cover the basic techniques of differentiation and some techniques of integration. NOTE: (1) This is the course appropriate for those students who are taking calculus in order to fulfill the quantitative core requirements. (2) This course can be used to satisfy the university Core Quantitative Reasoning B (QB) requirement or the GenEd Quantitative Literacy (GQ) requirement.

**Course Attributes:** QB

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
MATH 1021 | Minimum Grade of C | May not be taken concurrently
OR MC5 Y | May not be taken concurrently
OR MC6 Y | May not be taken concurrently
OR MA03 Y | May not be taken concurrently.

**MATH 1038. Calculus I with Lab. 4 Credit Hours.**

This course is typically offered in Fall and Spring and is linked with MATH 1039. This is a first semester calculus course that involves both theory and applications. Together with its linked MATH 1039 course, it includes extra emphasis on reviewing precalculus topics and practicing calculus topics. Students with previous calculus experience should consider MATH 1041. Topics include functions, limits and continuity, differentiation of algebraic, trigonometric, exponential and logarithmic functions, curve sketching, optimization, and L'Hospital's rule. NOTE: (1) Students may not get credit for more than one of MATH 1038, MATH 1041, and MATH 1941. (2) This course can be used to satisfy the university Core Quantitative Reasoning B (QB) requirement or the GenEd Quantitative Literacy (GQ) requirement. However, this course is not appropriate for students whose sole purpose is to fulfill the quantitative core requirements. They should take MATH 1031 instead.

**Co-requisites:** MATH 1039

**Course Attributes:** QB

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
MATH 1022 | Minimum Grade of C | May not be taken concurrently
OR MATH 1041 | Minimum Grade of D | May not be taken concurrently
OR MATH 1038 | Minimum Grade of D | May not be taken concurrently
OR MATH 1042 | Minimum Grade of D | May not be taken concurrently
OR MATH 1941 | Minimum Grade of D | May not be taken concurrently
OR MATH 1942 | Minimum Grade of D | May not be taken concurrently
OR MATH 1951 | Minimum Grade of D | May not be taken concurrently
OR MC6 Y | May not be taken concurrently
OR MA04 Y | May not be taken concurrently.

**MATH 1039. Lab for Calculus I with Lab. 1 Credit Hour.**

This course is typically offered in Fall and Spring and is linked with MATH 1038. This is the lab component of MATH 1038, a first semester calculus course that involves both theory and applications. MATH 1039 includes extra emphasis on reviewing precalculus topics and practicing calculus topics in support of its linked course, MATH 1038. Students with previous calculus experience should consider MATH 1041 instead of the linked courses MATH 1038 and MATH 1039. Topics include functions, limits and continuity, differentiation of algebraic, trigonometric, exponential and logarithmic functions, curve sketching, optimization and L'Hospital's rule.

**Co-requisites:** MATH 1038

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
MATH 1022 | Minimum Grade of C | May not be taken concurrently
OR MATH 1041 | Minimum Grade of D | May not be taken concurrently
OR MATH 1038 | Minimum Grade of D | May not be taken concurrently
OR MATH 1042 | Minimum Grade of D | May not be taken concurrently
OR MATH 1941 | Minimum Grade of D | May not be taken concurrently
OR MATH 1942 | Minimum Grade of D | May not be taken concurrently
OR MATH 1951 | Minimum Grade of D | May not be taken concurrently
OR MC6 Y | May not be taken concurrently
OR MA04 Y | May not be taken concurrently.
MATH 1041. Calculus I. 0 or 4 Credit Hours.
This course is typically offered in Fall, Spring, Summer I and Summer II. This is a first semester calculus course primarily for students with some calculus background or strong precalculus skills. It involves both theory and applications. Students with no previous calculus experience or those needing extra review of precalculus topics should consider the linked courses MATH 1038 and MATH 1039. Topics include functions, limits and continuity, differentiation of algebraic, trigonometric, exponential and logarithmic functions, curve sketching, optimization and L'Hospital's rule. NOTE: (1) Students may not get credit for more than one of MATH 1038, MATH 1041, and MATH 1941. (2) This course can be used to satisfy the university Core Quantitative Reasoning B (QB) requirement or the GenEd Quantitative Literacy (GQ) requirement. However, this course is not appropriate for students whose sole purpose is to fulfill the quantitative core requirements. They should take MATH 1031 instead.

Course Attributes: QB

Pre-requisites:
MATH 1022|Minimum Grade of C|May not be taken concurrently
OR MATH 1042|Minimum Grade of D|May not be taken concurrently
OR MATH 1942|Minimum Grade of D|May not be taken concurrently
OR MATH 1951|Minimum Grade of D|May not be taken concurrently
OR MC6 Y|May not be taken concurrently
OR MA04 Y|May not be taken concurrently.

MATH 1042. Calculus II. 4 Credit Hours.
This course is typically offered in Fall, Spring, Summer I and Summer II. This is a second semester calculus course that involves both theory and applications. Topics include the definite integral and the Fundamental Theorem of Calculus, applications of the definite integral, techniques of integration, improper integrals and sequences and series, including power and Taylor series.

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 1041|Minimum Grade of C|May not be taken concurrently
OR MATH 1941|Minimum Grade of C|May not be taken concurrently
OR MATH 1038|Minimum Grade of C|May not be taken concurrently
OR MATH 2043|Minimum Grade of D|May not be taken concurrently
OR MA06 Y|May not be taken concurrently.

MATH 1941. Honors Calculus I. 4 Credit Hours.
This course is typically offered in Fall and Spring. This is a first semester calculus course that involves both theory and applications. Topics include functions, limits and continuity, differentiation of algebraic, trigonometric, exponential and logarithmic functions, curve sketching, optimization and L'Hospital's Rule. NOTE: This course can be used to satisfy the university Core Quantitative Reasoning B (QB) requirement or the GenEd Quantitative Literacy (GQ) requirement. However, this course is not appropriate for students whose sole purpose is to fulfill the quantitative core requirements. They should take Math 1031 instead.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR

Course Attributes: HO, QB

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 1022|Minimum Grade of C|May not be taken concurrently
OR MATH 1042|Minimum Grade of D|May not be taken concurrently
OR MATH 1942|Minimum Grade of D|May not be taken concurrently
OR MATH 1951|Minimum Grade of D|May not be taken concurrently
OR MC6 Y|May not be taken concurrently
OR MA04 Y|May not be taken concurrently.

MATH 1942. Honors Calculus II. 4 Credit Hours.
This course is typically offered in Fall and Spring. This is a second semester calculus course that involves both theory and applications. Topics include the definite integral and the Fundamental Theorem of Calculus, applications of the definite integral, techniques of integration, improper integrals and sequences and series, including power and Taylor series.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 1041|Minimum Grade of C|May not be taken concurrently
OR MATH 1941|Minimum Grade of C|May not be taken concurrently
OR MATH 1038|Minimum Grade of C|May not be taken concurrently
OR MATH 2043|Minimum Grade of D|May not be taken concurrently
OR MA06 Y|May not be taken concurrently.
MATH 1951. Honors Accelerated Calculus I & II. 4 Credit Hours.
This course is typically offered in Fall.<p>This is a course for students who have had a year of calculus in high school. Its purpose is two-fold: to present a more theoretical treatment of calculus than is usually seen in an American high school and to prepare students for Math 2043, Calculus III. Topics covered will include some or all of the following: limits and continuity, derivatives and rules of differentiation, the Mean Value Theorem, L'Hopital's rule, optimization, graphing, the definite integral and the Fundamental Theorem of Calculus, u-substitution and integration by parts, limits of sequences, infinite series, convergence tests, power series, and Taylor series. NOTE: Prior to summer 2010, the course title was “Honors Differential & Integral Calculus.”
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(MATH 1041|Minimum Grade of C|May not be taken concurrently
OR MATH 1941|Minimum Grade of C|May not be taken concurrently
OR MATH 1038|Minimum Grade of C|May not be taken concurrently
OR MA06 Y|May not be taken concurrently)
AND (MATH 1042|Minimum Grade of C|May not be taken concurrently
OR MATH 1942|Minimum Grade of C|May not be taken concurrently
OR MA07 Y|May not be taken concurrently)

MATH 2021. Functions and Modeling. 3 Credit Hours.
This course is typically offered in Spring.<p>In this course, required for TUteach Mathematics with Teaching majors, students will give presentations and work in small groups to engage in explorations and lab activities designed to strengthen and expand their knowledge of the topics found in secondary mathematics; illuminate the connections between secondary and college mathematics and between various areas of mathematics; and illustrate productive uses of technology in teaching. Students will engage in non-routine problem solving, problem-based learning, and applications of mathematics. The course consists of four units: 1) Functions, 2) Modeling, 3) Overlooked Topics and Explorations, and 4) Geometry of Complex Numbers. Specific topics of investigation include function properties and patterns, complex numbers, parametric equations, polar equations, vectors, and exponential growth and decay. Explorations involve the use of multiple representations, transformations, data analysis techniques (such as curve fitting) and interconnections among topics in algebra, analytic geometry, statistics, trigonometry, and calculus. The lab investigations include use of various technologies including computers, calculators, and computer graphing software.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(MATH 1042|Minimum Grade of C-|May not be taken concurrently
OR MATH 1951|Minimum Grade of C-|May not be taken concurrently
OR SCTC 1189|Minimum Grade of C-|May not be taken concurrently
OR SCTC 1289|Minimum Grade of C-|May not be taken concurrently
OR SCTC 1389|Minimum Grade of C-|May not be taken concurrently
OR MGRE 3111|Minimum Grade of C-|May not be taken concurrently)

MATH 2031. Probability and Statistics. 3 Credit Hours.
This course is typically offered in Fall and Spring.<p>This course presents basic principles of statistical reasoning and the concepts from probability theory that give the student an understanding of the logic behind statistical techniques. Topics covered include rules of probability, discrete probability distributions, normal distribution, sampling distributions, the central limit theorem, point estimation, interval estimation, tests concerning means, tests based on count data, correlation and regression, and nonparametric statistics. NOTE: This course cannot be credited towards graduation if taken after Math 3031 or CIS 1166.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 1031|Minimum Grade of C-|May not be taken concurrently
OR MATH 1042|Minimum Grade of C-|May not be taken concurrently
OR MATH 1942|Minimum Grade of C-|May not be taken concurrently
OR MATH 2043 to 3080| Required Courses:1|Minimum Grade of C-|May be taken concurrently
OR STAT 1102|Minimum Grade of C-|May not be taken concurrently
OR STAT 1902|Minimum Grade of C-|May not be taken concurrently

MATH 2043. Calculus III. 4 Credit Hours.
This course is typically offered in Fall, Spring, Summer I and Summer II.<p>This is a third semester calculus course that involves both theory and applications. Topics include vectors in two or three dimensions, lines and planes in space, parametric equations, vector functions and their derivatives, functions of several variables, partial derivatives, multiple integrals, line integrals, and Green's, Divergence and Stokes' theorems.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 1042|Minimum Grade of C|May not be taken concurrently
OR MATH 1942|Minimum Grade of C|May not be taken concurrently
OR MATH 1951|Minimum Grade of C|May not be taken concurrently
OR MA07 Y|May not be taken concurrently.
MATH 2101. Linear Algebra. 3 Credit Hours.
This course is typically offered in Fall, Spring, Summer I and Summer II.<p>This course covers vectors and vector spaces, matrices, determinants, systems of linear equations, linear transformations, inner products and orthogonality, and eigenvectors and eigenvalues. NOTE: Only one course, Math 2101 or Math 2103, can be credited towards graduation.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 2043|Minimum Grade of C-|May be taken concurrently.

MATH 2103. Linear Algebra with Computer Lab. 4 Credit Hours.
This course is typically offered in Fall.<p>Topics in this course include: systems of linear equations; matrix algebra; determinants; fundamental subspaces; linear transformations; eigenvalues and eigenvectors; inner products; orthogonality; and spectral theory. Included is a computational lab component that uses activities and applications designed to promote understanding of the basic concepts from algebraic, symbolic, and geometric viewpoints. NOTE: Only one course, Math 2101 or Math 2103, can be credited towards graduation.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 2043|Minimum Grade of C-|May be taken concurrently.

MATH 2111. Basic Concepts of Math. 3 Credit Hours.
This course is typically offered in Fall and Spring.<p>This is a course designed to introduce students to mathematical abstraction and the language of mathematical proof. Topics include logic, sets, relations, integers, induction and modular arithmetic, functions, and cardinality. This course is highly recommended for students who have not been exposed to mathematical proof and intend to take advanced math courses.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 1042|Minimum Grade of C|May not be taken concurrently
OR MATH 1942|Minimum Grade of C|May not be taken concurrently
OR MATH 1951|Minimum Grade of C|May not be taken concurrently
OR MATH 2043 to 3080| Required Courses:1|Minimum Grade of C|May be taken concurrently
OR MA07 Y|May not be taken concurrently.

MATH 2943. Honors Calculus III. 4 Credit Hours.
This course is typically offered in Fall and Spring.<p>This is a third semester calculus course that involves both theory and applications. Topics include vectors in two or three dimensions, lines and planes in space, parametric equations, vector functions and their derivatives, functions of several variables, partial derivatives, multiple integrals, line integrals, and Green's, Divergence and Stokes' theorems.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 1042|Minimum Grade of C|May not be taken concurrently
OR MATH 1942|Minimum Grade of C|May not be taken concurrently
OR MATH 1951|Minimum Grade of C|May not be taken concurrently
OR MATH 2043 to 3080| Required Courses:1|Minimum Grade of C|May be taken concurrently
OR MA07 Y|May not be taken concurrently.

MATH 3003. Theory of Numbers. 3 Credit Hours.
This course is typically offered in Fall and Spring.<p>Divisibility properties of integers, prime factorization, distribution of primes, linear and quadratic congruences, primitive roots, quadratic residues, quadratic reciprocity, simple Diophantine equations, cryptology.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 2111|Minimum Grade of C|May not be taken concurrently.

MATH 3031. Probability Theory I. 3 Credit Hours.
This course is typically offered in Fall and Spring.<p>Counting techniques, axiomatic definition of probability, conditional probability, independence of events, Bayes Theorem, random variables, discrete and continuous probability distributions, expected values, moments and moment generating functions, joint probability distributions, functions of random variables, covariance and correlation. NOTE: Prior to summer 2010, the course title was "Introduction to Probability Theory."
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 1042|Minimum Grade of C|May not be taken concurrently
OR MATH 1942|Minimum Grade of C|May not be taken concurrently
OR MATH 1951|Minimum Grade of C|May not be taken concurrently
OR MATH 2043|Minimum Grade of C|May be taken concurrently
OR MA07 Y|May not be taken concurrently.
MATH 3032. Mathematical Statistics. 3 Credit Hours.
This course is typically offered in Fall and Spring.<p>Random sampling, sampling distributions, Student's t, chi-squared and F distributions, unbiasedness, minimum variance unbiased estimators, confidence intervals, tests of hypothesis, Neyman-Pearson Lemma, and uniformly most powerful tests. NOTE: Prior to summer 2010, the course title was "Introduction to Mathematical Statistics."
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 3031|Minimum Grade of C-|May not be taken concurrently
OR AS 2101|Minimum Grade of C-|May not be taken concurrently.

MATH 3041. Differential Equations I. 3 Credit Hours.
This course is typically offered in Fall, Spring, Summer I and Summer II.<p>This is a course in ordinary differential equations. Topics include first order ordinary differential equations, linear second order ordinary differential equations, systems of differential equations, numerical methods and the Laplace transform.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 2043|Minimum Grade of C-|May be taken concurrently.

MATH 3042. Differential Equations II. 4 Credit Hours.
This course is not offered every year.<p>This is a second course in differential equations. Topics include orthogonal polynomials, including Legendre and Chebyshev polynomials, Fourier series, partial differential equations, the boundary value problems and other topics of the instructor's choice. NOTE: This course is offered only in odd-numbered years.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 3041|Minimum Grade of C-|May not be taken concurrently
OR MATH 3045|Minimum Grade of C-|May not be taken concurrently.

MATH 3043. Numerical Analysis I. 3 to 4 Credit Hours.
This course is typically offered in Fall.<p>Computer arithmetic, pitfalls of computation, iterative methods for the solution of a single nonlinear equation, interpolation, least squares, numerical differentiation, numerical integration, and solutions of linear systems by direct and iterative methods.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(MATH 2043|Minimum Grade of C-|May not be taken concurrently)
AND (MATH 2101|Minimum Grade of C-|May not be taken concurrently)
OR OTR 2103|Minimum Grade of C-|May not be taken concurrently)
AND (CIS 1053|Minimum Grade of C-|May not be taken concurrently)
OR CIS 1057|Minimum Grade of C-|May not be taken concurrently
OR CIS 1068|Minimum Grade of C-|May not be taken concurrently
OR PHYS 2501|Minimum Grade of C-|May not be taken concurrently)

MATH 3044. Numerical Analysis II. 3 Credit Hours.
This course is typically offered in Spring.<p>Solution of systems of nonlinear equations, solution of initial value problems, matrix norms and the analysis of iterative solutions, numerical solution of boundary value problems and partial differential equations, and introduction to the finite element method. NOTE: Offered in even-numbered years only.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 3043|Minimum Grade of C-|May not be taken concurrently.

MATH 3045. Differential Equations with Linear Algebra. 4 Credit Hours.
This course is typically offered in Fall.<p>This is a course in ordinary differential equations that emphasizes the use of linear algebra. It has two objectives: 1) to teach students how to solve linear differential equations and systems of linear differential equations, and 2) to introduce students to the linear algebra concepts such as vector spaces, dimension, basis, matrices, eigenvalues and eigenvectors, that play a key role in the theory of linear differential equations.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 2043|Minimum Grade of C|May be taken concurrently
OR MA08 Y|May not be taken concurrently.
MATH 3046. Differential Equations with Computer Lab. 4 Credit Hours.
This course is typically offered in Spring.<p>This course combines traditional material with a modern systems approach. It presents a thorough introduction to differential equations, tempering a classic "pure math" approach with more practical applied aspects. The course covers key topics such as first order equations, matrix algebra, systems, and phase plane portraits. The focus is on interpreting and solving problems through the use of software support and technology projects. Using software tools, graphics will be used to display the ideas in ODEs; modeling and applications; and projects. An objective is to provide students with the opportunity to bring together much of what they have learned, including analytical, computational, and interpretative skills.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 2043|Minimum Grade of C|May be taken concurrently
OR MA08 Y|May not be taken concurrently.

MATH 3051. Theoretical Linear Algebra. 4 Credit Hours.
This course is typically offered in Spring.<p>This is a course in linear algebra with a higher degree of abstraction than a traditional undergraduate linear algebra course. Topics include vector spaces, linear transformations, determinants, eigenvalues and eigenvectors, canonical forms, inner product spaces, and bilinear forms.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(MATH 2111|Minimum Grade of C|May not be taken concurrently)
AND (MATH 3045|Minimum Grade of C-|May not be taken concurrently
OR MATH 2101|Minimum Grade of C-|May not be taken concurrently).

MATH 3061. Modern Geometry I. 3 Credit Hours.
This course is typically offered in Fall.<p>An introduction to Euclidean and Non-Euclidean geometries with a particular emphasis on theory and proofs.
NOTE: This course is primarily intended for math education majors.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(MATH 2111|Minimum Grade of C-|May not be taken concurrently)
AND (MATH 2101|Minimum Grade of C-|May not be taken concurrently
OR MATH 2103|Minimum Grade of C-|May not be taken concurrently
OR MATH 3051|Minimum Grade of C-|May not be taken concurrently).

MATH 3082. Junior Individual Study. 1 to 4 Credit Hour.
This course is typically offered in Fall, Spring, Summer I and Summer II.<p>Intensive study in a specific area. NOTE: May be taken in either semester.
Repeatability: This course may be repeated for additional credit.

MATH 3083. Junior Directed Reading. 1 to 4 Credit Hour.
This course is typically offered in Fall, Spring, Summer I and Summer II.<p>Intensive study in a specific area. NOTE: May be taken in either semester.
Repeatability: This course may be repeated for additional credit.

MATH 3096. Introduction to Modern Algebra. 3 Credit Hours.
This course is typically offered in Fall, Spring and Summer II.<p>This is a one-semester course in modern algebra that covers topics from group, ring, and field theory. Topics include groups and their basic properties, subgroups, normal subgroups and quotient groups, group homomorphisms, rings, rings of integers and polynomial rings, congruences in the rings of integers and polynomial rings, ideals and quotient rings, ring homomorphism, fields and field extensions, Galois theory.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 2111|Minimum Grade of C-|May not be taken concurrently.

MATH 3098. Modern Algebra. 3 Credit Hours.
This course is typically offered in Fall.<p>This is the first semester in a year-long modern algebra sequence Math 3098 - Math 3101. It is a thorough introduction to the theory of groups and rings. NOTE: Students who have had limited exposure to proofs should consider taking Math 2111 first.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(MATH 2111|Minimum Grade of C|May not be taken concurrently)
AND (MATH 2101|Minimum Grade of C|May not be taken concurrently
OR MATH 2103|Minimum Grade of C|May not be taken concurrently
OR MATH 3045|Minimum Grade of C-|May not be taken concurrently
OR MA09 Y|May not be taken concurrently
OR MA10 Y|May not be taken concurrently).
MATH 3101. Topics in Modern Algebra. 3 Credit Hours.
This course is typically offered in Spring.<p>This is the second semester of a year-long modern algebra course. Topics come from theory of rings, fields and modules and from Galois theory.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 3098|Minimum Grade of C-|May not be taken concurrently.

MATH 3137. Real & Complex Analysis I. 3 Credit Hours.
This course is typically offered in Fall and Summer I.<p>Real and complex number systems, completeness. Sequences and series and their limits. Continuity of real and complex functions. Derivative. Analytic functions. Power series.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(MATH 2043|Minimum Grade of C|May not be taken concurrently
OR MA08 Y|May not be taken concurrently)
AND (MATH 2111|Minimum Grade of C-|May not be taken concurrently).

MATH 3138. Real & Complex Analysis II. 3 Credit Hours.
This course is typically offered in Spring and Summer II.<p>The Riemann-Stiltjes integral. Cauchy integral theorem. Cauchy integral formula and its consequences. The calculus of residues.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 3137|Minimum Grade of C-|May not be taken concurrently
OR MATH 3141|Minimum Grade of C-|May not be taken concurrently.

MATH 3141. Advanced Calculus I. 3 Credit Hours.
This course is typically offered in Fall.<p>This is a first semester course in real analysis. Topics include the real number system and the completeness property, sequences and their limits, limits of real-valued functions and continuity and point-set topology of Euclidean spaces. NOTE: Students who have had limited exposure to proofs should consider taking Math 2111 first.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(MATH 2043|Minimum Grade of C|May not be taken concurrently
OR MA08 Y|May not be taken concurrently)
AND (MATH 2111|Minimum Grade of C|May not be taken concurrently
OR MA11 Y|May not be taken concurrently)
AND (MATH 2101|Minimum Grade of C|May not be taken concurrently
OR MATH 2103|Minimum Grade of C|May not be taken concurrently
OR MATH 3045|Minimum Grade of C|May not be taken concurrently
OR MA09 Y|May not be taken concurrently
OR MA10 Y|May not be taken concurrently).

MATH 3142. Advanced Calculus II. 3 Credit Hours.
This course is typically offered in Spring.<p>This is a second semester course in real analysis. Topics include the derivative and differentiable functions, the Riemann integral, infinite series and convergence tests, power and Taylor series and operations with them, and topics from calculus of several variables.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 3141|Minimum Grade of C-|May not be taken concurrently.

MATH 4001. History of Mathematics. 3 Credit Hours.
This course is not offered every year.<p>The development of the major mathematical concepts from ancient times to the present, emphasizing topics in the standard undergraduate curriculum. Special attention will be paid to the history of mathematics and mathematics education in the United States. NOTE: Offered in even-numbered years only.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 3001 to 4999| Required Courses:1|Minimum Grade of C|May not be taken concurrently.

MATH 4003. Combinatorics. 3 Credit Hours.
This course is typically offered in Fall of even years.<p>Basic theorems and applications of combinatorial analysis, including generating functions, difference equations, Polya's theory of counting, graph theory, matching, and block diagrams. NOTE: Offered in odd-numbered years only.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 2111|Minimum Grade of C-|May not be taken concurrently
OR MATH 2196|Minimum Grade of C-|May not be taken concurrently
OR MATH 3003|Minimum Grade of C-|May not be taken concurrently.
MATH 4033. Probability Theory II. 3 Credit Hours.
This course is typically offered in Fall and Spring.<p>-Markov chains, exponential distribution, Poisson process, continuous time Markov chains, Brownian motion, stationary processes. NOTE: Prior to summer 2010, the course title was “Introduction to Probability Theory.”
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 3031 | Minimum Grade of C- | May not be taken concurrently
OR MATH 3033 | Minimum Grade of C- | May not be taken concurrently
OR AS 2101 | Minimum Grade of C- | May not be taken concurrently.

MATH 4041. Partial Differential Equations. 3 Credit Hours.
This course is typically offered in Fall.<p>-The solution and properties of first and second order equations; heat and wave equation. Elliptic boundary value problems and Green’s functions. Hyperbolic problems and the theory of characteristics. Finite difference methods. The equations of mathematical physics.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(MATH 2101 | Minimum Grade of C- | May not be taken concurrently
OR MATH 2103 | Minimum Grade of C- | May not be taken concurrently
OR MATH 3051 | Minimum Grade of C- | May not be taken concurrently)
AND (MATH 3041 | Minimum Grade of C- | May not be taken concurrently
OR MATH 3045 | Minimum Grade of C- | May not be taken concurrently
OR MATH 3046 | Minimum Grade of C- | May not be taken concurrently).

MATH 4043. Applied Mathematics. 3 Credit Hours.
This course is typically offered in Fall.<p>-The construction and study of mathematical models for physical, economic, and social processes. NOTE: Offered in odd-numbered years only.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(MATH 2101 | Minimum Grade of C- | May not be taken concurrently
OR MATH 2103 | Minimum Grade of C- | May not be taken concurrently
OR MATH 3051 | Minimum Grade of C- | May not be taken concurrently)
AND (MATH 3041 | Minimum Grade of C- | May not be taken concurrently
OR MATH 3045 | Minimum Grade of C- | May not be taken concurrently
OR MATH 3046 | Minimum Grade of C- | May not be taken concurrently).

MATH 4051. Complex Analysis. 3 Credit Hours.
This course is typically offered in Fall.<p>-Complex numbers, analytic functions, harmonic functions, power and Laurent series, Cauchy’s theorem, calculus of residues, and conformal mappings. NOTE: Prior to summer 2010, the course title was “Introduction to Functions of a Complex Variable.”
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 3138 | Minimum Grade of C | May not be taken concurrently
OR MATH 3142 | Minimum Grade of C- | May not be taken concurrently
OR MA12 Y | May not be taken concurrently.

MATH 4061. Differential Geometry. 3 Credit Hours.
This course is typically offered in Spring of even years.<p>-This course is an introduction to differential geometry starting with concepts learned in Calculus III. A particular emphasis will be placed on the study of curves and surfaces in 3-space and their generalizations. The course will revolve around Riemannian geometry, but, time permitting, it will also include a brief introduction to one or more of the following: symplectic geometry and its relation to classical mechanics, general connections and their relation with field theory and pseudoriemannian manifolds, and general relativity.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(MATH 2043 | Minimum Grade of C | May not be taken concurrently
OR MA08 Y | May not be taken concurrently)
AND (MATH 2101 | Minimum Grade of C- | May not be taken concurrently
OR MATH 2103 | Minimum Grade of C- | May not be taken concurrently
OR MATH 3051 | Minimum Grade of C- | May not be taken concurrently).

MATH 4063. Topology I. 3 Credit Hours.
This course is typically offered in Spring of odd years.<p>-Topological and metric spaces. Continuity, compactness, connectedness, convergence. Introduction to algebraic and combinatorial topology. Classification of compact surfaces, fundamental groups and covering spaces.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(MATH 3137 | Minimum Grade of C | May not be taken concurrently
OR MATH 3141 | Minimum Grade of C- | May not be taken concurrently
AND (MATH 3096 | Minimum Grade of C- | May not be taken concurrently
OR MATH 3098 | Minimum Grade of C- | May not be taken concurrently).
MATH 4082. Senior Individual Study. 1 to 4 Credit Hour.
This course is typically offered in Fall, Spring, Summer I and Summer II. Intensive individual study at a senior or graduate level. Arranged each semester. Please consult with the instructor. NOTE: Can be taken in either semester.
Repeatability: This course may be repeated for additional credit.

MATH 4083. Senior Directed Reading. 1 to 4 Credit Hour.
This course is typically offered in Fall, Spring, Summer I and Summer II. Intensive individual study at a senior or graduate level. Arranged each semester. Please consult with the instructor. NOTE: Can be taken in either semester.
Repeatability: This course may be repeated for additional credit.

MATH 4096. Senior Problem Solving. 3 Credit Hours.
This course is typically offered in Spring. This is a course in mathematical discovery through problem solving. Students will be expected to develop two or three areas of mathematics by solving problems, assigned by the instructor. Problems will be solved both individually and in groups. (Capstone writing course.)
Course Attributes: WI
Repeatability: This course may be repeated for additional credits
Pre-requisites:
(MATH 3138|Minimum Grade of C-|May not be taken concurrently
OR MATH 3142|Minimum Grade of C-|May not be taken concurrently)
AND (MATH 3096|Minimum Grade of C-|May not be taken concurrently
OR MATH 3098|Minimum Grade of C-|May not be taken concurrently).

Mechanical Engineering (MEE)

Courses

MEE 0843. Technology Transformations. 3 Credit Hours.
Expand your knowledge by looking at how various technologies such as electricity, automobiles, airplanes, telephones, bridges, highways, electronics, computers, and information technology have transformed the world around us. What would we do without them? Where do they come from? How do they work? Technology is developed by people who have the ideas, design the machines and processes, and suffer the costs and benefits of technological changes in our society. Learn about science and technology through history of discovery, invention and innovation through lectures and labs. We will also study several promising fields which may lead us to the future of technology. NOTE: This course fulfills a Science & Technology (GS) requirement for students under GenEd and Science & Technology Second Level (SB) for students under Core.
Course Attributes: GS
Repeatability: This course may not be repeated for additional credits.

MEE 0844. The Bionic Human. 3 Credit Hours.
Can we replace our "worn-out" body parts with space-age materials? Will the day come when an injured athlete buys a tendon for the next big game? Why are your parents spending so much time at the doctor? We are on the verge of building "the bionic human" by repairing many of our body parts indefinitely. Become familiar with bio-engineered technologies for age-, disease-, sports-, and accident-related injuries. Learn why weight bearing exercise strengthens bones, the difference between MRI, CAT scan, and X-Ray, and what the folks at the Food and Drug Administration do. By the time you finish this course, you'll know how a pig heart could save your life, how stem cell research could affect your future, the purpose of animal testing, and why walking through airport security could be a problem if you have had your hip replaced. NOTE: This course fulfills a Science & Technology (GS) requirement for students under GenEd and Science & Technology Second Level (SB) for students under Core. Students cannot receive credit for this course if they have successfully completed MEE 0944.
Course Attributes: GS
Repeatability: This course may not be repeated for additional credits.

MEE 0944. Honors Bionic Human. 3 Credit Hours.
From MRIs to engineered organs, modern healthcare has become synonymous with applications of bioengineering and technology. This course focuses on the new bioengineering paradigm, exploring the ways in which disciplines intersect to produce advances in healthcare. A key goal is to enable students to make more informed decisions about healthcare based on their understanding not only of technological advancements but of the ethical and societal issues arising as a consequence. This discovery-based seminar includes interactive lectures, hands-on and virtual labs, discussion, research and presentations. NOTE: This course fulfills a Science & Technology (GS) requirement for students under GenEd and Science & Technology Second Level (SB) for students under Core. Students cannot receive credit for this course if they have successfully completed MEE 0944.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GS, HO
Repeatability: This course may not be repeated for additional credits.

MEE 1001. Introduction to Mechanical Engineering. 2 Credit Hours.
Provides an understanding of the study and practice associated with mechanical engineering and technology disciplines. Understand the importance of good communications and teamwork skills in a successful engineering and technology career. Understand the basics of problem solving and design. Discipline-specific labs.
Repeatability: This course may not be repeated for additional credits.
MEE 1019. Automotive Design I. 1 Credit Hour.
Design of automotive chassis, suspension, and drive train for participation in Society of Automotive Engineers competitions. Grade based on participation (50%) and/or design report (50%).
Repeatability: This course may not be repeated for additional credits.

MEE 1029. Automotive Design II. 1 Credit Hour.
Continuation of MEE 1019 (0180). Grade based on participation (50%) and/or design report (50%).
Repeatability: This course may not be repeated for additional credits.

MEE 1039. Automotive Design III. 1 Credit Hour.
Continuation of MEE 1029 (0181). Grade based on participation (50%) and/or design report (50%).
Repeatability: This course may not be repeated for additional credits.

MEE 2011. Linear Systems. 3 Credit Hours.
This course introduces applications of mathematical concepts of vector calculus to mechanical engineering through both the analytical description and the programming environment of Matlab. Topics covered include engineering applications of vectors and matrices, linear matrix equations, eigenvalue problems, interpolations, differentiation and integration, and optimization. A particular emphasis will be paid to applications of those concepts to various concrete problems of mechanical engineering.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Bioengineering, Civil Engineering, Mechanical Engineering
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(MATH 1042|Minimum Grade of C-|May not be taken concurrently
OR MATH 1942|Minimum Grade of C-|May not be taken concurrently)
AND (MATH 2043|Minimum Grade of C-|May be taken concurrently).

MEE 2305. Measurements & Dynamics Laboratory. 1 Credit Hour.
Basic measurements and measurement principles. Experiments and simulations of static and dynamic systems. Statistical analysis of results, written reports and journals.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ENGR 2332|Minimum Grade of C-|May be taken concurrently.

MEE 3301. Machine Theory and Design. 3 Credit Hours.
Course includes design process, statistical method, stress and deflection, materials, failure criteria from static and dynamic loadings. Analysis of mechanical components including screws, welded parts, gears, belts and shafts. Team design projects with written reports and presentations.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(ENGR 1117|Minimum Grade of C-|May not be taken concurrently)
AND (ENGR 2332|Minimum Grade of C-|May not be taken concurrently)
AND (ENGR 2333|Minimum Grade of C-|May not be taken concurrently)
OR ENGR 2933|Minimum Grade of C-|May not be taken concurrently)
AND (MEE 2305|Minimum Grade of C-|May not be taken concurrently).

MEE 3302. Kinematics of Mechanisms. 3 Credit Hours.
This course builds on the concepts of kinematics first presented in sophomore level Dynamics and explores its application to mechanical design. Starting with an introduction to links, joints and kinematic chains, students will learn the analysis and design of spatial mechanisms with an emphasis on position, velocity and acceleration of linkages. In addition to graphical and numerical analysis, computer aided mechanism design will be performed using SolidWorks Motion.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ENGR 2332|Minimum Grade of C-|May not be taken concurrently.

MEE 3305. Materials Laboratory. 1 Credit Hour.
Laboratory experiments related to the nature and properties of materials, including: stress, strain, fractures, microstructure, metallography, and nondestructive testing.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(ENGR 2333|Minimum Grade of C-|May not be taken concurrently
OR ENGR 2933|Minimum Grade of C-|May not be taken concurrently)
AND (ENGR 3496|Minimum Grade of C-|May be taken concurrently
OR ENGR 3201|Minimum Grade of C-|May be taken concurrently
OR ENGT 3396|Minimum Grade of C-|May not be taken concurrently)
AND (MEE 2305|Minimum Grade of C-|May not be taken concurrently).
MEE 3421. Dynamic Systems. 3 Credit Hours.
A study of the dynamic response of physical systems, concentrating on mechanical systems in translation, rotation, and combined motion. Mathematical models are developed using interacting elements, inter-connecting laws, and physical laws. Both the state variable and input-output analysis are considered. Solutions for the model response include using the following techniques: analytical, Laplace Transform, transfer function, matrix methods, and numerical analysis. Design project.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(ENGR 2332|Minimum Grade of C-|May not be taken concurrently)
AND (MEE 2011|Minimum Grade of C-|May not be taken concurrently)
OR MATH 2101|Minimum Grade of C-|May not be taken concurrently)
AND (MATH 3041|Minimum Grade of C-|May not be taken concurrently).

MEE 3506. Fluids and Energy Laboratory. 1 Credit Hour.
This laboratory aims to familiarize the students with different data acquisition techniques and devices to measure and control the vibratory behavior of various systems. Experiments will include pressure and velocity measurements as well as modern transducers and pressure/flow regulators.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(ENGR 3553|Minimum Grade of C-|May be taken concurrently)
OR ENGT 2521|Minimum Grade of D-|May be taken concurrently)
AND (ENGR 3571|Minimum Grade of D-|May be taken concurrently)
OR ENGT 3532|Minimum Grade of D-|May not be taken concurrently).

MEE 4040. Special Topics. 1 to 4 Credit Hour.
A course designed to present new and emerging areas of engineering. The course may also be used to present areas not normally taught in the College. Course requirements vary with the topic and instructor. Offered as needed or as appropriate.
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may be repeated for additional credit.

MEE 4173. Data Acquisition and Analysis for Engineers. 3 Credit Hours.
Course content includes the use of microcomputers for automated data acquisition, process control, and data analysis. The principles and applications of sensors, transducers, recording instruments, signal conditioning, and control instrumentation, and sampling theory. Data analysis using Fourier transform and least squares method. Computer software development for interfacing and graphics. Hands-on lab and design project required.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(MATH 2101|Minimum Grade of C-|May not be taken concurrently)
OR MEE 2011|Minimum Grade of C-|May not be taken concurrently)
AND (MEE 2305|Minimum Grade of C-|May not be taken concurrently)
AND (ECE 2112|Minimum Grade of C-|May not be taken concurrently).

MEE 4191. Independent Research in Mechanical Engineering. 2 to 5 Credit Hours.
Arranged each semester, please consult with the instructor.
Repeatability: This course may be repeated for additional credit.

MEE 4311. Mechanics of Composite Materials. 3 Credit Hours.
Introduction to the behavior of composite materials and their use in engineering structures: behavior and properties of the constituent fibers and matrices, micromechanical predictions of composite properties, anisotropic elasticity, behavior of composite laminae, classical lamination theory; fracture mechanisms, failure theories; behavior of composite plates and beams.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(ENGR 2333|Minimum Grade of C-|May not be taken concurrently)
OR ENGR 2933|Minimum Grade of C-|May not be taken concurrently)
AND (ENGR 3496|Minimum Grade of D-|May not be taken concurrently)
OR ENGR 3201|Minimum Grade of D-|May not be taken concurrently)
AND (MATH 2101|Minimum Grade of C-|May not be taken concurrently)
OR MEE 2011|Minimum Grade of C-|May not be taken concurrently)
AND (MATH 3041|Minimum Grade of C-|May not be taken concurrently).
MEE 4312. Deformation & Fracture of Engineering Materials. 3 Credit Hours.
Elastic and plastic deformation of materials; introduction to dislocation theory; failure analysis. Topics include loading in real-life situations, variable loading, failure theories, buckling and instability, fatigue analysis, and fracture mechanics. Case histories are introduced from a variety of industries including automotive, aerospace, utilities, oil and gas, petrochemical and biomedical. Helpful techniques are introduced such as operating stress maps.
Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may not be repeated for additional credits
Pre-requisites: (MEE 3301|Minimum Grade of C-|May not be taken concurrently) AND (ENGR 3496|Minimum Grade of D-|May not be taken concurrently OR ENGR 3201|Minimum Grade of D-|May not be taken concurrently).

MEE 4313. Metallurgy. 3 Credit Hours.
Course topics include physical and mechanical metallurgy, phase transformations, phase diagrams. Emphasis on heat treating, forming, welding, and other fabrication processes. Term design project.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: ENGR 3496|Minimum Grade of D-|May not be taken concurrently OR ENGR 3201|Minimum Grade of D-|May not be taken concurrently.

MEE 4382. Independent Study in Mechanical Engineering. 1 to 6 Credit Hours.
Arranged each semester, please consult with the instructor.
Repeatability: This course may be repeated for additional credit.

MEE 4405. Vibrations and Controls Laboratory. 1 Credit Hour.
This laboratory aims to familiarize the students with different data acquisition techniques and devices to measure and control the vibratory behavior of various systems. Experiments will include, but not be limited to, vibration behavior and control of single degree of freedom and continuous systems.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: (MEE 3421|Minimum Grade of D-|May not be taken concurrently AND MEE 4422|Minimum Grade of D-|May be taken concurrently).

MEE 4422. Mechanical Vibrations. 3 Credit Hours.
The study of single degree, two degrees, and multi-degrees of freedom systems, harmonic and non-harmonic excitation, damped and undamped response, free, forced, transient, and random vibrations, resonance beating, force transmission, isolation, base, and self excitation. Term design project.
Computer numerical methods.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: MEE 3421|Minimum Grade of D-|May not be taken concurrently.

MEE 4506. Energy Conversion Laboratory. 1 Credit Hour.
This laboratory will emphasize advanced measurement techniques in energy systems. Computer based data acquisition and statistics are integral parts of the course. Experiments will include: gas and liquid measurements, heat and mass transfer, and engine measurements.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: (ENGR 3553|Minimum Grade of C-|May not be taken concurrently OR ENGR 3953|Minimum Grade of C-|May not be taken concurrently) AND (ENGR 3571|Minimum Grade of C-|May not be taken concurrently) AND (MEE 3506|Minimum Grade of C-|May not be taken concurrently) AND (MEE 4571|Minimum Grade of D-|May be taken concurrently) AND (MEE 4572|Minimum Grade of D-|May be taken concurrently).

MEE 4512. Compressible Fluid Dynamics. 3 Credit Hours.
This course will introduce students to the subject of high speed gas dynamics. Compressible flows exhibit fundamentally different behavior from that observed in low speed, constant density fluids. Such flows are found in aerodynamics, combustors, turbines, jets, gas pipelines, and wind tunnel test facilities. Students will study phenomena associated with supersonic flows, including normal and oblique shocks, expansion fans, and compressible flows with friction and/or heat transfer. An introduction to high temperature and rarefied gas dynamics will also be included.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: (ENGR 3553|Minimum Grade of C-|May not be taken concurrently OR ENGR 3953|Minimum Grade of C-|May not be taken concurrently) AND (ENGR 3571|Minimum Grade of C-|May not be taken concurrently).
MEE 4513. Aerodynamics. 3 Credit Hours.
The forces and moments exerted by moving fluids on solid bodies are of concern in numerous applications. While the performance of flight vehicles is of particular interest, aerodynamics is also a subject of importance in passenger and race car design, wind turbines, structures, sea vessels, etc. Students will study various topics in low speed aerodynamics, including thin airfoil theory and airfoil nomenclature, finite wing theory, high lift and drag reduction devices, separated and vortical flows, and rotating blades. An introduction to transonic flows and computational aerodynamics will also be included.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Civil Engineering, Mechanical Engineering

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
ENGR 3553|Minimum Grade of C-|May not be taken concurrently
OR ENGR 3953|Minimum Grade of C-|May not be taken concurrently.

MEE 4571. Advanced Thermodynamics and Combustion. 3 Credit Hours.
Review of basic concepts, first and second laws, entropy (statistical and classical), power and refrigeration cycles, thermodynamic relationships, mixtures, chemical reactions and equilibrium, introduction to combustion process. Term design project.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
ENGR 3571|Minimum Grade of C-|May not be taken concurrently.

MEE 4572. Heat and Mass Transfer. 3 Credit Hours.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(MATH 3041|Minimum Grade of C-|May not be taken concurrently)
AND (ENGR 3571|Minimum Grade of C-|May not be taken concurrently)
AND (ENGR 3553|Minimum Grade of C-|May not be taken concurrently)
OR ENGR 3953|Minimum Grade of C-|May not be taken concurrently).

MEE 4573. Internal Combustion Engines. 1 Credit Hour.
Types of engines, design considerations, combustion, friction, emission.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
MEE 4571|Minimum Grade of D-|May be taken concurrently.

MEE 4574. Heating, Ventilating, and Air Conditioning. 3 Credit Hours.
Course content includes human comfort criteria, heating and cooling loads, HVAC system types, room air distribution, terminal unit selection, fans and ducts, pumps and piping, computer-aided design; term design project.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(ENGR 3571|Minimum Grade of C-|May not be taken concurrently)
AND (ENGR 3553|Minimum Grade of C-|May not be taken concurrently)
OR ENGR 3953|Minimum Grade of C-|May not be taken concurrently).

MEE 4575. Renewable and Alternative Energy. 3 Credit Hours.
Current state of renewable and alternative energy; different scenarios of producing energy: mechanical heat engines, ocean thermal energy converters, thermoelectricity, solar radiation, biomass, photovoltaic converters, wind energy, and ocean engines; design of hydrogen-powered systems: polymer electrolyte membrane fuel cells.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
ENGR 3571|Minimum Grade of C-|May not be taken concurrently.

MEE 4576. Photovoltaic System Design for Engineers. 3 Credit Hours.
The course will introduce students to the photovoltaic system design. It will begin by providing a basic understanding of the properties of sunlight, review the relevant semiconductor concepts and provide an in-depth understanding of the principles governing conventional solar cell operation. Focus will then be placed on the intricacies of solar cell design exploring such aspects as module fabrication, standalone and grid-connected system requirements, and photovoltaic material specific issues. The remainder of the course will be devoted to requirements, design and economics of specific purpose photovoltaic applications.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
ENGR 3571|Minimum Grade of C-|May not be taken concurrently.
MEE 4643. Manufacturing Engineering. 3 Credit Hours.
A course designed to present new and emerging areas of Manufacturing Engineering. This course covers manufacturing processes under the classification of processing operations and the assembly operations, and the parameters involved in these processes. The course is combination of lectures and intensive lab activities such as machining, welding, 3-D printing.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Mechanical Engineering
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MEE 3301|Minimum Grade of D-|May not be taken concurrently.

MEE 4731. Cardiovascular Fluid Dynamics. 3 Credit Hours.
Mechanics of blood circulation, fluid mechanics of the heart, blood flow in arteries, unsteady flow in veins, current concepts in circulatory assist devices, biofluidics, and other selected topics.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ENGR 3553|Minimum Grade of C-|May not be taken concurrently
OR ENGR 3953|Minimum Grade of C-|May not be taken concurrently.

MEE 4734. Forensic Engineering. 3 Credit Hours.
The purpose of this course is to expose students to rigorous engineering techniques and methodologies utilized in forensic engineering, accident reconstruction, failure analysis and the analysis of injury biomechanics. Additionally, the role of engineering accident reconstruction and biomechanical injury analysis in the engineering design process to ensure product safety will also be discussed, as will the role of standards in engineering design.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(ENGR 2333|Minimum Grade of C-|May not be taken concurrently
OR ENGR 2933|Minimum Grade of C-|May not be taken concurrently)
AND (ENGR 3553|Minimum Grade of C-|May not be taken concurrently
OR ENGR 3953|Minimum Grade of C-|May not be taken concurrently).

Mechanical Engineering Tech (MET)

Courses
MET 4671. Computer Integrated Manufacturing Systems. 3 Credit Hours.
CAD/CAM in practice: flexible systems, operations, and performance. The course also considers communication and the integration of robots and computerized machines. Laboratory and demonstrations.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(ENGT 3651|Minimum Grade of D-|May not be taken concurrently
AND ENGT 3652|Minimum Grade of D-|May not be taken concurrently).

Media Studies & Production (MSP)

Courses
MSP 0821. The Future of Your TV. 3 Credit Hours.
What is the future of your TV and what kinds of programming will you see in the next two years? Television is not going away but how, where and when we interact with TV changes constantly. What roles do blogs, podcasts, YouTube, Netflix and new digital technologies have in furthering television into a medium where consumers drive content? In large lecture you will learn about these changes; in small groups, you will take the driver's seat as a critic and creator of content. NOTE: This course fulfills the Arts (GA) requirement for students under GenEd and Arts (AR) for students under Core.
Course Attributes: GA
Repeatability: This course may not be repeated for additional credits.

MSP 0823. Latin American Media. 3 Credit Hours.
From the music of Shakira and Pitbull to Bart Simpson's bad Spanish (no problema!) and the cross-over appeal of Modern Family's Sofia Vergara, Latin American influences are increasingly evident in U.S. media and culture. The influence goes both ways: U.S. media and culture have had great impact in Latin America. This class focuses on Latin American media as key institutions within the region and also as they interact with the United States. Media systems are so intertwined with society that understanding them requires understanding where they come from, so we will look at Latin America itself first - Where is it? What are its characteristics? The class will then examine Latin American media and the ways that Latin American people have reacted to U.S. influence. We will also explore the growing presence of Latino media in the U.S. and in Philadelphia. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core.
Course Attributes: GG
Repeatability: This course may not be repeated for additional credits.
MSP 1011. Introduction to Media Theory. 3 Credit Hours.
This class provides a broad survey of key theoretical approaches to the understanding of human communicative behavior with an emphasis on those theoretical frameworks associated with mediated communication. The course helps students develop an appreciation for the role theory plays in our society, including the relationship of theory to research and the application of theoretical models to contemporary phenomena. NOTE: For MSP majors, BTMM majors and Communication Studies majors; must be taken during first 45 credit hours in degree program.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites:
(MSP 1011|Minimum Grade of C-|May not be taken concurrently
AND MSP 1021|Minimum Grade of C-|May not be taken concurrently).

MSP 1021. Media and Society. 3 Credit Hours.
This is an introductory course that focuses on the past, present, and future roles of media in society. The course explores the complex relationships between media and society, especially in light of prevailing technological and cultural conditions in the U.S. and around the world. It also provides an introduction to specific approaches for being more enlightened consumers and producers of mass media messages by strengthening skills of reasoning, research, critical thinking, creativity, and writing. NOTE: For MSP majors, BTMM majors and Communication Studies majors; must be taken during first 45 credit hours in degree program.

Repeatability: This course may not be repeated for additional credits.

MSP 1655. The Business of Media. 3 Credit Hours.
This course is an introduction to the media structures and managerial roles and responsibilities in the electronic media industries, including radio, television, cable, satellite, online and mobile. Understanding the financial implications leading to profitability of media entities and challenges facing non-profit entities will be considered. Other issues covered include; how media managers are influenced by the changing media landscape, the role of government, and the impact of technology on the future of media. Class discussions draw on information from books on media management, current media industry magazines & websites, media content from a wide variety of sources, guest speakers, the real world executive media management experience of the professor, and the life and work experiences of the class. The course focuses on four broad areas influencing the media industry: managerial practices, content development, organizational structure, and business/revenue models.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites:
(MSP 1011|Minimum Grade of C-|May not be taken concurrently
AND MSP 1021|Minimum Grade of C-|May not be taken concurrently).

MSP 1701. Introduction to Media Technology. 3 Credit Hours.
An introduction to visual aesthetics, communication design and other concepts relevant to the world of digital media. Students are introduced to various multimedia applications (Adobe Photoshop, WordPress, Audacity and Final Cut Pro) and learn how to construct effective media projects including web sites, graphics and audio and video work.

Repeatability: This course may not be repeated for additional credits.

MSP 2141. Media Research. 3 Credit Hours.
This class is an introduction to research, focusing on media communication. Topics include the research process itself - identifying a research question, selecting a research method, defining terms, sampling, data collection, presentation of results - and research settings - institutional, academic, journalistic. The focus is on media research, including preproduction research, ratings and other types of audience measurement.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites:
MSP 1011|Minimum Grade of C-|May not be taken concurrently
OR CMST 2111|Minimum Grade of C|May not be taken concurrently.

MSP 2421. Media Popular Culture. 3 Credit Hours.
This course critically examines the relationship of the media to a cultural form that has been both dismissed as trivial and condemned as debasing: popular culture. Of particular interest is the media’s role in the production and consumption of this cultural form. This course introduces students to some of the most important critiques of popular culture from the 20th and early 21st centuries in an effort to understand the aesthetics, politics, and economics of popular culture texts, including movies, television shows, songs, novels, magazines, comics, web pages, online videos and social media. Through these critiques, the class will trace the historical development of this cultural form in America and Europe, its relationship to high culture and folk culture, its globalization during the 20th century, and the influences on it from non-European cultural formations such as anime from Japan, Bollywood films from India, and Latin pop music from Central and South America.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites:
MSP 1021|Minimum Grade of C-|May not be taken concurrently
OR CMST 2111|Minimum Grade of C|May not be taken concurrently.

MSP 2701. Introduction to Media Production. 4 Credit Hours.
This is an introductory level production course in which students study the various techniques and practices involved with creating and understanding media production. Students become familiar with all of the basic aspects of television production in its three stages: pre-production, production and post-production. Student will be required to work both individually and in groups to complete various studio and field projects throughout the semester. Students will also gain an understanding of the ethical issues faced in creating such media.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites:
MSP 1701|Minimum Grade of C-|May not be taken concurrently.
MSP 2721. Voice-Over Techniques for Media. 4 Credit Hours.
This is an intermediate course that focuses on vocal development and performance in a variety of styles. Students will work to identify their own regional accents and accents and vocal issues in others. Students will also work to create accents and characters for various projects. Students will experiment with a variety of voice-over areas such as DJ work, commercials, PSA's, podcasts for public service, anime, children's programming, and narration of books on tape.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MSP 1701|Minimum Grade of C-|May not be taken concurrently.

MSP 2741. Introduction to Internet Studies and Web Authoring. 3 Credit Hours.
The purpose of this course is to develop a deeper understanding of online media and the social, legal and cultural issues of the Internet. This is an introductory course to web design and digital media that explores the practical applications and the theoretical implications of the Internet and how it compares to "traditional" media. It examines several Internet developments and topics such as media convergence and web 2.0 applications, and explores their economic, social, and cultural implications. Students design their own web sites using web authoring software.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MSP 1701|Minimum Grade of C-|May not be taken concurrently.

MSP 2751. Audio for Media. 4 Credit Hours.
An introduction to sound design principles and recording techniques for multitrack audio production in all media production settings. As students examine design theory and technical practices, they learn the basic functioning and operation of microphones, mixing consoles, loudspeakers, digital audio workstations, and field recording devices, as well as rudimentary acoustical physics. Considerable time is also spent on critical listening skills and design aesthetics.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MSP 1701|Minimum Grade of C-|May not be taken concurrently.

MSP 2889. Field Experience in Youth Media and Media Literacy. 3 Credit Hours.
This course provides students with a community learning experience helping children and teens build their communication, media production and critical thinking skills. Students spend time each week in a school or after school setting, providing assistance to teachers and students. They reflect on the role of media and technology in the lives of youth and gain experience through direct engagement with teaching, learning and exploring the creativity and skills inherent in the practice of media literacy education.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
MSP 1701|Minimum Grade of C-|May not be taken concurrently.

MSP 2900. Honors MSP Special Topics. 3 Credit Hours.
Topics vary.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.

MSP 3196. Writing Workshop. 3 Credit Hours.
An intensive course that stresses writing fundamentals while encouraging students to express themselves in many forms of writing from blogs, to essays, to scripts and more, with a special emphasis on writing for broadcast and other forms of production. Students read their work in class, work in groups, and meet with the instructor for personal critiques.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

MSP 3225. Educational Multimedia Production. 3 Credit Hours.
Examination of the educational media industry. Students create multimedia productions for education clients. Each semester, students may produce videos, websites, or online games that support the practice of teaching and learning.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(MSP 1011|Minimum Grade of C-|May not be taken concurrently
AND MSP 1701|Minimum Grade of C-|May not be taken concurrently).

MSP 3296. Travel Writing. 3 Credit Hours.
This course explores international communication, intercultural competence, and the nature of travel (why and how we travel, and what we can learn from it) through a travel writing curriculum.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.
MSP 3421. Technology and Culture. 3 Credit Hours.
This course critically examines the nature, role, and significance of new communication technologies in contemporary U.S. culture. It considers how these technologies impact our ideas on work, leisure, art, knowledge, identity, and environment and thus provides a foundation for understanding the nature, role, and significance of new communication technologies as a dynamic factor in society. We will examine socio-cultural imperatives that shape the development of new information/communication technologies in addition to the socio-cultural influences of those technologies. We will explore the nature of technology in general to understand what it is and how it is linked closely with cultural change. The course also addresses the social history of technology in terms of the philosophies, politics, and economics surrounding the creation of new technologies.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(MSP 1011|Minimum Grade of C-|May not be taken concurrently
AND MSP 1021|Minimum Grade of C|May not be taken concurrently)
OR CMST 2111|Minimum Grade of C|May not be taken concurrently.

MSP 3471. Media and Cultural Differences. 3 Credit Hours.
This course critically examines the way media construct difference in a variety of ways. It introduces students to the many ways forms of difference have been analyzed in media and cultural studies. It addresses how diverse cultural groups incorporate media into their negotiation of everyday life and formation of identities. In the course, particular attention is given to the social and political implications of mainstream media representations of nationality, race, ethnicity, religion, gender, sexuality, physical ability, and class. This course also examines the ways different groups employ media technologies to construct alternative representations to those found in the mainstream commercial media.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MSP 1011|Minimum Grade of C-|May not be taken concurrently
OR CMST 2111|Minimum Grade of C|May not be taken concurrently.

MSP 3473. Media and the Environment. 3 Credit Hours.
This course provides students with an understanding of how people’s relationship with the environment is shaped by media messages. By addressing questions of media ownership, content and global flow, the course examines how ideas and issues regarding the environment are bound and circulated through communication channels and networks in a variety of interrelated narrative and imaginistic forms. At the heart of this examination are the interplay between corporate agendas, national policies, commodity hunger, the materialism of class conflict, issues of waste management and environmental risk, and community activism. Of central interest is how historically media’s representation of environmental issues have influenced public perceptions of natural resource exploitation and sustainability, and framed modern lifestyles.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MSP 1021|Minimum Grade of C|May not be taken concurrently
OR CMST 2111|Minimum Grade of C|May not be taken concurrently.

MSP 3572. Communication and Development. 3 Credit Hours.
The purpose of this course is to develop an understanding of the relationship between communication and development in different political, social, and cultural settings. We will read about historical trends, economic structures, culture, and communication development models and theories in different parts of the world – Asia, Africa and Latin America, as well as in our hometown of Philadelphia.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MSP 1011|Minimum Grade of C-|May not be taken concurrently
OR CMST 2111|Minimum Grade of C|May not be taken concurrently.

MSP 3590. Intermediate Topics in Media. 3 or 4 Credit Hours.
Specific topic varies each semester. Please view course subtitle or consult with instructor for details.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(MSP 1011|Minimum Grade of C-|May not be taken concurrently
AND MSP 1021|Minimum Grade of C|May not be taken concurrently
AND MSP 1701|Minimum Grade of C-|May not be taken concurrently).

MSP 3611. Media Advertising. 3 Credit Hours.
This course is intended to provide an overview of the principles and practices of advertising in broadcast media, including psychological and creative factors, media research, rate structure, and campaign strategy. It examines advertising from the perspectives of marketing and social role of advertising, audience and consumer behavior, creative and management concepts, strategy, planning, advertising media, and effectiveness evaluation.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MSP 1011|Minimum Grade of C-|May not be taken concurrently.
MSP 3631. Media Sales. 3 Credit Hours.
This course introduces students to the advanced strategies of media sales and related theories. Students will learn fundamental concepts related to media buying, planning, planning tools, advertising, and problem solving research skills, measurement techniques, and audience factors.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
MSP 1655|Minimum Grade of C-|May not be taken concurrently.

MSP 3663. Marketing Music and Media. 3 Credit Hours.
An examination of general marketing principles focusing on practices, techniques, and theories specific to media with an emphasis on music product. The use of multiple media in the music marketing process will be discussed in the context of developing and guiding an entertainment project to success, highlighting the opportunities and challenges of doing so in the digital age. Topics include publicity, promotion, the roles of radio, grass-roots efforts, social networking and other "new media" in the process of bringing entertainment products to market. Students, working in groups, will apply this theoretical knowledge in a semester-long project in which they will design a full marketing plan for a music or media product.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
MSP 1655|Minimum Grade of C-|May not be taken concurrently
OR CMST 2111|Minimum Grade of C|May not be taken concurrently.

MSP 3701. Genres of Media Production. 4 Credit Hours.
This intermediate level production course will build on the fundamental theories and practices learned in 2701. Sections will be dedicated to specific genres, and the genres covered will vary from semester to semester. Students are advised to consult the section subtitles prior to registering.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
MSP 2701|Minimum Grade of C-|May not be taken concurrently.

MSP 3709. Advanced Editing. 4 Credit Hours.
This course concentrates on the principles and skills of digital editing for image and sound and provides students with the critical, technical and aesthetic framework needed to create and critique polished, edited work.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
MSP 2701|Minimum Grade of C-|May not be taken concurrently.

MSP 3721. Media Performance. 4 Credit Hours.
Students will learn advanced on-camera performance techniques and get practical experience in various television performance specialties. Students will use studio, field, and computer technologies. Students will increase competencies in on-camera performance, producing, and writing for television. Students will study techniques for effective on-camera presentation and will critically evaluate themselves, their classmates, and media professionals.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
MSP 1701|Minimum Grade of C-|May not be taken concurrently.

MSP 3751. Studio Music Recording Techniques. 4 Credit Hours.
An in-depth examination of recording and editing techniques in which students gain hands-on experience on a high-end Digital Audio Workstation during the recording and overdubbing phases of production. Emphasis is placed on running actual sessions in a variety of settings including music and sound for media production. Discussion regarding approaches to file management, time management and effective interaction with performers are interwoven throughout all production work.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
MSP 2751|Minimum Grade of C-|May not be taken concurrently.

MSP 3771. Radio. 4 Credit Hours.
This is a lecture and production course. Students trace radio from its beginnings to current technologies and platforms and gain practical experience in digital audio production. Through lecture and research, students will examine radio in its various forms (terrestrial, HD, satellite, and internet.) Students will study the positions and departments in radio, including management, sales, talent, production, promotions, and engineering. Students will also examine ratings and research and the future of the medium. In the lab component, students will produce, write, record, and edit audio projects using industry-standard Pro Tools technology.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
MSP 2751|Minimum Grade of C-|May not be taken concurrently.

MSP 3890. Intermediate Topics in Media Production. 2 to 4 Credit Hours.
Specific topic varies each semester. Please view course subtitle or consult with instructor for details.

Repeatability: This course may be repeated for additional credit.

Pre-requisites:
MSP 1701|Minimum Grade of C-|May not be taken concurrently.
MSP 4039. Senior Seminar. 3 Credit Hours.
Professional development seminar designed to prepare students to enter the media workforce. Discussions of media occupations, resume writing, organizing a job search, networking, interviewing, and job preparedness. Guest lectures. NOTE: Enrollment limited.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Broadcasting/Telecom/Mass Medi, Media Studies and Production
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may not be repeated for additional credits.

MSP 4153. Media Criticism. 3 Credit Hours.
This upper level course examines the multiple ways in which media have been analyzed and critiqued by the social sciences, the humanities, and media theorists. Students are exposed to different theories about media's intellectual, cultural, and socio-economic functions in society. Students are challenged to expand their understanding of how mass media shape the way we understand our world and ourselves. The course explores issues of media's role in a democratic society, media and representation (aesthetics and "voice" as well as issues of race, ethnicity, gender, sexuality), media and violence, media and science, media and ecology, and media and consumer culture.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(MSP 1011|Minimum Grade of C-|May not be taken concurrently
AND MSP 1021|Minimum Grade of C-|May not be taken concurrently)
OR CMST 2111|Minimum Grade of C|May not be taken concurrently.

MSP 4182. Independent Study. 1 to 4 Credit Hour.
Available for students who wish to take on the study of a special topic that goes beyond those available through the regular curriculum of the major.
NOTE: Topic must be proposed to a MSP faculty member who will supervise the study and approved by that faculty member and the department chair.
Proposal forms are obtained through the MSP department office. May be taken once or repeatedly for up to 8 s.h.
Repeatability: This course may be repeated for additional credit.

MSP 4221. Information Technology Policy. 3 Credit Hours.
As business and everyday practices become increasingly mediated by communication and information technologies it is important that we critically examine technologies and policies that work in tandem to regulate human behavior. Policy and law form part of the social infrastructure that enables information and communication technologies to work in certain ways and prevents them from working in other. The course explores key policy and legal issues surrounding information and communication technology. These issues include privacy, digital copyright, and internet governance.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MSP 1011|Minimum Grade of C-|May not be taken concurrently
OR CMST 2111|Minimum Grade of C|May not be taken concurrently.

MSP 4226. Public Media. 3 Credit Hours.
In a media-saturated world filled with hundreds of cable channels, satellite radio, broadband networks and user-generated content, what is the role of public media? What role should public media play in providing educational content, if any? Should public media concern itself with entertainment and competition with commercial media-Outlets? Should it be responsible for creating the "public square" of diverse voices so important for a democratic society? This course will explore the evolution of public media, from the Habermas' notion of a "public sphere," to the start of public broadcasting in the late-1960's, to its contemporary term, public media. The course will consider the original purpose of public broadcasting (as stated in the Carnegie Commission report) and debate the best purpose for its future.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MSP 1021|Minimum Grade of C-|May not be taken concurrently
OR CMST 2111|Minimum Grade of C|May not be taken concurrently.

MSP 4252. Law and Ethics of Digital Media. 3 Credit Hours.
This course is intended to introduce students to American law and regulation as it pertains to digital media (Internet, mobile, multimedia, satellite, digital communication). Because legal issues permeate society, it is important for potential communication professionals to understand the principles of media law, both as observers of the judicial process and as potential participants in legal matters stemming from professional activities. As the new communication technologies become more integrated into our media landscape, new legal and ethical issues are being debated and new law is made every day. Historical perspectives will be discussed, but the primary focus of the class is on the current status of communicators' legal rights and the theoretical underpinnings on which they're based. This course will help you both as citizens and as prospective media professionals.
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MSP 1701|Minimum Grade of C-|May not be taken concurrently
OR CMST 2111|Minimum Grade of C|May not be taken concurrently.
MSP 4296. History of Electronic Media. 3 Credit Hours.
Examines the origins, development and current status of electronic, mass and interpersonal media. From the invention of the telephone and the advent of radio and television to the creation of advanced digital devices and wireless systems, the course explores the media technology that changed the world and our lives. This class focuses on the social, economic, organizational, regulatory, creative and ethical issues that have challenged media practitioners, and the consumers they serve, in historical and political contexts. Students learn about the innovative figures whose manifold contributions have shaped the current media environment. The creation of content for these platforms is also covered, as well as a topical and critical look at events and issues in media history as they happen. The very notion of mass media is being redefined on a daily basis. This class is designed to help you develop the tools required for you to formulate your personal and professional vision for the future of media.

Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MSP 1021|Minimum Grade of C-|May not be taken concurrently
OR CMST 2111|Minimum Grade of C|May not be taken concurrently.

MSP 4324. The Video Game Industry and Game Culture. 3 Credit Hours.
With sales reaching into the billions, an ever-expanding market, and player demographics that span age, race, and gender, it is increasingly important to examine the intersection of communication and culture within the video game industry. This course pursues this task by introducing students to the field of Video Game Studies, exploring video games and the video game industry from its origins as a marginal entertainment medium - the pre-occupation of young males mostly - to its status today as a popular-culture phenomenon. We will discuss the theories developed in recent years to understand the impact of this new media on society, the cultures that have arisen around its consumption and production, and a critical analysis of content. During this course you will also be asked to play a game of your choosing, join/observe the online communities associated with that game, and write a term paper based on your readings and experience.

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(MSP 1011|Minimum Grade of C-|May not be taken concurrently
AND MSP 1701|Minimum Grade of C|May not be taken concurrently)
OR CMST 2111|Minimum Grade of C|May not be taken concurrently.

MSP 4390. Advanced Topics in Institution Study. 1 to 4 Credit Hour.
Specific topic; varies each semester. Please view course subtitle or consult with instructor for details.
Repeatability: This course may be repeated for additional credit.

MSP 4425. Lesbian, Gay, Bisexual, and Transgender Representation in Popular Media. 3 Credit Hours.
This class investigates the history of LBGT representation in a range of popular media since the 1960s—in news, film, television, marketing, comics, video games, and on the Internet. How have LBGT people been represented in popular media? What negative—and positive—stereotypes have characterized them? How have these images changed over time in different media? How can we account for these changes? This course introduces students to some of the major debates about LBGT representation in the United States, including how gender, race, class, and economic factors shape how we understand sexuality and its representation. We will look at both mainstream and alternative media to consider the role of LBGT producers and audiences in shaping queer images. We will consider on-going debates about visibility, stereotypes, camp, and the value and limits of "positive images."
The class includes a strong emphasis on independent research: students will learn how to develop and carry out an original qualitative research project throughout the semester.

Repeatability: This course may not be repeated for additional credits.

MSP 4445. Media Images and Analysis. 3 Credit Hours.
This upper division course focuses on the critical analysis of media images in society, from television programs to advertising to films to social media. Students are exposed to multiple ways of analyzing the production and consumption of media images and how these images shape our understanding of gender, identity, ethnicity, production, consumption, technology, ideology, ecology, sports, body image, and many other topics. Students are challenged to examine the role of media images in shaping the organization of society and culture, including the very nature of what we think is true, real, and desirable.
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MSP 1021|Minimum Grade of C-|May not be taken concurrently
OR CMST 2111|Minimum Grade of C|May not be taken concurrently.
MSP 4446. Psychological Processing of Media. 3 Credit Hours.
This is an advanced media analysis course in which students learn about research and theory concerning the contemporary psychological significance of media and mediated experience. Topics include attention, memory, comprehension, emotional response, arousal, picture perception, unconscious processing, and person perception as they relate to traditional media (e.g., print, radio, TV, film) as well as emerging media (e.g., telepresence teleconferencing, virtual reality, virtual worlds).

**Class Restrictions:** Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
(MSP 1011|Minimum Grade of C-|May not be taken concurrently
AND MSP 1021|Minimum Grade of C-|May not be taken concurrently)
OR CMST 2111|Minimum Grade of C|May not be taken concurrently.

MSP 4453. Information Society. 3 Credit Hours.
This course examines tensions, policies, issues, and theories relating to the global information society, also referred to as the knowledge society, the post-industrial society, or the post-modern society. The term “information society” points to the increasing influence of the role of information and communication technology (ICT) in our society. Students will explore the historical development of the information society, and develop a critical understanding of the contemporary debates surrounding the global information society tied to economics, ownership and regulation.

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
MSP 1021|Minimum Grade of C-|May not be taken concurrently
OR CMST 2111|Minimum Grade of C|May not be taken concurrently.

MSP 4454. Public Information Media Campaigns. 3 Credit Hours.
This is an advanced course about the use of theory and research in the design, implementation and evaluation of public information campaigns conducted via mass and other media. Students learn about key theories and research techniques regarding campaigns to affect knowledge, attitudes and behaviors on issues related to the individual and social good such as smoking, drug abuse, safe sex, recycling, animal welfare, disaster relief and many others. They then apply this knowledge by creating, conducting and evaluating a complete campus wide campaign on campus.

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
MSP 1011|Minimum Grade of C-|May not be taken concurrently
OR CMST 2111|Minimum Grade of C|May not be taken concurrently.

MSP 4455. New Media Literacies. 3 Credit Hours.
Examines intersection of education and participatory culture, literacy and technology change, the knowledge gap, informal learning and knowledge communities, emerging social skills and cultural competencies.

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
(MSP 1011|Minimum Grade of C-|May not be taken concurrently
AND MSP 1021|Minimum Grade of C-|May not be taken concurrently
AND MSP 1701|Minimum Grade of C-|May not be taken concurrently).

MSP 4487. TUTV Practicum. 3 Credit Hours.
This course exposes students to a wide range of skills and protocols required to manage, sustain and grow a public, educational, commercial, broadcast or cable television station. It examines scheduling, promotion, marketing, sales, content development, rights and clearances, standards and practices, partnership management, talent management and collective bargaining agreements. Students enrolled play a key role in the operation of Temple University Television (TUTV), and will work with the course instructor, engineering staffers and others to schedule the station, produce original content (variety, sports, reality, talk, & mini-doc’s, etc.), re-version existing, historically relevant programs, create station promotion, develop marketing plans, as well as interact with guests from respected local, regional and national media organizations. The class will also concentrate on managing the collateral, new media platforms that operate in association with the television service.

**Repeatability:** This course may be repeated for additional credit.

**Pre-requisites:**
MSP 2701|Minimum Grade of C-|May not be taken concurrently.
MSP 4496. Global Media. 3 Credit Hours.
This course explores questions of media ownership, content, flow, cultural values, political power and technological impact in relation to one of today's most used but least understood terms: globalization. Lectures, discussions, class activities, videos/films and course readings focus on how history (colonialism, imperialism, international relations), industrialization (industrial vs. "developing"), political systems (communism vs. democracy), economics (public vs. private) and culture (religion, language & world view) have shaped communication systems in Africa, Asia, Canada, Europe and Latin America. To do so, the course surveys media systems in industrialized, newly industrialized and developing countries and examines the interrelationship between "global culture" & local culture as related to mass media.

Course Attributes: WI
Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(MSP 1011|Minimum Grade of C-|May not be taken concurrently
AND MSP 1021|Minimum Grade of C-|May not be taken concurrently)
OR CMST 2111|Minimum Grade of C|May not be taken concurrently.

MSP 4497. Media and Children. 3 Credit Hours.
This is an advanced, writing intensive analysis course in which students learn about the history, economics, structure and regulation of media industries catering to a young audience and the evolving role of media in children's and families' lives. The possible effects of television, video games, comics and the Internet on children and youth are examined, including issues of gender, racial identity, violence, social learning, and consumerism.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits

Course Attributes: WI
Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(MSP 1011|Minimum Grade of C-|May not be taken concurrently
AND MSP 1021|Minimum Grade of C-|May not be taken concurrently)
OR CMST 2111|Minimum Grade of C|May not be taken concurrently.

MSP 4540. Advanced Topics in Media Studies and Production. 3 Credit Hours.
Topic varies.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may be repeated for additional credit.

MSP 4541. Mobile Media. 3 Credit Hours.
Mobile technology is an increasingly important tool for modern communication. This course will take a critical exploration of the role of mobile communication in public life, in part by having students design their own mobile media. Throughout the course, we will explore the societal impact of mobile communication so that students can gain a deeper intellectual understanding of mobile communication in public life and its impact on issues such as social interaction, identity, privacy, sense of place, and surveillance. During the class examples of mobile media applications and services will be introduced. The course consists of conceptual and theoretical teachings, but also includes many practical and hands-on elements in the form of demonstrations of real-life mobile applications, conducted studies and projects. To teach preliminary practical mobile media production skills there will be exercises in mobile application concept design and in mobile application research.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
MSP 1701|Minimum Grade of C-|May not be taken concurrently
OR CMST 2111|Minimum Grade of C|May not be taken concurrently.

MSP 4571. Foreign Studies in BTMM. 2 to 6 Credit Hours.
This course is a summer seminar in one of SMC's study abroad locations. The course consists of lectures, presentations by guest speakers from local media and government on a variety of topics, and various site visits. For more information and an application, students should visit the SMC web site at www.temple.edu/smc.

Repeatability: This course may be repeated for additional credit.

MSP 4572. British Media and Telecommunication. 3 to 6 Credit Hours.
Students spend a semester studying British Mass Media and Culture while living in a city founded in 43 A.D. For more information and an application, students should visit the SMC web site at www.temple.edu/smc. NOTE: Offered only through the Temple London Program.

Repeatability: This course may be repeated for additional credit.
MSP 4596. TV News Production Practicum - Temple Update. 4 Credit Hours.
This practicum exposes students to the skills and protocols required to conceptualize, produce and deliver television news. It is an intensive, hands-on production course simulating a newsroom operation in which students will learn to research and propose story ideas, conduct interviews, write, report and edit news stories and fill control room and studio positions including producer, director, audio, computer graphics, floor manager, studio camera operator and web producer. Students produce a weekly broadcast news show, Temple Update, created in cooperation with student volunteers. Note: Digital video editing is a skill students should know prior to taking this course. They should also be familiar with digital video cameras, tripods, and microphones for field production. Prior volunteer experience with Temple Update is strongly recommended.

Course Attributes:
WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MSP 2701|Minimum Grade of C-|May not be taken concurrently.

MSP 4597. Sports Production Practicum. 4 Credit Hours.
This OwlSports Update capstone class is a specialized course for students interested in a career in the writing, producing, and directing of sports programming. The class will be structured in a similar fashion to Temple Update or Comcast SportsNet’s Sportsnite. Students will create a weekly 30-minute sportscast aimed at informing viewers of important sports news, with an emphasis on the local professional and college teams, including Temple athletics. This is an intensive hands-on production course where students will experience the real-world feel of a real sports programming environment that includes researching, writing and reporting, shooting, editing, producing and directing. Students will learn, first-hand, the realities of enterprise their own stories, working a locker room, handling deadline pressure and writing in a clear and unique style specifically required to communicate effectively in the sports world.

Course Attributes:
WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MSP 2701|Minimum Grade of C-|May not be taken concurrently.

MSP 4614. Creating a Media Business. 3 Credit Hours.
This is an advanced level course that focuses on understanding the risks and rewards of starting a media-related small business. The course explores the general business strategies and tactics that are employed by successful small businesses, along with the particular requirements for creative media entrepreneurship.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may not be repeated for additional credits.

MSP 4641. Programming for Multiplatform Media. 3 Credit Hours.
This course will explain the principles of programming and explore the fundamentals of scheduling content for distribution on broadcasting and cable television, video on demand, web pages, and emerging digital video platforms. We will investigate the protocols and cost of content acquisition, program placement, strategic promotions, and audience development. We will assess the influence of new audience measurement technology and qualitative research in structuring a schedule.

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MSP 1701|Minimum Grade of C-|May not be taken concurrently.

MSP 4657. Current Issues in Media Management. 3 Credit Hours.
Changes in the media business, including technology, distribution, content platforms, business models, even in styles of managing people and teams require a new perspective and approach. This course combines lecture, vibrant class discussion, student presentations, personal reflection and guest speakers to explore and clarify these media business areas. The course will focus on three core questions: 1) What are the skills and behaviors reflected in successful media managers today with respect to technology, entrepreneurship, innovation, communication and content development? 2) What are your own managerial preferences & skills and how can you build upon them? 3) What is the relationship between media business trends and the changing role of the media manager?

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MSP 1655|Minimum Grade of C-|May not be taken concurrently
OR CMST 2111|Minimum Grade of C-|May not be taken concurrently.

MSP 4663. Art and Business of Record Production. 3 Credit Hours.
An examination of the creative, business, and legal issues involved in the process of a music recording project from the perspective of the Record Producer. Students develop skills related to the understanding of music industry contracts, project budgeting and financing, copyright and publishing. Significant time is also spent analyzing current industry trends, developing leadership skills, and individual growth of a unique production style within an historical perspective.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MSP 1701|Minimum Grade of C-|May not be taken concurrently.
MSP 4682. Independent Projects. 1 to 4 Credit Hour.
Available for students who wish to create a special project that goes beyond those available through the regular curriculum of the major. Topic must be proposed to and approved by an MSP faculty member who will supervise the study. Proposal forms are obtained through the MSP department office.
NOTE: Topic must be proposed to an MSP faculty member who will supervise the study and approved by that faculty member and the department chair. Proposal forms are obtained through the MSP department office. May be taken once or repeatedly for up to 8 s.h.
Repeatability: This course may be repeated for additional credit.

MSP 4687. Recording Industry Practicum. 3 Credit Hours.
An intensive, practical course that involves students in the day-to-day operation of our student-run record label, Bell Tower Music. Students will search for talent, contract performers, facilitate business affairs, oversee the production of a marketable product, develop marketing efforts, and promote musical acts to the public. Regular marketing activities include hosting a WHIP radio show, hosting a TUTV program, mounting live events, creating music videos, and developing content for and maintaining the label’s social networking sites and the belltowermusic.com web site.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
MSP 3663|Minimum Grade of C-|May not be taken concurrently
OR MSP 3751|Minimum Grade of C-|May not be taken concurrently.

MSP 4690. Advanced Topics in Organizational Management. 2 to 8 Credit Hours.
Specific topic; varies each semester. Please view course subtitle or consult with instructor for details.
Repeatability: This course may be repeated for additional credit.

MSP 4696. Communication in Media Organizations. 3 Credit Hours.
Whether managing the department of a television station or network, a broadband content site, a radio station or other media company, understanding how to work and lead within media organizations means understanding how to be an effective communicator for this unique field. This course is designed to blend the scholarship and foundational research on communication to explore communication skills within today’s media organizations.
It focuses on communication from leader to worker(s), from worker to leader(s), from peer to peer, within teams, inside the structures and outside. It also covers differences in communication styles and their effectiveness in large organizations, moderate and small businesses, team settings, cyber teams and when working independently. Topics include conflict resolution, managing cross-cultural workplaces, the impact of technology, online communication, emotions in the workplace, and current global trends. As an online class, work will consist of independent readings, weekly postings to a course online discussion board, online live chats, writing video commentaries, content review exams and a final project on a related topic.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MSP 1655|Minimum Grade of C-|May not be taken concurrently
OR CMST 2111|Minimum Grade of C|May not be taken concurrently.

MSP 4701. Producing and Directing. 4 Credit Hours.
Capstone Course in theory and practice of television producing and directing techniques. Students will pitch original project ideas and work in small groups as a production company, focusing on longform works of TV/video production and will produce a quality television program from inception to completion. Students will also engage in writing for TV, casting, and editing in order to develop a professional and creative portfolio piece.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MSP 3701|Minimum Grade of C-|May not be taken concurrently.

MSP 4703. Multimedia Production for Corporations and Non-Profits. 4 Credit Hours.
This is an advanced level production course in which students study the various techniques and practices involved in the production media for corporations and non-profit organizations. Students work through the three phases of production: pre-production, production and post-production. Students will be required to work both individually and in groups to complete video, audio, mixed media and web projects. Students may have the opportunity to produce projects for clients within the University or the community.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(MSP 2701|Minimum Grade of C-|May not be taken concurrently
AND MSP 2741|Minimum Grade of C-|May not be taken concurrently).

MSP 4741. Emergent Media Production. 4 Credit Hours.
MSP 4741 is a hands-on production studio/theory course in which students use new and emerging software and technologies to create web-based and mobile productions. The course involves lecture, discussion, demos, weekly blogs and project critiques. Mode: Hybrid (half online).
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(MSP 1701|Minimum Grade of C-|May not be taken concurrently
AND MSP 2741|Minimum Grade of C-|May not be taken concurrently).
MSP 4751. Audio Mixing and Mastering. 4 Credit Hours.
An intensive, hands-on examination of advanced music mixing and signal processing techniques in both analog and digital domains. Students will create both small-format, manual analog and large-format, fully automated digital mixes of music from various genres for both stereo and multichannel surround formats. Time will also be spent examining the mastering process and practicing basic mastering techniques.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MSP 3751|Minimum Grade of C-|May not be taken concurrently.

MSP 4785. Internship. 3 or 4 Credit Hours.
Students undertake paid or unpaid internships at compatible media organizations which provide experience in an industry or business setting, increase awareness of business principles and practices and provide insight into the professional arena. Supervised by MSP Internship Directors. Goals/objectives statement, two papers and evaluation of supervisor by student plus two evaluations of intern by site supervisor are required. For details, see http://smc.temple.edu/msp/internships/. NOTE: To register for this internship, you must be a MSP or BTMM major of junior or senior standing; have completed BTMM/MSP 1011, 1021 and 1701; have at least a 2.75 BTMM/MSP average; and have permission of the internship director.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Broadcasting/Telecom/Mass Medi, Media Studies and Production
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(MSP 1011|Minimum Grade of C-|May not be taken concurrently)
AND (MSP 1021|Minimum Grade of C-|May not be taken concurrently)
OR JRN 1111|Minimum Grade of C-|May not be taken concurrently)
AND (MSP 1701|Minimum Grade of C-|May not be taken concurrently).

MSP 4786. Internship. 1 to 3 Credit Hour.
As an elective, students undertake a paid or unpaid internships at compatible media organizations which provide experience in an industry or business setting, increase awareness of business principles and practices and provide insight into the professional arena. Goals/objectives statement, two papers and evaluation of supervisor by student plus two evaluations of intern by site supervisor are required. NOTE: To register for this internship, you must be a MSP or BTMM major of junior or senior standing; have completed BTMM/MSP 4785 or practicum; have at least a 2.75 BTMM/MSP average; and have permission of the internship director.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Broadcasting/Telecom/Mass Medi, Media Studies and Production
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
MSP 4785|Minimum Grade of C-|May not be taken concurrently.

MSP 4787. Television Production Workshop. 3 to 8 Credit Hours.
Students develop and produce programs ranging from weekly long-form programs that are primarily shot in the field to studio-based productions. The focus is on the production team: students pitch story ideas and the class functions as a management team, making decisions on which programs will be produced over the seven week term.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
MSP 2701|Minimum Grade of C-|May not be taken concurrently.

MSP 4796. Creative Scriptwriting. 3 Credit Hours.
This course is designed to introduce students to the fundamentals of developing and writing original scripts for television and media. The course emphasizes proper scriptwriting formats, exploration of themes, the development of story, plot, dialogue, and character development, as well as theories, methods, and practices in writing and developing original scripts.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MSP 2701|Minimum Grade of C-|May not be taken concurrently.

MSP 4887. Radio Production Practicum. 3 Credit Hours.
Provides hands-on experience in various aspects of radio operations; takes place at the WRFT Internet Radio, located at Temple's Ambler campus. Serves as a training ground for future radio journalists, producers, programmers, managers, and on-air talent. Students will work individually and in teams on various assignments. These assignments will be based in part on individual backgrounds and skill sets.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
MSP 3771|Minimum Grade of C-|May not be taken concurrently.

MSP 4890. Advanced Topics in Media. 2 to 8 Credit Hours.
Specific topic; varies each semester. Please view course subtitle or consult with instructor for details.
Repeatability: This course may be repeated for additional credit.
MSP 4990. Honors Special Topics. 4 Credit Hours.
Networking and individual career guidance for honors students. Variable topics. For information on this course, contact the MSP office.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.

**Medicine Undergraduate Courses (MEDU)**

**Courses**

MEDU 1001. Major Breakthroughs in Biomedicine and Biotechnology. 3 Credit Hours.
Science and medicine are advancing at an ever faster rate. Fortunately, it turns out that one can keep up with this dizzying pace by following a few journals—the American general science journal *Science*, its British counterpart *Nature*, and the *New England Journal of Medicine*—along with reports of major breakthroughs from other journals as covered in the media. These discoveries have important implications not only for science and medicine, but also society, business and even culture in general. In this class first by lectures, but then by listening to podcasts, reading news stories, then commentaries and summaries of the papers, students will learn to identify and appreciate major medical and scientific advances. This is a crucial skill to have whatever field of endeavor one chooses to pursue in life.
Repeatability: This course may not be repeated for additional credits.

**Middle Grades Education (MGRE)**

**Courses**

MGRE 3109. Cognitive Development in the Content Areas. 3 Credit Hours.
The primary goal of this course is to present contemporary theories and research on cognitive development that has relevance for educators of students in the middle grades. Foci include (a) theories of learning, development, motivation, expertise, and intelligence, (b) development of concepts and skills within the domains of math, science, social studies, reading, writing, (c) individual, gender, and ethnic differences in achievement; and (d) using cognitive developmental theories and research to understand learning challenges faced by special education and ELL students. By learning this information, students will gain the knowledge they need to make good instructional decisions in the middle-level classroom. NOTE: Background clearances required.
College Restrictions: Must be enrolled in one of the following Colleges: Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Co-requisites: MGRE 3111
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
EDUC 2109|Minimum Grade of C-|May be taken concurrently.

MGRE 3111. Applications of Learning Theory to Middle Grades Education. 3 Credit Hours.
This course will introduce students to the structure and philosophy of middle level schools, curriculum, and instruction by examining their relationship to aspects of young adolescent development and theories of learning. Emphasis will be placed on current understandings of how early adolescents learn and how these understandings inform instructional practices. Issues of motivating, engaging, and managing diverse, young adolescent students will be explored. NOTE: Background clearances required.
College Restrictions: Must be enrolled in one of the following Colleges: Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Co-requisites: MGRE 3109
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
EDUC 2109|Minimum Grade of C-|May be taken concurrently.

MGRE 3145. Teaching and Learning Math in the Middle Grades. 3 Credit Hours.
This course examines methods of teaching and assessing mathematics in the middle grades. Special attention is paid to understanding the conceptual difficulties students have in moving from whole numbers to rational numbers, additive thinking to multiplicative thinking, and arithmetic to algebra. Problem-solving, connections, and concrete models are emphasized.
College Restrictions: Must be enrolled in one of the following Colleges: Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY
Repeatability: This course may not be repeated for additional credits.
MGRE 3196. Teaching and Learning Literacy in the Middle Grades. 3 Credit Hours.
The purpose of this writing intensive course is to prepare pre-service students to teach reading and English/language arts in the upper elementary and middle level settings. Students will be introduced to theories and current views of practice in the literacy field. The areas of language, listening, reading and writing are presented throughout this course as interrelated and integrated processes. Emphasis will be on providing pre-service teachers with the competencies to implement engaging literacy instructional practices while providing ongoing assessment for a diverse middle grades population.

College Restrictions: Must be enrolled in one of the following Colleges: Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY
Co-requisites: MGRE 3296, SPED 3187
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(MGRE 3109|Minimum Grade of C-|May not be taken concurrently
AND MGRE 3111|Minimum Grade of C-|May not be taken concurrently).

MGRE 3296. Cultures, Communities, and Families. 3 Credit Hours.
This course examines the ways practices of cultures, communities and families impact teaching and learning. Using the social studies disciplines and pedagogical frames, special attention is paid to the areas of multicultural and citizenship education as well as other compelling topics that influence the "public or common good" in a diverse society such as race relations, gender socialization, immigration, religious freedom, equality of economic and social opportunities as well as global interdependence.

College Restrictions: Must be enrolled in one of the following Colleges: Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY
Co-requisites: MGRE 3196, SPED 3187
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(MGRE 3109|Minimum Grade of C-|May not be taken concurrently
AND MGRE 3111|Minimum Grade of C-|May not be taken concurrently).

MGRE 4108. Teaching and Learning Science in the Middle Grades. 3 Credit Hours.
The purpose of this course is to prepare pre-service teachers to teach science in the upper elementary and middle level settings. The course will be based on the "Big Ideas" in the field of science and science education and will focus heavily on scientific inquiry as a pedagogical approach and a learning goal. The Big Ideas in Biology, Chemistry, Physics and Earth/Space Sciences will be integrated into the various classes along with themes, such as motivating students, assessing & moving student's ideas toward science conceptions through inquiry, using questioning and flexible teaching methods (based on how children learn), and integrating science with other disciplines. Students will apply, evaluate, and reflect upon science teaching methods through class and lab activities, case studies, field experience assignments, and instructional technology (e.g., science web sites and videos). Assignments for the course will use the foundation fostered in the course to examine (a) science content, (b) student conceptions, (c) the meeting of theory and practice, (d) instructional resources (e.g., websites), and (e) lesson planning.

College Restrictions: Must be enrolled in one of the following Colleges: Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY
Co-requisites: SPED 4109
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(MGRE 3109|Minimum Grade of C-|May not be taken concurrently
AND MGRE 3111|Minimum Grade of C-|May not be taken concurrently).

MGRE 4801. Senior Seminar and Performance Assessment in Middle Grades Education. 3 Credit Hours.
Students will be involved in experiences that prepare them for making the transition from college to the practice setting, and engage in activities that foster professionalism in school and community settings. The senior performance assessment, a requirement for teacher certification students, is also a part of the course. NOTE: This is a required course for all teacher certification candidates, which is taken during the student teaching semester.

College Restrictions: Must be enrolled in one of the following Colleges: Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY
Co-requisites: MGRE 4888
Repeatability: This course may not be repeated for additional credits.
MGRE 4888. Student Teaching in the Middle Grades. 9 Credit Hours.
The student teaching experience is the last course taken before completion of a teacher preparation program and graduation. Students are provided with an opportunity to be in a classroom for an extended period of time and to put into practice what they have learned in their Middle Grades Program. Over the course of the semester, students will experience, in depth, the full role and meaning of teaching in a middle grades classroom. Experiences include planning and organizing for instruction, developing classroom teaching competencies and skills, evaluating pupil progress, participating in extra-class activities, working with special school personnel, and utilizing school and community resources in the instructional program. NOTE: Background clearances required. All coursework must be completed before taking this course.

College Restrictions: Must be enrolled in one of the following Colleges: Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY
Co-requisites: MGRE 4801
Repeatability: This course may not be repeated for additional credits.

Military Science (MLSC)

Courses

MLSC 1001. Introduction to Military Science I. 1 Credit Hour.
This course introduces the roles and mission of the Army, Army customs and traditions, and the personal challenges and competencies that are critical for effective leadership. You will learn how the personal development of life skills such as goal setting, time management, physical fitness and stress management relate to leadership, officerhip and the Army profession. The focus is on developing basic knowledge and comprehension of Army leadership dimensions while gaining a big picture understanding of the ROTC program, its purpose in the Army, and its advantages for the student. While this class is available for open enrollment, students that have formally contracted into the ROTC program must maintain a minimum aggregate GPA of 2.0. Contracted Cadets failing to maintain minimum aggregate GPA of 2.0 in all Military Science courses are subject to adverse action or dismissal from the program. Contracted Cadets who do not earn at least a C grade in a Military Science course must gain approval from the instructor to register for additional Military Science courses. Students registering for courses for which they have previously received academic credit are advised that repeat courses will not result in additional academic credit. NOTE: Students must participate in one weekend exercise. Leadership lab (MLSC 4003) is required for Army ROTC students.

Repeatability: This course may not be repeated for additional credits.

MLSC 1002. Introduction to Military Science II. 1 Credit Hour.
This course introduces cadets to the Army tactical concepts such as map reading, land navigation, marksmanship, small unit tactics and general operations. It also focuses on the Army Leadership model and explores these dimensions in more detail. Cadets will focus on basic knowledge and skills needed for personal leadership competence in the Army. While this class is available for open enrollment, students that have formally contracted into the ROTC program must maintain a minimum aggregate GPA of 2.0. Contracted Cadets failing to maintain minimum aggregate GPA of 2.0 in all Military Science courses are subject to adverse action or dismissal from the program. Contracted Cadets who do not earn at least a C grade in a Military Science course must gain approval from the instructor to register for additional Military Science courses. Students registering for courses for which they have previously received academic credit are advised that repeat courses will not result in additional academic credit. NOTE: Students must participate in one weekend exercise. Leadership lab (MLSC 4003) is required for Army ROTC students.

Repeatability: This course may not be repeated for additional credits.

MLSC 2001. Small Unit Operations and Leadership I. 1 Credit Hour.
This course examines leadership fundamentals and the application of leadership principles in both theory and practice. Historical examples of military leadership are used as case studies. Emphasis is on the formulation of military values, principles and leadership styles. It explores the dimensions of creative and innovative tactical leadership strategies and styles by examining team dynamics and two historical leadership theories that form the basis of the Army leadership framework. The focus continues to build on developing knowledge of the leadership values and attributes through understanding Army rank, structure and duties as well as broadening knowledge of land navigation and squad tactics. While this class is available for open enrollment, students that have formally contracted into the ROTC program must maintain a minimum aggregate GPA of 2.0. Contracted Cadets failing to maintain minimum aggregate GPA of 2.0 in all Military Science courses are subject to adverse action or dismissal from the program. Contracted Cadets who do not earn at least a C grade in a Military Science course must gain approval from the instructor to register for additional Military Science courses. Students registering for courses for which they have previously received academic credit are advised that repeat courses will not result in additional academic credit. NOTE: Students participate in one weekend field exercise. Leadership lab (MLSC 4003) is required for Army ROTC students.

Repeatability: This course may not be repeated for additional credits.
MLSC 2002. Small Unit Operations and Leadership II. 1 Credit Hour.
This course focuses on how to build teams, how to influence, how to communicate, how and when to make decisions, how to engage in problem solving, and how to plan and organize. This instruction will be conducted simultaneously with the leadership development instruction and will consist of physical fitness and training, giving military briefings, map reading and land navigation, duty positions, squad formations, battle drills, troop leading procedures, and operations orders. While this class is available for open enrollment, students that have formally contracted into the ROTC program must maintain a minimum aggregate GPA of 2.0. Contracted Cadets failing to maintain a minimum aggregate GPA of 2.0 in all Military Science courses are subject to adverse action or dismissal from the program. Contracted Cadets who do not earn at least a C grade in a Military Science course must gain approval from the instructor to register for additional Military Science courses. Students registering for courses for which they have previously received academic credit are advised that repeat courses will not result in additional academic credit. NOTE: Students participate in one weekend field exercise. Leadership lab (MLSC 4003) is required for Army ROTC students.
Repeatability: This course may not be repeated for additional credits.

Pre-requisites:
MLSC 2002|Minimum Grade of C|May be taken concurrently.

MLSC 2002 uses increasingly intense situational leadership challenges to build cadet awareness and skills in leading small units. Skills in decision-making, persuading and motivating team members when “under fire” are explored, evaluated, and developed. Aspects of military operations are reviewed as a means of preparing for the ROTC Leader Development and Assessment Course (LDAC). Cadets are expected to apply basic principles of the Law of Land Warfare, Army training, and motivation to troop leading procedures. Emphasis is also placed on conducting military briefings and developing proficiency in Garrison operation orders. MLSC 2002 Cadets are evaluated on what they know and do as leaders. At the completion of this course Cadets have completed half of the minimum coursework needed for a commission and are prepared for their 30 day attendance at the Leadership Development and Assessment Camp (LDAC) during the summer of their junior year. While this class is available for open enrollment, students that have formally contracted into the ROTC program must maintain a minimum aggregate GPA of 2.0. Contracted Cadets failing to maintain a minimum aggregate GPA of 2.0 in all Military Science courses are subject to adverse action or dismissal from the program. Contracted Cadets who do not earn at least a C grade in a Military Science course must gain approval from the instructor to register for additional Military Science courses. Students registering for courses for which they have previously received academic credit are advised that repeat courses will not result in additional academic credit. NOTE: Students participate in one weekend field exercise. Leadership lab (MLSC 4003) is required for Army ROTC students. Credits will count toward GenEd or General Electives.
Repeatability: This course may not be repeated for additional credits.

Pre-requisites:
MLSC 2001|Minimum Grade of C|May be taken concurrently.

MLSC 2001 develops student proficiency in planning, executing, and assessing complex operations, functioning as a member of a staff, and providing performance feedback to subordinates. You are given situational opportunities to assess risk, make ethical decisions, and lead fellow ROTC Cadets. Lessons on military justice and personnel processes prepare you to make the transition to becoming an Army officer. During your Military Science Level IV year you will lead Cadets at lower levels. Both your classroom and battalion leadership experiences are designed to prepare you for your first unit of assignment. You will identify responsibilities of key staff, coordinate staff roles, and use battalion operations situations to teach, train, and develop subordinates. While this class is available for open enrollment, students that have formally contracted into the ROTC program must maintain a minimum aggregate GPA of 2.0. Contracted Cadets failing to maintain a minimum aggregate GPA of 2.0 in all Military Science courses are subject to adverse action or dismissal from the program. Contracted Cadets who do not earn at least a C grade in a Military Science course must gain approval from the instructor to register for additional Military Science courses. Students registering for courses for which they have previously received academic credit are advised that repeat courses will not result in additional academic credit. NOTE: Students participate in one weekend field exercise. Leadership lab (MLSC 4003) is required for Army ROTC students. Credits will count towards GenEd or General Electives.
Repeatability: This course may not be repeated for additional credits.

Pre-requisites:
MLSC 3002|Minimum Grade of C|May be taken concurrently.
MLSC 4002. Advanced Leadership and Management II. 2 Credit Hours.
MLSC 4002 explores the dynamics of leading in the complex situations of current military operations in the contemporary operating environment (COE). Cadets examine differences in customs and courtesies, military law, principles of war, and rules of engagement in the face of international terrorism. They also explore aspects of interacting with non-government organizations, civilians on the battlefield, and host nation support. The course places significant emphasis on preparing Cadets for their first unit of assignment. It uses case studies, scenarios, and “What Now, Lieutenant?” exercises to prepare Cadets to face the complex ethical and practical demands of leading as commissioned officers in the United States Army. This course is designed in coordination with MLSC 4001 to complete your Cadet pre-commissioning training and education as required in the Army’s Basic Officer Leadership Course Phase I (BOLC I) in order to ensure your success at BOLC Phases II and III. Cadets enrolled in this course will gain practical leadership experience in positions of responsibility as they plan, coordinate, execute and evaluate Army ROTC activities. While this class is available for open enrollment, students that have formally contracted into the ROTC program must maintain a minimum aggregate GPA of 2.0. Contracted Cadets failing to maintain a minimum aggregate GPA of 2.0 in all Military Science courses are subject to adverse action or dismissal from the program. Contracted Cadets who do not earn at least a C grade in a Military Science course must gain approval from the instructor to register for additional Military Science courses. Students registering for courses for which they have previously received academic credit are advised that repeat courses will not result in additional academic credit. NOTE: Students participate in one weekend field exercise. Leadership lab (MLSC 4003) is required for Army ROTC students. Credits will count toward GenEd or General Electives.

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MLSC 4001 Minimum Grade of C|May be taken concurrently.

MLSC 4003. Leadership Lab. 0 Credit Hours.
Leadership lab is required for Army ROTC students. Students perform hands on training in drill and ceremonies, field craft, individual movement techniques, squad tactics, map reading and land navigation, first aid, and other basic military activities.

Repeatability: This course may be repeated for additional credit.

Music (MUSC)

Courses

MUSC 1000. Recital/Concert Credit. 0 Credit Hours.
College recital and concert attendance requirement. Of the eight required recitals attended, one must be an official Boyer College World Music Recital or Multicultural Music Lecture-Performance.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College

Repeatability: This course may be repeated for additional credit.

MUSC 1201. Voice Concentration. 2 Credit Hours.
Weekly private lesson and voice class with major teacher. Recital, partial or full, only with recommendation of voice faculty.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College

Repeatability: This course may not be repeated for additional credits.

MUSC 1202. Voice Concentration. 2 Credit Hours.
Weekly private lesson and voice class with major teacher. Recital, partial or full, only with recommendation of voice faculty.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUSC 1201 Minimum Grade of C|May not be taken concurrently.

MUSC 1203. Voice Major. 3 Credit Hours.
Weekly private lesson and voice class with major teacher. Recital, partial or full, only with recommendation of voice faculty.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College

Repeatability: This course may not be repeated for additional credits.

MUSC 1204. Voice Major. 3 Credit Hours.
Weekly private lesson and voice class with major teacher. Recital, partial or full, only with recommendation of voice faculty.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUSC 1203 Minimum Grade of C|May not be taken concurrently.

MUSC 1211. Voice Class. 1 Credit Hour.
Voice class for music majors as specified for curriculum. NOTE: Class meets two hours per week.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College

Repeatability: This course may not be repeated for additional credits.
MUSC 1212. Voice Class. 1 Credit Hour.
Voice class for music majors as specified for curriculum. NOTE: Class meets two hours per week.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites: MUSC 1211 Minimum Grade of C- May not be taken concurrently.

MUSC 1223. Class Voice for Non-Majors I. 1 Credit Hour.
Voice class for non-music majors. NOTE: Class meets two hours per week.
Repeatability: This course may be repeated for additional credit.

MUSC 1224. Class Voice for Non-Majors II. 1 Credit Hour.
Voice class for non-music majors. NOTE: Class meets two hours per week.
Repeatability: This course may be repeated for additional credit.
Pre-requisites: MUSC 1223 Minimum Grade of C- May not be taken concurrently.

MUSC 1225. English Diction. 1 Credit Hour.
Diction for singing in the English language. Introduction to the International Phonetic Alphabet. NOTE: Singing is required.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits.

MUSC 1256. Private Voice for Non-Music Majors. 1 Credit Hour.
Individual half-hour private lesson for students outside the College of Music who have reached at least an intermediate level of achievement. NOTE: Section 001 - Classical only; Section 002 - Jazz only. Additional fee required.
Repeatability: This course may be repeated for additional credit.
Pre-requisites: MUSC 1256 Minimum Grade of C- May not be taken concurrently.

MUSC 1257. Private Voice for Non-Music Majors. 1 Credit Hour.
Individual half-hour private lesson for students outside the College of Music who have reached at least an intermediate level of achievement. NOTE: Section 001 - Classical only; Section 002 - Jazz only. Additional fee required.
Repeatability: This course may be repeated for additional credit.
Pre-requisites: MUSC 1257 Minimum Grade of C- May not be taken concurrently.

MUSC 1258. Private Voice for Non-Music Majors. 1 Credit Hour.
Individual half-hour private lesson for students outside the College of Music who have reached at least an intermediate level of achievement. NOTE: Section 001 - Classical only; Section 002 - Jazz only. Additional fee required.
Repeatability: This course may be repeated for additional credit.
Pre-requisites: MUSC 1258 Minimum Grade of C- May not be taken concurrently.

MUSC 1401. Piano Concentration. 2 Credit Hours.
Weekly private lesson and regularly scheduled master classes with major teacher. With instructor's permission, student may present either half or full senior recital.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits.

MUSC 1402. Piano Concentration. 2 Credit Hours.
Weekly private lesson and regularly scheduled master classes with major teacher. With instructor's permission, student may present either half or full senior recital.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites: MUSC 1401 Minimum Grade of C- May not be taken concurrently.

MUSC 1403. Piano Major. 4 Credit Hours.
Weekly private lesson and regularly scheduled master classes with major teacher. Culminates in full recital during final semester of study.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits.
MUSC 1404. Piano Major. 4 Credit Hours.
Weekly private lesson and regularly scheduled master classes with major teacher. Culminates in full recital during final semester of study.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUSC 1403|Minimum Grade of C-|May not be taken concurrently.

MUSC 1405. Secondary Piano for Music Majors. 1 Credit Hour.
Fulfills piano requirements for students in programs of study other than piano major or piano concentration.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits.

MUSC 1406. Secondary Piano for Music Majors. 1 Credit Hour.
Fulfills piano requirements for students in programs of study other than piano major or piano concentration.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUSC 1405|Minimum Grade of C-|May not be taken concurrently.

MUSC 1407. Piano for Non-Music Majors I. 1 Credit Hour.
For the beginner. Instruction in groups (piano laboratory). Chords, transposition, sight reading, improvisation, elementary jazz, ensemble playing.
Repeatability: This course may not be repeated for additional credits.

MUSC 1408. Piano for Non-Music Majors II. 1 Credit Hour.
A sequel to Music 1407 (0030) with increased emphasis on playing by ear, development of technique, repertoire, improvisation, and ensemble playing.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUSC 1407|Minimum Grade of C-|May not be taken concurrently.

MUSC 1411. Private Piano for Non-Music Majors. 1 Credit Hour.
Individual half-hour private lesson for students outside the College of Music who have reached at least an intermediate level of achievement. NOTE: Lab fee required.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
MUSC 1411|Minimum Grade of C-|May not be taken concurrently.

MUSC 1412. Private Piano for Non-Music Majors. 1 Credit Hour.
Individual half-hour private lesson for students outside the College of Music who have reached at least an intermediate level of achievement. NOTE: Lab fee required.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
MUSC 1411|Minimum Grade of C-|May not be taken concurrently.

MUSC 1415. Introduction to Piano Pedagogy. 2 Credit Hours.
A general survey course. Key practical and pedagogical aspects of the piano teaching profession.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits.

MUSC 1428. Accompanying and Piano Ensemble. 1 Credit Hour.
Training in both vocal and instrumental accompanying; two-piano and four-hand repertory. Senior piano majors should accompany two recitals per semester. NOTE: This class is for all applied piano majors.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may be repeated for additional credit.

MUSC 1429. Accompanying and Piano Ensemble. 1 Credit Hour.
Training in both vocal and instrumental accompanying, two-piano and four-hand repertory. Senior piano majors should accompany two recitals per semester. NOTE: This class is for all applied piano majors.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may be repeated for additional credit.

MUSC 1446. Private Keyboard for Music Majors. 1 Credit Hour.
Private keyboard instruction.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits.
MUSC 1447. Private Keyboard for Music Majors. 1 Credit Hour.
Private keyboard instruction.
**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
MUSC 1446|Minimum Grade of C-|May not be taken concurrently.

MUSC 1448. Private Keyboard for Music Majors. 1 Credit Hour.
Private keyboard instruction.
**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
MUSC 1447|Minimum Grade of C-|May not be taken concurrently.

MUSC 1449. Private Keyboard for Music Majors. 1 Credit Hour.
Private keyboard instruction.
**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
MUSC 1448|Minimum Grade of C-|May not be taken concurrently.

MUSC 1501. Instrumental Concentration. 2 Credit Hours.
Weekly instrumental private lesson with major teacher.
**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
**Repeatability:** This course may not be repeated for additional credits.

MUSC 1502. Instrumental Concentration. 2 Credit Hours.
Weekly instrumental private lesson with major teacher.
**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
MUSC 1501|Minimum Grade of C-|May not be taken concurrently.

MUSC 1503. Instrumental Major. 4 Credit Hours.
Weekly instrumental private lesson with major teacher. Open only to candidates for a Bachelor of Music degree with a major in instrumental performance. Students are required to perform or teach private lessons outside the university, subject to availability and/or scheduling conflicts with other Boyer courses or obligations.

**Field of Study Restrictions:** Must be enrolled in one of the following Majors: Music
**Repeatability:** This course may not be repeated for additional credits.

MUSC 1504. Instrumental Major. 4 Credit Hours.
Weekly instrumental private lesson with major teacher. Open only to candidates for a Bachelor of Music degree with a major in instrumental performance. Students are required to perform or teach private lessons outside the university, subject to availability and/or scheduling conflicts with other Boyer courses or obligations.

**Field of Study Restrictions:** Must be enrolled in one of the following Majors: Music
**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
MUSC 1503|Minimum Grade of C-|May not be taken concurrently.

MUSC 1529. Guitar for Non-Music Majors. 1 Credit Hour.
For beginning guitarists. Students will develop functional guitar skills for playing songs, including: basic chords, picking and strumming methods, and understanding the musical elements needed to play from a song sheet.
**Repeatability:** This course may not be repeated for additional credits.

MUSC 1603. Harpsichord Major. 4 Credit Hours.
**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
**Repeatability:** This course may not be repeated for additional credits.

MUSC 1604. Harpsichord Major. 4 Credit Hours.
**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
MUSC 1603|Minimum Grade of C-|May not be taken concurrently.
MUSC 2123. Class Voice for Non-Majors: Jazz. 1 Credit Hour.
Introduction to the concepts and techniques of modern vocal jazz culminating in the application and demonstration of skills including various scales, melodies, and improvisational techniques utilized in the standard jazz repertoire.
Repeatability: This course may be repeated for additional credit.

MUSC 2124. Class Voice for Non-Majors: Jazz. 1 Credit Hour.
Development of the concepts and techniques of modern vocal jazz culminating in the application and demonstration of skills including various scales, melodies, and improvisational techniques utilized in the standard vocal jazz repertoire.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
MUSC 2123|Minimum Grade of C-|May not be taken concurrently.

MUSC 2133. Class Guitar for Non-Majors: Jazz. 1 Credit Hour.
Introduction of concepts and techniques of modern jazz guitar culminating in the application and demonstration of fundamental skills including various scales, melodies, harmonic progressions, and improvisation found in the standard jazz guitar repertoire.
Repeatability: This course may be repeated for additional credit.

MUSC 2134. Class Guitar for Non-Majors: Jazz. 1 Credit Hour.
Further development of concepts and techniques of modern jazz guitar culminating in the application and demonstration of skills including various scales, melodies, harmonic progressions, and improvisation found in the standard jazz guitar repertoire.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
MUSC 2133|Minimum Grade of C-|May not be taken concurrently.

MUSC 2143. Class Piano for Non-Majors: Jazz. 1 Credit Hour.
Introduction of concepts and techniques of modern jazz on the piano culminating in the application and demonstration of fundamental jazz piano skills including various scales, melodies, improvisation, and harmonic progressions found in the standard repertoire.
Repeatability: This course may be repeated for additional credit.

MUSC 2144. Class Piano for Non-Majors: Jazz. 1 Credit Hour.
Further development of the concepts and techniques of modern jazz piano culminating in the application and demonstration of skills including various scales, melodies, harmonic progressions, and improvisational techniques utilized in the standard jazz repertoire.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
MUSC 2143|Minimum Grade of C-|May not be taken concurrently.

MUSC 2201. Voice Concentration. 2 Credit Hours.
Weekly private lesson and voice class with major teacher. Recital, partial or full, only with recommendation of voice faculty.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUSC 1202|Minimum Grade of C-|May not be taken concurrently.

MUSC 2202. Voice Concentration. 2 Credit Hours.
Weekly private lesson and voice class with major teacher. Recital, partial or full, only with recommendation of voice faculty.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUSC 2201|Minimum Grade of C-|May not be taken concurrently.

MUSC 2203. Voice Major. 3 Credit Hours.
Weekly private lesson and voice class with major teacher. Recital, partial or full, only with recommendation of voice faculty.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUSC 1204|Minimum Grade of C-|May not be taken concurrently.

MUSC 2204. Voice Major. 3 Credit Hours.
Weekly private lesson and voice class with major teacher. Recital, partial or full, only with recommendation of voice faculty.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUSC 2203|Minimum Grade of C-|May not be taken concurrently.
MUSC 2211. Voice Class. 1 Credit Hour.
Voice class for music majors as specified for curriculum. NOTE: Class meets two hours per week.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUSC 1212|Minimum Grade of C-|May not be taken concurrently.

MUSC 2212. Voice Class. 1 Credit Hour.
Voice class for music majors as specified for curriculum. NOTE: Class meets two hours per week.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUSC 2211|Minimum Grade of C-|May not be taken concurrently.

MUSC 2323. Basic Conducting. 1 Credit Hour.
Fundamentals of conducting technique for both choral and instrumental organizations; musical terminology; basic conducting patterns, etc. NOTE:
Although the conducting course sequence [Music 2323 (0123), Music 2324 (0124), Music 4323 (0330)] is intended primarily for music majors, it is
possible for other students to enroll if they have evidence of a background in music theory. Non-music majors must obtain permission from the instructor
before they register for a conducting class.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUSC 1711|Minimum Grade of C-|May not be taken concurrently.

MUSC 2324. Conducting Intermediate. 1 Credit Hour.
Further development of conducting techniques including irregular and changing meters; involvement with more complex scores emphasizing interpretive
conducting and stylistic awareness.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUSC 2323|Minimum Grade of C-|May not be taken concurrently.

MUSC 2401. Piano Concentration. 2 Credit Hours.
Weekly private lesson and regularly scheduled master classes with major teacher. With instructor's permission, student may present either half or full
senior recital.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUSC 1402|Minimum Grade of C-|May not be taken concurrently.

MUSC 2402. Piano Concentration. 2 Credit Hours.
Weekly private lesson and regularly scheduled master classes with major teacher. With instructor's permission, student may present either half or full
senior recital.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUSC 2401|Minimum Grade of C-|May not be taken concurrently.

MUSC 2403. Piano Major. 4 Credit Hours.
Weekly private lesson and regularly scheduled master classes with major teacher. Culminates in full recital during final semester of study.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUSC 1404|Minimum Grade of C-|May not be taken concurrently.

MUSC 2404. Piano Major. 4 Credit Hours.
Weekly private lesson and regularly scheduled master classes with major teacher. Culminates in full recital during final semester of study.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUSC 2403|Minimum Grade of C-|May not be taken concurrently.
MUSC 2405. Secondary Piano for Music Majors. 1 Credit Hour.
Fulfills piano requirements for students in programs of study other than piano major or piano concentration.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUSC 1406|Minimum Grade of C-|May not be taken concurrently.

MUSC 2406. Secondary Piano for Music Majors. 1 Credit Hour.
Fulfills piano requirements for students in programs of study other than piano major or piano concentration.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUSC 2405|Minimum Grade of C-|May not be taken concurrently.

MUSC 2407. Piano for Non-Music Majors III. 1 Credit Hour.
A continuation of class piano study in small groups.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUSC 2408|Minimum Grade of C-|May not be taken concurrently.

MUSC 2408. Piano for Non-Music Majors IV. 1 Credit Hour.
A continuation of class piano study in small groups.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUSC 2407|Minimum Grade of C-|May not be taken concurrently.

MUSC 2411. Private Piano for Non-Music Majors. 1 Credit Hour.
Individual half-hour private lesson for students outside the College of Music who have reached at least an intermediate level of achievement. NOTE: Lab fee required.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUSC 1412|Minimum Grade of C-|May not be taken concurrently.

MUSC 2412. Private Piano for Non-Music Majors. 1 Credit Hour.
Individual half-hour private lesson for students outside the College of Music who have reached at least an intermediate level of achievement. NOTE: Lab fee required.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUSC 2411|Minimum Grade of C-|May not be taken concurrently.

MUSC 2415. Pedagogy of Technique. 2 Credit Hours.
Various technical approaches developed since the 18th century. Pedagogical schools will be examined and students will have an opportunity to test their abilities through the actual teaching of technique to peers.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits.

MUSC 2416. Creative Activities for the Piano Teacher. 2 Credit Hours.
Objectives include the encouragement of keyboard exploration at various levels of development through a multitude of musical activities and games, devised by the members of the class; translation from theory to practical procedures.
Repeatability: This course may not be repeated for additional credits.

MUSC 2500. Collegiate Band Lesson. 1 Credit Hour.
Supplemental instruction for non-music major, Collegiate Band participants.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
MUSC 3510|Minimum Grade of C-|May not be taken concurrently.

MUSC 2501. Instrumental Concentration. 2 Credit Hours.
Weekly instrumental private lesson with major teacher.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUSC 1502|Minimum Grade of C-|May not be taken concurrently.
MUSC 2502. Instrumental Concentration. 2 Credit Hours.  
Weekly instrumental private lesson with major teacher.  
**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College  
**Repeatability:** This course may not be repeated for additional credits  
**Pre-requisites:**  
MUSC 2501|Minimum Grade of C-|May not be taken concurrently.

MUSC 2503. Instrumental Major. 4 Credit Hours.  
Weekly instrumental private lesson with major teacher. Open only to candidates for a Bachelor of Music degree with a major in instrumental performance. Students are required to perform or teach private lessons outside the university, subject to availability and/or scheduling conflicts with other Boyer courses or obligations.  
**Field of Study Restrictions:** Must be enrolled in one of the following Majors: Music  
**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College  
**Repeatability:** This course may not be repeated for additional credits  
**Pre-requisites:**  
MUSC 1504|Minimum Grade of C-|May not be taken concurrently.

MUSC 2504. Instrumental Major. 4 Credit Hours.  
Weekly instrumental private lesson with major teacher. Open only to candidates for a Bachelor of Music degree with a major in instrumental performance. Students are required to perform or teach private lessons outside the university, subject to availability and/or scheduling conflicts with other Boyer courses or obligations.  
**Field of Study Restrictions:** Must be enrolled in one of the following Majors: Music  
**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College  
**Repeatability:** This course may not be repeated for additional credits  
**Pre-requisites:**  
MUSC 2503|Minimum Grade of C-|May not be taken concurrently.

MUSC 2603. Harpsichord Major. 4 Credit Hours.  
**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College  
**Repeatability:** This course may not be repeated for additional credits  
**Pre-requisites:**  
MUSC 1604|Minimum Grade of C-|May not be taken concurrently.

MUSC 2604. Harpsichord Major. 4 Credit Hours.  
**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College  
**Repeatability:** This course may not be repeated for additional credits  
**Pre-requisites:**  
MUSC 2603|Minimum Grade of C-|May not be taken concurrently.

MUSC 3100. Small Jazz Ensemble. 1 Credit Hour.  
Various workshops may be offered focusing on rhythm sections, brass, saxophone, guitar, percussion, bass, and vocalizing.  
**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College  
**Repeatability:** This course may be repeated for additional credit.

MUSC 3110. Large Jazz Ensemble. 1 Credit Hour.  
Emphasis on reading and stylization. Arrangements are used. NOTE: Weekly rehearsals.  
**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College  
**Repeatability:** This course may be repeated for additional credit.

MUSC 3201. Voice Concentration. 2 Credit Hours.  
Weekly private lesson and voice class with major teacher. Recital, partial or full, only with recommendation of voice faculty.  
**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College  
**Repeatability:** This course may not be repeated for additional credits  
**Pre-requisites:**  
MUSC 2202|Minimum Grade of C-|May not be taken concurrently.

MUSC 3202. Voice Concentration. 2 Credit Hours.  
Weekly private lesson and voice class with major teacher. Recital, partial or full, only with recommendation of voice faculty.  
**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College  
**Repeatability:** This course may not be repeated for additional credits  
**Pre-requisites:**  
MUSC 3201|Minimum Grade of C-|May not be taken concurrently.
MUSC 3203. Voice Major. 3 Credit Hours.
Weekly private lesson and voice class with major teacher. Recital, partial or full, only with recommendation of voice faculty.
**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
**Repeatability:** This course may not be repeated for additional credits
**Pre-requisites:**
MUSC 2204|Minimum Grade of C-|May not be taken concurrently.

MUSC 3204. Voice Major. 3 Credit Hours.
Weekly private lesson and voice class with major teacher. Recital, partial or full, only with recommendation of voice faculty.
**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
**Repeatability:** This course may not be repeated for additional credits
**Pre-requisites:**
MUSC 3203|Minimum Grade of C-|May not be taken concurrently.

MUSC 3231. Musical Theater Scene Study. 2 Credit Hours.
Practical work in the application of performance techniques to specific scenes from the American Musical Theater provides further development for the student of Musical Theater. Vocal and acting skills are combined with the development of character in musical play scene-work including both song and dialogue. Students spend the semester in collaboration with fellow students on notable and challenging scenes from the musical theater.
**Field of Study Restrictions:** Must be enrolled in one of the following Fields of study: Musical Theater
**Repeatability:** This course may not be repeated for additional credits.

MUSC 3232. Musical Theater Voice & Acting. 2 Credit Hours.
Practical work in the application of performance techniques to specific songs from the American Musical Theater of the first half of the 20th century. The incorporation of truthful acting with attention to given circumstances and objectives is blended with principles of healthy, supported singing.
**Field of Study Restrictions:** Must be enrolled in one of the following Fields of study: Musical Theater
**Repeatability:** This course may not be repeated for additional credits.

MUSC 3251. Applied Lesson - Vocal. 2 to 4 Credit Hours.
Additional applied voice lesson for music students. NOTE: Additional private lesson fee.
**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
**Repeatability:** This course may be repeated for additional credit.

MUSC 3267. Vocal Repertoire. 2 Credit Hours.
A survey of solo vocal literature of various periods and styles. Performance and analysis.
**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
**Repeatability:** This course may not be repeated for additional credits.

MUSC 3268. Vocal Repertoire. 2 Credit Hours.
A survey of solo vocal literature of various periods and styles. Performance and analysis.
**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
**Repeatability:** This course may not be repeated for additional credits.

MUSC 3300. Choral Ensemble. 0 or 1 Credit Hours.
Performance of standard choral literature. At least one public performance per semester. NOTE: This ensemble is available to any undergraduate or graduate student enrolled in the University.
**Repeatability:** This course may be repeated for additional credit.

MUSC 3385. Diamond Peer Teachers - Internship I. 1 Credit Hour.
The Diamond Peer Teachers Program provides students with a mentored university-level teaching experience in their major. Course requirements include participation in the three-day pre-semester Teaching Institute and regular participation in the Peer Teachers support group throughout the semester. Peer Teachers provide supplemental instruction in first- and second-year courses, promote student engagement, and model successful study habits and academic preparedness for students with whom they work. For Diamond Peer Teachers only.
**Repeatability:** This course may be repeated for additional credit.

MUSC 3386. Diamond Peer Teachers - Internship II. 1 Credit Hour.
The Diamond Peer Teachers Program provides students with a mentored university-level teaching experience in their major. Course requirements include participation in the three-day pre-semester Teaching Institute and regular participation in the Peer Teachers support group throughout the semester. Peer Teachers provide supplemental instruction in first- and second-year courses, promote student engagement, and model successful study habits and academic preparedness for students with whom they work. For Diamond Peer Teachers only.
**Repeatability:** This course may be repeated for additional credit.

MUSC 3401. Piano Concentration. 2 Credit Hours.
Weekly private lesson and regularly scheduled master classes with major teacher. With instructor's permission, student may present either half or full senior recital.
**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
**Repeatability:** This course may not be repeated for additional credits
**Pre-requisites:**
MUSC 2402|Minimum Grade of C-|May not be taken concurrently.
MUSC 3402. Piano Concentration. 2 Credit Hours.
Weekly private lesson and regularly scheduled master classes with major teacher. With instructor's permission, student may present either half or full senior recital.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUSC 3401|Minimum Grade of C-|May not be taken concurrently.

MUSC 3403. Piano Major. 4 Credit Hours.
Weekly private lesson and regularly scheduled master classes with major teacher. Culminates in full recital during final semester of study. Students are required to perform or teach private lessons outside the university, subject to availability and/or scheduling conflicts with other Boyer courses or obligations.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUSC 2404|Minimum Grade of C-|May not be taken concurrently.

MUSC 3404. Piano Major. 4 Credit Hours.
Weekly private lesson and regularly scheduled master classes with major teacher. Culminates in full recital during final semester of study. Students are required to perform or teach private lessons outside the university, subject to availability and/or scheduling conflicts with other Boyer courses or obligations.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUSC 3403|Minimum Grade of C-|May not be taken concurrently.

MUSC 3405. Secondary Piano for Music Majors. 1 Credit Hour.
Fulfills piano requirements for students in programs of study other than piano major or piano concentration.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUSC 2406|Minimum Grade of C-|May not be taken concurrently.

MUSC 3406. Secondary Piano for Music Majors. 1 Credit Hour.
Fulfills piano requirements for students in programs of study other than piano major or piano concentration.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUSC 3405|Minimum Grade of C-|May not be taken concurrently.

MUSC 3415. Pedagogy of Children. 2 Credit Hours.
A survey of available teaching methods and pedagogical approaches to be used with children in individual or group instruction, including an introduction to the basic Suzuki philosophy.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits.

MUSC 3416. Pedagogy of the College Non-Music Major. 2 Credit Hours.
Designed to prepare pianists to teach college students who are not music majors, either in groups or privately, by providing them with methods and materials of instruction, and understanding of group dynamics, and techniques for eliciting creative activities. NOTE: One hour practice teaching required.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits.

MUSC 3421. Suzuki for Pianists. 2 Credit Hours.
For experienced piano teachers as well as college-level piano students seeking in-depth knowledge of the Suzuki method.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits.

MUSC 3422. Keyboard Literature. 3 Credit Hours.
A survey of keyboard literature of various periods and styles. Performance and analysis.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits.

MUSC 3423. Keyboard Literature. 3 Credit Hours.
A survey of keyboard literature of various periods and styles. Performance and analysis.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits.
MUSC 3443. Listening & Learning Skills for Pianists I. 3 Credit Hours.
Basic techniques to improve sight reading, learning facility, and aural/tactile relationships at the keyboard.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits.

MUSC 3444. Listening & Learning Skills for Pianists II. 3 Credit Hours.
Advanced techniques to improve sight reading, learning facility, and aural/tactile relationships at the keyboard.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits.

MUSC 3451. Applied Lesson - Keyboard. 2 to 4 Credit Hours.
Additional applied keyboard lesson for music students. NOTE: Additional private lesson fee.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may be repeated for additional credit.

MUSC 3500. Collegiate Band. 0 to 1 Credit Hours.
Performance in all-University concert band.
Repeatability: This course may be repeated for additional credit.

MUSC 3501. Instrumental Concentration. 2 Credit Hours.
Weekly instrumental private lesson with major teacher.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUSC 2502|Minimum Grade of C-|May not be taken concurrently.

MUSC 3502. Instrumental Concentration. 2 Credit Hours.
Weekly instrumental private lesson with major teacher.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUSC 3501|Minimum Grade of C-|May not be taken concurrently.

MUSC 3503. Instrumental Major. 4 Credit Hours.
Weekly instrumental private lesson with major teacher. Open only to candidates for a Bachelor of Music degree with a major in instrumental performance. Weekly instrumental private lesson with major teacher. Students are required to perform or teach private lessons outside the university, subject to availability and/or scheduling conflicts with other Boyer courses or obligations. NOTE: This course is for majors only.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUSC 2504|Minimum Grade of C-|May not be taken concurrently.

MUSC 3504. Instrumental Major. 4 Credit Hours.
Weekly instrumental private lesson with major teacher. Open only to candidates for a Bachelor of Music degree with a major in instrumental performance. Weekly instrumental private lesson with major teacher. Students are required to perform or teach private lessons outside the university, subject to availability and/or scheduling conflicts with other Boyer courses or obligations. NOTE: This course is for majors only.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUSC 3503|Minimum Grade of C-|May not be taken concurrently.

MUSC 3510. Marching Band. 0 or 1 Credit Hours.
Performance in Temple University Marching Band at home university football games, select away trips, and other special events. NOTE: Attendance at pre-season band camp one week prior to the beginning of classes is required.
Repeatability: This course may be repeated for additional credit.

MUSC 3551. Applied Lesson - Instrumental. 2 to 4 Credit Hours.
Additional applied instrumental lessons for music students. NOTE: Additional private lesson fee.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may be repeated for additional credit.

MUSC 3561. Multi-Percussion in Orchestra. 1 to 2 Credit Hour.
Course will enable students to develop the complex skills necessary to perform multi-percussion and drum set parts in the symphony orchestra.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits.
MUSC 3571. International Exchange Applied Instrumental Lesson. 2 to 4 Credit Hours.
Weekly instrumental private lesson with major teacher. Open only to International Exchange students. Students are required to perform outside the university, subject to availability and/or scheduling conflicts with other Boyer courses or obligations.
Repeatability: This course may be repeated for additional credit.

MUSC 3572. International Exchange Applied Voice Lesson. 2 to 4 Credit Hours.
Weekly voice private lesson with major teacher. Open only to International Exchange students. Students are required to perform outside the university, subject to availability and/or scheduling conflicts with other Boyer courses or obligations.
Repeatability: This course may be repeated for additional credit.

MUSC 3573. International Exchange Large Ensemble. 1 Credit Hour.
Large ensemble with scheduled rehearsals and public performances. May include: symphony orchestra, wind symphony, symphonic band, choral ensembles, jazz band, and jazz lab band.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may be repeated for additional credit.

MUSC 3574. International Exchange Small Ensemble. 1 Credit Hour.
Small ensembles with scheduled rehearsals and public performances. May include: chamber ensembles, percussion ensemble, new music ensemble, choral ensembles, and jazz ensembles.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may be repeated for additional credit.

MUSC 3579. Orchestra Audition Prep. 1 Credit Hour.
Analysis of standard orchestral repertoire with emphasis upon the development of audition strategies and techniques.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may be repeated for additional credit.

MUSC 3603. Harpsichord Major. 4 Credit Hours.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUSC 2604|Minimum Grade of C-|May not be taken concurrently.

MUSC 3604. Harpsichord Major. 4 Credit Hours.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUSC 3403|Minimum Grade of C-|May not be taken concurrently.

MUSC 3611. Harpsichord for Pianists. 3 Credit Hours.
A practical introduction to performance on the harpsichord for pianists with little or no experience with historical keyboards. Topics include history, technique and repertoire from ca. 1500-present.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Performance
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits.

MUSC 4201. Voice Concentration. 2 Credit Hours.
Weekly private lesson and voice class with major teacher. Recital, partial or full, only with recommendation of voice faculty.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUSC 3202|Minimum Grade of C-|May not be taken concurrently.

MUSC 4202. Voice Concentration. 2 Credit Hours.
Weekly private lesson and voice class with major teacher. Recital, partial or full, only with recommendation of voice faculty.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUSC 4201|Minimum Grade of C-|May not be taken concurrently.
MUSC 4203. Voice Major. 3 Credit Hours.
Weekly private lesson and voice class with major teacher. Recital, partial or full, only with recommendation of voice faculty.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUSC 3204|Minimum Grade of C-|May not be taken concurrently.

MUSC 4223. Vocal Coaching. 1 Credit Hour.
Emphasis on style, diction, phrasing, and performance traditions. Preparation for senior recital. NOTE: Open only to Voice Majors. One hour per week.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Music
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits.
Pre-requisites:
MUSC 4223|Minimum Grade of C-|May not be taken concurrently.

MUSC 4224. Vocal Coaching. 1 Credit Hour.
Emphasis on style, diction, phrasing, and performance traditions. Preparation for senior recital. NOTE: Open only to Voice Majors. One hour per week.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Music
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits.
Pre-requisites:
MUSC 4223|Minimum Grade of C-|May not be taken concurrently.

MUSC 4225. Vocal Pedagogy. 2 Credit Hours.
Basic principles and techniques of training the solo voice. NOTE: Open only to Voice Majors.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Music
Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits.

MUSC 4226. Diction Skills. 1 Credit Hour.
Study of the phonetic rules and sounds of the classical pronunciations of Italian and French as found in Art Song and Opera. The International Phonetic Alphabet is utilized. NOTE: Singing is required.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits.
Pre-requisites:
MUSC 4226|Minimum Grade of C-|May not be taken concurrently.

MUSC 4227. Diction Skills. 1 Credit Hour.
Study of the phonetic rules and sounds of the classical pronunciations of French, Latin and German as found in Art Song and Opera. The International Phonetic Alphabet is utilized. NOTE: Singing is required.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUSC 4226|Minimum Grade of C-|May not be taken concurrently.

MUSC 4228. Opera Workshop. 3 Credit Hours.
Opera Workshop is designed to give singers the opportunity to develop and refine singing/acting skills through the study of operatic literature. NOTE: Open only to Voice Majors.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Music
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may be repeated for additional credit.

MUSC 4229. Opera Workshop. 2 Credit Hours.
Opera Workshop is designed to give singers the opportunity to develop and refine singing/acting skills through the study of operatic literature. NOTE: Open only to Voice Majors.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Music
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
MUSC 4228|Minimum Grade of C-|May not be taken concurrently.

MUSC 4233. Musical Theater: Dress Rehearsal. 2 Credit Hours.
The Musical Theater Concentration culminates in MUSC 4233, an intensive audition and performance seminar specially designed to prepare students for the rigorous demands of auditioning for and performing in professional musical theater. Throughout the semester, visiting guest professionals from Philadelphia and New York City provide valuable insight into the realities of acting in the musical theater as a profession.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Musical Theater
Repeatability: This course may not be repeated for additional credits.
MUSC 4258. Performing Musical Theater. 2 Credit Hours.
Music Theater Performance Class offers the student the opportunity to develop and refine singing/acting skills through the preparation and presentation of solos, duets, ensembles and dialogues from American Music Theater repertoire.

**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College

**Repeatability:** This course may be repeated for additional credit.

MUSC 4284. Voice Major. 3 Credit Hours.
Weekly private lesson and voice class with major teacher. Recital, partial or full, only with recommendation of voice faculty.

**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College

**Repeatability:** This course may be repeated for additional credit.

**Pre-requisites:**
MUSC 4203|Minimum Grade of C-|May not be taken concurrently.

MUSC 4296. Vocal Pedagogy. 3 Credit Hours.
Basic principles and techniques of training the solo voice with related writing assignments. NOTE: This is a writing-intensive course.

**Department restrictions:** Must be enrolled in one of the following Departments: Music:Voice & Opera

**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College

**Course Attributes:** WI

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
MUSC 3204|Minimum Grade of C-|May not be taken concurrently.

MUSC 4300. Concert Choir. 0 to 1 Credit Hours.
Auditions are held during the final week of fall semester for the spring semester, and at the end of spring semester and during August for fall semester. Auditions will be granted based on previous choral experience. Performance of a wide range of choral literature. NOTE: Active performance schedule on and off campus. Contact the office manager at 215-204-8304 for specific audition dates.

**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College

**Repeatability:** This course may be repeated for additional credit.

MUSC 4310. Graduate Conductors Choir. 0 to 1 Credit Hours.
Two hours of rehearsal each week; two performances each semester.

**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College

**Co-requisites:** MUSC 4300

**Repeatability:** This course may be repeated for additional credit.

MUSC 4323. Conducting (Choral). 2 Credit Hours.
Problems correlating vocal and choral idioms; analysis and interpretation of choral literature appropriate for use in school and community. NOTE: Although the conducting course sequence [Music 2323 (0123), Music 2324 (0124), Music 4323 (0330)] is intended primarily for music majors, it is possible for other students to enroll if they have evidence of a background in music theory.

**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
MUSC 2324|Minimum Grade of C-|May not be taken concurrently.

MUSC 4324. Conducting (Instrumental). 2 Credit Hours.
Advanced instrumental conducting techniques including asymmetrical time patterns, multi-meters, phrasing and rehearsal techniques. Instrumental score study and preparation. Conducting of band and orchestra repertoire of varying levels of difficulty with ensembles.

**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
MUSC 2324|Minimum Grade of C-|May not be taken concurrently.

MUSC 4352. Singing Owls Campus/Community Choir. 0 to 1 Credit Hours.
The Singing Owls is a chorus comprised of Temple University students and members of the Greater Philadelphia community, and is open to all without audition. The ensemble rehearsees once weekly and performs once per semester. Repertoire is varied and diverse. Members may elect to participate for Temple University academic credit or pay a nominal fee to join as a community member.

**Repeatability:** This course may be repeated for additional credit.

MUSC 4353. Teaching Choral Music. 2 Credit Hours.
For the prospective teacher of vocal music; practical solutions to problems of audition procedures, development of musical skills within the choral rehearsal, repertoire and programming, voice classes, performance planning and execution, the changing voice, etc. NOTE: Required of music education majors with concentrations in voice and keyboard instruments.

**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
MUSC 4323|Minimum Grade of C-|May not be taken concurrently.
MUSC 4401. Piano Concentration. 2 Credit Hours.
Weekly private lesson and regularly scheduled master classes with major teacher. With instructor’s permission, student may present either half or full senior recital.
**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
**Repeatability:** This course may not be repeated for additional credits
**Pre-requisites:**
MUSC 3402|Minimum Grade of C-|May not be taken concurrently.

MUSC 4402. Piano Concentration. 2 Credit Hours.
Weekly private lesson and regularly scheduled master classes with major teacher. With instructor’s permission, student may present either half or full senior recital.
**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
**Repeatability:** This course may not be repeated for additional credits
**Pre-requisites:**
MUSC 4401|Minimum Grade of C-|May not be taken concurrently.

MUSC 4403. Piano Major. 4 Credit Hours.
Weekly private lesson and regularly scheduled master classes with major teacher. Culminates in full recital during final semester of study. Students are required to perform or teach private lessons outside the university, subject to availability and/or scheduling conflicts with other Boyer courses or obligations.
**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
**Repeatability:** This course may not be repeated for additional credits
**Pre-requisites:**
MUSC 4404|Minimum Grade of C-|May not be taken concurrently.

MUSC 4431. Introduction to the Alexander Technique. 1 Credit Hour.
This course offers a basic understanding of the history and principles of the Alexander Technique. It is designed to enable the student to enhance expression and performance skills, prevent injuries, and develop healthy practice and rehearsal techniques. The technique offers a practical solution to on-going issues with pain and fatigue, effective expression and intonation, breath support and stage presence. The principles can be applied to all areas of creative expression, from instrumental, vocal and dance technique, to acting, writing, painting and sculpting.
**Repeatability:** This course may not be repeated for additional credits.

MUSC 4484. Piano Major. 4 Credit Hours.
Weekly private lesson and regularly scheduled master classes with major teacher. Culminates in full recital during final semester of study. Students are required to perform or teach private lessons outside the university, subject to availability and/or scheduling conflicts with other Boyer courses or obligations.
**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
**Repeatability:** This course may be repeated for additional credit.
**Pre-requisites:**
MUSC 4403|Minimum Grade of C-|May not be taken concurrently.

MUSC 4500. Instrumental Ensemble. 1 Credit Hour.
Large or small instrumental ensemble. Ensemble may include symphony orchestra, wind symphony, chamber music ensembles, percussion ensemble, brass ensembles, and other small instrumental ensembles.
**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
**Repeatability:** This course may be repeated for additional credit.

MUSC 4501. Instrumental Concentration. 2 Credit Hours.
Weekly instrumental private lesson with major teacher for music education/jazz and jazz arranging curricula.
**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
**Repeatability:** This course may not be repeated for additional credits
**Pre-requisites:**
MUSC 3502|Minimum Grade of C-|May not be taken concurrently.

MUSC 4502. Instrumental Concentration. 2 Credit Hours.
Weekly instrumental private lesson with major teacher for music education/jazz and jazz arranging curricula. With instructor’s permission, student may present either half or full recital during this final semester of study.
**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
**Repeatability:** This course may not be repeated for additional credits
**Pre-requisites:**
MUSC 4501|Minimum Grade of C-|May not be taken concurrently.
MUSC 4503. Instrumental Major. 4 Credit Hours.
Weekly instrumental private lesson with major teacher. Open only to candidates for a Bachelor of Music degree with a major in instrumental performance. Weekly instrumental private lesson with major teacher. Students are required to perform or teach private lessons outside the university, subject to availability and/or scheduling conflicts with other Boyer courses or obligations. NOTE: This course is for majors only.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Music
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUSC 3504|Minimum Grade of C-|May not be taken concurrently.

MUSC 4510. Instrumental Ensemble. 1 Credit Hour.
Large or small instrumental ensemble. Ensemble may include symphony orchestra, wind symphony, chamber music ensembles, percussion ensemble, brass ensembles, and other small instrumental ensembles.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may be repeated for additional credit.

MUSC 4520. Ensemble. 1 Credit Hour.
To be used only when student is taking more than two ensembles of the same number and/or type. NOTE: Section 002 for jazz emphasis.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may be repeated for additional credit.

MUSC 4539. Instrumental Conducting Seminar: Score Analysis, Programming & Interpretation of Wind Ensemble Lit. 2 Credit Hours.
Focus on score study, programming, rehearsal techniques and advancement of personal interpretation specifically related to the wind ensemble and its literature.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
MUSC 4323|Minimum Grade of C-|May not be taken concurrently
OR MUSC 4324|Minimum Grade of C-|May not be taken concurrently.

MUSC 4541. History of Wind & Brass Chamber Music. 2 Credit Hours.
Traces the development of small wind and brass chamber ensembles from circa 1000 to the present. Examines quintets, the Vienna octet school, harmoniemusik, and works for various combinations of instruments with emphasis on their literature.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits.

MUSC 4544. Wind Repertory in History: European Antiquity through the 21st Century. 2 Credit Hours.
This course will survey the development and repertory of wind-band music from European Antiquity through the present day. Course topics will include the examination and analysis of the development of instruments, cornerstone pieces in each period, performance practice considerations, commissioning projects, current state of wind-band performance opportunities, varied styles of concert programming, audio identification, and developing strategies to determine quality repertory for the medium.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
MUSC 3201|Minimum Grade of C-|May not be taken concurrently
OR MUSC 3203|Minimum Grade of C-|May not be taken concurrently
OR MUSC 3401|Minimum Grade of C-|May not be taken concurrently
OR MUSC 3403|Minimum Grade of C-|May not be taken concurrently
OR MUSC 3501|Minimum Grade of C-|May not be taken concurrently
OR MUSC 3503|Minimum Grade of C-|May not be taken concurrently.

MUSC 4552. Samba Owls. 1 Credit Hour.
A fun, high-energy musical ensemble exploring the rhythms, sounds, and movement of Brazil's samba schools. Participants will learn actively as a performing member of a <i>batucada</i>, the traditional percussion ensemble of the samba groups. Students are involved in rhythm, drumming, movement, and singing/vocalization. There are no musical prerequisites - anyone is welcome to join.
Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate
Repeatability: This course may be repeated for additional credit.

MUSC 4556. Afro-Cuban Percussion Techniques. 2 Credit Hours.
A practical study in the musical language and percussive traditions of Afro-Cuban and Latin American music. The goal is to equip the learner with greater knowledge, understanding, and practical performance skills with regard to percussion instruments of the Afro-Cuban musical traditions. Students will engage in group performance and improvisation and will hone ensemble and presentation skills. The course experience is largely a "hands-on" lab; therefore, students are required to attend the weekly meetings.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may be repeated for additional credit.
MUSC 4560. Seminar in Guitar Performance and Literature. 1 to 2 Credit Hour.
Exploration of issues related to performance. Analysis of representative works. Attention to problems of transcription and performance practice.
Performance of representative guitar chamber and ensemble literature.
**College Restrictions**: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
**Repeatability**: This course may be repeated for additional credit.

MUSC 4561. Percussion Pedagogy. 2 to 3 Credit Hours.
Course designed to enable students to develop the necessary knowledge and skills to make intelligent and informed decisions about the teaching of percussion instruments. Students will analyze, compare and critique curricula, teaching modalities, performance practices, methods, materials, and literature.
**College Restrictions**: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
**Repeatability**: This course may not be repeated for additional credits
**Pre-requisites**:
MUSC 1651|Minimum Grade of C-|May not be taken concurrently.

MUSC 4563. Upper String Pedagogy. 2 Credit Hours.
Problems and teaching techniques; solo and ensemble literature; available teaching materials at beginning through advanced levels.
**College Restrictions**: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
**Repeatability**: This course may not be repeated for additional credits.

MUSC 4567. Viola for Violinists. 1 Credit Hour.
Performance-oriented course for violin performance majors or music education majors whose main instrument is violin. Focus is on the differences between violin playing and viola playing, including clef reading, vibrato, and bowing techniques. Orchestral excerpts, short solos, and chamber music from the baroque to the present are performed in class. Students are asked to bring their own viola if possible.
**College Restrictions**: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
**Repeatability**: This course may not be repeated for additional credits.

MUSC 4570. Orchestral Repertoire. 1 to 2 Credit Hour.
Reading workshop to acquaint players with standard orchestral repertoire and playing techniques. NOTE: Separate sections offered for woodwinds, brasses, and string instruments.
**College Restrictions**: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
**Repeatability**: This course may be repeated for additional credit.

MUSC 4584. Instrumental Major. 4 Credit Hours.
Weekly instrumental private lesson with major teacher. Student is required to present a full recital during this semester of study. Open only to candidates for a Bachelor of Music degree with a major in instrumental performance. Weekly instrumental private lesson with major teacher. Students are required to perform or teach private lessons outside the university, subject to availability and/or scheduling conflicts with other Boyer courses. NOTE: This course is for majors only.
**Field of Study Restrictions**: Must be enrolled in one of the following Majors: Music
**College Restrictions**: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
**Repeatability**: This course may be repeated for additional credit.
**Pre-requisites**:
MUSC 4503|Minimum Grade of C-|May not be taken concurrently.

MUSC 4603. Harpsichord Major. 4 Credit Hours.
**College Restrictions**: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
**Repeatability**: This course may not be repeated for additional credits
**Pre-requisites**:
MUSC 3604|Minimum Grade of C-|May not be taken concurrently.

MUSC 4684. Harpsichord Major. 4 Credit Hours.
**College Restrictions**: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
**Repeatability**: This course may be repeated for additional credit.
**Pre-requisites**:
MUSC 4603|Minimum Grade of C-|May not be taken concurrently.

Music Education (MUED)
Courses

MUED 1651. Percussion. 1 Credit Hour.
Methods for teaching percussion skills to students in a school setting. Topics may include but are not limited to: literature selection, various instrument performance idiosyncrasies, hand position and posture, maintenance, repair, proactive teaching and troubleshooting, methods and materials; instrument makes, accessories. Students are required to develop a fundamental playing knowledge of instruments and literature. NOTE: Required of all music education majors.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Music Education
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Repeatability: This course may not be repeated for additional credits.

MUED 1652. Woodwinds I. 1 Credit Hour.
Methods for teaching woodwind skills to students in a school setting. Topics may include but are not limited to: literature selection, instrument assembly, hand position and posture, maintenance, assembling, embouchure, tone production, transposition, fingerings, range; proactive teaching and troubleshooting, methods and materials; instrument makes, and accessories. Students are required to develop a fundamental playing knowledge of instruments. NOTE: Required of all music education majors.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Music Education
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Repeatability: This course may not be repeated for additional credits.

MUED 1653. Upper Strings. 1 Credit Hour.
Students with voice, piano, or guitar performance concentration may take either Music Education 1653 (0052) or Music Education 1654 (0053) [Music Education 1653 (0052) is recommended]. Methods for teaching string skills to students in a school setting. Topics may include but are not limited to: literature selection, fingering and bowing patterns, shifting, vibrato, hand position and posture, maintenance, tone production, proactive teaching and troubleshooting, methods and materials; instrument makes, and accessories. Students are required to develop a fundamental playing knowledge of instruments. NOTE: Required of all music education majors with band or orchestra emphasis.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Music Education
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Repeatability: This course may not be repeated for additional credits.

MUED 1654. Lower Strings. 1 Credit Hour.
Students with voice, piano, or guitar performance concentration may take either Music Education 1653 (0052) or Music Education 1654 (0053) [Music Education 1653 (0052) is recommended]. Methods for teaching string skills to students in a school setting. Topics may include but are not limited to: literature selection, fingering and bowing patterns, shifting, vibrato, hand position and posture, maintenance, tone production, proactive teaching and troubleshooting, methods and materials; instrument makes, accessories. Students are required to develop a fundamental playing knowledge of instruments. NOTE: Required of all music education majors with band or orchestra emphasis.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Music Education
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Repeatability: This course may not be repeated for additional credits.

MUED 1655. Brass I. 1 Credit Hour.
Methods for teaching brass skills to students in a school setting. Topics may include but are not limited to: literature selection, instrument assembly, hand position and posture, maintenance, embouchure, tone production, transposition, fingerings, range; proactive teaching and troubleshooting, methods and materials; instrument makes, accessories, and repairs. Students are required to develop a fundamental playing knowledge of instruments. NOTE: Required of all music education majors.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Music Education
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Repeatability: This course may not be repeated for additional credits.

MUED 1656. Brass II. 1 Credit Hour.
Advanced methods for teaching brass skills to students in a school setting. Topics may include but are not limited to: literature selection, instrument assembly, hand position and posture, maintenance, embouchure, tone production, transposition, fingerings, range; proactive teaching and troubleshooting, methods and materials; instrument makes, accessories, and repairs. Students are required to develop a fundamental playing knowledge of instruments. NOTE: Required of all music education majors.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Music Education
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Repeatability: This course may not be repeated for additional credits.
MUED 1657. Woodwinds II. 1 Credit Hour.
Methods for teaching double reed skills to students in a school setting. Topics may include but are not limited to: literature selection, instrument assembly, hand position and posture, maintenance, embouchure, tone production, transposition, fingerings, range; proactive teaching and troubleshooting, methods and materials; instrument makes, and accessories. Students are required to develop a fundamental playing knowledge of instruments. NOTE: Required of all music education majors.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Music Education
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Repeatability: This course may not be repeated for additional credits.

MUED 1658. Guitar I. 1 Credit Hour.
Carefully sequenced developmental technical exercises designed to achieve competency with basic chord formations in all keys.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits.

MUED 1659. Guitar II. 1 Credit Hour.
A continuation of Music Education 1658 (0058) in which skills are further developed to include positions and more advanced folk and popular accompaniment techniques.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUED 1658|Minimum Grade of C-|May not be taken concurrently.

MUED 1671. Collaboration & Creativity in the New Music Community. 3 Credit Hours.
This is an experiential course for students in the major. Its focus is on teaching music as a collaborative pursuit involving free and creative personal expression among all people in learning communities. Topics will include (but not be limited to) awareness and development of community music, roles of music industry and music institutions as resources in music instruction, organizing and leading collaborative musical experiences, social and cultural aspects of music involvement, the value of informal music making, improvisation, and composing. NOTE: This course is for majors only.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Music Education
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(MUED 2665|Minimum Grade of C-|May not be taken concurrently)
AND MUED 2696|Minimum Grade of C-|May not be taken concurrently
AND MUED 3661|Minimum Grade of C-|May not be taken concurrently
AND MUED 4666|Minimum Grade of C-|May not be taken concurrently.

MUED 2665. Music Learning & Development. 3 Credit Hours.
Understanding how learners develop and how individual learners’ needs affect music learning can inform teachers how to teach. In this course, preservice music teachers study music development from the learners’ perspective and begin to process ways in which music learning theories, approaches, processes, and methods can guide learners’ development. NOTE: Includes field observations. This course is for majors only.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Music Education
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(MUED 3661|Minimum Grade of C-|May not be taken concurrently)
AND MUED 4666|Minimum Grade of C-|May not be taken concurrently.

MUED 2671. School Choral Ensembles. 2 Credit Hours.
In this course, preservice music teachers increase their understanding of vocal development, inclusive vocal settings, diverse music repertoire and transfer of music across in-school and out-of-school settings. Preservice music teachers consider a variety of approaches to ensemble formations (e.g.: non-select/select-implications of inclusion/exclusion; curricular/extra-curricular) and ways in which types of school ensembles (e.g.: Jazz, Show Choir, Barbershop, Gospel, Women's Chorus, Men's Chorus, Mixed Chorus) have traditionally been established and maintained. Contemporary research and practice, with implications for new types of vocal and choral ensembles in Pre-K-12 school settings, also will be considered. Emphasis is on building a course of study for choral music in schools. NOTE: Special authorization only. In-class performances and peer evaluations, and observations (in-class) required. This course is for majors only.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Music Education
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Repeatability: This course may not be repeated for additional credits.
MUED 2672. Diction Using Choral Repertoire. 2 Credit Hours.
Orientation to the International Phonetic Alphabet and its application to literature appropriate for solo and choral literature in English, Italian, German, and French. NOTE: Special authorization only. In-class performances of literature in the language required. This course is for majors only.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Music Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Repeatability: This course may not be repeated for additional credits.

MUED 2673. Jazz Education - Instrumental. 2 Credit Hours.
This course surveys strategies for the development of the instrumental jazz ensemble in secondary school settings. Topics will include (but not be limited to): instrumentation, rehearsal techniques, literature, listening, improvisation, styles, rhythm, articulation, rhythm section, and programming. NOTE: Special authorization only. Required of all music education majors with band or orchestra emphasis.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Music Education
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Repeatability: This course may not be repeated for additional credits.

MUED 2674. Jazz Education - Vocal. 2 Credit Hours.
This course surveys strategies for the development of the vocal jazz ensemble in secondary school settings. Topics will include (but not be limited to): Swing and show choirs, balancing voices, rehearsal techniques, literature, listening, improvisation, styles, rhythm, articulation, rhythm section, and programming. NOTE: Special authorization only; required for all music education majors with choral or general emphasis.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Music Education
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Repeatability: This course may not be repeated for additional credits.

MUED 2675. Inclusive Vocal Development: Pre-Kindergarten - Secondary. 2 Credit Hours.
In this course, preservice music teachers learn to guide their future students through stages of vocal development. Emphases include presentation of an exemplary vocal model for one's students, voice care for choral musicians and teachers, and considerations for selecting repertoire appropriate for Pre-Kindergarten, elementary, and secondary school choral musicians. NOTE: Special authorization only. In-class performances and peer evaluations, and observations (in-class) required. This course is for majors only.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Music Education
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Repeatability: This course may not be repeated for additional credits.

MUED 2696. Teaching General Music to Inclusive Populations (TGMIP). 3 Credit Hours.
The principles, practices, and materials central to the general music program in elementary and secondary education. NOTE: Special authorization only. Required for all music education majors. Includes Field Experience.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Music Education
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Repeatability: This course may not be repeated for additional credits.

MUED 3385. Diamond Peer Teachers - Internship I. 1 Credit Hour.
The Diamond Peer Teachers Program provides students with a mentored university-level teaching experience in their major. Course requirements include participation in the three-day pre-semester Teaching Institute and regular participation in the Peer Teachers support group throughout the semester. Peer Teachers provide supplemental instruction in first- and second-year courses, promote student engagement, and model successful study habits and academic preparedness for students with whom they work. For Diamond Peer Teachers only.
Repeatability: This course may be repeated for additional credit.

MUED 3386. Diamond Peer Teachers - Internship II. 1 Credit Hour.
The Diamond Peer Teachers Program provides students with a mentored university-level teaching experience in their major. Course requirements include participation in the three-day pre-semester Teaching Institute and regular participation in the Peer Teachers support group throughout the semester. Peer Teachers provide supplemental instruction in first- and second-year courses, promote student engagement, and model successful study habits and academic preparedness for students with whom they work. For Diamond Peer Teachers only.
Repeatability: This course may be repeated for additional credit.
MUED 3631. Functional Voice I. 1 Credit Hour.
Students will learn how to use their voices appropriately and safely in clinical situations; how to sing standard clinical repertoire by memory. NOTE: A
two-semester sequence for Music Therapy majors.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits.

MUED 3632. Functional Voice II. 1 Credit Hour.
A continued development of skills learned in Functional Voice I, where students will learn techniques on eliciting singing responses from various client populations. NOTE: A two-semester sequence for Music Therapy majors.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUED 3631|Minimum Grade of C-|May not be taken concurrently.

MUED 3633. Functional Piano I. 1 Credit Hour.
Students will develop functional skills and repertoire for leading and accompanying vocal and instrumental activities in the music therapy setting.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits.

MUED 3634. Functional Piano II. 1 Credit Hour.
A continued development of skills learned in Functional Piano I, where students continue to learn functional skills for accompanying therapy sessions.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUED 3633|Minimum Grade of C-|May not be taken concurrently.

MUED 3635. Functional Guitar I. 1 Credit Hour.
Students will develop functional singing and accompanying skills on guitar using the music therapy song literature. Second semester is a continuation.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits.

MUED 3636. Functional Guitar II. 1 Credit Hour.
A continuation of skills learned in Functional Guitar I, where students continue to learn various techniques and accompanying skills on guitar.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUED 3635|Minimum Grade of C-|May not be taken concurrently.

MUED 3651. Music Education Lab Band. 0 or 1 Credit Hours.
This is an experiential course with a focus on concert band literature selection and rehearsal techniques appropriate for beginning and intermediate level ensembles. Students will participate through performance on primary and secondary instruments as well as conducting and rehearsing.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(MUED 2323|Minimum Grade of C-|May not be taken concurrently
AND MUED 2324|Minimum Grade of C-|May not be taken concurrently).

MUED 3661. Introduction to Teaching Students with Special Needs. 3 Credit Hours.
A foundation for understanding the characteristics of exceptional children and the implications of these characteristics to music education. A variety of music materials especially designed or adaptable for teaching music to handicapped children discussed in terms of their practical use for classroom instruction.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Repeatability: This course may not be repeated for additional credits.

MUED 3662. Keyboard Harmony - Music Education. 3 Credit Hours.
Skills development in use of the keyboard as a classroom tool. Focus on chord progressions, sequences, modulations, harmonizations of small forms, transposition, extemporization, score reading. NOTE: Special authorization only. Required for all music education majors.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Music Education
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUSC 2406|Minimum Grade of C-|May not be taken concurrently
OR MUST 2106|Minimum Grade of C-|May not be taken concurrently.
MUED 3680. Music Therapy: Special Topics. 2 Credit Hours.
An in-depth examination of a particular topic in Music Therapy practice, research or theory.
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
MUED 3689|Minimum Grade of C|May not be taken concurrently
OR MUED 3789|Minimum Grade of C|May not be taken concurrently
OR MUED 3889|Minimum Grade of C|May not be taken concurrently.

MUED 3689. Fieldwork in Music Therapy. 1 to 3 Credit Hour.
Supervised field placements where students learn how to plan and conduct music therapy sessions with different client populations.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may be repeated for additional credit.

MUED 3789. Fieldwork in Music Therapy II. 1 to 3 Credit Hour.
Supervised field placements where students learn how to plan and conduct music therapy sessions with different client populations.
Department restrictions: Must be enrolled in one of the following Departments: Music:Education
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may be repeated for additional credit.

MUED 3889. Fieldwork in Music Therapy III. 1 to 3 Credit Hour.
Supervised field placements where students learn how to plan and conduct music therapy sessions with different client populations.
Department restrictions: Must be enrolled in one of the following Departments: Music:Education
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may be repeated for additional credit.

MUED 4611. Music Therapy Overview. 3 Credit Hours.
An introduction to music therapy theory and practice. Clinical case studies will be used to illustrate general principles of assessment, goal planning, treatment and evaluation.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits.

MUED 4613. Music Therapy Foundations. 3 Credit Hours.
An examination of philosophical, psychological, biological and sociological foundations for the use of music as therapy.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits.

MUED 4614. Psychiatric Music Therapy. 3 Credit Hours.
An examination of music therapy practice with psychiatric populations (e.g., schizophrenia, affective disorders, PTSD), with laboratory training in how to design and implement music experiences to meet therapeutic goals.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits.

MUED 4615. Rehabilitative Music Therapy. 3 Credit Hours.
A survey of music therapy literature based on physical rehabilitation (e.g., brain injury, stroke, cerebral palsy, neuromotor disease), with laboratory training in how to design and implement music experiences to meet therapeutic goals.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits.

MUED 4616. Developmental Music Therapy. 3 Credit Hours.
An examination of music therapy methods used with children who have developmental problems (e.g., mental retardation, learning disabilities, behavior problems, sensory disorders) with laboratory training in how to design and implement music experiences to meet therapeutic needs.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits.

MUED 4617. Medical Music Therapy. 3 Credit Hours.
A survey of music therapy literature based on medical applications (e.g., general hospital, surgery, chronic and terminal illness), with laboratory training in how to design and implement music experiences to meet therapeutic goals. NOTE: This course is for majors only.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Music Education
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits.

MUED 4618. Music Therapy Ethics. 1 to 2 Credit Hour.
An examination of ethical issues in music therapy practice, research, education, and supervision.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may be repeated for additional credit.
MUED 4619. Medical/Rehabilitative Music Therapy. 3 Credit Hours.
An examination of music therapy treatment in physical rehabilitation treatment (e.g., brain injury, stroke, cerebral palsy, neuromotor disease) and medical issues (surgery, diabetes, cancer, AIDS) with laboratory training in how to design and implement music experiences to meet therapeutic goals. NOTE: This course is for majors only.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Music Education
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits.

MUED 4641. Music Therapy Experiences I: Creative Methods. 1 Credit Hour.
Students experience creative methods of Music Therapy and explore their therapeutic potential. NOTE: This course is for majors only.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Music Education
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits.

MUED 4642. Music Therapy Experiences II: Recreational Methods. 1 Credit Hour.
Students experience recreational methods of Music Therapy and explore their therapeutic potential. NOTE: This course is for majors only.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Music Education
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits.

MUED 4643. Music Therapy Experiences III: Receptive Methods. 1 Credit Hour.
Students experience receptive methods of Music Therapy and explore their therapeutic potential. NOTE: This course is for majors only.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Music Education
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits.

MUED 4646. Music Therapy Research. 3 Credit Hours.
A survey of music therapy research provides a foundation for developing skills in formulating research questions, reviewing the literature, designing a study, analyzing and interpreting data, and writing reports. Ethical issues are considered.
Department restrictions: Must be enrolled in one of the following Departments: Music:Education
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits.

MUED 4652. Night Owls Campus/Community Band. 0 or 1 Credit Hours.
The Night Owls Campus/Community Band is a large concert wind band that is comprised of Temple University students (majors and non-majors) and community members from the Greater Philadelphia area. No audition is required for membership. The ensemble meets one evening per week, totaling two hours of rehearsal, and performs a concert at the end of each semester. Repertory performed includes standard wind literature and crowd-pleasing favorites. Members may elect to participate for Temple University academic credit or pay a nominal fee to join as a community member (course credit is not transcripted in the latter choice). NOTE: Ability to read music is required; personally owned instrument or rental needed.
Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate
Repeatability: This course may be repeated for additional credit.

MUED 4661. Curricular Options in Secondary School Music. 3 Credit Hours.
Training in effective and ethical music teaching, pedagogy, systematic observation skills, classroom management, and diverse populations. Classroom activities and assignments call on the synthesis of musical knowledge and skills acquired throughout the degree program in preparation for a successful Student Teaching experience.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUED 2665|Minimum Grade of C-|May not be taken concurrently.

MUED 4663. Interactive Multimedia I. 3 Credit Hours.
This course is designed to teach students how to create interactive multimedia applications using authoring software, multimedia hardware, and multimedia elements such as sound files, digital video, standard MIDI files, and clip art. Students will complete a final project demonstrating their ability to effectively use the hardware and software in creating a useful interactive multimedia application for education.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits.

MUED 4664. Interactive Multimedia II. 3 Credit Hours.
Students will be able to create multimedia objects using graphics, digital audio, digital video, and MIDI hardware and software. Each student will complete a final project demonstrating his or her ability to effectively use multimedia hardware and software in creating a useful application for education. The final project will be deployed on the World Wide Web.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUED 4663|Minimum Grade of C-|May not be taken concurrently.
MUED 4666. Assessment of Music Learning. 3 Credit Hours.
Students learn to measure music learning (achievement), skill-based and cognitive-based, and to measure music potential (aptitude) across a range of ages. They write achievement tests, which they evaluate subjectively and statistically, and learn to evaluate the quality and appropriateness of standardized tests of music achievement and music aptitude. NOTE: Special authorization only. Required for all music education majors.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Music Education
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Repeatability: This course may not be repeated for additional credits.

MUED 4667. Teaching Instrumental Music to Inclusive Populations. 3 Credit Hours.
For the prospective teacher of instrumental music in the elementary and secondary schools. A synthesis of all previous work in instrumental music courses. Emphasis on efficient rehearsal and teaching techniques for small and large group settings; developing musical and technical skills of instrumental music students; recruiting; repertoire; programming; performance issues; evaluation; administration. NOTE: Required of music education majors.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(MUED 1651|Minimum Grade of C-|May not be taken concurrently
AND MUED 1652|Minimum Grade of C-|May not be taken concurrently
AND MUED 1653|Minimum Grade of C-|May not be taken concurrently
AND MUED 1654|Minimum Grade of C-|May not be taken concurrently
AND MUED 1655|Minimum Grade of C-|May not be taken concurrently
AND MUED 1656|Minimum Grade of C-|May not be taken concurrently
AND MUED 1657|Minimum Grade of C-|May not be taken concurrently
AND MUED 2665|Minimum Grade of C-|May not be taken concurrently).

MUED 4668. Senior Student Teaching Seminar. 1 to 3 Credit Hour.
Seminar for senior music education majors enrolled in Music Education 4689 (0351) and/or Music Education 4789 (0352). NOTE: Special authorization only.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Music Education
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Repeatability: This course may not be repeated for additional credits.

MUED 4669. Teaching Choral Music to Inclusive Populations. 2 to 3 Credit Hours.
For the prospective teacher of vocal music; practical solutions to problems of audition procedures, development of musical skills within the choral rehearsal, repertoire and programming, voice classes, performance planning and execution, the changing voice, and needs of special learners. NOTE: Required for all music education majors.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(MUED 2665|Minimum Grade of C-|May not be taken concurrently
AND MUED 3661|Minimum Grade of C-|May not be taken concurrently
AND MUED 4666|Minimum Grade of C-|May not be taken concurrently).

MUED 4670. Special Problems in Music Education. 1 to 4 Credit Hour.
Registration by special course authorization. NOTE: Arranged by semester, please consult with the instructor.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Repeatability: This course may be repeated for additional credit.

MUED 4680. Music Therapy: Special Topics. 1 to 4 Credit Hour.
An in-depth examination of a particular topic in Music Therapy practice, research, or theory.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Music Therapy, Music Therapy Jazz
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may be repeated for additional credit.

MUED 4685. Music Therapy Clinical Internship. 1 to 6 Credit Hour.
Academic supervision of clinical experiences in music therapy with various client populations. NOTE: Weekly seminars with other interns are required. This course is for majors only.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Music Therapy, Music Therapy Jazz
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may be repeated for additional credit.
MUED 4689. Student Teaching-Elementary. 3 Credit Hours.
Field experience in elementary grades for senior music education majors. NOTE: Special authorization only.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Music Education
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Repeatability: This course may be repeated for additional credit.

MUED 4696. Music Therapy Research. 3 Credit Hours.
A survey of music therapy research provides a foundation for developing skills in formulating research questions, reviewing the literature, designing a study, analyzing and interpreting data, and writing reports. Ethical issues are considered.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

MUED 4697. Music Therapy Foundations. 3 Credit Hours.
This writing intensive course involves a critical examination of music therapy theory, focusing on philosophical, psychological, biological, and socio-cultural foundations for the practice of music therapy.
Department restrictions: Must be enrolled in one of the following Departments: Music:Education
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(MUED 3689|Minimum Grade of C|May not be taken concurrently
AND MUED 3789|Minimum Grade of C|May not be taken concurrently
AND MUED 3889|Minimum Grade of C|May not be taken concurrently
AND MUED 4611|Minimum Grade of C|May not be taken concurrently
AND MUED 4614|Minimum Grade of C|May not be taken concurrently
AND MUED 4616|Minimum Grade of C|May not be taken concurrently
AND MUED 4619|Minimum Grade of C|May not be taken concurrently).

MUED 4789. Student Teaching - Secondary. 3 Credit Hours.
Field experience in secondary grades for senior music education majors.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Music Education
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Repeatability: This course may be repeated for additional credit.

Music Studies (MUST)

Courses

MUST 0802. The Art of Listening. 4 Credit Hours.
Are you an active or passive listener? What kind of music do you enjoy? How do you compare different musical styles, and what qualities make one performance different from another? Be challenged to rethink your entire conception of music by focusing on how to listen to music to deepen your appreciation of what you are hearing, and to ponder the importance of music in your life and to society. You will not be required to become a performer yourself, but you will become a more discriminating consumer of music through attendance at live concerts in the local area, by observation of in-class performances, rehearsals, and music lessons, and through guided listening exercises in and outside of class. Repertoire selected from Classical, Jazz, Broadway, and World Music will engage your intellectual and emotional response as a concert-goer, listener, researcher, critic, and communicator.
NOTE: This course fulfills the Arts (GA) requirement for students under GenEd and Arts (AR) for students under Core. Students cannot receive credit for this course if they have successfully completed MUST 0902.
Course Attributes: GA
Repeatability: This course may not be repeated for additional credits.

MUST 0804. Shakespeare and Music. 3 Credit Hours.
What is it about the Bard of Stratford-on-Avon? From the concert hall to the stage and silver screen, no other author's works have inspired more adaptations than those of William Shakespeare. In this new century, as the "cult of originality" continues to grow at an exponential rate and celebrity is sought as an end in itself (see Hilton, Paris), why have the works of a man whose very identity is shrouded in mystery remained so popular? This course will explore "Macbeth," "A Midsummer Night's Dream" and "Romeo and Juliet," and their adaptation by composers and choreographers. Students will then get a chance to "bend the Bard" on their own! NOTE: This course fulfills the Arts (GA) requirement for students under GenEd and Arts (AR) for students under Core.
Course Attributes: GA
Repeatability: This course may not be repeated for additional credits.
MUST 0809. World Musics & Cultures. 3 Credit Hours.
Have you ever wondered why musical compositions from different parts of the world sound so dissimilar? Why does Japanese music employ silence as a structural element and Chinese melodies use only five notes? Discover how an artist's creative imagination is molded by the cultural values of the society at large. Listen to guest musicians demonstrate different styles of playing and attend a live concert. Examine folk, art and popular music from around the world and discuss the wonderful and strange sounds that are produced. NOTE: This course fulfills the Arts (GA) requirement for students under GenEd and Arts (AR) for students under Core. Students cannot receive credit for this course if they have successfully completed MUST 0809.  
**Course Attributes:** GA  
**Repeatability:** This course may not be repeated for additional credits.

MUST 0812. Exploring Music. 3 Credit Hours.
Why do we enjoy listening to music? Besides our own enjoyment of it, what is the purpose of music---not only for us today, but also throughout history? What is so important to humans about music that it exists in every culture on earth, regardless of time or place? How has Western music developed over the centuries? What does music tell us about ourselves? What words should you use to describe the music you are hearing? Explore these and other questions while you are actively involved, participating in listening exercises, viewing video recordings of concerts, operas, ballets, films, and staged productions, and attending at least one live concert. NOTE: This course fulfills the Arts (GA) requirement for students under GenEd and Arts (AR) for students under Core.

**Course Attributes:** GA
**Repeatability:** This course may not be repeated for additional credits.

MUST 0902. Honors: The Art of Listening. 4 Credit Hours.
Are you an active or passive listener? What kind of music do you enjoy? How do you compare different musical styles, and what qualities make one performance different from another? Be challenged to rethink your entire conception of music by focusing on how to listen to music to deepen your appreciation of what you are hearing, and to ponder the importance of music in your life and to society. You will not be required to become a performer yourself, but you will become a more discriminating consumer of music through attendance at live concerts in the local area, by observation of in-class performances, rehearsals, and music lessons, and through guided listening exercises in and outside of class. Repertoire selected from Classical, Jazz, Broadway, and World Music will engage your intellectual and emotional response as a concert-goer, listener, researcher, critic, and communicator. (This is an Honors course.) NOTE: This course fulfills the Arts (GA) requirement for students under GenEd and Arts (AR) for students under Core. Students cannot receive credit for this course if they have successfully completed MUST 0802.

**Cohort Restrictions:** Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
**Course Attributes:** GA, HO
**Repeatability:** This course may not be repeated for additional credits.

MUST 0909. Honors World Musics & Cultures. 3 Credit Hours.
Have you ever wondered why musical compositions from different parts of the world sound so dissimilar? Why does Japanese music employ silence as a structural element and Chinese melodies use only five notes? Discover how an artist's creative imagination is molded by the cultural values of the society at large. Listen to guest musicians demonstrate different styles of playing and attend a live concert. Examine folk, art and popular music from around the world and discuss the wonderful and strange sounds that are produced. (This is an Honors course.) NOTE: This course fulfills the Arts (GA) requirement for students under GenEd and Arts (AR) for students under Core. Students cannot receive credit for this course if they have successfully completed MUST 0809.

**Cohort Restrictions:** Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
**Course Attributes:** GA, HO
**Repeatability:** This course may not be repeated for additional credits.

MUST 1045. Introduction to Music Theory and Literature. 2 Credit Hours.
Introduction to basic theoretical concepts of music. A wide range of musical compositions, drawn from different musical cultures and various periods of music history.

**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
**Repeatability:** This course may not be repeated for additional credits.

MUST 1106. Jazz Secondary Piano. 1 Credit Hour.
Introduction to voicing techniques, sight reading, comping, improvisation, and advanced jazz voicings

**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
**Repeatability:** This course may not be repeated for additional credits.

**Pre-requisites:**
MUSC 1405|Minimum Grade of C-|May not be taken concurrently.

MUST 1118. Business of Music I. 2 Credit Hours.
Business fundamentals for the Performing Artist.

**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
**Repeatability:** This course may not be repeated for additional credits.
MUST 1132. Aural Skills II Jazz. 2 Credit Hours.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits.

MUST 1133. Harmony I: Jazz. 3 Credit Hours.
Basic jazz theory with emphasis upon standard melodic and harmonic structures in jazz practice, diatonic intervals, seventh chords, modulation, inversions, secondary dominant chords, tritone substitutions, melodic and harmonic analysis. 
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits

MUST 1134. Harmony II: Jazz. 4 Credit Hours.
Intermediate jazz theory with emphasis upon intermediate rhythmic and melodic transcription, chord-scale relationship, harmonic analysis, extended voicings, modal harmony.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUST 1133|Minimum Grade of C-|May not be taken concurrently.

MUST 1701. Music Theory for Non-Music Majors. 2 Credit Hours.
Basic musical theory. Basic scales, intervals, rhythm and chord structures, simple harmonization, rudimentary aural theory. Some previous training is helpful, but not necessary. NOTE: For non-music majors.
Repeatability: This course may not be repeated for additional credits.

MUST 1702. Introduction to Music. 1 Credit Hour.
A companion course to Music Studies 1761 (C061) for first-term freshmen. This course provides guidance with the assignments of the core course. Emphasis is on reading, listening, speaking, and writing within the context of the core course. Assistance is also given in the continued development of English-language skills, especially academic reading and the acquisition of a general academic vocabulary. NOTE: Offered at Temple University Japan only.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUST 1701|Minimum Grade of C-|May not be taken concurrently.

MUST 1703. Introduction to World Music. 3 Credit Hours.
Exposes students to the diversity of music cultures existing in the world today and also to the particular instruments, genres, and musical contexts with which they are associated. Students become acquainted with research topics of interest to ethnomusicologists in recent years. NOTE: (1) Open to non-music majors only. No prior musical experience or coursework is necessary. (2) This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for information. In addition to meeting the university Core International Studies requirement, this course meets the Non-Western/Third World IS requirement for Communication Sciences majors. Please note the recent update to the Core IS requirement at www.temple.edu/vpus/resources/coreupdates.htm#coreisupdate.
Course Attributes: IS
Repeatability: This course may not be repeated for additional credits.

MUST 1704. Music in American Society. 3 Credit Hours.
Using a historical framework, this course will survey various styles of music found in the United States. Folk, fine art, and popular music examples will be examined on the basis of their intrinsic qualities, as well as in connection with their social, economic, and political milieu. Issues of racism in American society's musical life will be an ongoing theme. NOTE: (1) No prior musical experience or course work is necessary. (2) This course can be used to satisfy the university Core American Culture (AC) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: AC
Repeatability: This course may not be repeated for additional credits.

MUST 1705. Music Theory for Non-Music Majors II. 3 Credit Hours.
"Music Theory for Non-Majors II" is a continuation of "Music Theory for Non-Majors I." It is a partly theoretical, partly skills-based approach to learning the basics of music theory. In addition to covering more advanced rudiments (all diatonic 7th chords, all common types of cadences and phrase structures, simple chromaticism, larger forms, etc.), students will complete counterpoint and part-writing exercises, do rhythmic and solfege exercises in class and write short compositions. For the final exam, students will be expected to do some or all of the following: write a two-part melodic dictation; complete a simple harmonic dictation; sing melodies with solfege (prepared and at sight); analyze form (either aurally or visually); analyze phrase structures, cadences, Roman Numerals, and non-chord tones; realize a figured bass; and harmonize a soprano line (SATB).
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUST 1701|Minimum Grade of C-|May not be taken concurrently.
MUST 1711. Theory I. 4 Credit Hours.
Introduction to melody, modal counterpoint, all species of two-part writing and basic voice leading, along with simple diatonic harmony and figured bass. Exercises include writing original second parts to given melodies, four-part harmonization of diatonic melodies, and analysis of music literature excerpts. 
NOTE: (1) Special authorization required for non-music majors. (2) This course can be used to satisfy the university Core Arts (AR) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Music
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Course Attributes: AR
Repeatability: This course may not be repeated for additional credits.

MUST 1712. Theory II. 4 Credit Hours.
Continuation of the study of tonal harmony; introduction of chromaticism, diatonic modulation, and expanded forms such as sonata allegro and rondo through analysis of larger works and composition of short pieces. NOTE: Special authorization required for non-music majors. Section 005 - Jazz Majors only. Jazz Harmony I & Aural Skills I-- Basic jazz musicianship with emphasis upon sight-singing, interval recognition, jazz syncopation, triads, seventh and ninth chords, basic chord progressions, melodic and harmonic dictation.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Music
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Pre-requisites: 
MUST 1711|Minimum Grade of C-|May not be taken concurrently
OR MUST 3770|Minimum Grade of C-|May not be taken concurrently.

MUST 1741. Aural Theory I. 2 Credit Hours.
A basic course in the aural perception and singing of intervals, scales, and triads. Special attention to application of these concepts as well as other musical parameters in the aural perception of a wide variety of literature. NOTE: Remedial section available.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits.
Pre-requisites: MUST 1741|Minimum Grade of C-|May not be taken concurrently.

MUST 1742. Aural Theory II. 2 Credit Hours.
Further study of intervals, scales, and triads, with special attention given to tonal music; developing the power to visualize, sing, and write music from dictation.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites: MUST 1741|Minimum Grade of C-|May not be taken concurrently.

MUST 1758. Composition Lesson I. 3 Credit Hours.
Weekly composition lesson under supervision of the private teacher. The student is expected to create original work in acceptable professional notation. Works created during the semester will be reviewed by the composition faculty at the end of the term in a brief interview with the student.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits.
Pre-requisites: MUST 1758|Minimum Grade of C-|May not be taken concurrently.

MUST 1759. Composition Lesson II. 3 Credit Hours.
Weekly composition lesson under supervision of the private teacher. The student is expected to create original work in acceptable professional notation. Works created during the semester will be reviewed by the composition faculty at the end of the term in a brief interview with the student.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites: MUST 1758|Minimum Grade of C-|May not be taken concurrently.

MUST 1761. Introduction to Music. 3 Credit Hours.
An introduction to the elements of music and the evolution of musical styles in representative masterpieces from the baroque to the contemporary periods. To broaden knowledge of music and enhance listening enjoyment. NOTE: (1) For non-music majors. (2) This course can be used to satisfy the university Core Arts (AR) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: AR
Repeatability: This course may not be repeated for additional credits.

MUST 1763. American Popular Music. 2 Credit Hours.
Survey of all styles of twentieth century American Popular music. NOTE: For non-music majors.
Repeatability: This course may not be repeated for additional credits.
MUST 1912. Honors Theory II. 4 Credit Hours.
Continuation of the study of tonal harmony; introduction of chromaticism, diatonic modulation, and expanded forms such as sonata allegro and rondo through analysis of larger works and composition of short pieces. NOTE: This is an honors course.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUST 1911|Minimum Grade of C-|May not be taken concurrently.

MUST 1961. Honors Introduction to Music. 3 Credit Hours.
An introduction to the elements of music and the evolution of musical styles in representative masterpieces, from early music to the contemporary periods. The course is intended to broaden students' knowledge of music and to enhance listening enjoyment. NOTE: (1) This is an Honors course for non-music majors. (2) This course can be used to satisfy the university Core Arts (AR) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: AR, HO
Repeatability: This course may not be repeated for additional credits.

MUST 2105. Jazz Secondary Piano. 1 Credit Hour.
Continuation of voicing techniques, sight reading, comping, improvisation, and advanced jazz voicings.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUST 1106|Minimum Grade of C-|May not be taken concurrently.

MUST 2106. Jazz Secondary Piano. 1 Credit Hour.
Continuation of voicing techniques, sight reading, comping, improvisation, and advanced jazz voicings.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUST 2105|Minimum Grade of C-|May not be taken concurrently.

MUST 2111. Music in Advertising and Marketing. 2 Credit Hours.
The study of music as it relates to the advertising and marketing industries. Topics discussed will include composition and lyric writing for broadcast, advertising, marketing films and videos, and multi-image presentations. NOTE: Designed for music majors with a theory background.
Repeatability: This course may not be repeated for additional credits.

MUST 2112. Pop Song Writing. 2 Credit Hours.
Composing songs in pop idiom. Emphasis on chord progression, melody, and lyrics, as well as actual performance in class of student compositions. NOTE: A thorough understanding of jazz harmony is essential.
Repeatability: This course may not be repeated for additional credits.

MUST 2113. History of Pop. 3 Credit Hours.
Popular song styles of the 20th century from a variety of idioms: blues, folk, pop groups, rock, film, etc. Listening, analysis, and criticism.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits.

MUST 2114. History of Jazz. 3 Credit Hours.
Survey of jazz practice in the 20th century with emphasis upon the major styles and the major artists.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits.

MUST 2131. Aural Skills III: Jazz. 2 Credit Hours.
Advanced musicianship with emphasis upon advanced sight singing, advanced interval recognition, advanced chord progressions, modal applications, transcription. NOTE: Open only to Jazz Studies/Music Majors.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUST 1132|Minimum Grade of C-|May not be taken concurrently.

MUST 2133. Harmony III: Jazz. 3 Credit Hours.
Advanced jazz theory with emphasis upon advanced melodic and rhythmic transcription, reharmonization, non-functional harmony.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUST 1134|Minimum Grade of C-|May not be taken concurrently.
MUST 2703. Music in History. 3 Credit Hours.
The history, style, and musical forms from antiquity through the Renaissance. Musical analysis and individual assignments. NOTE: Open only to music majors; others by permission.
**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
**Repeatability:** This course may not be repeated for additional credits
**Pre-requisites:**
MUST 1712|Minimum Grade of C-|May not be taken concurrently
OR MUST 3770|Minimum Grade of C-|May not be taken concurrently.

MUST 2704. Music in History. 3 Credit Hours.
The history, style, and musical forms of the Baroque period. Musical analysis and individual assignments. NOTE: Open only to music majors; others by permission.
**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
**Repeatability:** This course may not be repeated for additional credits
**Pre-requisites:**
MUST 1712|Minimum Grade of C-|May not be taken concurrently
OR MUST 3770|Minimum Grade of C-|May not be taken concurrently.

MUST 2711. Theory III. 4 Credit Hours.
Advanced chromatic harmony; modality, atonality, twelve-tone technique. Works by such composers as Wagner, Debussy, Schoenberg, and Stravinsky; exercises written using these works as models. NOTE: (1) Special authorization required for non-music majors. Section 005 - Jazz Majors only. Jazz Harmony II & Aural Skills II--Intermediate musicianship with emphasis upon sight singing, interval recognition, jazz syncopation, transcription, eleventh and thirteenth chords, intermediate chord progressions, melodic and harmonic dictation. (2) This course can be used to satisfy the university Core Quantitative Reasoning B (QB) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
**Field of Study Restrictions:** Must be enrolled in one of the following Majors: Music
**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
**Course Attributes:** QB
**Repeatability:** This course may not be repeated for additional credits
**Pre-requisites:**
MUST 1712|Minimum Grade of C-|May not be taken concurrently.

MUST 2712. Theory IV. 4 Credit Hours.
Theory IV entails the study of contemporary music. Topics include the study of modality, atonality, twelve-tone, and other techniques of modern music. The aim is to learn the musical vocabulary of contemporary music through reading, analysis and basic composition exercises, and to gain a better understanding of musical style, structure and form through the analysis of pieces from the repertoire. The course involves both aural and written components. In the aural component, students learn to sight sing melodies in contemporary music and recognize common harmonic and motivic procedures. NOTE: Special authorization required for non-music majors. Section 5--Jazz Majors only. Jazz Harmony III & Aural Skills III--Advanced musicianship with emphasis upon advanced sight singing, advanced interval recognition, advanced chord progressions, modal applications, transcription.
**Field of Study Restrictions:** Must be enrolled in one of the following Majors: Music
**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
**Repeatability:** This course may not be repeated for additional credits
**Pre-requisites:**
MUST 2711|Minimum Grade of C-|May not be taken concurrently.

MUST 2733. American Musical Theater. 3 Credit Hours.
A look at the changing forms and styles of the musical theater in America from the nineteenth-century extravaganza to contemporary Sweeney Todd. Emphasizes such significant Broadway shows as "Show Boat," "Oklahoma," "My Fair Lady," and "West Side Story" and the contributions of composers, lyricists, and other artists responsible for the success of those shows.
**Repeatability:** This course may not be repeated for additional credits.

MUST 2741. Aural Theory III. 2 Credit Hours.
Continuation of aural perception of tonal music with concentration on modulation and chromaticism; aural analysis of smaller forms.
**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
**Repeatability:** This course may not be repeated for additional credits
**Pre-requisites:**
MUST 1742|Minimum Grade of C-|May not be taken concurrently.

MUST 2742. Aural Theory IV. 2 Credit Hours.
Continuation of aural perception with an emphasis on 20th century literature and techniques.
**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
**Repeatability:** This course may not be repeated for additional credits
**Pre-requisites:**
MUST 2741|Minimum Grade of C-|May not be taken concurrently.
MUST 2748. Composition I. 2 Credit Hours.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits.

MUST 2749. Composition II. 2 Credit Hours.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits.

MUST 2758. Composition Lesson III. 3 Credit Hours.
Weekly composition lesson under supervision of the private teacher. The student is expected to create original work in acceptable professional notation. Works created during the semester will be reviewed by the composition faculty at the end of the term in a brief interview with the student.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites: MUST 1759|Minimum Grade of C-|May not be taken concurrently.

MUST 2759. Composition Lesson IV. 3 Credit Hours.
Weekly composition lesson under supervision of the private teacher. The student is expected to create original work in acceptable professional notation. Works created during the semester will be reviewed by the composition faculty at the end of the term in a brief interview with the student.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites: MUST 2758|Minimum Grade of C-|May not be taken concurrently.

MUST 2900. Honors Music Studies Special Topics. 3 to 4 Credit Hours.
Contingent on the special topic.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.

MUST 2962. Honors History of American Popular Music. 3 Credit Hours.
Popular song styles of the 20th century from a variety of idioms: blues, folk, pop groups, rock, film, etc. Listening, analysis, and criticism.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.

MUST 3105. Jazz Class Piano. 1 Credit Hour.
Arranged each semester, please consult with the instructor. NOTE: Course required for 1) all undergraduate music therapy majors with a piano concentration and 2) graduate music therapy majors who failed the diagnostic piano test and have the necessary piano technique.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites: MUST 2106|Minimum Grade of C-|May not be taken concurrently.

MUST 3106. Jazz Class Piano. 1 Credit Hour.
Arranged each semester. Please consult with the instructor. NOTE: Course required for 1) all undergraduate music therapy majors with a piano concentration and 2) graduate music therapy majors who failed the diagnostic piano test and have the necessary piano technique.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites: MUST 3105|Minimum Grade of C-|May not be taken concurrently.

MUST 3196. History of Pop. 3 Credit Hours.
This writing-intensive course focuses on popular song styles of the 20th century from a variety of idioms: blues, folk, pop groups, rock, film, etc. Listening, analysis, and criticism.
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites: IH 0852|Minimum Grade of C-|May not be taken concurrently.
MUST 3385. Diamond Peer Teachers - Internship I. 1 Credit Hour.  
The Diamond Peer Teachers Program provides students with a mentored university-level teaching experience in their major. Course requirements include participation in the three-day pre-semester Teaching Institute and regular participation in the Peer Teachers support group throughout the semester. Peer Teachers provide supplemental instruction in first- and second-year courses, promote student engagement, and model successful study habits and academic preparedness for students with whom they work. For Diamond Peer Teachers only.  
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College  
Repeatability: This course may be repeated for additional credit.  
MUST 3386. Diamond Peer Teachers - Internship II. 1 Credit Hour.  
The Diamond Peer Teachers Program provides students with a mentored university-level teaching experience in their major. Course requirements include participation in the three-day pre-semester Teaching Institute and regular participation in the Peer Teachers support group throughout the semester. Peer Teachers provide supplemental instruction in first- and second-year courses, promote student engagement, and model successful study habits and academic preparedness for students with whom they work. For Diamond Peer Teachers only.  
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College  
Repeatability: This course may be repeated for additional credit.  
MUST 3696. Music in History. 3 Credit Hours.  
The history, style, and musical forms from the preclassic to the early romantic. Music analysis, essay exams, listening assignments, and research paper.  
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College  
Course Attributes: WI  
Repeatability: This course may not be repeated for additional credits  
Pre-requisites:  
MUST 2703|Minimum Grade of C-|May not be taken concurrently  
OR MUST 2704|Minimum Grade of C-|May not be taken concurrently.  
MUST 3710. Theory Seminar. 1 to 3 Credit Hour.  
Practical application of current pedagogical principles with outside projects. Weekly seminar designed for and required of all theory majors in the junior and senior years. NOTE: Four semesters required.  
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College  
Repeatability: This course may be repeated for additional credit.  
Pre-requisites:  
MUST 2712|Minimum Grade of C-|May not be taken concurrently.  
MUST 3713. Orchestration. 3 Credit Hours.  
Instrumental characteristics and potential. Varied problems in sectional, ensemble, and orchestral scoring. Laboratory work possible in connection with practice orchestra.  
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College  
Repeatability: This course may not be repeated for additional credits  
Pre-requisites:  
MUST 2712|Minimum Grade of C-|May not be taken concurrently.  
MUST 3714. Contemporary Music. 3 Credit Hours.  
Late 19th century orchestral practices; theories of Sessions, Hindemith, Bartok, Wuorinen; concentration on neoclassic style. NOTE: Required for all composition majors. Labs included.  
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College  
Repeatability: This course may not be repeated for additional credits.  
MUST 3741. Keyboard Harmony. 3 Credit Hours.  
The playing of chord progressions, sequences, modulations, and harmonization of small forms. Transposition, extemporization, reading from open score. NOTE: Music Education students take Mus Ed 3662 (0245).  
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College  
Repeatability: This course may not be repeated for additional credits  
Pre-requisites:  
MUSC 2406|Minimum Grade of C-|May not be taken concurrently  
OR MUST 2106|Minimum Grade of C-|May not be taken concurrently.  
MUST 3748. Composition Junior Seminar I. 2 Credit Hours.  
A one-hour composition lesson every second week for composition majors. NOTE: Attendance required for departmental concerts and special events.  
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College  
Repeatability: This course may not be repeated for additional credits  
Pre-requisites:  
MUST 2749|Minimum Grade of C-|May not be taken concurrently.
MUST 3749. Composition Junior Seminar II. 2 Credit Hours.
A one-hour composition lesson every second week for composition majors. NOTE: Attendance required for departmental concerts and special events.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites: MUST 3748|Minimum Grade of C-|May not be taken concurrently.

MUST 3758. Composition Lesson V. 3 Credit Hours.
Weekly composition lesson under supervision of the private teacher. The student is expected to create original work in acceptable professional notation. Works created during the semester will be reviewed by the composition faculty at the end of the term in a brief interview with the student.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites: MUST 2759|Minimum Grade of C-|May not be taken concurrently.

MUST 3759. Composition Lesson VI. 3 Credit Hours.
Weekly composition lesson under supervision of the private teacher. The student is expected to create original work in acceptable professional notation. Works created during the semester will be reviewed by the composition faculty at the end of the term in a brief interview with the student.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites: MUST 3758|Minimum Grade of C-|May not be taken concurrently.

MUST 3770. Topics in Music Theory. 1 to 3 Credit Hour.
Survey of advanced written and aural concepts in music theory.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may be repeated for additional credit.

MUST 3780. Topics in Music History. 1 to 3 Credit Hour.
Survey of advanced concepts in music history.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may be repeated for additional credit.

MUST 3796. Music in History. 3 Credit Hours.
The history, style, and musical forms from the late romantic through the contemporary periods. Music analysis, essay exams, listening assignments, and research paper.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites: MUST 2703|Minimum Grade of C-|May not be taken concurrently
OR MUST 2704|Minimum Grade of C-|May not be taken concurrently.

MUST 3896. Theory Seminar II. 2 to 3 Credit Hours.
Practical application of current pedagogical principles with outside projects. Required weekly writing intensive seminar for theory majors, emphasizing critical writing and discussion.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Course Attributes: WI
Repeatability: This course may be repeated for additional credit.
Pre-requisites: MUST 2712|Minimum Grade of C-|May not be taken concurrently.

MUST 3900. Honors Music Studies Special Topics. 3 or 4 Credit Hours.
Contingent on the special topic.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.

MUST 4110. Seminar in Jazz Composition and Arranging. 2 Credit Hours.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may be repeated for additional credit.
Pre-requisites: MUST 2712|Minimum Grade of C-|May not be taken concurrently
OR MUST 3770|Minimum Grade of C-|May not be taken concurrently.
MUST 4111. Jazz Style and Analysis. 2 Credit Hours.
In-depth examination of the music of one or two artists with an emphasis upon style, melodic and harmonic content, and importance of the artist(s) to the jazz canon.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUST 2712|Minimum Grade of C-|May not be taken concurrently
OR MUST 3770|Minimum Grade of C-|May not be taken concurrently.

MUST 4112. Jazz Arranging I. 3 Credit Hours.
Writing for various small and large jazz groups. Emphasis upon jazz orchestration and chord substitutions.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUST 2712|Minimum Grade of C-|May not be taken concurrently
OR MUST 3770|Minimum Grade of C-|May not be taken concurrently.

MUST 4113. Jazz Improvisation: Theory and Practice I. 2 Credit Hours.
Application of melodic and harmonic improvisational concepts and devices to standard jazz repertoire. Emphasis upon melodic stylistic development.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUST 2711|Minimum Grade of C-|May not be taken concurrently
OR MUST 3770|Minimum Grade of C-|May not be taken concurrently.

MUST 4114. Jazz Improvisation: Theory and Practice II. 2 Credit Hours.
More advanced melodic and harmonic improvisational concepts applied to standard jazz repertoire with an emphasis upon stylistic development.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUST 4113|Minimum Grade of C-|May not be taken concurrently.

MUST 4115. Jazz Arranging II. 3 Credit Hours.
Advanced arranging concepts for small and large jazz ensembles.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUST 4112|Minimum Grade of C-|May not be taken concurrently.

MUST 4120. Seminar in Advanced Jazz Composition and Arranging. 2 Credit Hours.
Advanced composition in the jazz idiom.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
MUST 4110|Minimum Grade of C-|May not be taken concurrently.

MUST 4700. Latin Amer Mus Ensemble. 0 to 1 Credit Hours.
Repeatability: This course may be repeated for additional credit.

MUST 4710. Early Music Ensemble. 1 Credit Hour.
An opportunity to perform music from medieval through preclassical times. Reproduction of original instruments, principles of performance practice in original form and as they emerge through modern efforts at reconstruction. NOTE: Limited to 20 singers and instrumentalists.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may be repeated for additional credit.

MUST 4711. Computers in Musical Applications. 3 Credit Hours.
Introduction to theory and practice of digital synthesis of musical sound. Sampling theory, additive synthesis, and modulation synthesis are examined using models. NOTE: This course can be used to satisfy the university Core Science & Technology Second Level (SB) requirement.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Course Attributes: SB
Repeatability: This course may not be repeated for additional credits.
MUST 4712. Computer Synthesis of Music. 3 Credit Hours.
Advanced study of software synthesis methods building on Music Studies 4711 (C315). Subtractive synthesis and reverberation techniques are examined. Synthesis algorithms are implemented using the C Sound language.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUST 4711|Minimum Grade of C-|May not be taken concurrently.

MUST 4713. Sound Recording. 3 Credit Hours.
A course in concert hall recording of live music including topics such as room acoustics, electrical signals, microphones, recording decks and editing systems. A quantitative approach to theory will be balanced by practical laboratory instruction. NOTE: The course is required for students who have elected the Music Technology Component.
Repeatability: This course may not be repeated for additional credits.

MUST 4714. Sound Editing. 3 Credit Hours.
A course in digital audio editing that applies principles and techniques learned in Sound Recording. Students work with ProTools software and complete a series of projects to develop listening and editing skills.
Repeatability: This course may not be repeated for additional credits.

MUST 4715. World Music. 3 Credit Hours.
This course will acquaint students with a diversity of styles of world music from Africa, Asia, Latin America, and elsewhere. It will also focus brief attention on the history of ethnomusicology as a discipline, and topics of special interest within that field. NOTE: Open only to music majors; others by permission.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Music
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits.

MUST 4716. Composing Music for Films. 3 Credit Hours.
Students learn to use MIDI equipment and software to compose music for synchronization to film and video. The vocabulary and technology of film production are taught, as well as an understanding of the function of music in documentary and experimental film and video. The course contains a laboratory component in which students develop sequencing skills and work with synchronized videotape.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUST 4711|Minimum Grade of C-|May not be taken concurrently.

MUST 4717. Counterpoint. 3 Credit Hours.
The principles of two- and three-part counterpoint and practical application in the form of the invention and three-part imitative writing of the 18th century.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUST 1712|Minimum Grade of C-|May not be taken concurrently
OR MUST 3770|Minimum Grade of C-|May not be taken concurrently.

MUST 4718. Analysis. 3 Credit Hours.
A supplement and sequel to the analysis introduced in Music Studies 2703 (0160), Music Studies 3796 (W261) and Music Studies 2711 (C243). Development of aural perception techniques. NOTE: Individual assignments.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUST 2711|Minimum Grade of C-|May not be taken concurrently
OR MUST 3770|Minimum Grade of C-|May not be taken concurrently.

MUST 4719. MIDI. 3 Credit Hours.
An introduction to the use of MIDI Technology, including basic synthesis, sound design, sequencing, and sampling.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUST 4711|Minimum Grade of C-|May not be taken concurrently.

MUST 4720. New Music Seminar. 1 Credit Hour.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may be repeated for additional credit.
MUST 4721. Computer Music Studio. 3 Credit Hours.
Independent composition study following completion of either Music Studies 4719 (0346), Music Studies 4712 (0316), or Music Studies 4716 (0335).

**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
- MUST 4712|Minimum Grade of C-|May not be taken concurrently
- OR MUST 4716|Minimum Grade of C-|May not be taken concurrently
- OR MUST 4719|Minimum Grade of C-|May not be taken concurrently.

MUST 4722. Advanced Orchestration. 2 Credit Hours.
Full scoring for orchestra and band, ranging from monody to complex texture.

**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
- MUST 3713|Minimum Grade of C-|May not be taken concurrently.

MUST 4723. Score Reading. 3 Credit Hours.
A continuation of Music Studies 3741 (0241). Emphasis on reading from open score with the alto, tenor, and soprano clefs in addition to the G and F clefs. Also, modulation to remote keys, varied sequences.

**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
- MUST 3741|Minimum Grade of C-|May not be taken concurrently.

MUST 4724. Print Mus Scores & Parts. 3 Credit Hours.

**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College

**Repeatability:** This course may not be repeated for additional credits.

MUST 4725. Advanced Audio Production. 3 Credit Hours.
The class will focus on advanced skills of audio production based on skills learned in Sound Editing (MUST 4714). Work will be done on the most common Digital Audio Workstation, Pro Tools, but is applicable to all DAWs. Prerequisite is Sound Editing (MUST 4714); strongly recommended is Sound Recording (MUST 4713).

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
- MUST 4714|Minimum Grade of C-|May not be taken concurrently.

MUST 4727. Electronic Music Composition: Practice, History, Theory. 3 Credit Hours.
The history of electro-acoustic music, which is essential to music in the 20th century. Composers who wrote for electronic instruments include Edgard Varèse, Olivier Messiaen and Paul Hindemith, the "musique concrète" school (Pierre Schaeffer, Pierre Henry, Edgard Varèse, etc.), Karlheinz Stockhausen, Gyorgi Ligeti, Luciano Berio, Milton Babbitt, John Cage, Iannis Xenakis, and Mario Davidovsky. These composers used unique and varied technologies in their music. New technologies soon crossed over into pop music, and now dominate commercial music and film. A dialogue between composers and engineers is now crucial in order to make all aspects of sound available to composers. This is available to composers, theorists, historians, and instrumentalists, who must master the extended techniques that are now an essential part of new music performance.

**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
- (MUST 1711|Minimum Grade of C-|May not be taken concurrently)
- AND (MUST 1712|Minimum Grade of C-|May not be taken concurrently)
- AND (MUST 2711|Minimum Grade of C-|May not be taken concurrently)
- AND (MUST 2712|Minimum Grade of C-|May not be taken concurrently).

MUST 4748. Composition Senior Seminar I. 3 Credit Hours.
A one-hour composition lesson every week for composition majors. NOTE: Attendance required for departmental concerts and special events.

**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
- MUST 3749|Minimum Grade of C-|May not be taken concurrently.

MUST 4749. Composition Senior Seminar II. 3 Credit Hours.
A one-hour composition lesson every week for composition majors. NOTE: Attendance required for departmental concerts and special events.

**College Restrictions:** Must be enrolled in one of the following Colleges: Music & Dance, Boyer College

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
- MUST 4748|Minimum Grade of C-|May not be taken concurrently.
MUST 4758. Composition Lesson VII. 3 Credit Hours.
Weekly composition lesson under supervision of the private teacher. The student is expected to create original work in acceptable professional notation. Works created during the semester will be reviewed by the composition faculty at the end of the term in a brief interview with the student.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUST 3759|Minimum Grade of C-|May not be taken concurrently.

MUST 4759. Composition Lesson VIII. 3 Credit Hours.
Weekly composition lesson under supervision of the private teacher. The student is expected to create original work in acceptable professional notation. Works created during the semester will be reviewed by the composition faculty at the end of the term in a brief interview with the student.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MUST 4758|Minimum Grade of C-|May not be taken concurrently.

MUST 4762. Music Technology. 3 Credit Hours.
Introduction to the ways computer hardware and software can be used to create, teach, and interact with music. Provides systematic, hands-on applications of computer hardware and software to music-specific activities and tasks, including audio editing, music notation, and multimedia presentations. The Final Project demonstrates the student's ability to create and store on CD-ROM and/or DVD a complete musical project using a variety of file formats, and audio and video production software.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may not be repeated for additional credits.

MUST 4782. Independent Study. 1 to 4 Credit Hour.
The area of concentration selected by the student with the approval of the supervising teacher and Associate Dean.

College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College
Repeatability: This course may be repeated for additional credit.

Naval Science - Navy ROTC (NAVS)

Courses

NAVS 1001. Naval Orientation. 3 Credit Hours.
A three-hour course designed to familiarize the student with the history, characteristics and present employment of sea power. Particular emphasis is placed upon our naval forces and their capability in achieving and maintaining national objectives. Naval organization and operational functions are discussed in conjunction with sea power concepts. Additionally, the student is given an insight into the Naval Service, shipboard organization and safety, time-management skills and study techniques. NOTE: Fall only. This course is taken at the University of Pennsylvania.

Repeatability: This course may not be repeated for additional credits.

NAVS 1002. Seapower and Maritime Affairs. 3 Credit Hours.
A three-hour course providing a broad survey of naval history designed to add historical perspective to current defense problems. Topics include: naval power as an aspect of national defense policy, navies as an instrument of foreign policy, strategy selection, resource control, technology, and personnel management. NOTE: Spring only. This course is taken at the University of Pennsylvania.

Repeatability: This course may not be repeated for additional credits.

NAVS 1003. Naval Science Drill. 0 Credit Hours.
A no-credit laboratory promoting naval leadership and professional development. While emphasis is given to military drill, leadership development, and physical fitness, the course also includes lectures from sources in and out of the Navy. Guest speakers cover topics on leadership, Navy career paths, equal opportunity, rights and responsibilities, AIDS awareness, terrorism/counter-terrorism, naval warfare doctrine, employment of naval forces, ethics and values, operations security, and safety. NOTE: This course is taken at the University of Pennsylvania.

Repeatability: This course may be repeated for additional credit.

NAVS 2001. Leadership & Management. 3 Credit Hours.
This three-hour course emphasizes principles of leadership, personnel and material management, and subordinate development in the context of the naval organization. Practical applications are explored through experiential exercises and case studies. NOTE: Fall only. This course is taken at the University of Pennsylvania.

Repeatability: This course may not be repeated for additional credits.

NAVS 2002. Navigation. 3 Credit Hours.
A three-hour course, with comprehensive study of the theory and practice of terrestrial, celestial, and electronic navigation and the laws of vessel operations. Topics include fundamentals of coastal and harbor piloting, nautical astronomy, electronic navigation, and means of navigating without reference to land. International and inland nautical Rules of the Road are studied. Case studies and practical exercises are used to reinforce the fundamentals of marine navigation. NOTE: Spring only. This course is taken at the University of Pennsylvania.

Repeatability: This course may not be repeated for additional credits.
NSCI 1051. Fundamentals of Neuroscience. 3 Credit Hours.
One of the last frontiers in science is the brain. Neuroscience is one of the fastest growing domains in all of science - and a good bet for a future career path. Neuroscientists investigate brain function from the level of molecular genetics, to cellular dynamics, to brain anatomy and physiology, to relations between brain, behavior, and cognition, to brain development and aging, to diseases of the brain. In this course, we will touch on knowledge about the brain at all these levels. The major course goal is to introduce you to neuroscience and its multidisciplinary dimensions.

Repeatability: This course may not be repeated for additional credits.
NSCI 1951. Honors Fundamentals of Neuroscience. 3 Credit Hours.
One of the last frontiers in science is the brain. Neuroscience is one of the fastest growing domains in all of science – and a good bet for a future career path. Neuroscientists investigate brain function from the level of molecular genetics, to cellular dynamics, to brain anatomy and physiology, to relations between brain, behavior and cognition, to brain development and aging, to diseases of the brain. In this course, we will touch on knowledge about the brain at all of these levels. The major course goal is to introduce you to neuroscience and its multidisciplinary dimensions. Note: Students who have received credit for NSCI 1051 will not receive additional credit for this course.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.

NSCI 2001. Functional Neuroanatomy. 3 Credit Hours.
The organization of the major neural systems underlying sensory, motor, and cognitive function will be emphasized.

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
NSCI 1051|Minimum Grade of C-|May not be taken concurrently
OR NSCI 1951|Minimum Grade of C-|May not be taken concurrently.

NSCI 2121. Development/Plasticity/Repair. 3 Credit Hours.
The major aim of this course is to present the neurobiology of development from conception to birth and neurological and behavioral development in infancy and childhood. The initial emphasis is on embryonic and fetal development of the central nervous system and emergent behavioral plasticity. Sensory and motor developments in the fetus are examined. Postnatal development of the cerebral cortex and behavioral outcomes are explored in the context of environmental effects that can amplify or inhibit adaptive capacity. Biological (e.g., genetic) and environmental (e.g., parenting) influences on brain development of emotion and cognition are addressed. The tremendous plasticity of the brain is emphasized. Plasticity is the ability of the nervous system to respond to change. Neural malleability is maximal in early development, but the capacity for change and repair in the nervous system is maintained throughout life.

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
NSCI 1051|Minimum Grade of C-|May not be taken concurrently
OR NSCI 1951|Minimum Grade of C-|May not be taken concurrently.

NSCI 2122. Cellular Neuroscience. 3 Credit Hours.
An exciting scientific frontier is the molecular genetics and cellular dynamics of brain function. This course addresses phenomena at a cellular and molecular level that underlie brain plasticity and function. The cellular basis of the nervous system, some genetic factors involved in neural cell division and proliferation, proteins enabling neural receptor function, and molecules that comprise neurotransmitters will be covered. The molecular cascade that is initiated by glutamate release and responses of AMPA and NMDA receptors that results in genetic changes and structural formation of synapses is one example of molecular mechanisms to be addressed in this course.

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
NSCI 1051|Minimum Grade of C-|May not be taken concurrently
OR NSCI 1951|Minimum Grade of C-|May not be taken concurrently.

NSCI 2222. The Neurobiology of Disease. 3 Credit Hours.
Advances in basic neuroscience research have the potential to lead to understanding, treatment, and even cures for major nervous system disease. This course will provide students with state-of-the-art knowledge about applied neuroscience - the causes and treatment of some major diseases of the central nervous system. There is an emphasis on neuropathologies at all points of the life span - from diseases in infancy such as Phenylketonuria and Tay Sachs disease, to diseases in adulthood such as Multiple Sclerosis, AIDS and forms of demyelination caused by the JC virus, to neurodegenerative diseases of old age such as Alzheimer's disease and Parkinson's disease.

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
NSCI 1051|Minimum Grade of C-|May not be taken concurrently
OR NSCI 1951|Minimum Grade of C-|May not be taken concurrently.

NSCI 3000. Current Topics in Neuroscience. 3 Credit Hours.
The goal of this class is to explore in depth a current topic in neuroscience. Potential topics include addiction, schizophrenia, Alzheimer's disease, memory reconsolidation, and more. Note: A semester's course will cover one topic in depth and not cover multiple topics. In addition, students will also read primary literature (research articles), lead a 10 minute discussion on an article, write a review on a related topic, and present slides with their view. These exercises are intended to promote scientific analysis and the development of public speaking and writing skills.

Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(NSCI 1051|Minimum Grade of C-|May not be taken concurrently
OR NSCI 1951|Minimum Grade of C-|May not be taken concurrently)
AND (NSCI 2001|Minimum Grade of C-|May not be taken concurrently)
AND (PSY 1003|Minimum Grade of C-|May not be taken concurrently)
NSCI 3005. Affective Neuroscience. 3 Credit Hours.
The brain is not just a thinking machine; it is also a feeling machine. This course explores the neural substrates behind emotions such as love, trust, fear, and pleasure. We will also discuss the relationship between emotions and cognition, the effect of emotions on animal and human behavior, and the biological basis of affective disorders such as anxiety and depression.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(PSY 2501|Minimum Grade of C-|May not be taken concurrently
OR PSY 2502|Minimum Grade of C-|May not be taken concurrently
OR NSCI 2001|Minimum Grade of C-|May not be taken concurrently)
AND (PSY 1003|Minimum Grade of C-|May not be taken concurrently).

NSCI 3087. Techniques in Neuroscience. 3 Credit Hours.
A major reason that neuroscience is such a dynamic and rapidly advancing field is that it relies on cutting edge technology. Throughout the history of neuroscience, advances have come with the development of new techniques. In this course, students will learn about a variety of traditional techniques in basic and clinical neuroscience as well as newly developed techniques driving the field to new insights. Methods to be discussed will be selected from among: genetic assays, genotyping, histology, immunohistochemistry, stereotaxic surgery, electrophysiology (patch clamping, single and multiple unit recording, EEG), behavioral assessment of animals, neuropsychological assessment in humans, human electrophysiology, transcranial magnetic stimulation, fMRI and MRI. From among identified neuroscience techniques, students will select one and prepare a demonstration or video.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(NSCI 1051|Minimum Grade of C-|May not be taken concurrently
OR NSCI 1951|Minimum Grade of C-|May not be taken concurrently
AND (NSCI 2121|Minimum Grade of C-|May not be taken concurrently)
AND (NSCI 2122|Minimum Grade of C-|May not be taken concurrently)
AND (NSCI 2222|Minimum Grade of C-|May not be taken concurrently).

NSCI 3096. Conducting Neuroscience Research. 3 Credit Hours.
The objective of this writing intensive course is to develop critical thinking and analytical skills necessary for applying the scientific method in neuroscience. In the course, students will complete readings of primary sources, discuss literature, and participate in activities to strengthen research abilities. This experience will reinforce key methodological and statistical concepts that were taught earlier in the curriculum, while stimulating growth in understanding neuroscience and research processes in general. Students will present reports in writing and in class presentations.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(NSCI 1051|Minimum Grade of C-|May not be taken concurrently
OR NSCI 1951|Minimum Grade of C-|May not be taken concurrently
AND (PSY 1003|Minimum Grade of C-|May not be taken concurrently).

NSCI 4182. Independent Study in Neuroscience 1. 1 to 4 Credit Hour.
Neuroscience majors are encouraged to gain first-hand experience with research as provided by Independent Study. This course is available in the laboratories of neuroscience faculty members at Temple University listed on the Neuroscience web site: www.temple.edu/cla/neuroscience. Students will carry out supervised neuroscience research by observing and participating in ongoing research in the laboratory. This course requires the student to spend 3-4 hours per credit per week of a 14-week semester in the lab.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Neuroscience
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
NSCI 1051|Minimum Grade of C-|May not be taken concurrently
OR NSCI 1951|Minimum Grade of C-|May not be taken concurrently.

NSCI 4191. Collaborative Research I. 1 to 4 Credit Hour.
Faculty advisor needed for research in a particular area. For projects outside Temple University, approval must be obtained through a faculty member who will handle the liaison with the outside institution and ensure uniformity of requirements.
Repeatability: This course may be repeated for additional credit.

NSCI 4197. Capstone in Neuroscience. 4 Credit Hours.
The focus of this capstone is a topic important to many domains in neuroscience. Different topics will be covered in different semesters. This course has two major components: (1) instruction and practice on scientific writing of research papers and proposals, and instruction and practice on oral presentations; (2) Integration of content in basic and clinical neuroscience. The course will allow students to follow issues in neuroscience from cellular and molecular levels to translation and application in human life. The emphasis is on synthesis and application of material learned in the neuroscience major. NOTE: This course is limited to neuroscience majors in their senior year.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Neuroscience
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
NSCI 3087|Minimum Grade of C-|May not be taken concurrently.
NSCI 4282. Independent Study in Neuroscience 2. 1 to 4 Credit Hour.
Neuroscience majors are encouraged to gain first-hand experience with research as provided by Independent Study and may take up to 8 independent study credits. Independent Study in Neuroscience 2 follows Neuroscience 4182, Independent Study in Neuroscience 1, and can be taken in the same laboratory or in another lab of a neuroscience faculty member at Temple University. Faculty members sponsoring this course are listed on the Neuroscience web site: www.temple.edu/cla/neuroscience. Students will carry out supervised neuroscience research by observing and participating in ongoing research. This course requires the student to spend 3-4 hours per credit per week of a 14-week semester in the lab.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Neuroscience
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
NSCI 1051|Minimum Grade of C-|May not be taken concurrently
OR NSCI 1951|Minimum Grade of C-|May not be taken concurrently.

NSCI 4291. Collaborative Research II. 1 to 4 Credit Hour.
Faculty advisor needed for research in a particular area. For projects outside Temple University, approval must be obtained through a faculty member who will handle the liaison with the outside institution and ensure uniformity of requirements.
Repeatability: This course may be repeated for additional credit.

New Media Interdisciplinary (NMIC)

Courses

NMIC 1451. Survey of New Media. 3 Credit Hours.
This lecture course introduces the history and theory of computer/telecommunications media and new media arts. Today's convergence of computational, telecommunications and audiovisual media is transforming human interaction at personal, local and global levels. Paradoxically it has introduced new modes of alienation while creating new means of contact. Simulation and interactivity suggest new kinds of realism. Random-access databases offer both greater control of information and the emergence of hypermedia narratives that allow the reader to get lost in information. Readings include the commentaries and works of philosophers, theorists, writers and artists and draw on theoretical and historical texts, fiction, interactive multimedia, audiovisual media and the internet.
Repeatability: This course may not be repeated for additional credits.

NMIC 2002. Introduction to Interdisciplinary New Media 2. 3 Credit Hours.
Designing for a public community. The class will investigate both the technological and theoretical issues associated with public space, installation, information design and accessibility. The class assignment is to design an interactive experience in public space.
Repeatability: This course may not be repeated for additional credits.

NMIC 3001. Design and Visual Language. 4 Credit Hours.
An introduction to creating, planning and producing visual communication design for the screen and print. Examining composition, typography as an element of information design and the interaction of color and form, text and image. Exploring the computer in relation to print animation, web and interactivity.
Repeatability: This course may not be repeated for additional credits.

NMIC 3002. Physical Computing. 4 Credit Hours.
Physical Computing is an approach to learning how humans communicate through computers that starts by considering how humans express themselves physically. Students spend a lot of time building circuits, soldering, writing programs, building structures to hold sensors and controls, and figuring out how best to make all of these things relate to a person's expression.
Repeatability: This course may not be repeated for additional credits.

NMIC 3010. Special Topics in Production. 4 Credit Hours.
Rotating class in New Media. Please check www.temple.edu/nmic for details or contact h.iverson@temple.edu.
Repeatability: This course may be repeated for additional credit.

NMIC 3020. Special Topics. 4 Credit Hours.
Rotating class in New Media. Please check www.temple.edu/nmic for details or contact h.iverson@temple.edu.
Repeatability: This course may be repeated for additional credit.

NMIC 3030. Special Topics in New Media. 4 Credit Hours.
Rotating class in New Media. Please check www.temple.edu/nmic for details or contact h.iverson@temple.edu.
Repeatability: This course may be repeated for additional credit.

NMIC 3040. Special Topics. 4 Credit Hours.
Rotating class in New Media. Please check www.temple.edu/nmic for details or contact h.iverson@temple.edu.
Repeatability: This course may be repeated for additional credit.

NMIC 4001. New Media Synthesis. 4 Credit Hours.
A capstone course in the New Media Interdisciplinary Concentration. A studio and critique based class for the development of a portfolio project suitable for grant and school applications. Projects will be conceptualized, prototyped and written about in a proposal format.
Repeatability: This course may not be repeated for additional credits.
NMIC 4002. Neighborhood Narratives. 4 Credit Hours.

Neighborhood Narratives is an out-of-the-classroom New Media interdisciplinary education project. It introduces students to the concept of locative media, where all types of media (analogue, digital, text, sound, image, etc.) are applied to real places and thus trigger real social interactions. The class researches the relationship between the self and place, the reciprocal action between what we carry with us and how we find our way through an urban landscape. Students design their own projects, using alternative methods that tie their stories to the environment at hand. The class provides a context within which to explore new and old models of communication, community and exchange. Neighborhood Narratives links the Philadelphia main campus of Temple University with its international campuses in London, Tokyo and Rome. The international network of classes videochats with each other throughout the semester, sharing their experiences and projects. All the location-based stories from each site are connected and archived using the web and mobile telephones. The final assignments are presented on location in the city.

Repeatability: This course may be repeated for additional credit.

NMIC 4003. Game of Life. 4 Credit Hours.

How can observation and participation in everyday life be translated into gaming structures? The class will review a broad sample of both traditional and electronic games. Students will be given assignments and readings to provoke analysis of digital environments, to explore interactive narrative, and to inspire the creation of an interactive universe of their own construction.

Repeatability: This course may not be repeated for additional credits.

NMIC 4010. Special Topics. 3 Credit Hours.

Rotating class in New Media. Please check www.temple.edu/nmic for details or contact h.iverson@temple.edu.

Repeatability: This course may be repeated for additional credit.

NMIC 4020. Special Topics. 3 Credit Hours.

Rotating class in New Media. Please check www.temple.edu/nmic for details or contact h.iverson@temple.edu.

Repeatability: This course may be repeated for additional credit.

NMIC 4030. Special Topics. 3 Credit Hours.

Rotating class in New Media. Please check www.temple.edu/nmic for details or contact h.iverson@temple.edu.

Repeatability: This course may be repeated for additional credit.

NMIC 4040. Special Topics. 1 to 4 Credit Hour.

Rotating class in New Media. Please check www.temple.edu/nmic for details or contact h.iverson@temple.edu.

Repeatability: This course may be repeated for additional credit.

NMIC 4082. Independent Study. 1 Credit Hour.

Directed projects and independent study in interdisciplinary new media. Topics will vary.

Repeatability: This course may be repeated for additional credit.

Nursing (NURS)

Courses

NURS 1001. Introduction to Professional Nursing. 3 Credit Hours.

This course begins with an introduction to professional nursing and the role of the nurse in the promotion of healthy lifestyles and health maintenance for individuals, families, and communities. Essential concepts such as therapeutic communication, health education, and ethics are explored as they relate to the role of the nurse in the delivery of health care. The application of mathematics utilizing dimensional analysis is introduced.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Nursing 4 Year

Repeatability: This course may not be repeated for additional credits.

NURS 1089. Nursing and Healthy Lifestyles Management. 3 Credit Hours.

This course focuses on the role of the nurse in health promotion and disease prevention for individuals in the community through the use of interventions that support lifestyle changes. The links between lifestyle issues such as nutrition, stress management, physical activity, and disease prevention are explored. Specific topics will include: key trends in the U.S. diet; diet-related disease; weight management approaches; food sources, policies, and their implications; physical activity and other behaviors; supporting therapeutic lifestyle changes; physiological stress factors; and life expectancy and quality issues. A fieldwork experience provides an opportunity for students to practice communication techniques and apply theoretical concepts within a community setting focusing on education for health promotion, risk reduction, and disease prevention across the lifespan. NOTE: Restricted to BSN majors only.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Nursing 4 Year

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(KINS 1223|Minimum Grade of C|May not be taken concurrently
OR KIN1 Y|May not be taken concurrently)
AND (NURS 1001|Minimum Grade of C|May not be taken concurrently).
NURS 2144. Health Assessment. 3 Credit Hours.
An introductory course to health assessment is presented with emphasis on understanding the range of normal and common abnormal findings. The focus is on individuals across the lifespan including newborn, pediatric, adult, and geriatric populations. Theory and practice focus on effective interviewing for the health history, health assessment techniques, and systematic method of recording data. Defining characteristics of nursing diagnoses are identified. Principles of therapeutic communication and critical thinking are emphasized.

Department restrictions: Must be enrolled in one of the following Departments: CPH:Nursing
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Nursing 4 Year
Co-requisites: NURS 2261
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(CHEM 1021|Minimum Grade of C|May not be taken concurrently
OR CHM4 Y|May not be taken concurrently)
AND (CHEM 1023|Minimum Grade of C|May not be taken concurrently
OR CHM5 Y|May not be taken concurrently)
AND (KINS 1224|Minimum Grade of C|May not be taken concurrently
OR KIN2 Y|May not be taken concurrently)
AND (NURS 1089|Minimum Grade of C|May not be taken concurrently).

NURS 2189. Community Home I. 1 Credit Hour.
This course is the first of six courses in the major that situate the student in a selected community agency. The role of the generalist practice nurse in the care of the community is emphasized. Taken in conjunction with health assessment and pharmacology the student engages in health assessment and medication teaching as part of the experience. In collaboration with the community of interest, and under the mentorship of senior students, the student engages in health promotion activities. In addition, students initiate a comprehensive assessment of the community in which the agency is situated. The complexity of poverty and obtaining appropriate drug therapy is considered.

Department restrictions: Must be enrolled in one of the following Departments: CPH:Nursing
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Nursing 4 Year
Co-requisites: NURS 2144, NURS 2261
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(CHEM 1021|Minimum Grade of C|May not be taken concurrently
OR CHM4 Y|May not be taken concurrently)
AND (CHEM 1023|Minimum Grade of C|May not be taken concurrently
OR CHM5 Y|May not be taken concurrently)
AND (KINS 1224|Minimum Grade of C|May not be taken concurrently
OR KIN2 Y|May not be taken concurrently)
AND (NURS 1089|Minimum Grade of C|May not be taken concurrently).

NURS 2261. Pharmacology for Generalist Nursing Practice. 3 Credit Hours.
The major classifications of drugs are examined with particular attention to principles of pharmacokinetics, pharmacodynamics, and pharmacotherapeutics. The role of the generalist practice nurse in the management of client care as it relates to medication therapy is delineated. Particular emphasis is placed on teaching individuals and community groups about medications and the nurse’s responsibilities in preventing medication errors.

Department restrictions: Must be enrolled in one of the following Departments: CPH:Nursing
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Nursing 4 Year
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(CHEM 1021|Minimum Grade of C|May not be taken concurrently
OR CHM4 Y|May not be taken concurrently)
AND (CHEM 1023|Minimum Grade of C|May not be taken concurrently
OR CHM5 Y|May not be taken concurrently)
AND (KINS 1224|Minimum Grade of C|May not be taken concurrently
OR KIN2 Y|May not be taken concurrently)
AND (NURS 1089|Minimum Grade of C|May not be taken concurrently).
NURS 2289. Community Home II. 1 Credit Hour.
This course is the second of six courses in the major that situate the student in a selected community agency. The role of the generalist practice nurse in the care of the community is emphasized with a focus on the determinants of health which include income, social status, education, physical environment, social support networks, genetics, and access to health care services. The comprehensive assessment of the larger community begun in Nursing 2189 is completed. Health promotion and health maintenance activities undertaken in the previous semester will be continued under the mentorship of senior students.
Department restrictions: Must be enrolled in one of the following Departments: CPH:Nursing
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Nursing 4 Year
Co-requisites: NURS 2589
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(NURS 2189|Minimum Grade of C|May not be taken concurrently)
AND (NURS 2261|Minimum Grade of C|May not be taken concurrently)
AND (NURS 3144|Minimum Grade of C|May not be taken concurrently)
OR NURS 2144|Minimum Grade of C|May not be taken concurrently)
AND (SOC 1176|Minimum Grade of C|May not be taken concurrently)
OR SOC1 Y|May not be taken concurrently)
AND (BIOL 2001|Minimum Grade of C|May not be taken concurrently)
OR BIO9 Y|May not be taken concurrently).

NURS 2589. Generalist Nursing Practice I: Principles of Care and Clinical Decision Making. 5 Credit Hours.
Through a combination of classroom, laboratory and fieldwork activities students learn how to develop the plan of care and implement essential therapeutic interventions for common health problems from a theoretical research base. Students are challenged to engage in clinical decision-making in the management of client care and the application of integrated nursing therapeutics for clients experiencing common health alterations.
Department restrictions: Must be enrolled in one of the following Departments: CPH:Nursing
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Nursing 4 Year
Co-requisites: NURS 2289
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(BIOL 2001|Minimum Grade of C|May not be taken concurrently
OR BIO9 Y|May not be taken concurrently)
AND (NURS 2189|Minimum Grade of C|May not be taken concurrently)
AND (NURS 2261|Minimum Grade of C|May not be taken concurrently)
AND (NURS 3144|Minimum Grade of C|May not be taken concurrently)
OR NURS 2144|Minimum Grade of C|May not be taken concurrently)
AND (SOC 1176|Minimum Grade of C|May not be taken concurrently)
OR SOC1 Y|May not be taken concurrently).

NURS 3101. Nursing Informatics. 3 Credit Hours.
This is sequentially the first course of the nursing major. Nursing informatics, a nursing specialty field that integrates information sciences and computer technology in nursing science and practice, is introduced. Emphasis is placed on the knowledge and skill set required to obtain, manage, and communicate information needed to assure quality nursing care delivery across diverse settings. Health information systems available in direct patient care situations as well as evolving systems employed in management of health records are examined. Students will be introduced to the electronic medical record and the Statistical Package for the Social Sciences. Through course projects, assignments, and other learning experiences, students will develop skills to effectively administer nursing care in technologically complex environments. The course is designed to instill an appreciation for the contribution of nursing informatics knowledge and skills in support of life-long learning in the profession.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Nursing
Repeatability: This course may not be repeated for additional credits.

NURS 3197. Philosophical Foundation of Nursing Science. 3 Credit Hours.
This course provides an overview of the study of philosophy and the underlying ethics as they relate to nursing science, its metaparadigm, construct evolution, methods of inquiry, interpretative capacity, and social mission. The writings of prominent historical philosophers are explored as they impact modern patterns of thought and science. Major areas of philosophical inquiry are explored in relation to the evolution of nursing science. The philosophies of various nursing scientists are examined through oral presentations and analytical papers. The logic of nursing scientific inquiry is explored against the framework provided by the philosophy of science. Philosophical methods are employed to promote understanding of nursing problems and to enhance productive contributions to society. The knowledge and skills provided by the philosophy of nursing science assists in the realization of the critical role played by nurses in improving the health of U.S. citizens.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Nursing
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.
NURS 3202. Nursing and the Politics of Gender, Race and Class. 3 Credit Hours.
This course provides a comprehensive review of the history of nursing through the multiple and intersecting forces of gender, race, and class. Examination of the historical, socio-cultural, ethical, economic, and political contexts that have shaped the profession is incorporated. The past and present status of nursing is analyzed through an examination of feminist epistemologies. The links between systems of power that create and sustain oppressive forces that affect the profession, the practice of nursing, and the construction of nurse identity is emphasized. The interrelationship between the status of nursing, the status of women, systems of structural power, and the U.S. healthcare system is analyzed. Analysis and critique of a wide variety of documents is the contextual foundation for understanding how the profession has developed and evolved over time.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Nursing

Repeatability: This course may not be repeated for additional credits.

NURS 3204. Perspectives on Health I: Thinking Globally. 3 Credit Hours.
This is the first part of a two-course sequence that examines the social determinants of health. The focus of the course is on how the social, political, built, physical, and health care environments influence the health of societies around the world. Epidemiological concepts provide the tools needed to compare and contrast the health status of persons living in developing and developed societies, and provides a means to relate these findings to differing sociopolitical and environmental conditions. Issues of oppression and injustice are explored. The independent role that nurses play in the promotion, restoration, and maintenance of health for populations is highlighted. Additionally the necessity of expanding nursing's advocacy role to include actively advancing social justice and protecting human rights is examined. Development of a collaborative partnership with an oppressed community that will serve as the site of fieldwork experience in Nursing 3389 is initiated.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Nursing 4 Year

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
((NURS 3289)[Minimum Grade of C](May not be taken concurrently)
AND NURS 3689)[Minimum Grade of C](May not be taken concurrently)
AND NURS 4296)[Minimum Grade of C](May not be taken concurrently))
AND (PSY 1167)[Minimum Grade of C](May not be taken concurrently)
OR SOC 1167)[Minimum Grade of C](May not be taken concurrently)
OR SOC 3201)[Minimum Grade of C](May not be taken concurrently)
OR STT6 Y)(May not be taken concurrently).

NURS 3249. Ethics and Health Care. 3 Credit Hours.
This course explores the role of the health care professional in enabling patient or client systems to achieve optimal health through critical thinking and collaborative problem solving that leads to participation in health care decisions, behavior change and the attainment of self-direction. Applications of concepts of bioethics are utilized in an interdisciplinary approach for health promotion and restoration. Theories and principles of bioethics are analyzed as a basis for analyzing ethical dilemmas and problem-solving. A variety of classroom activities is used to enhance student learning. Evaluation is done with student participation, presentations, case simulations, written assignments and examinations.

Repeatability: This course may not be repeated for additional credits.

NURS 3289. Community Home III. 1 Credit Hour.
This course is the third of six courses in the major that situate the student in a selected community agency. The role of the generalist practice nurse in the care of the community is emphasized with a focus on the implementation of nursing interventions appropriate for the identified health promotion and preventative services needed at the specific community agency. Students will analyze the data collected in the comprehensive community assessment completed in Community Home II and will formulate community diagnoses. Students will plan and implement nursing interventions based on these findings in collaboration with the clients and staff at the agency. These activities will be implemented with the mentorship of senior students.

Department restrictions: Must be enrolled in one of the following Departments: CPH:Nursing

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Nursing 4 Year

Co-requisites: NURS 3689

Repeatability: This course may be repeated for additional credit.

Pre-requisites:
(NURS 2289)[Minimum Grade of C](May not be taken concurrently)
AND (NURS 2589)[Minimum Grade of C](May not be taken concurrently)
AND (PSY 2301)[Minimum Grade of C](May not be taken concurrently)
OR PSY 3 Y)(May not be taken concurrently).

NURS 3297. Research Methods. 3 Credit Hours.
Introduction to nursing research. Methods of the research process and research reports. Ethical considerations for the protection of human subjects. The nurse as a consumer of research is emphasized. NOTE: Special sections are available at other locations for RNs only.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Nursing

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
SOC 1167)[Minimum Grade of C](May not be taken concurrently)
OR PSY 1167)[Minimum Grade of C](May not be taken concurrently)
OR SOC 3201)[Minimum Grade of C](May not be taken concurrently)
OR STT6 Y)(May not be taken concurrently).
NURS 3305. Evidence Based Practice and Nursing Research: Analysis and Critical Appraisal. 3 Credit Hours.
This course serves to cultivate a foundational understanding of the research process and the practice of evidence-based care. Translation of research findings into the clinical practice environment will be emphasized. The interaction of theory, research, and clinical expertise in the development of evidence-based practice is examined. Strategies for critically reviewing, integrating, and disseminating findings from clinical research will be discussed as well as the implications of findings for nursing practice. Through the development of evidence-based practice projects, confidence with evaluating studies using informatics and understanding research and research implementation processes is gained. The conduction of research in an ethical context is explored.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Nursing 4 Year
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(NURS 3289|Minimum Grade of C|May not be taken concurrently)
AND (NURS 3689|Minimum Grade of C|May not be taken concurrently)
AND (NURS 4296|Minimum Grade of C|May not be taken concurrently)
AND (SOC 1167|Minimum Grade of C|May not be taken concurrently)
OR PSY 1167|Minimum Grade of C|May not be taken concurrently
OR SOC 3201|Minimum Grade of C|May not be taken concurrently
OR STT6 Y|May not be taken concurrently).

NURS 3389. Perspectives on Health II: Acting Locally. 3 Credit Hours.
This course is the second half of a two-course sequence concerned with the determinants of health. Application of theoretical knowledge attained from prior courses is emphasized. In collaboration with a previously selected oppressed community, a fieldwork project aimed at promoting health in the selected community is carried out. The design, implementation, and critical evaluation of the project are essential components.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Nursing 4 Year
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(NURS 3204|Minimum Grade of C|May not be taken concurrently
AND NURS 3305|Minimum Grade of C|May not be taken concurrently
AND NURS 3489|Minimum Grade of C|May not be taken concurrently
AND NURS 3789|Minimum Grade of C|May not be taken concurrently).

NURS 3489. Community Home IV. 1 Credit Hour.
This course is the fourth of six courses in the major that situate the student in a selected community agency. The role of the generalist practice nurse in the care of the community is emphasized with a focus on the continued implementation of nursing interventions designed in Community Home III experience. Evaluation of the outcomes of the interventions is required. These activities will be implemented with the mentorship of senior students.
Department restrictions: Must be enrolled in one of the following Departments: CPH:Nursing
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Nursing 4 Year
Co-requisites: NURS 3204, NURS 3305, NURS 3789
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(NURS 3289|Minimum Grade of C|May not be taken concurrently)
AND (NURS 3689|Minimum Grade of C|May not be taken concurrently)
AND (NURS 4296|Minimum Grade of C|May not be taken concurrently)
AND (PSY 1167|Minimum Grade of C|May not be taken concurrently)
OR SOC 1167|Minimum Grade of C|May not be taken concurrently
OR SOC 3201|Minimum Grade of C|May not be taken concurrently
OR STT6 Y|May not be taken concurrently).

NURS 3689. Generalist Nursing Practice II: Primary & Secondary Care of the Family. 6 Credit Hours.
This course focuses on the application of theories, concepts, research, genetics, and issues related to the primary and secondary management of reproductive health and the primary care of children. The student will provide nursing care to the new family, explore normal growth and development of the child from the embryonic stage through adolescence, and engage in interventions aimed at supporting women's and men's reproductive health throughout the lifespan. Health promotion, health maintenance, major health concerns, common illnesses, cultural practices, and their influences on each developmental stage will be explored.
Department restrictions: Must be enrolled in one of the following Departments: CPH:Nursing
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Nursing 4 Year
Co-requisites: NURS 3289
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(NURS 2289|Minimum Grade of C|May not be taken concurrently)
AND (NURS 2589|Minimum Grade of C|May not be taken concurrently)
AND (PSY 2301|Minimum Grade of C|May not be taken concurrently
OR PSY3 Y|May not be taken concurrently).
NURS 3789. Generalist Nursing Practice III: Secondary Care Across the Lifespan. 6 Credit Hours.
This course focuses on the application of theories, concepts, research, and issues related to the care of clients, across the lifespan, with identified chronic health problems in need of secondary health care services. Concepts of disability, rehabilitation, mental illness, cancer, and other chronic illnesses are explored. Students will engage in the management of care for clients with chronic diseases and/or disabilities. Related issues of development, diagnosis, treatment, and family concerns are included. Fieldwork experiences will include sites along the continuum of care including acute inpatient, rehabilitation, long-term care and hospice facilities, as well as clients’ homes. Involvement of the client, family and community as integral members of the health care team is emphasized. End of life issues and hospice care are also addressed.
Department restrictions: Must be enrolled in one of the following Departments: CPH:Nursing
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Nursing 4 Year
Co-requisites: NURS 3204, NURS 3305, NURS 3489
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(NURS 3289|Minimum Grade of C|May not be taken concurrently)
AND (NURS 3689|Minimum Grade of C|May not be taken concurrently)
AND (NURS 4296|Minimum Grade of C|May not be taken concurrently)
AND (PSY 1061|Minimum Grade of C|May not be taken concurrently)
OR PSY 1001|Minimum Grade of C|May not be taken concurrently
OR PSY1 Y|May not be taken concurrently)
AND (PSY 1167|Minimum Grade of C|May not be taken concurrently)
OR SOC 1167|Minimum Grade of C|May not be taken concurrently
OR SOC 3201|Minimum Grade of C|May not be taken concurrently
OR STT6 Y|May not be taken concurrently).

NURS 4106. Healthy Aging. 3 Credit Hours.
This course focuses on promoting healthy aging in the context of the local community. Current theories on aging are examined from multiple perspectives including psychological, sociological, political, economic and cultural. Of particular interest are the effects of health disparities on healthy aging in vulnerable populations. The concepts of palliative care and end-of-life care are explored from the perspective of economically and socially at-risk elderly. A fieldwork experience with older adults in a variety of settings including homeless shelters, federally funded nurse-managed clinics, local senior citizen centers, hospice centers, and mental health clinics is an essential component.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Nursing
Repeatability: This course may not be repeated for additional credits.

NURS 4198. Health Policy and Economics. 3 Credit Hours.
This writing-intensive course focuses on the roles of economics, policy, legislation, and regulation in regard to health care and public health services in the U.S. Emphasis is placed on social, cultural, economic, and demographic factors that have had an impact on health care policy, with particular focus on distributive justice in health care. Students explore relationships between broad societal constructs and the evolution of nursing legislation from generalist to advanced practice licensure and certification. Basic principles of access, equity, quality care, and health promotion and prevention are discussed and debated within the broad context of health insurance in the U.S. Students explore the effects of federal health care and social welfare programs on the quality and quantity of nursing care delivered.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Nursing
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(NURS 3389|Minimum Grade of C|May not be taken concurrently)
AND NURS 4589|Minimum Grade of C|May not be taken concurrently
AND NURS 4889|Minimum Grade of C|May not be taken concurrently).

NURS 4296. Genetics and Genomics. 3 Credit Hours.
This course explores genetic concepts and principles as major determinants of population health. Genetic theory and research is discussed with an emphasis on how genes interact with each other and the environment in ways that predispose individuals to common health conditions such as heart disease, arthritis, diabetes, cancer, and immunopathologies. Translation of genetic and genomic principles into clinical practice, including recognition of disease patterns among genetically related groups is emphasized. Application of ethical principles to clinical practice situations is examined.
Department restrictions: Must be enrolled in one of the following Departments: CPH:Nursing
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Nursing 4 Year
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(NURS 2289|Minimum Grade of C|May not be taken concurrently)
AND (NURS 2589|Minimum Grade of C|May not be taken concurrently)
AND (PSY 2301|Minimum Grade of C|May not be taken concurrently
OR PSY3 Y|May not be taken concurrently).
NURS 4489. Senior Seminar: Evidence Based Practice Fieldwork Experience. 3 Credit Hours.
This is sequentially the final course in the nursing major. In collaboration with partner agencies, a relevant practice issue is identified and an evidence-based practice project is produced. Emphasis is placed on the critique and synthesis of relevant literature and other sources of evidence. Formulation of recommendations for practice, planning for implementation, and the development of evaluation strategies are key components. Awareness of the effect of cultural beliefs, values, and practices of individuals, families, and communities on healthcare preferences is an essential element. Systems of structural power, social justice, and ethics are integrated into practice.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Nursing 4 Year
Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may not be repeated for additional credits
Pre-requisites: (NURS 3389|Minimum Grade of C|May not be taken concurrently
AND NURS 4589|Minimum Grade of C|May not be taken concurrently
AND NURS 4889|Minimum Grade of C|May not be taken concurrently).

NURS 4555. Nursing Leadership. 3 Credit Hours.
This capstone course serves as an introduction to theories of leadership and management. The course focuses on leadership as an essential component of the professional nurse's role. In addition, managerial issues related to health care delivery systems are discussed.
Department restrictions: Must be enrolled in one of the following Departments: CPH:Nursing
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Nursing
Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may not be repeated for additional credits
Pre-requisites: (NURS 4141|Minimum Grade of C|May not be taken concurrently
AND NURS 4142|Minimum Grade of C|May not be taken concurrently
AND NURS 4187|Minimum Grade of C|May not be taken concurrently
AND NURS 4197|Minimum Grade of C|May not be taken concurrently
AND NURS 4287|Minimum Grade of C|May not be taken concurrently).

NURS 4589. Community Home V. 1 Credit Hour.
This course is the fifth of six courses in the major that situate the student in a selected community agency. The role of the generalist practice nurse in the care of the community is emphasized with a focus on leadership for health promotion and disease prevention. Senior students will supervise freshmen, sophomore, and junior students in the assessment, implementation, and evaluation of heath promotion and secondary prevention interventions at the assigned community home. Senior students will collaborate with community home members, community agency leadership, and other stakeholders in the development and ongoing delivery of health services by Temple University nursing students and faculty.
Department restrictions: Must be enrolled in one of the following Departments: CPH:Nursing
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Nursing 4 Year
Co-requisites: NURS 3389, NURS 4889
Repeatability: This course may be repeated for additional credit.
Pre-requisites: (NURS 3204|Minimum Grade of C|May not be taken concurrently
AND NURS 3305|Minimum Grade of C|May not be taken concurrently
AND NURS 3489|Minimum Grade of C|May not be taken concurrently
AND NURS 3789|Minimum Grade of C|May not be taken concurrently).

NURS 4689. Community Home VI. 1 Credit Hour.
This course is the final course in the series of six course which situate the student in a selected community agency. A continuation of Community Home V, the role of the generalist practice nurse in the care of the community is emphasized with a focus on leadership for health promotion and disease prevention. Senior students will continue to supervise freshmen, sophomore, and junior students in the assessment, implementation, and evaluation of heath promotion and secondary prevention interventions at the assigned community home. Senior students will collaborate with community home members, community agency leadership, and other stakeholders in the development and ongoing delivery of health services by Temple University nursing students and faculty.
Department restrictions: Must be enrolled in one of the following Departments: CPH:Nursing
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Nursing 4 Year
Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Co-requisites: NURS 4198, NURS 4489, NURS 4885
Repeatability: This course may be repeated for additional credit.
Pre-requisites: (NURS 3389|Minimum Grade of C|May not be taken concurrently
AND NURS 4589|Minimum Grade of C|May not be taken concurrently
AND NURS 4889|Minimum Grade of C|May not be taken concurrently).
NURS 4877. Professional Seminar. 3 Credit Hours.
This course examines the concepts of stress, coping and crisis intervention. Related contemporary topics will be addressed from an evidence-based approach. Complementary healthcare practices are explored as a method of coping. NOTE: An advanced course and should be taken as the final course in the sequence.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Nursing
Repeatability: This course may not be repeated for additional credits
Pre-requisites: (NURS 3143|Minimum Grade of C|May not be taken concurrently
AND NURS 3246|Minimum Grade of C|May not be taken concurrently
AND NURS 3262|Minimum Grade of C|May not be taken concurrently
AND NURS 3297|Minimum Grade of C|May not be taken concurrently
AND NURS 3796|Minimum Grade of C|May not be taken concurrently).

NURS 4882. Independent Study in Nursing. 1 to 6 Credit Hour.
Individual study of a theoretical or clinical nursing problem or topic. Student-initiated focus under the guidance of appropriate faculty.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Nursing
Repeatability: This course may be repeated for additional credit.

NURS 4885. Generalist Nursing Practice Internship. 2 Credit Hours.
The internship experience is designed to prepare the student to function as a graduate nurse and focuses on the integration and synthesis of scientific knowledge with clinical nursing practice and the development of the professional nursing role. During this course the student is paired with a professional nurse. Students select a practice area from a variety of options in primary, secondary, or tertiary care settings. Students provide the full range of direct and indirect nursing care and evaluate the outcomes of care. Principles of leadership, accountability, and self-regulation will be applied to clinical practice as the student operationalizes the professional nursing role.
Department restrictions: Must be enrolled in one of the following Departments: CPH:Nursing
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Nursing 4 Year
Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Co-requisites: NURS 4198, NURS 4489, NURS 4689
Repeatability: This course may be repeated for additional credit.
Pre-requisites: (NURS 3389|Minimum Grade of C|May not be taken concurrently
AND NURS 4589|Minimum Grade of C|May not be taken concurrently
AND NURS 4889|Minimum Grade of C|May not be taken concurrently).

NURS 4889. Generalist Nursing Practice IV: Tertiary Care Across the Lifespan. 6 Credit Hours.
This course focuses on the application of theories, concepts, research, and issues related to acute illness requiring specialized nursing care across the lifespan in tertiary care settings. Concepts such as high risk pregnancy, critical care, trauma, burns, and organ transplants will be addressed. The synthesis of core nursing knowledge in the management of clients across the lifespan with potentially life-threatening, unstable, and complex health problems is emphasized.
Department restrictions: Must be enrolled in one of the following Departments: CPH:Nursing
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Nursing 4 Year
Co-requisites: NURS 3389, NURS 4589
Repeatability: This course may not be repeated for additional credits
Pre-requisites: (NURS 3204|Minimum Grade of C|May not be taken concurrently
AND NURS 3305|Minimum Grade of C|May not be taken concurrently
AND NURS 3489|Minimum Grade of C|May not be taken concurrently
AND NURS 3789|Minimum Grade of C|May not be taken concurrently).

Organizational Studies (ORGS)

Courses

OTHR 1001. Exploring Occupational Therapy. 2 Credit Hours.
This course, designed for non-majors, serves as an overview and introduction to occupational therapy (OT). Socio-historical influences leading to the establishment of the profession will be explored, as well as the philosophical foundation of "occupation" as therapeutic intervention. Experiential learning includes guided observation of a clinical setting as well as hands-on activities. Weekly readings from multiple sources inform students of professional issues and first-hand experiences of individuals adapting to disability and rehabilitation.
Repeatability: This course may not be repeated for additional credits.
Courses

ORGS 4096. Senior Seminar in Organizational Studies. 4 Credit Hours.
Students read texts chosen because they are reflective about organizations. Students undertake a research project and write a long report or paper that integrates this research with their academic work in the major. The research data will be either one aspect of their current work experience or a scholarly exploration of a single topic. NOTE: This course serves as the Capstone reading and research course for the Organizational Studies major.

Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

PHETE (PHTE)

Courses

PHTE 2541. Introduction to Teaching Health Education I. 1 Credit Hour.
First in a two-course sequence designed to introduce health education to students preparing to be teachers of health and physical education in grades K to 12. Three teaching strategies (lecture and discussion, texts and work sheets, and media) are taught while introducing three non-sensitive areas of health (personal health, nutrition, and safety). Students are introduced to various health curricula.

Co-requisites: PHTE 2543, PHTE 2555
Repeatability: This course may not be repeated for additional credits.

PHTE 2542. Introduction to Teaching Health Education II. 1 Credit Hour.
Second in a two-course sequence designed to introduce health education to students preparing to be teachers of health and physical education in grades K to 12. Four teaching strategies (role play, dramatizations, cooperative learning, and learning stations) are taught while introducing three sensitive areas of health (drug abuse, human sexuality, and emotional health). Students are introduced to various health curricula.

Co-requisites: PHTE 2544, PHTE 2556
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
PHTE 2541|Minimum Grade of C|May not be taken concurrently.

PHTE 2543. Basic Movement I. 1 Credit Hour.
First in a two-course sequence designed to introduce basic movement forms to students preparing to be teachers of health and physical education in grades K to 12. Fundamental locomotor, axial, and manipulative movements are studied along with their teaching progressions. Basic game play and developmental sequencing are studied along with teaching progressions. NOTE: This course is designed for PHETE students.

Co-requisites: PHTE 2541, PHTE 2555
Repeatability: This course may not be repeated for additional credits.

PHTE 2544. Basic Movement II. 1 Credit Hour.
Second in a two-course sequence designed to introduce basic movement forms to students preparing to be teachers of health and physical education in grades K to 12. Rhythmic activities and developmental dance are studied along with their teaching progressions. Fundamental aquatic skills, safety, games, and springboard diving are studied along with their teaching progressions. NOTE: This course is designed for PHETE students.

Co-requisites: PHTE 2542, PHTE 2556
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
PHTE 2543|Minimum Grade of C|May not be taken concurrently.

PHTE 2555. Microteaching in PHETE. 1 Credit Hour.
First in a two-course sequence designed to introduce physical education to students preparing to be teachers of health and physical education in grades K to 12. Fundamentals of planning activities, analyzing tasks, demonstrating techniques, and managing skills are learned. Students practice teaching a small group of students (6-7) one period a week in a local elementary school. NOTE: Transportation may be required.

Co-requisites: PHTE 2541, PHTE 2543
Repeatability: This course may not be repeated for additional credits

PHTE 2556. Tutorial in PHETE. 1 Credit Hour.
Second in a two-course sequence designed to introduce physical education to students preparing to be teachers of health and physical education in grades K to 12. Fundamentals of planning activities, analyzing tasks, managing discipline, questioning techniques, providing feedback, and managing skills are learned. Students practice teaching a small group of students (6-7) one period a week in a local elementary school. NOTE: Transportation may be required.

Co-requisites: PHTE 2542, PHTE 2544
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
PHTE 2555|Minimum Grade of C|May not be taken concurrently.
PHTE 2601. Movement and Learning in Early Childhood. 2 or 3 Credit Hours.
Movement and Learning in Early Childhood is designed to help prepare undergraduate teacher certification students in the College of Education's Early Childhood Education (PreK-4) program and the College of Public Health's Physical and Health Education Teacher Education program plan and conduct movement experiences for preschool-aged children. The main content areas of the course include: 1) children's gross motor development, 2) teaching movement concepts (e.g., spatial awareness) and skills (e.g., locomotor movements), 3) using movement activities to teach academic content (e.g., literacy and math concepts), 4) facilitating children's unstructured free play, and 5) safety considerations when conducting movement experiences. Content will be delivered through online tasks, such as instructional videos for students to watch and then complete related assignments, and through in-class meetings to provide students with practical experience in planning and conducting movement activities. In addition, students will observe a movement-based lesson at a preschool program and document the experience. Students' knowledge and skills will be assessed primarily through 1) lesson plans, 2) peer-teaching episodes, 3) reaction papers, 4) quizzes, 5) discussion board responses, and 6) blog postings.

Repeatability: This course may not be repeated for additional credits.

PHTE 3541. Advanced Movement I. 3 Credit Hours.
First in a two-course sequence designed to introduce advanced movement forms to students preparing to be teachers of health and physical education in grades K to 12. Adventure activities, track and field, and dance are studied along with their teaching progressions. Instruction in a local public school plus a weekend field trip to participate in adventure activities are included in this course. NOTE: This course is designed for PHETE students.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
PHTE 2544|Minimum Grade of C|May not be taken concurrently.

PHTE 3542. Advanced Movement II. 3 Credit Hours.
Second in a two-course sequence designed to introduce advanced movement forms to students preparing to be teachers of health and physical education in grades K to 12. Badminton, personal defense, line dancing, and soccer are studied along with their teaching progressions. NOTE: This course is designed for PHETE students.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
PHTE 3541|Minimum Grade of C|May not be taken concurrently.

PHTE 3553. PHETE I. 4 Credit Hours.
First in a two-course sequence designed to develop competent teachers of health and physical education in grades K to 12. Topics include, but are not limited to, foundations of physical and health education, lesson plans, direct teaching styles, learning theory, discipline, and instructional media. Students micro-teach physical and health education lessons in lab settings.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
PHTE 2556|Minimum Grade of C|May not be taken concurrently.

PHTE 3554. PHETE II. 4 Credit Hours.
Second in a two course sequence designed to develop competent teachers of health and physical education in grades K to 12. Topics include, but are not limited to, unit plans, indirect teaching styles, assessment, evaluation, and grading. Students micro-teach physical and health education lessons in lab settings.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
PHTE 3553|Minimum Grade of C|May not be taken concurrently.

PHTE 3561. Health Science I. 3 Credit Hours.
Comprehensive health education information on physiological and environmental health. Creative and innovative teaching methods. NOTE: This course is for PHETE majors only.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
PHTE 2542|Minimum Grade of C|May not be taken concurrently.

PHTE 3562. Health Science II. 3 Credit Hours.
Health education and teaching methods in the areas of mental health, drug abuse, sexuality, family living, accident prevention, consumer health, and community health. NOTE: This course is for PHETE majors only.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
PHTE 3561|Minimum Grade of C|May not be taken concurrently.

PHTE 3587. PHETE Practicum I. 1 Credit Hour.
This course is an in-school practicum whereby students spend two hours per week teaching physical and health education in a local middle school or high school.

Co-requisites: PHTE 3553, PHTE 3561

Repeatability: This course may be repeated for additional credit.

Pre-requisites:
PHTE 2541 to 2556|Minimum Grade of C|May not be taken concurrently.
PHTE 3687. PHETE Practicum II. 1 Credit Hour.
This course is an in-school practicum wherein students spend two hours per week teaching physical and health education in a local middle school or high school (whichever level was not experienced in PHTE 3587).
Co-requisites: PHTE 3554, PHTE 3562
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
PHTE 3587|Minimum Grade of C|May not be taken concurrently.

PHTE 3787. Parkway High School Practicum. 1 Credit Hour.
Parkway High School Practicum is a one-credit course designed to afford junior level, PHETE certification students the opportunity to put theory into practice by teaching both health and physical education classes to students from the School District of Philadelphia’s Parkway High School. This practicum experience affords PHETE students the opportunity to take full responsibility for designing and delivering units of instruction in both health and physical education.
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
PHTE 2541 to 2556|Minimum Grade of C|May not be taken concurrently.

PHTE 4554. The School Environment. 2 Credit Hours.
A survey course which deals with school organization, school law, legal liability, organization of intramural and interscholastic programs, professional associations and publications, and other sources of professional information.
Co-requisites: PHTE 4556, PHTE 4563, PHTE 4587
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
PHTE 3554|Minimum Grade of C|May not be taken concurrently.

PHTE 4556. Developmental and Adapted PHETE. 3 Credit Hours.
This course is designed to assist students in meeting the needs of special populations. Students learn normal and abnormal patterns of human growth and development, and how to modify both curriculum and instruction to meet the needs of special populations. NOTE: Students practice teaching special needs students one hour per week in local schools and agencies.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
PHTE 3554|Minimum Grade of C|May not be taken concurrently.

PHTE 4563. Health Science III. 3 Credit Hours.
Addresses the issues of community/public health on consumer health, communicable diseases, self-help, medical care and child abuse. NOTE: This course is for PHETE majors only.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Phete
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
PHTE 3562|Minimum Grade of C|May not be taken concurrently.

PHTE 4587. PHETE Practicum III. 1 Credit Hour.
This course is an in-school practicum whereby students spend two hours per week teaching physical and health education in a local elementary school (same site as student teaching assignment).
Co-requisites: PHTE 4554, PHTE 4556
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
PHTE 3687|Minimum Grade of C|May not be taken concurrently.

PHTE 4588. Student Teaching in Health and Physical Education. 12 Credit Hours.
The final field work practicum associated with the PHETE program providing a full-time teaching experience in health and physical education. Students are assigned to two public schools (at least one in an urban setting), one elementary, and one secondary, for eight weeks each. NOTE: Students spend the entire day teaching under the supervision of a cooperating master teacher.
Co-requisites: PHTE 4589
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
((KINS 2203|Minimum Grade of C-|May not be taken concurrently
AND KINS 2204|Minimum Grade of C-|May not be taken concurrently
AND KINS 3202|Minimum Grade of C-|May not be taken concurrently))
AND (KINS 4279|Minimum Grade of C-|May not be taken concurrently
OR KINS 4296|Minimum Grade of C-|May not be taken concurrently)
AND (PHTE 2541 to 4587|Minimum Grade of C|May not be taken concurrently).
PHTE 4589. Field Study in PHETE. 1 Credit Hour.
This seminar, taken in conjunction with student teaching, provides students with the opportunity to discuss their practicum experiences and learn from the experiences of others. Current topics facing the profession are also discussed. Systematic observation instruments employed to analyze teaching/learning environment are used to introduce students to teaching assessment.
Co-requisites: PHTE 4588
Repeatability: This course may be repeated for additional credit.

PHTE 4590. Special Topics in PHETE. 1 to 6 Credit Hour.
The focus of this course is a topic important to the field of teaching health and physical education. Different topics will be covered in different semesters. The emphasis will be on important topics in teaching, teacher preparation and the application of new ideas to the teaching and learning environment.
NOTE: PHETE majors only.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Phete
Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may be repeated for additional credit.

Painting, Drawing & Sculpture (PDS)

Courses

PDS 2011. Painting. 3 Credit Hours.
Introduces the second-year student to the procedural logic necessary to articulate the figure and still life in oil and acrylic media. The student is encouraged to explore invented as well as analytical form.
Field of Study Restrictions: May not be enrolled in one of the following Majors: Art History
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts, Bach of Science Educ
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(FDPR 1511|Minimum Grade of C-|May not be taken concurrently
AND FDPR 1512|Minimum Grade of C-|May not be taken concurrently
OR VS 1151|Minimum Grade of C-|May not be taken concurrently.

PDS 2051. Painting Materials & Techniques. 3 Credit Hours.
The course will address both traditional and contemporary topics in the materials and techniques of drawing and painting.
Field of Study Restrictions: May not be enrolled in one of the following Majors: Art History
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(FDPR 1511|Minimum Grade of C-|May not be taken concurrently
AND FDPR 1512|Minimum Grade of C-|May not be taken concurrently
OR VS 1151|Minimum Grade of C-|May not be taken concurrently.

PDS 2111. Painting. 3 Credit Hours.
Introduces the second-year student to the procedural logic necessary to articulate the figure and still life in oil and acrylic media. The student is encouraged to explore invented as well as analytical form.
Field of Study Restrictions: May not be enrolled in one of the following Majors: Art History
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts, Bach of Science Educ
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(FDPR 1511|Minimum Grade of C-|May not be taken concurrently
AND FDPR 1512|Minimum Grade of C-|May not be taken concurrently
OR VS 1151|Minimum Grade of C-|May not be taken concurrently.

PDS 2211. Painting on Paper for Non-Tyler BFA Students. 3 Credit Hours.
This introduction to watercolor and other water-based media course meets in the studio as well as on-site throughout the city. Subjects range from landscape to the model and still life with an emphasis on art historical and current references to subject matter. Painting from observation provides the structure for almost all the assignments but individual interpretation and fluency with color are the ultimate goals of the class. NOTE: This course will not fulfill Tyler BFA requirements.
Repeatability: This course may not be repeated for additional credits.
PDS 2231. Painting Workshop. 3 Credit Hours.
A studio painting course with emphasis on the development of a student's individual point of view. Class work will focus on the development of the student's ability to work at a conceptually advanced level. Experimentation is encouraged.
**College Restrictions:** Must be enrolled in one of the following Colleges: Art, Tyler School
**Repeatability:** This course may be repeated for additional credit.
**Pre-requisites:**
(FDPR 1511|Minimum Grade of C-|May not be taken concurrently AND FDPR 1512|Minimum Grade of C-|May not be taken concurrently) OR VS 1151|Minimum Grade of C-|May not be taken concurrently.

PDS 2311. Intermediate Drawing. 3 Credit Hours.
The practice of drawing as a way to explore ideas and materials as well as the development of a disciplined approach to draftsmanship.
**Field of Study Restrictions:** May not be enrolled in one of the following Majors: Art History
**Degree Restrictions:** Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
**College Restrictions:** Must be enrolled in one of the following Colleges: Art, Tyler School
**Repeatability:** This course may not be repeated for additional credits
**Pre-requisites:**
(FDPR 1511|Minimum Grade of C-|May not be taken concurrently AND FDPR 1512|Minimum Grade of C-|May not be taken concurrently) OR VS 1151|Minimum Grade of C-|May not be taken concurrently.

PDS 2321. Intermediate Drawing. 3 Credit Hours.
The practice of drawing as a way to explore ideas and materials as well as the development of a disciplined approach to draftsmanship.
**Field of Study Restrictions:** May not be enrolled in one of the following Majors: Art History
**Degree Restrictions:** Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
**College Restrictions:** Must be enrolled in one of the following Colleges: Art, Tyler School
**Repeatability:** This course may not be repeated for additional credits
**Pre-requisites:**
(FDPR 1511|Minimum Grade of C-|May not be taken concurrently AND FDPR 1512|Minimum Grade of C-|May not be taken concurrently) OR VS 1151|Minimum Grade of C-|May not be taken concurrently.

PDS 2331. Intermediate Figure Drawing. 3 Credit Hours.
An intermediate course focused entirely on the human figure as subject. There is emphasis on a variety of approaches to drawing the figure. Dynamics, proportion, anatomy, volume, and structure will be investigated through various drawing methods and selected materials. Frequent historical references will be made through reproductions and slides, and 20th century figure drawing will be thoroughly discussed.
**Field of Study Restrictions:** May not be enrolled in one of the following Majors: Art History
**Degree Restrictions:** Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
**College Restrictions:** Must be enrolled in one of the following Colleges: Art, Tyler School
**Repeatability:** This course may not be repeated for additional credits
**Pre-requisites:**
(FDPR 1511|Minimum Grade of C-|May not be taken concurrently AND FDPR 1512|Minimum Grade of C-|May not be taken concurrently) OR VS 1151|Minimum Grade of C-|May not be taken concurrently.

PDS 2341. Digital Drawing. 3 Credit Hours.
This course engages students with the possibilities of the computer as a drawing tool. Digital Drawing expands the conceptual and pictorial fundamentals of drawing and painting.
**Field of Study Restrictions:** May not be enrolled in one of the following Majors: Art History
**Degree Restrictions:** Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts, Bach of Science Educ
**College Restrictions:** Must be enrolled in one of the following Colleges: Art, Tyler School
**Repeatability:** This course may be repeated for additional credit.
**Pre-requisites:**
(FDPR 1511|Minimum Grade of C-|May not be taken concurrently AND FDPR 1512|Minimum Grade of C-|May not be taken concurrently) OR VS 1151|Minimum Grade of C-|May not be taken concurrently.

PDS 2361. Drawing Workshop. 3 Credit Hours.
Studies in drawing emphasizing individual instruction for students of varied backgrounds.
**Field of Study Restrictions:** May not be enrolled in one of the following Majors: Art History
**Repeatability:** This course may be repeated for additional credit.
**Pre-requisites:**
(FDPR 1511|Minimum Grade of C-|May not be taken concurrently AND FDPR 1512|Minimum Grade of C-|May not be taken concurrently) OR VS 1151|Minimum Grade of C-|May not be taken concurrently.
PDS 2511. Art Matters. 3 Credit Hours.  
Art Matters is designed for the sophomore student intending to major in painting. The course objective is to incorporate a working understanding of art-historical precedents and their relationships to cultural, political, historical, and critical discourses as a complex and vital component of the development of a contemporary painting practice. This course combines a seminar approach of study using readings, film, field trips, and discussions in relation to studio practice.  
Field of Study Restrictions: May not be enrolled in one of the following Majors: Art History  
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts  
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School  
Repeatability: This course may be repeated for additional credit.  
Pre-requisites:  
(FDPR 1511|Minimum Grade of C-|May not be taken concurrently  
AND FDPR 1512|Minimum Grade of C-|May not be taken concurrently)  
OR VS 1151|Minimum Grade of C-|May not be taken concurrently.

PDS 2521. Video Workshop. 3 Credit Hours.  
This course is an introduction to basic digital video editing.  
Field of Study Restrictions: May not be enrolled in one of the following Majors: Art History  
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts  
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School  
Repeatability: This course may not be repeated for additional credits  
Pre-requisites:  
(FDPR 1511|Minimum Grade of C-|May not be taken concurrently  
AND FDPR 1512|Minimum Grade of C-|May not be taken concurrently)  
OR VS 1351|Minimum Grade of C-|May not be taken concurrently.

PDS 2611. Sculpture. 3 Credit Hours.  
Develops the integration of sculptural concept and practice, and the critical analysis of completed sculpture through a series of projects that investigate basic sculptural processes and issues. Lectures on directions in sculpture, technical demonstrations, and group critiques are scheduled.  
Field of Study Restrictions: May not be enrolled in one of the following Majors: Art History  
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts, Bach of Science Educ  
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School  
Repeatability: This course may be repeated for additional credit.  
Pre-requisites:  
(FDPR 1511|Minimum Grade of C-|May not be taken concurrently  
AND FDPR 1512|Minimum Grade of C-|May not be taken concurrently)  
OR VS 1351|Minimum Grade of C-|May not be taken concurrently.

PDS 2621. Sculpture. 3 Credit Hours.  
Develops the integration of sculptural concept and practice, and the critical analysis of completed sculpture through a series of projects that investigate basic sculptural processes and issues. Lectures on directions in sculpture, technical demonstrations, and group critiques are scheduled.  
Field of Study Restrictions: May not be enrolled in one of the following Majors: Art History  
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts, Bach of Science Educ  
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School  
Repeatability: This course may be repeated for additional credit.  
Pre-requisites:  
(FDPR 1511|Minimum Grade of C-|May not be taken concurrently  
AND FDPR 1512|Minimum Grade of C-|May not be taken concurrently)  
OR VS 1351|Minimum Grade of C-|May not be taken concurrently.

PDS 2631. Figure Modeling. 3 Credit Hours.  
This course stresses clinical observation as well as analytical response to issues pertaining to the body. The nature and aspects of representation in the sculptural tradition are considered. Work from the model in class.  
Field of Study Restrictions: May not be enrolled in one of the following Majors: Art History  
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Bachelor of Fine Arts, Bach of Science Educ  
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School  
Repeatability: This course may be repeated for additional credit.  
Pre-requisites:  
(FDPR 1511|Minimum Grade of C-|May not be taken concurrently  
AND FDPR 1512|Minimum Grade of C-|May not be taken concurrently)  
OR VS 1351|Minimum Grade of C-|May not be taken concurrently.
PDS 2632. Installation. 3 Credit Hours.
Investigations into the intrinsic meaning of the site will be coupled with the effective channeling of those issues into the work of art. Ideas, material, and placement will be analyzed so as to achieve cogent integration into the site. Introduction to use of scale models and various types of models to analyze a site and plan work for a site is part of this course. Lectures, individual discussions, and group critiques are scheduled.
Field of Study Restrictions: May not be enrolled in one of the following Majors: Art History
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
((FDPR 1531|Minimum Grade of C-|May not be taken concurrently
AND FDPR 1532|Minimum Grade of C-|May not be taken concurrently)
OR VS 1351|Minimum Grade of C-|May not be taken concurrently)
AND (PDS 2611|Minimum Grade of C-|May not be taken concurrently
OR PDS 2621|Minimum Grade of C-|May not be taken concurrently).

PDS 2641. Mold-Making Technology. 3 Credit Hours.
Flexible moldmaking techniques are explored using foam, latex, RTV and silicone rubber, as well as alginate compounds for direct body casts. Non-flexible techniques include wood forms for cement castings. Positives are cast in cement, plaster, rubber and polyurethane using both solid and hollow casting methods. Students incorporate these techniques in directed projects, or for completing self-directed work.
Field of Study Restrictions: May not be enrolled in one of the following Majors: Art History
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
((FDPR 1531|Minimum Grade of C-|May not be taken concurrently
AND FDPR 1532|Minimum Grade of C-|May not be taken concurrently)
OR VS 1351|Minimum Grade of C-|May not be taken concurrently)
AND (PDS 2611|Minimum Grade of C-|May not be taken concurrently
OR PDS 2621|Minimum Grade of C-|May not be taken concurrently).

PDS 3011. Advanced Painting. 3 Credit Hours.
A studio painting course with emphasis on the development of a student's individual point of view. Class work focuses on the development of the student's ability to work at a conceptually advanced level. Experimentation is encouraged and there are frequent class critiques.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(PDS 2011|Minimum Grade of C-|May not be taken concurrently
OR PDS 2111|Minimum Grade of C-|May not be taken concurrently)
AND (PDS 2311|Minimum Grade of C-|May not be taken concurrently
OR PDS 2321|Minimum Grade of C-|May not be taken concurrently
OR PDS 2331|Minimum Grade of C-|May not be taken concurrently
OR PDS 2341|Minimum Grade of C-|May not be taken concurrently).

PDS 3021. Landscape. 3 Credit Hours.
An examination of painting problems involved in the variable light, space, and form of cityscape and landscape. Work from various sites and sources.
NOTE: This course may fulfill an advanced Painting/Drawing Studio Major or Studio Elective.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(PDS 2011|Minimum Grade of C-|May not be taken concurrently
OR PDS 2111|Minimum Grade of C-|May not be taken concurrently)
AND (PDS 2311|Minimum Grade of C-|May not be taken concurrently
OR PDS 2321|Minimum Grade of C-|May not be taken concurrently
OR PDS 2331|Minimum Grade of C-|May not be taken concurrently
OR PDS 2341|Minimum Grade of C-|May not be taken concurrently).
PDS 3031. Figure Painting. 3 Credit Hours.
A painting course based on direct observation. Fundamentals of oil painting as well as an understanding of anatomy, composition, and the relationship of the figure to its environment are stressed. The development of an individualized approach and the use of content are explored through group discussion and assigned work.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(PDS 2011|Minimum Grade of C-|May not be taken concurrently
OR PDS 2111|Minimum Grade of C-|May not be taken concurrently)
AND (PDS 2311|Minimum Grade of C-|May not be taken concurrently
OR PDS 2321|Minimum Grade of C-|May not be taken concurrently
OR PDS 2331|Minimum Grade of C-|May not be taken concurrently
OR PDS 2341|Minimum Grade of C-|May not be taken concurrently).

PDS 3041. Color. 3 Credit Hours.
The study of color, its characteristics, and interaction, explored through studio painting experiences. NOTE: This course may fulfill an advanced Painting/ Drawing Studio Major or Studio Elective.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(PDS 2011|Minimum Grade of C-|May not be taken concurrently
OR PDS 2111|Minimum Grade of C-|May not be taken concurrently)
AND (PDS 2311|Minimum Grade of C-|May not be taken concurrently
OR PDS 2321|Minimum Grade of C-|May not be taken concurrently
OR PDS 2331|Minimum Grade of C-|May not be taken concurrently
OR PDS 2341|Minimum Grade of C-|May not be taken concurrently).

PDS 3111. Advanced Painting. 3 Credit Hours.
A studio painting course with emphasis on the development of a student's individual point of view. Class work focuses on the development of the student's ability to work at a conceptually advanced level. Experimentation is encouraged and there are frequent class critiques.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(PDS 2011|Minimum Grade of C-|May not be taken concurrently
OR PDS 2111|Minimum Grade of C-|May not be taken concurrently)
AND (PDS 2311|Minimum Grade of C-|May not be taken concurrently
OR PDS 2321|Minimum Grade of C-|May not be taken concurrently
OR PDS 2331|Minimum Grade of C-|May not be taken concurrently
OR PDS 2341|Minimum Grade of C-|May not be taken concurrently).

PDS 3141. Color. 3 Credit Hours.
The study of color, its characteristics, and interaction, explored through studio painting experiences. NOTE: This course may fulfill an advanced Painting/ Drawing Studio Major or Studio Elective.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(PDS 2011|Minimum Grade of C-|May not be taken concurrently
OR PDS 2111|Minimum Grade of C-|May not be taken concurrently)
AND (PDS 2311|Minimum Grade of C-|May not be taken concurrently
OR PDS 2321|Minimum Grade of C-|May not be taken concurrently
OR PDS 2331|Minimum Grade of C-|May not be taken concurrently
OR PDS 2341|Minimum Grade of C-|May not be taken concurrently).
PDS 3211. Painting on Paper. 3 Credit Hours.
A study of the uses of aqueous media beyond transparent watercolor. Opaque watercolor, collage, and transfer techniques, and oil and acrylic on paper are explored.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(PDS 2011|Minimum Grade of C-|May not be taken concurrently
OR PDS 2111|Minimum Grade of C-|May not be taken concurrently
AND (PDS 2311|Minimum Grade of C-|May not be taken concurrently
OR PDS 2321|Minimum Grade of C-|May not be taken concurrently
OR PDS 2331|Minimum Grade of C-|May not be taken concurrently
OR PDS 2341|Minimum Grade of C-|May not be taken concurrently).

PDS 3221. Painting on Paper. 3 Credit Hours.
A study of the uses of aqueous media beyond transparent watercolor. Opaque watercolor, collage, and transfer techniques, and oil and acrylic on paper are explored.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(PDS 2011|Minimum Grade of C-|May not be taken concurrently
OR PDS 2111|Minimum Grade of C-|May not be taken concurrently
AND (PDS 2311|Minimum Grade of C-|May not be taken concurrently
OR PDS 2321|Minimum Grade of C-|May not be taken concurrently
OR PDS 2331|Minimum Grade of C-|May not be taken concurrently
OR PDS 2341|Minimum Grade of C-|May not be taken concurrently).

PDS 3231. Painting Workshop. 3 Credit Hours.
A studio painting course with emphasis on the development of a student's individual point of view. Class work will focus on the development of the student's ability to work at a conceptually advanced level. Experimentation is encouraged.

Repeatability: This course may be repeated for additional credit.

PDS 3341. Digital Drawing. 3 Credit Hours.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.

PDS 3351. Rome Sketchbook. 3 Credit Hours.
Participants record their observations in sketchbook form on daily outings to significant sites. Rome - incomparably rich historically and visually - provides a host of subjects ideal for improving drawing technique. The concentration required in drawing directly from observation leads to a deeper understanding of the city's forms.

Repeatability: This course may not be repeated for additional credits.

PDS 3361. Drawing Workshop. 3 Credit Hours.
Studies in drawing emphasizing individual instruction for students of varied backgrounds.

Repeatability: This course may be repeated for additional credit.

PDS 3411. Advanced Drawing. 3 Credit Hours.
A course designed to encourage the development of mature skills in draftsmanship.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(PDS 2011|Minimum Grade of C-|May not be taken concurrently
OR PDS 2111|Minimum Grade of C-|May not be taken concurrently
AND (PDS 2311|Minimum Grade of C-|May not be taken concurrently
OR PDS 2321|Minimum Grade of C-|May not be taken concurrently
OR PDS 2331|Minimum Grade of C-|May not be taken concurrently
OR PDS 2341|Minimum Grade of C-|May not be taken concurrently).
PDS 3421. Advanced Drawing. 3 Credit Hours.
A course designed to encourage the development of mature skills in draftsmanship.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(PDS 2011|Minimum Grade of C-|May not be taken concurrently
OR PDS 2111|Minimum Grade of C-|May not be taken concurrently)
AND (PDS 2311|Minimum Grade of C-|May not be taken concurrently
OR PDS 2321|Minimum Grade of C-|May not be taken concurrently
OR PDS 2331|Minimum Grade of C-|May not be taken concurrently
OR PDS 2341|Minimum Grade of C-|May not be taken concurrently).

PDS 3431. Figure Drawing. 3 Credit Hours.
An advanced course focused entirely on the human figure as subject. There is emphasis on a variety of approaches to drawing the figure. Dynamics, proportion, anatomy, volume, and structure will be investigated through various drawing methods and selected materials. Frequent historical references will be made through reproductions and slides, and 20th century figure drawing will be thoroughly discussed.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(PDS 2011|Minimum Grade of C-|May not be taken concurrently
OR PDS 2111|Minimum Grade of C-|May not be taken concurrently)
AND (PDS 2311|Minimum Grade of C-|May not be taken concurrently
OR PDS 2321|Minimum Grade of C-|May not be taken concurrently
OR PDS 2331|Minimum Grade of C-|May not be taken concurrently
OR PDS 2341|Minimum Grade of C-|May not be taken concurrently).

PDS 3441. Figure Drawing. 3 Credit Hours.
An advanced course focused entirely on the human figure as subject. There is emphasis on a variety of approaches to drawing the figure. Dynamics, proportion, anatomy, volume, and structure will be investigated through various drawing methods and selected materials. Frequent historical references will be made through reproductions and slides, and 20th century figure drawing will be thoroughly discussed.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(PDS 2011|Minimum Grade of C-|May not be taken concurrently
OR PDS 2111|Minimum Grade of C-|May not be taken concurrently)
AND (PDS 2311|Minimum Grade of C-|May not be taken concurrently
OR PDS 2321|Minimum Grade of C-|May not be taken concurrently
OR PDS 2331|Minimum Grade of C-|May not be taken concurrently
OR PDS 2341|Minimum Grade of C-|May not be taken concurrently).

PDS 3451. Interactive Projects. 3 Credit Hours.
The intent of this course is to broaden the studio practice through the use of interactive technologies. Students will create a portfolio web site and an animated, interactive Flash project to be shown on the web or CD-ROM. Software explored in this course includes DreamWeaver, Flash and SoundEdit 16. Basic HTML and Action Scripting is also included in the curriculum. The finished work will be burned onto a CD-ROM and posted on the web. NOTE: Special Authorization for Non-Majors.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.

PDS 3521. Advanced Video. 3 Credit Hours.
This course is geared towards students who are working with concepts best expressed through the various forms of video art. Projects will develop and challenge the students’ ability to address technical, formal, and conceptual elements in their work. NOTE: Students are expected to have some prior knowledge of video production and/or postproduction.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
PDS 3596. PDS Seminar. 3 Credit Hours.
Group discussion and individual presentation concerning formal, conceptual, historical, and personal creative issues in contemporary painting, drawing and sculpture. NOTE: Special Authorization for Non-Majors.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Painting, Sculpture
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Course Attributes: WI
Repeatability: This course may be repeated for additional credit.

PDS 3611. Advanced Sculpture. 3 Credit Hours.
Emphasis on development of an individual direction in sculpture through studio work, drawing, writing, and some research. Progress is reviewed through individual critiques. The development of critical analysis of completed work is emphasized in group critiques.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credit.
Pre-requisites:
PDS 2611|Minimum Grade of C-|May not be taken concurrently
OR PDS 2621|Minimum Grade of C-|May not be taken concurrently.

PDS 3612. Advanced Sculpture. 3 Credit Hours.
Emphasis on development of an individual direction in sculpture through studio work, drawing, writing, and some research. Progress is reviewed through individual critiques. The development of critical analysis of completed work is emphasized in group critiques.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
PDS 2611|Minimum Grade of C-|May not be taken concurrently
OR PDS 2621|Minimum Grade of C-|May not be taken concurrently.

PDS 3621. Advanced Sculpture. 3 Credit Hours.
Emphasis on development of an individual direction in sculpture through studio work and special research on topics relative to contemporary practice. Progress is reviewed through individual critiques. The development of critical analysis of completed work is emphasized in group critiques.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
PDS 2611|Minimum Grade of C-|May not be taken concurrently
OR PDS 2621|Minimum Grade of C-|May not be taken concurrently.

PDS 3622. Advanced Sculpture. 3 Credit Hours.
Emphasis on development of an individual direction in sculpture through studio work, drawing, writing, and some research. Progress is reviewed through individual critiques. The development of critical analysis of completed work is emphasized in group critiques.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
PDS 2611|Minimum Grade of C-|May not be taken concurrently
OR PDS 2621|Minimum Grade of C-|May not be taken concurrently.

PDS 3631. Installation. 3 Credit Hours.
Investigations into the intrinsic meaning of the site will be coupled with the effective channeling of those issues into the work of art. Ideas, material, and placement will be analyzed so as to achieve cogent integration into the site. Introduction to use of scale models and various types of models to analyze a site and plan work for a site is part of this course. Lectures, individual discussions, and group critiques are scheduled.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
PDS 2611|Minimum Grade of C-|May not be taken concurrently
OR PDS 2621|Minimum Grade of C-|May not be taken concurrently.
PDS 3641. Mold-Making Technology. 3 Credit Hours.
Flexible moldmaking techniques are explored using foam, latex, RTV and silicone rubber, as well as alginate compounds for direct body casts. Non-flexible techniques include wood forms for cement castings. Positives are cast in cement, plaster, rubber and polyurethane using both solid and hollow casting methods. Students incorporate these techniques in directed projects, or for completing self-directed work.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
PDS 2611|Minimum Grade of C-|May not be taken concurrently
OR PDS 2621|Minimum Grade of C-|May not be taken concurrently.

PDS 3711. Foundry. 3 Credit Hours.
Ceramic shell bronze and aluminum casting techniques are emphasized, as well as a variety of hot and cold casting materials and processes. The course focuses on the way these techniques serve sculptural thinking. NOTE: Special authorization for all.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.

PDS 3721. Public Art Projects. 3 Credit Hours.
The class will introduce the processes involved in designing actual site-specific public art projects. These will include site research, design development, architectural drawings and model building, and presentation techniques. Studio visits with architects, model-makers, sculptors, and project coordinators are an integral part of the course. Students work on an actual project that is juried by area arts professionals at the end of the semester. NOTE: Special authorization is required from the instructor in order to register for this class.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
PDS 2611|Minimum Grade of C-|May not be taken concurrently
OR PDS 2621|Minimum Grade of C-|May not be taken concurrently.

PDS 3731. Sculpture Techniques & Materials. 3 Credit Hours.
This course is meant to give students the tools they need to acquire and produce and exhibit. Students will examine displays in multiple contexts, and will be introduced to presentation concepts in art, retail, and the home. They will gain skills in exhibit design, model-making, proper art handling, crate design, fabrication, and shipping. The course will culminate with an off-campus exhibit that is themed, designed, installed and publicized by the class. NOTE: Special authorization for all.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
PDS 2611|Minimum Grade of C-|May not be taken concurrently
OR PDS 2621|Minimum Grade of C-|May not be taken concurrently.

PDS 3741. Junior Sculpture Seminar. 3 Credit Hours.
This studio class is a bridge from lower level introductory courses to advanced studio work. Aspirations of the profession, studio principles, and critical thinking are stressed, along with readings and discussions in contemporary art theory.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
PDS 2611|Minimum Grade of C-|May not be taken concurrently
OR PDS 2621|Minimum Grade of C-|May not be taken concurrently.

PDS 3751. Sculpture Workshop. 3 Credit Hours.
The main focus of the course will be to help each student develop a well-considered and professional show of their own work.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
PDS 4011. Advanced Painting. 3 Credit Hours.
A studio painting course with emphasis on the development of a student's individual point of view. Class work focuses on the development of the student's ability to work at a conceptually advanced level. Experimentation is encouraged and there are frequent class critiques.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(PDS 2011|Minimum Grade of C-|May not be taken concurrently
OR PDS 2111|Minimum Grade of C-|May not be taken concurrently
AND (PDS 2311|Minimum Grade of C-|May not be taken concurrently
OR PDS 2321|Minimum Grade of C-|May not be taken concurrently
OR PDS 2331|Minimum Grade of C-|May not be taken concurrently
OR PDS 2341|Minimum Grade of C-|May not be taken concurrently).

PDS 4021. Landscape. 3 Credit Hours.
An examination of painting problems involved in the variable light, space, and form of cityscape and landscape. Work from various sites and sources.
NOTE: This course may fulfill an advanced Painting/Drawing Studio Major or Studio Elective.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(PDS 2011|Minimum Grade of C-|May not be taken concurrently
OR PDS 2111|Minimum Grade of C-|May not be taken concurrently
AND (PDS 2311|Minimum Grade of C-|May not be taken concurrently
OR PDS 2321|Minimum Grade of C-|May not be taken concurrently
OR PDS 2331|Minimum Grade of C-|May not be taken concurrently
OR PDS 2341|Minimum Grade of C-|May not be taken concurrently).

PDS 4031. Figure Painting. 3 Credit Hours.
A painting course based on direct observation. Fundamentals of oil painting as well as an understanding of anatomy, composition, and the relationship of the figure to its environment are stressed. The development of an individualized approach and the use of content are explored through group discussion and assigned work.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(PDS 2011|Minimum Grade of C-|May not be taken concurrently
OR PDS 2111|Minimum Grade of C-|May not be taken concurrently
AND (PDS 2311|Minimum Grade of C-|May not be taken concurrently
OR PDS 2321|Minimum Grade of C-|May not be taken concurrently
OR PDS 2331|Minimum Grade of C-|May not be taken concurrently
OR PDS 2341|Minimum Grade of C-|May not be taken concurrently).

PDS 4041. Color. 3 Credit Hours.
The study of color, its characteristics, and interaction, explored through studio painting experiences. NOTE: This course may fulfill an advanced Painting/Drawing Studio Major or Studio Elective.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(PDS 2011|Minimum Grade of C-|May not be taken concurrently
OR PDS 2111|Minimum Grade of C-|May not be taken concurrently
AND (PDS 2311|Minimum Grade of C-|May not be taken concurrently
OR PDS 2321|Minimum Grade of C-|May not be taken concurrently
OR PDS 2331|Minimum Grade of C-|May not be taken concurrently
OR PDS 2341|Minimum Grade of C-|May not be taken concurrently).

PDS 4072. Senior Painting Studio. 3 Credit Hours.
The senior painting studio program is designed to provide an intensive studio experience while working in individual studio space. The group works with two faculty members in individual and group critiques. NOTE: This is a 6 credit course sequence. Must register for both 4072 and 4172.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
PDS 4111. Advanced Painting. 3 Credit Hours.
A studio painting course with emphasis on the development of a student's individual point of view. Class work focuses on the development of the student's ability to work at a conceptually advanced level. Experimentation is encouraged and there are frequent class critiques.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
PDS 2011|Minimum Grade of C-|May not be taken concurrently
OR PDS 2111|Minimum Grade of C-|May not be taken concurrently.

PDS 4172. Senior Painting Studio. 3 Credit Hours.
The senior painting studio program is designed to provide an intensive studio experience while working in individual studio space. The group works with two faculty members in individual and group critiques. NOTE: This is a 6 credit course sequence. Must register for both 4072 and 4172.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.

PDS 4411. Advanced Drawing. 3 Credit Hours.
A course designed to encourage the development of mature skills in draftsmanship.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
PDS 2311|Minimum Grade of C-|May not be taken concurrently
OR PDS 2321|Minimum Grade of C-|May not be taken concurrently
OR PDS 2331|Minimum Grade of C-|May not be taken concurrently.

PDS 4431. Figure Drawing. 3 Credit Hours.
An advanced course focused entirely on the human figure as subject. There is emphasis on a variety of approaches to drawing the figure. Dynamics, proportion, anatomy, volume, and structure will be investigated through various drawing methods and selected materials. Frequent historical references will be made through reproductions and slides, and 20th century figure drawing will be thoroughly discussed.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
PDS 2311|Minimum Grade of C-|May not be taken concurrently
OR PDS 2321|Minimum Grade of C-|May not be taken concurrently
OR PDS 2331|Minimum Grade of C-|May not be taken concurrently.

PDS 4441. Figure Drawing. 3 Credit Hours.
An advanced course focused entirely on the human figure as subject. There is emphasis on a variety of approaches to drawing the figure. Dynamics, proportion, anatomy, volume, and structure will be investigated through various drawing methods and selected materials. Frequent historical references will be made through reproductions and slides, and 20th century figure drawing will be thoroughly discussed.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
PDS 2311|Minimum Grade of C-|May not be taken concurrently
OR PDS 2321|Minimum Grade of C-|May not be taken concurrently
OR PDS 2331|Minimum Grade of C-|May not be taken concurrently.

PDS 4511. Critical Dialogues. 3 Credit Hours.
Each week a different visiting speaker delivers a public lecture about the history of their work. The speakers are culled primarily from artists, but also from curators and critics. Class members meet after the public lecture for a seminar on the work and ideas presented. Each class member has a private studio critique with a few of the visiting speakers.
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.

PDS 4582. Independent Study. 1 to 3 Credit Hour.
Independent study is intended as an area of study to supplement existing study courses for students classified as juniors and seniors. NOTE: A written proposal outlining area of investigation must be developed, signed by faculty overseeing the project, and the department chair.
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may be repeated for additional credit.
PDS 4585. Field Internship. 1 to 3 Credit Hour.
A field internship must provide practical experience in a setting which is relevant to the student's course of study, such as in a gallery, museum or community art center, etc. A comprehensive paper must be written. NOTE: A written proposal must be developed and agreed upon before the beginning of the semester, describing the setting and the time commitment, which must equal at least 10 hours per week for the full semester.
**College Restrictions:** Must be enrolled in one of the following Colleges: Art, Tyler School
**Repeatability:** This course may be repeated for additional credit.

PDS 4611. Senior Sculpture. 3 Credit Hours.
A combined studio and seminar course for senior majors in sculpture. Research of graduate schools and studio practice and career after the BFA is part of this course. Students will work on the preparation of a portfolio and statement of individual working philosophy for either graduate school or gallerygrant applications. The course emphasizes knowledge of contemporary issues in sculpture, and critical and analytical skills through research projects and group discussions and development of the focus of each participants' studio practice through individual and group critiques. The mounting of a group show and design of a catalog for the show are part of this class.
**Degree Restrictions:** Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
**College Restrictions:** Must be enrolled in one of the following Colleges: Art, Tyler School
**Repeatability:** This course may be repeated for additional credit.
**Pre-requisites:**
- PDS 2611 Minimum Grade of C- May not be taken concurrently
- OR PDS 2621 Minimum Grade of C- May not be taken concurrently.

PDS 4711. Foundry. 3 Credit Hours.
Ceramic shell bronze and aluminum casting techniques are emphasized, as well as a variety of hot and cold casting materials and processes. The course focuses on the way these techniques serve sculptural thinking. NOTE: Special authorization for all.
**Degree Restrictions:** Must be enrolled in one of the following Degrees: Bachelor of Fine Arts
**College Restrictions:** Must be enrolled in one of the following Colleges: Art, Tyler School
**Repeatability:** This course may not be repeated for additional credits.

**Philosophy (PHIL)**

**Courses**

PHIL 0811. Asian Behavior & Thought. 3 Credit Hours.
We incessantly engage ourselves in doing things. We are beings-at-doing. We define ourselves by the kind of actions we perform. How we act or conduct ourselves is shaped by the kind of self we construct for ourselves. And that self is shaped by the society into which we happen to be born. Self-identity, which is socially and culturally constructed by our experiences and interactions with others, carries a personal as well as an interpersonal meaning. Learn the four Asian paradigmatic cases of self-identity and examine your self in light of them. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: ASST 0811, CRIT 0811, REL 0811/0911, Chinese 0811, or Japanese 0811.
**Course Attributes:** GB
**Repeatability:** This course may not be repeated for additional credits.

PHIL 0824. Landscape of American Thought. 3 Credit Hours.
America once was envisioned by its colonizers as a new world, as a city upon a hill beckoning to humanity. After centuries of conquest, enslavement, immigration, and political struggle, conditions for sustaining this early vision continue to evolve. Explore the emergence of some of the most distinctive and influential American voices to inform our national debate about freedom, the individual, race, democracy, and oppression, as it has unfolded over the past two centuries. Through consideration of selected works of some of the most renowned figures to shape the landscape of American public discourse, we return to face the question of the promise of America, as it plays out today in the thought of some of the leading public intellectuals of our time. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed Philosophy 0924.
**Course Attributes:** GU
**Repeatability:** This course may not be repeated for additional credits.

PHIL 0839. Philosophy of the Human. 3 Credit Hours.
What is a human being? How do we become fully human, and how might that humanity be diminished or compromised? This course examines a range of answers to these questions from ancient, romantic, modern, postmodern, and postcolonial sources. Including the thought of Plato on the meaning of love, Emerson on our genius, Sartre on our agency, and Fanon on our liberation, discussion turns to some of the most influential literary, historical, and cinematic treatments of the human condition as it appears in our own time. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed Philosophy 0939.
**Course Attributes:** GB
**Repeatability:** This course may not be repeated for additional credits.
PHIL 0847. The Meaning of the Arts. 3 Credit Hours.
As we blend philosophical inquiry into the nature of several of the arts and the roles they play in society with analyses of particular artistic practices, we shall critically examine questions like these: Is the main goal of art to imitate or represent the world? If so, do painting, sculpture, architecture, photography, movies, music, dance, theater, performance art, literature, handicrafts, fashion, bodily ornamentation and the like, provide knowledge about ourselves and the world around us? What is - or should be - the relationship between art and some of the other great domains of human thought, action, and concerns such as religion or the realm of social and political relations, especially matters concerning gender, sexuality, class, race, morality, and community? Do the arts or artistic institutions have specific social functions? For example, is there a connection between museums, imperialism, and nationalism? Are films embedded in networks of commodity production? Are there specifically urban or global dimension to these questions? NOTE: This course fulfills the Arts (GA) requirement for students under GenEd and Arts (AR) for students under Core. Students cannot receive credit for this course if they have successfully completed Philosophy 0947.

Course Attributes: GA
Repeatability: This course may not be repeated for additional credits.

PHIL 0859. The Making of American Society: Melting Pot or Culture Wars?. 3 Credit Hours.
Terrorism, illegal immigration, gay marriage, religious conflict, political in-fighting, corporate corruption, racial animosities, civil liberties assaults, media conglomeration, Wal-Mart goes to China and the rich get richer. America in the 21st century is a contentious society. How did we get to this place in time? Examine what makes American society distinctive from other advanced industrial democracies as we study the philosophical origins of America, the development of social and economic relationships over time, and the political disputes dominating contemporary American life. The course relies heavily on perspectives from History, Sociology and Political Science to explain the challenges facing contemporary American society. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: AMST 0859, History 0859, POLS 0859, or SOC 0859.

Course Attributes: GU
Repeatability: This course may not be repeated for additional credits.

PHIL 0863. Religion in the World. 3 Credit Hours.
Learn about the major religious traditions found worldwide today: Hinduism, Buddhism, Judaism, Christianity, Islam, and several indigenous traditions. Examine the beliefs, practices, and values of these groups in order to understand the worldviews and ways of life of the people who practice them. Our interdisciplinary analysis and interpretation of specific examples of religious experience will help shed light on the overall meaning of religion and human existence. We will carefully consider examples while also focusing on particular thematic issues, like cosmology and ritual. Develop appreciation for the religious vibrancy and diversity that exist in human cultures while you actively engage in the learning process through class presentation, class participation, paper-writing, and a self-selected field trip. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Duplicate Credit Warning: Students may take only one of the following courses for credit; all other instances will be deducted from their credit totals: Religion 0863, 0963, 1101, C053, Asian Studies 0863, Critical Languages 0863, or Philosophy 0863.

Course Attributes: GG
Repeatability: This course may not be repeated for additional credits.

PHIL 0924. Honors Landscape of American Thought. 3 Credit Hours.
America once was envisioned by its colonizers as a new world, as a city upon a hill beckoning to humanity. After centuries of conquest, enslavement, immigration, and political struggle, conditions for sustaining this early vision continue to evolve. Explore the emergence of some of the most distinctive and influential American voices to inform our national debate about freedom, the individual, race, democracy, and oppression, as it has unfolded over the past two centuries. Through consideration of selected works of some of the most renowned figures to shape the landscape of American public discourse, we return to face the question of the promise of America, as it plays out today in the thought of some of the leading public intellectuals of our time. (This is an Honors course.) NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed Philosophy 0824.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR

Course Attributes: GU, HO
Repeatability: This course may not be repeated for additional credits.

PHIL 0939. Honors Philosophy of the Human. 3 Credit Hours.
What is a human being? How do we become fully human, and how might that humanity be diminished or compromised? This course examines a range of answers to these questions from ancient, romantic, modern, postmodern, and postcolonial sources. Including the thought of Plato on the meaning of love, Emerson on our genius, Sartre on our agency, and Fanon on our liberation, discussion turns to some of the most influential literary, historical, and cinematic treatments of the human condition as it appears in our own time. (This is an Honors course.) NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed PHIL 0839.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR

Course Attributes: GB, HO
Repeatability: This course may not be repeated for additional credits.
PHIL 0947. Honors The Meaning of the Arts. 3 Credit Hours.
As we blend philosophical inquiry into the nature of several of the arts and the roles they play in society with analyses of particular artistic practices, we shall critically examine questions like these: Is the main goal of art to imitate or represent the world? If so, do painting, sculpture, architecture, photography, movies, music, dance, theater, performance art, literature, handicrafts, fashion, bodily ornamentation and the like, provide knowledge about ourselves and the world around us? What is - or should be - the relationship between art and some of the other great domains of human thought, action, and concerns such as religion or the realm of social and political relations, especially matters concerning gender, sexuality, class, race, morality, and community? Do the arts or artistic institutions have specific social functions? For example, is there a connection between museums, imperialism, and nationalism? Are films embedded in networks of commodity production? Are there specifically urban or global dimension to these questions? (This is an Honors course.) NOTE: This course fulfills the Arts (GA) requirement for students under GenEd and Arts (AR) for students under Core. Students cannot receive credit for this course if they have successfully completed Philosophy 0847.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GA, HO
Repeatability: This course may not be repeated for additional credits.

PHIL 1001. Philosophical Challenges to the Individual. 3 Credit Hours.
This course combines historical and contemporary sources to study individuals and their social settings. Thus it introduces the basic issues of ethics, and social and political philosophy. It serves as the entry course not only for further study of these fields, but also for the study of business and professional ethics and philosophy of law. NOTE: (1) Philosophy majors or minors who have taken 1101 (0100), Introduction to Philosophy, should not take this course. (2) This course can be used to satisfy the university Core Individual & Society (IN) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: IN
Repeatability: This course may not be repeated for additional credits.

PHIL 1055. Critical Thinking. 3 Credit Hours.
A course in reasoning well: logically and critically. Increase your ability to read something and decide if it should persuade or be rejected. How to back up what you say with evidence and/or good arguments. While the course is not a "prep" for the LSAT's, and other exams that test critical abilities, it focuses directly on the skills necessary to do well in them. NOTE: Philosophy majors or minors who have taken 1066 (C066), Introduction to Logic should not take this course.

Repeatability: This course may not be repeated for additional credits.

PHIL 1061. Art and Society. 3 Credit Hours.
Besides treating the major issues internal to the arts and their criticism (e.g., definitions of art and aesthetic experience, artistic expression, form, representation, critical interpretation and evaluation), the course also deals with wider questions of the social function and value of the arts, several of which relate to current issues of gender, race, and ethnicity. NOTE: This course can be used to satisfy the university Core Arts (AR) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: AR
Repeatability: This course may not be repeated for additional credits.

PHIL 1062. Morality and the Law. 3 Credit Hours.
Recommended for pre-law and pre-social administration students. The course provides a basic grounding in moral and legal philosophy, and addresses issues on which both touch, such as capital punishment, affirmative action, sexual behavior, and the right to welfare. NOTE: This course can be used to satisfy the university Core Individual & Society (IN) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: IN
Repeatability: This course may not be repeated for additional credits.

PHIL 1063. American Thinkers. 3 Credit Hours.
The major figures and central problems of American philosophy will be surveyed historically, with a view to examining what is distinctive in American thought and how American philosophy relates to its natural cultural context. NOTE: This course can be used to satisfy the university Core American Culture (AC) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: AC
Repeatability: This course may not be repeated for additional credits.

PHIL 1066. Introduction to Logic. 3 Credit Hours.
The meaning of such logical notions as the validity of arguments, the equivalence of statements, and the inconsistency of sets of statements. Symbolization of the logically relevant features of statements and testing of arguments for validity, sets for inconsistency, etc. Development of logical theory in connection with these notions and techniques. NOTE: (1) Students who have taken Philosophy 1055 (0055), Critical Thinking, should consult with an advisor before taking this course. (2) This course can be used to satisfy the university Core Quantitative Reasoning B (QB) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: QB
Repeatability: This course may not be repeated for additional credits.
PHIL 1076. Philosophy East and West. 3 Credit Hours.
Systematic and comparative study of representative philosophies of India, China, Japan, and Western Europe. NOTE: This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. In addition to meeting the university Core International Studies requirement, this course meets the Non-Western/Third World IS requirement for Communication Sciences majors. Please note the recent update to the Core IS requirement at www.temple.edu/vpus/resources/coreupdates.htm#coreisupdate.

Course Attributes: IS
Repeatability: This course may not be repeated for additional credits.

PHIL 1077. Science in Context. 3 Credit Hours.
A study of scientific method by critical examination of cases of scientific work in their social, political, and psychological context. Attention to the values and ethical concerns in scientific inquiry. NOTE: This course can be used to satisfy the university Core Science & Technology Second Level (SB) requirement.

Course Attributes: SB
Repeatability: This course may not be repeated for additional credits.

PHIL 1101. Introduction to Philosophy. 3 Credit Hours.
Philosophical problems in the works of great thinkers from ancient times to present. Selected questions concern the nature of reality, human freedom, the foundations of knowledge, standards of value, and the existence of God. NOTE: Students who have taken 1001 (C050), Challenges to the Individual should consult with an advisor before taking this course.

Repeatability: This course may not be repeated for additional credits.

PHIL 1196. Introduction to Philosophy. 3 Credit Hours.
This course is an introduction to philosophy that focuses on the reading, thinking, and writing skills needed for the study of philosophy. The course concentrates on close readings of a few texts rather than a broad survey of the philosophical tradition. NOTE: This course fulfills one of the two writing requirements for the major.

Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

PHIL 1861. Art and Society. 3 Credit Hours.
Besides treating the major issues internal to the arts and their criticism (e.g., definitions of art and aesthetic experience, artistic expression, form, representation, critical interpretation and evaluation), the course also deals with wider questions of the social function and value of the arts, several of which relate to current issues of gender, race, and ethnicity.

Repeatability: This course may not be repeated for additional credits.

PHIL 1955. Honors Critical Thinking. 3 Credit Hours.
Honors version of 1055 (0055).

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR

Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.

PHIL 1962. Honors Morality & the Law. 3 Credit Hours.
Honors version of 1062 (C062). NOTE: This course can be used to satisfy the university Core Individual & Society (IN) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR

Course Attributes: HO, IN
Repeatability: This course may not be repeated for additional credits.

PHIL 1966. Honors Introduction to Logic. 3 Credit Hours.
Honors version of 1066 (C066). NOTE: This course can be used to satisfy the university Core Quantitative Reasoning B (QB) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR

Course Attributes: HO, QB
Repeatability: This course may not be repeated for additional credits.

PHIL 1977. Honors Science in Context. 3 Credit Hours.
A study of scientific method by critical examination of cases of scientific work in their social, political, and psychological context. Attention to the values and ethical concerns in scientific inquiry. NOTE: This course can be used to satisfy the university Core Science & Technology Second Level (SB) requirement.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR

Course Attributes: HO, SB
Repeatability: This course may not be repeated for additional credits.
PHIL 2100. Special Topics. 3 Credit Hours.
Arranged each semester. Please consult with the instructor.
Repeatability: This course may be repeated for additional credit.

PHIL 2121. Introduction to Ethical Theory. 3 Credit Hours.
An introduction to major schools of ethical theory such as utilitarian ethics, deontological ethics, virtue ethics, and the ethics of care. Specific problems from meta ethics and applied ethics may also be treated.
Repeatability: This course may not be repeated for additional credits.

PHIL 2125. Philosophy of African-American Experiences. 3 Credit Hours.
An introduction to African-American philosophy and the issues around which it has developed: the meaning of racial identity, concepts of personhood, the nature of racial oppression and its relation to gender and class oppression, strategies for black liberation. We will pay close attention to the ways in which African American philosophy is simultaneously a development of and a radical critique of Anglo-European philosophy. NOTE: This course can be used to satisfy the university Core Studies in Race (RS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: RS
Repeatability: This course may not be repeated for additional credits.

PHIL 2126. Contemporary Social Philosophy. 3 Credit Hours.
An overview of recent and current thinking about philosophically relevant problems of and in the present-day world. Normally a few key texts will be focused upon, drawn from writing of the late 20th and early 21st centuries. Environment, racial tension, globalization, economy, the nature of power, generational conflict, and the persistence of war are some typical topics.
Repeatability: This course may not be repeated for additional credits.

PHIL 2131. Introduction to Aesthetics. 3 Credit Hours.
This course addresses major issues internal to the arts and their criticism such as definitions of art and aesthetic experience, artistic expression, form, representation, critical interpretation and evaluation. The course may also address more specific issues such as the relationship of art and race, art and freedom of expression, art and morality. NOTE: Students who have taken PHIL 2931 will not earn additional credits for this course.
Repeatability: This course may not be repeated for additional credits.

PHIL 2141. Philosophy of Biology. 3 Credit Hours.
This course explores a range of philosophical questions about biology, such as: What is the nature of biological explanation? Are there laws of biology? Is the current debate about creationism and intelligent design a scientific debate? Is there a unique taxonomy of biological organisms? Has human nature evolved? What is genetic determinism and is there any evidence for it? This course is geared toward scientifically-minded philosophers, philosophically-minded scientists, and everyone in between.
Repeatability: This course may not be repeated for additional credits.

PHIL 2144. Introduction to the Philosophy of Mind. 3 Credit Hours.
An introductory overview of the most important issues in contemporary philosophy of mind and cognitive studies. Especially aimed at students of Psychology.
Repeatability: This course may not be repeated for additional credits.

PHIL 2154. Political Philosophy. 3 Credit Hours.
An examination of such issues as the source of obligation to obey the state, natural rights, the limits of governmental authority, and the justification of various forms of government. Readings drawn from classical and contemporary sources.
Repeatability: This course may not be repeated for additional credits.

PHIL 2157. Environmental Ethics. 3 Credit Hours.
A study of the ethical dimensions of several contemporary environmental controversies. The course examines the major theoretical approaches to environmental ethics, including human-centered (anthropocentric), animal-centered (zoocentric), and nature-centered (biocentric and ecocentric) value systems, as well as the most important critiques of these ethical approaches. The course will also address specific issues such as biodiversity and wilderness preservation; human use of animals as food, entertainment, and research subjects; environmental racism and toxic dumping; sustainable development, population and consumption.
Repeatability: This course may not be repeated for additional credits.

PHIL 2161. History of Philosophy: Greek. 3 Credit Hours.
A survey of ancient Greek philosophy from the Presocratics through the Hellenistic Period. Primary and secondary materials used.
Repeatability: This course may not be repeated for additional credits.

PHIL 2165. Hume, Marx, Darwin, and Freud. 3 Credit Hours.
An exploration of four major figures who are important in the rise of the social sciences. Their influence in the present will be stressed.
Repeatability: This course may not be repeated for additional credits.

PHIL 2172. History of Philosophy: Modern. 3 Credit Hours.
A historical and critical study of the thought of selected philosophers from Descartes to Hume emphasizing their treatment of such topics as perception, the mind/body relationship, the structure of knowledge, and personal identity.
Repeatability: This course may not be repeated for additional credits.
PHIL 2196. Perspectives on Science and Mathematics. 3 Credit Hours.
“Perspectives on Science and Mathematics” is a 3-credit upper-division Philosophy course designed to meet the unique needs of future K-12 teachers of science and mathematics. It is one of the specially-designed content courses in the TUteach Program. It is designed to be taken in the fall of the third year of this program, and also satisfies Writing Intensive and Liberal Arts course requirements. This course is an upper-level introductory course on the Nature of Science (NOS). It uses the history of science, philosophy of science, sociology of science, gender and race theory and ethics of science to look at science and mathematics from a variety of perspectives. Detailed case studies include the Copernican Revolution, the Darwinian Revolution, the history of genetics and eugenics, contemporary controversies in genetic technology and controversies in mathematics (pure, applied and ethnomathematics). A central theme of the course is that science and mathematics have been advanced by the struggles of diverse people, on the basis of often-conflicting criteria and interests. “Textbook science” is the result of multiple developments, contestations, and eventually general acceptance. While science produces and relies on empirical evidence, it has a creative component that is influenced by historical, cultural, ideological and psychological factors.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

PHIL 2596. Philosophical Perspectives on the Environment. 3 Credit Hours.
Views both historical and modern on our relationship to the natural world around (and in) us, and the terms in which we can best think about it.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

PHIL 2921. Honors Introduction to Ethical Theory. 3 Credit Hours.
Honors version of Philosophy 2121 (0121).
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.

PHIL 2925. Honors Philosophy of African-American Experiences. 3 Credit Hours.
Honors version of 2125 (R125). NOTE: This course can be used to satisfy the university Core Studies in Race (RS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO, RS
Repeatability: This course may not be repeated for additional credits.

PHIL 2931. Honors Introduction to Aesthetics. 3 Credit Hours.
This course addresses major issues internal to the arts and their criticism such as definitions of art and aesthetic experience, artistic expression, form, representation, critical interpretation and evaluation. The course may also address more specific issues such as the relationship of art and race, art and freedom of expression, art and morality. NOTE: Students who have taken PHIL 2131 will not earn additional credits for this course.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.

PHIL 3075. Pre-Law Seminar. 3 Credit Hours.
The companion course to Philosophy 3085 (0198), Pre-Law Internship. The course deals with issues related to lawyers and the practice of law such as professional ethics, legal reasoning and the nature of legal education. Must be taken in conjunction with Philosophy 3085 (0198). NOTE: Requires permission of instructor to register. Students must consult with the instructor in the Fall to arrange an internship placement.
Co-requisites: PHIL 3085
Repeatability: This course may not be repeated for additional credits.

PHIL 3085. Pre-Law Internship. 3 Credit Hours.
Internship with a legal office or law-related office in the Philadelphia area. Must be taken in conjunction with Philosophy 3075 (0199), Pre-Law Seminar. NOTE: Must consult course instructor in the Fall to arrange placement.
Co-requisites: PHIL 3075
Repeatability: This course may be repeated for additional credit.

PHIL 3116. Development of Western Cosmology. 3 Credit Hours.
An examination of how modern cosmology developed from its roots in Egypt and Asia, through the classical ancient world, Islam and the Middle Ages, to the great discoveries of the modern and contemporary periods in understanding space and time.
Repeatability: This course may not be repeated for additional credits.

PHIL 3116. Development of Western Cosmology. 3 Credit Hours.
An examination of how modern cosmology developed from its roots in Egypt and Asia, through the classical ancient world, Islam and the Middle Ages, to the great discoveries of the modern and contemporary periods in understanding space and time.
Repeatability: This course may not be repeated for additional credits.
PHIL 3168. Themes in Existentialism. 3 Credit Hours.
The meaning of life and death, freedom and anxiety, joy and suffering, faith and despair -- these and other dimensions of the human condition will be explored. The course covers existential philosophers such as Kierkegaard, Nietzsche, Camus, and Sartre, though it may also focus on existentialism in film, existentialism in theater and literature, or non-Western philosophies of existence.
Repeatability: This course may not be repeated for additional credits.

PHIL 3210. Special Topics in Philosophy. 3 Credit Hours.
Arranged each semester. Please consult with the instructor.
Repeatability: This course may be repeated for additional credit.

PHIL 3211. Intermediate Logic. 3 Credit Hours.
An introduction to the meta theory of the elementary logic of predicates and quantifiers (familiarity with which is presupposed). Proofs that a standard derivation system is sound and complete are central.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
PHIL 1066|Minimum Grade of C-|May not be taken concurrently
OR PHIL 1966|Minimum Grade of C-|May not be taken concurrently.

PHIL 3216. Philosophy of Science. 3 Credit Hours.
Basic issues in the current philosophy of science, and particularly various accounts of such key notions of science as hypotheses, confirmation, laws, causation, explanation, and theories.
Repeatability: This course may not be repeated for additional credits.

PHIL 3217. Feminist Epistemology and Philosophy of Science. 3 Credit Hours.
Human knowledge is influenced by gender ideologies. This course examines the pervasiveness of these influences, and the resultant implications for the possibility of attaining objectivity and truth in inquiry. Scientific knowledge and philosophical theories of the nature of knowledge are special focuses of attention in this course. Scientific knowledge is considered through detailed discussion of cases in empirical science. The complex relations between gender, race, and class are also discussed in relation to these epistemological issues.
Repeatability: This course may not be repeated for additional credits.

PHIL 3218. Philosophy of Medicine. 3 Credit Hours.
Philosophy of Medicine is a new and growing field in philosophy of science and the medical humanities, which looks at the specific characteristics of theories in medicine and ways of knowing in medicine. It asks questions such as: What is the meaning of illness and of health? Are some diseases (e.g. end stage renal disease, chronic fatigue syndrome, ADHD) partly or wholly socially constructed? What are the differences between conventional and alternative or non-Western approaches to illness and healing? What is "evidence based medicine," and what are its limitations? What is the new technique of "narrative medicine?" What is meant by claiming that medicine is an "art" as well as a science? We will learn about the "biopsychosocial" model of clinical care, causation and genetic disease, the classification of diseases and phenomenological accounts of illness.
Repeatability: This course may not be repeated for additional credits.

PHIL 3220. Special Topics in Philosophy. 4 Credit Hours.
Arranged each semester. Please consult with the instructor.
Repeatability: This course may be repeated for additional credit.

PHIL 3222. Contemporary Ethical Theory. 3 Credit Hours.
Issues in ethical theory that have come to prominence since the 20th century. Both meta-ethical issues (about the meaning and justification of ethical statements) and normative issues (about obligation, responsibility, and goodness) will be examined.
Repeatability: This course may not be repeated for additional credits.

PHIL 3223. Feminist Ethics and Political Philosophy. 3 Credit Hours.
An examination of feminism's contribution to ethics, political philosophy, and legal theory. Issues may include: the role of care versus that of justice in determining moral obligations; the nature and causes of women's oppression (including the difference between the sexual oppression experienced by white women and the additional forms of oppression to which women of color/third-world women are subject); pornography and prostitution; equality and difference; essentialism as it pertains to gender and race; feminist jurisprudence; postmodern feminism.
Repeatability: This course may not be repeated for additional credits.

PHIL 3225. Good & Bad, Right & Wrong. 3 Credit Hours.
This course focuses on basic concepts in ethics. For example, good and bad, right and wrong are among the most basic ethical concepts. Other basic ethical concepts include: freedom, justice, morality, practical reason, happiness, obligation, duty, rights, value, conscience, care, trust, and friendship. From semester to semester the course will select one or more of these concepts and examine them in depth. The standard method of examination in philosophy is conceptual analysis, that is, the analysis of concepts. But depending on the concepts chosen, the examination will be informed or supplemented by the study of language, psychology, or history.
Repeatability: This course may not be repeated for additional credits.

PHIL 3226. Classics in Moral Philosophy. 3 Credit Hours.
A study of the major works in the history of moral philosophy selected from among the writings of such philosophers as Plato, Aristotle, Hobbes, Spinoza, Hume, Kant, Mill, Nietzsche, Moore.
Repeatability: This course may not be repeated for additional credits.
PHIL 3232. History of Aesthetics. 3 Credit Hours.
A study of major works in the history of aesthetics selected from such philosophers as Plato, Aristotle, Hume, Kant, Schopenhauer, Hegel, Dewey, Bell, Collingwood, Beardsley, Langer, Dickie, Danto, and contemporary figures.
Repeatability: This course may not be repeated for additional credits.

PHIL 3234. Philosophy of Music. 3 Credit Hours.
An examination of philosophical issues concerning the nature and value of music, such as the nature of composition, performance, and appreciation of music, the varieties of musical meaning, the relation of music to the emotions, and the social importance of music.
Repeatability: This course may not be repeated for additional credits.

PHIL 3235. Classics in Moral Philosophy. 3 Credit Hours.
A study of the major works in the history of moral philosophy. This course will generally focus on figures and schools from classical Greek and Roman moral philosophy.
Repeatability: This course may not be repeated for additional credits.

PHIL 3240. Special Topics. 3 Credit Hours.
Arranged each semester. Please consult with the instructor.
Repeatability: This course may be repeated for additional credit.

PHIL 3243. Philosophy of Law. 3 Credit Hours.
An introduction to philosophical problems arising in the examination of legal systems, including questions and theories about the nature of law itself, about legal responsibility and legal punishment, and about standards of fairness in settling legal disputes.
Repeatability: This course may not be repeated for additional credits.

PHIL 3245. Philosophy of Psychology. 3 Credit Hours.
Throughout its history, philosophy has taken an interest in psychology. In the theory of knowledge, philosophers have been concerned with cognition and its particular forms and components: perception, belief, concepts, and reasoning. In ethics, philosophers have been concerned with action and emotion. And in metaphysics, they have been interested in the nature of the mind itself and consciousness. Central to this course are topics and questions at the intersection of philosophy and contemporary empirical psychology. The choice of topics varies from semester to semester.
Repeatability: This course may not be repeated for additional credits.

PHIL 3249. Ethics in Medicine. 3 Credit Hours.
Exploration of ethical issues generated by the application of scientific and technological advances to the preservation, destruction, and programming of human life. Topics may include: ethics of medical research, abortion, euthanasia, behavior control, allocation of scarce medical resources, and the ethics of patient-physician interaction. NOTE: Students who have taken PHIL 3949 will not earn additional credits for this course.
Repeatability: This course may not be repeated for additional credits.

PHIL 3280. Special Topics. 3 Credit Hours.
Arranged each semester; please consult with the instructor.
Repeatability: This course may be repeated for additional credit.

PHIL 3282. Undergraduate Tutorial. 2 Credit Hours.
Independent study for undergraduates with one of the professors in the department. NOTE: Arrangements with that professor must be made before signing up for the course.
Repeatability: This course may be repeated for additional credit.

PHIL 3283. Undergraduate Tutorial. 3 Credit Hours.
Independent study for undergraduates with one of the professors in the department. NOTE: Arrangements with that professor must be made before signing up for the course.
Repeatability: This course may be repeated for additional credit.

PHIL 3910. Honors Special Topics in Philosophy. 3 Credit Hours.
Arranged each semester. Please consult with the instructor.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.

PHIL 3949. Honors Ethics in Medicine. 3 Credit Hours.
This course is an exploration of ethical issues generated by the application of scientific and technological advances to the preservation, destruction, and programming of human life. Topics may include: ethics of medical research, abortion, euthanasia, behavior control, allocation of scarce medical resources, and the ethics of patient-physician interaction. NOTE: Students who have taken PHIL 3249 will not earn additional credits for this course.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.
PHIL 3968. Honors Themes in Existentialism. 3 Credit Hours.
Honors version of 3168 (0186).
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.

PHIL 4221. Social and Political Philosophy. 3 Credit Hours.
This course studies the major value questions that are addressed in contemporary theories of the nature of society and the state, including the
requirements of justice in the distribution of benefits and burdens within a political society, and the justification of democracy as not only processes of
majority rule but as involving participation and deliberation among citizens. The recognition of cultural identities and the role of gender and race are
considered, and proposed norms of inclusiveness and diversity are analyzed. The course goes on to take up the challenge posed for philosophical
theory by globalization in its economic and ecological impacts, and analyzes the norms of human rights and solidarity across borders that may be
relevant in this new context. An emphasis will be placed on alternative philosophical frameworks within contemporary social and political philosophy,
such as contractualism, consequentialism, and care ethics. Readings will include such philosophers as John Rawls, Jurgen Habermas, Thomas
Pogge, Iris Marion Young, and Nancy Fraser.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
PHIL 2000 to 4999| Required Courses:1|Minimum Grade of C-|May not be taken concurrently
OR POLS 2496|Minimum Grade of C-|May not be taken concurrently.

PHIL 4225. Metaethics. 3 Credit Hours.
This course examines the foundations of ethical value, including the metaphysics of ethical value, the semantics of ethical language, normativity, and
the relation between kinds of value such as instrumental, final, intrinsic, and extrinsic as well as personal, ethical, moral, and prudential. This course is
designed for students who have done some advanced work in philosophy.
Repeatability: This course may not be repeated for additional credits.

PHIL 4229. Philosophy in Literature. 3 Credit Hours.
Selected philosophical themes as they appear in classical and modern literature. Frequently the themes concern the "enlightenment project,"
"modernism," and their critics.
Repeatability: This course may not be repeated for additional credits.

PHIL 4233. Problems in Aesthetics. 3 Credit Hours.
An examination of the philosophical issues concerning the nature and importance of the arts and artistic practice, including questions about the nature
of aesthetic experience, the definition of art, representation and expression in art, the ontological status of artworks, truth and reference in art, and the
values of art.
Repeatability: This course may not be repeated for additional credits.

PHIL 4240. Topics in the Philosophy of Psychology. 3 Credit Hours.
Selected topics - varies according to the expertise of the instructor.
Repeatability: This course may be repeated for additional credit.

PHIL 4241. Theory of Knowledge. 3 Credit Hours.
An examination of knowledge and belief. The specific subtopics involving them include truth, perception, innate ideas, justification, induction, the a priori,
mathematical knowledge and rationalism versus empiricism.
Repeatability: This course may not be repeated for additional credits.

PHIL 4242. Metaphysics. 3 Credit Hours.
An examination of the most general features of the universe. Topics include the character of truth, the existence of abstract entities, the nature of
persons, free will, the existence or non-existence of God, ontological commitment, the relation of philosophy to science, causation, modal properties,
reality and appearance, and various forms of realism and anti-realism.
Repeatability: This course may not be repeated for additional credits.

PHIL 4244. Philosophy of Mind. 3 Credit Hours.
An examination of the character of mental and psychological states. Specific issues may include the nature of persons, relations between natural and
psychological sciences, action, mental content and its relation to language.
Repeatability: This course may not be repeated for additional credits.

PHIL 4251. Philosophy of Language. 3 Credit Hours.
The study of theories of meaning and meaningfulness. Selected topics may include reference, vagueness, speech act theory, and metaphor. NOTE:
Students who have taken PHIL 4951 will not earn additional credit for this course.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
PHIL 1196|Minimum Grade of C-|May not be taken concurrently.
PHIL 4253. Philosophy of History. 3 Credit Hours.
Problems of historical knowledge, e.g., problems about the historian's claim to explain historical events (causation in history, reasons for actions, challenges to the objectivity of history) and problems about historical interpretation (including global interpretations of the historical process, such as Augustine's, Kant's, and Hegel's).
Repeatability: This course may not be repeated for additional credits.

PHIL 4268. Indian Philosophy: An Introduction. 3 Credit Hours.
Beginnings of Indian philosophical thinking in the hymns of Rig Veda and the Upanishads and the major schools of Indian philosophy as they took shape during the next thousand years. The latter include Samkhya, the Buddhist schools, the Vaiseskika, the Nyaya, and the major schools of Vedanta. Issues in metaphysics, epistemology, and logic emphasized.
Repeatability: This course may not be repeated for additional credits.

PHIL 4269. Contemporary British and American Philosophy. 3 Credit Hours.
Selected topics in 20th and 21st century English-speaking philosophy, varying according to instructor and semester.
Repeatability: This course may not be repeated for additional credits.

PHIL 4271. 19th Century Philosophy. 3 Credit Hours.
Selected European philosophers from Hegel to Bradley.
Repeatability: This course may not be repeated for additional credits.

PHIL 4273. Greek Philosophy. 3 Credit Hours.
Interpretation and critical examination of the dialogues of Plato and the works of Aristotle.
Repeatability: This course may not be repeated for additional credits.

PHIL 4274. Pragmatism and American Thought. 3 Credit Hours.
American pragmatism and naturalism, with emphasis on Emerson, James, Peirce, Mead, Dewey, and contemporary pragmatists.
Repeatability: This course may not be repeated for additional credits.

PHIL 4275. British Empiricism. 3 Credit Hours.
Selected topics in 17th and 18th century philosophers such as Locke, Berkeley, Hume and Reid.
Repeatability: This course may not be repeated for additional credits.

PHIL 4276. Contemporary Continental Philosophy. 3 Credit Hours.
Phenomenology and existentialism, with emphasis on such 20th century philosophers as Husserl, Heidegger, Sartre, Merleau-Ponty, Foucault, Derrida, and other post-structuralists.
Repeatability: This course may not be repeated for additional credits.

PHIL 4277. Continental Rationalism. 3 Credit Hours.
This course is devoted to selected topics in 17th and 18th century philosophers in the Rationalist tradition such as Descartes, Spinoza, Malebranche and Leibniz.
Repeatability: This course may not be repeated for additional credits.

PHIL 4278. Philosophy of Culture. 3 Credit Hours.
This course addresses central themes in philosophy of culture such as philosophical problems raised by the notion of cultural conditions of possibility, the relation of mythic knowledge to scientific and philosophical knowledge, the role of signs and symbols in the theories of culture, and the distinction between a philosophical anthropology and anthropological theory.
Repeatability: This course may not be repeated for additional credits.

PHIL 4279. Kant. 3 Credit Hours.
In depth study of some of the major critical writings of Kant.
Repeatability: This course may not be repeated for additional credits.

PHIL 4282. Undergraduate Tutorial. 3 Credit Hours.
Independent study for undergraduates with one of the professors in the department. NOTE: Arrangements with that professor must be made before signing up for the course.
Repeatability: This course may be repeated for additional credit.

PHIL 4297. Pre-Law Tutorial. 3 Credit Hours.
An alternative capstone course for majors headed toward the legal profession.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Philosophy
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

PHIL 4298. Senior Seminar. 3 Credit Hours.
The normal capstone course for philosophy majors.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Philosophy
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.
PHIL 4951. Honors Philosophy of Language. 3 Credit Hours.
Philosophy of Language is the study of theories of meaning and meaningfulness. Selected topics may include reference, vagueness, speech act theory, and metaphor. NOTE: Students who have taken PHIL 4251 will not earn additional credit for this course.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.

PHIL 4999. Honors Senior Thesis. 3 Credit Hours.
The writing of the thesis required for graduation with distinction in philosophy.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.

Physics (PHYS)

Courses

PHYS 0834. Exploring the Cosmos. 3 Credit Hours.
This course is typically offered in Fall, Spring, and Summer I.<p>This GenEd course will use the fascinating science surrounding the makeup, origin, and future of our Universe to teach the methods by which scientists study nature. The course will also explore the (sometimes controversial) history of the subject, including the intersections of ethics and science as well as the role of different cultures.
Course Attributes: GS
Repeatability: This course may not be repeated for additional credits.

PHYS 0839. Powering the Future. 3 Credit Hours.
This course is typically offered in Fall and Spring.<p>How can we provide inexpensive, safe, environmentally clean energy supplies for the United States and the world as a whole despite rising population and increasing affluence? Study problems of our conventional fossil and nuclear fuel use, and how they might be relieved; explore the physical and technological possibilities for using energy much more efficiently; investigate various renewable-energy sources (such as solar, hydrogen cells, hydropower, and biofuels) that significantly reduce effects on the environment. In the course lab projects, you will research and develop a sustainable energy proposal for your own home, campus, or community. NOTE: This course fulfills a Science & Technology (GS) requirement for students under GenEd and Science & Technology Second Level (SB) for students under Core. Students cannot get credit for this course if they have successfully completed Physics 0939.
Course Attributes: GS
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 0701 to 0702| Required Courses:1|Minimum Grade of C|May not be taken concurrently
OR MATH 0800 to 4999| Required Courses:1|Minimum Grade of C-|May be taken concurrently
OR (PM1 0916|May not be taken concurrently
AND PMC 1850|May not be taken concurrently).

PHYS 0847. How Things Work: The Physics of Everyday Life. 3 Credit Hours.
This course is typically offered in Fall, Spring, and Summer I.<p>As you observe films, demonstrations and photographic techniques both real and computer-simulated, and as you perform several simple in-home experiments you will gain a basic understanding of the laws of nature as they play out in everyday life. In a special project you will compare the science in different science fiction films. NOTE: This course fulfills a Science & Technology (GS) requirement for students under GenEd and Science & Technology Second Level (SB) for students under Core.
Course Attributes: GS
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 0701 to 0702| Required Courses:1|Minimum Grade of C|May not be taken concurrently
OR MATH 0800 to 4999| Required Courses:1|Minimum Grade of C-|May be taken concurrently.
PHYS 0872. The Science of Sound. 3 Credit Hours.
This course is typically offered in Fall, Spring, and Summer I. For living things the ability to hear sounds is an essential tool for survival, and sound is central to speech and languages. In the arts sound also plays a fundamental role, above all in music. The close connection between music, mathematics, and physics has long fascinated scientists. Advances in electronics and computing are revolutionizing the composition, production, and recording of sound. Science of Sound is an interdisciplinary course involving elements of physics, physiology, psychology, music, and engineering. After a four-week introduction to the fundamental physics of sound waves, we will consider human hearing and the human voice; scales, harmony, and sound production by musical instruments; architectural acoustics; and the electronic reproduction of sound. The course includes many in-class demonstrations. NOTE: This course fulfills a Science & Technology (GS) requirement for students under GenEd and Science & Technology Second Level (SB) for students under Core. Students cannot get credit for this course if they have completed Physics 1003: Acoustics.

Course Attributes: GS
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 0701 to 0702| Required Courses:1|Minimum Grade of C|May not be taken concurrently
OR MATH 0800 to 4999| Required Courses:1|Minimum Grade of C-|May be taken concurrently.

PHYS 0939. Honors Powering the Future. 3 Credit Hours.
This course is typically offered in Spring. How can we provide inexpensive, safe, environmentally clean energy supplies for the United States and the world as a whole despite rising population and increasing affluence? Study problems of our conventional fossil and nuclear fuel use, and how they might be relieved; explore the physical and technological possibilities for using energy much more efficiently; investigate various renewable-energy sources (such as solar, hydrogen cells, hydropower, and biofuels) that significantly reduce effects on the environment. In the course lab projects, you will research and develop a sustainable energy proposal for your own home, campus, or community. (This is an Honors course.) NOTE: This course fulfills a Science & Technology (GS) requirement for students under GenEd and Science & Technology Second Level (SB) for students under Core. Students cannot get credit for this course if they have successfully completed Physics 0839.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GS, HO
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 0701 to 0702| Required Courses:1|Minimum Grade of C|May not be taken concurrently
OR MATH 0800 to 4999| Required Courses:1|Minimum Grade of C-|May be taken concurrently
OR (PM1 0916|May not be taken concurrently
AND PMC 1850|May not be taken concurrently).

PHYS 1001. Physics: Matter and Motion. 4 Credit Hours.
This course is typically offered in Fall and Spring. An introduction to the ideas and techniques used in the study of motion. Application to a wide variety of physical systems ranging from air molecules to footballs to black holes. Mostly descriptive using photographic techniques, films, and demonstrations. NOTE: (1) No laboratory. (2) This course can be used to satisfy the university Core Science & Technology First Level (SA) requirement. To determine if this course in combination with another course can satisfy the GenEd Science & Technology requirement, see your advisor. (3) Students who have taken a higher number introductory physics sequence cannot take this course for credit.

Course Attributes: SA
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 0701 to 0702| Required Courses:1|Minimum Grade of C-|May not be taken concurrently
OR MATH 0800 to 4999| Required Courses:1|Minimum Grade of C-|May be taken concurrently
OR MC3 Y|May not be taken concurrently
OR MC4 Y|May not be taken concurrently
OR MC5 Y|May not be taken concurrently
OR MC6 Y|May not be taken concurrently
OR STAT 1001|Minimum Grade of C-|May be taken concurrently
OR STT2 Y|May not be taken concurrently
OR STAT 1102|Minimum Grade of C-|May be taken concurrently
OR STAT 1902|Minimum Grade of C-|May be taken concurrently.
PHYS 1004. Introduction to Astronomy. 3 Credit Hours.
This course is typically offered in Fall, Spring, and Summer I.<p>After a description of local space which includes the universe of galaxies, red shift, and the big bang will be discussed. White dwarfs, red giants, pulsars, black holes, and quasars will be covered. The treatment will be mostly descriptive, utilizing slides, NASA films, and several trips to our planetarium. NOTE: (1) No laboratory. (2) This course can be used to satisfy the university Core Science & Technology Second Level (SB) requirement. To determine if this course in combination with another course can satisfy the GenEd Science & Technology requirement, see your advisor.

Course Attributes: SB
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 1021|Minimum Grade of C-|May not be taken concurrently
OR MATH 1022 to 3080| Required Courses:1|Minimum Grade of C-|May be taken concurrently
OR MC5 Y|May not be taken concurrently
OR MC6 Y|May not be taken concurrently
OR STAT 1001|Minimum Grade of C-|May not be taken concurrently
OR STT2 Y|May not be taken concurrently
OR STAT 1102|Minimum Grade of C-|May not be taken concurrently
OR STAT 1902|Minimum Grade of C-|May not be taken concurrently.

PHYS 1005. Light, Art, and Nature. 4 Credit Hours.
This course is typically offered in Spring.<p>An introduction to the properties of light, whether interpreted as rays, waves, or photons. Discussion of the basic ideas of geometric and wave optics, with application to the analysis of photography, color, vision, and modern physics. Emphasis is on factors that permit the artist and observer to understand and more fully control the design and interpretation of images of all kinds. Demonstrations, experiments, and video and computer simulations to analyze signals received by the eyes or instruments. NOTE: (1) Course is primarily designed for students interested in the visual arts, but is open to anyone. Minimal mathematics. (2) This course can be used to satisfy the university Core Science & Technology First Level (SA) requirement.

Course Attributes: SA
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 0701 to 0702| Required Courses:1|Minimum Grade of C-|May not be taken concurrently
OR MATH 0800 to 4999| Required Courses:1|Minimum Grade of C-|May be taken concurrently
OR MC3 Y|May not be taken concurrently
OR MC4 Y|May not be taken concurrently
OR MC5 Y|May not be taken concurrently
OR MC6 Y|May not be taken concurrently
OR STAT 1001|Minimum Grade of C-|May be taken concurrently
OR STT2 Y|May not be taken concurrently
OR STAT 1102|Minimum Grade of C-|May be taken concurrently
OR STAT 1902|Minimum Grade of C-|May be taken concurrently.

PHYS 1006. Medical Physics. 3 Credit Hours.
This course is not offered every year.<p>Medical Physics is an introductory science elective course that is open to students with little exposure to science or mathematics. With nominal (high school level) mathematics preparation, students can learn how basic principles of physics are utilized in medical processes. Topics to be examined include: the nature of radiation, radiation exposure, nuclear medicine, CT and MR imaging, and ultrasound techniques.

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 1021|Minimum Grade of C-|May not be taken concurrently
OR MATH 1022 to 3080| Required Courses:1|Minimum Grade of C-|May be taken concurrently
OR MC5 Y|May not be taken concurrently
OR MC6 Y|May not be taken concurrently
OR STAT 1001|Minimum Grade of C-|May not be taken concurrently
OR STT2 Y|May not be taken concurrently
OR STAT 1102|Minimum Grade of C-|May not be taken concurrently
OR STAT 1902|Minimum Grade of C-|May not be taken concurrently.
PHYS 1007. Science & Science Fiction in Film. 3 Credit Hours.
This course is typically offered in Spring. This course takes a captivating look at physical phenomena depicted in a collection of popular science fiction films. These include Deep Impact (1998) in which Earth is threatened by a giant comet, The Peacemaker (1998) where a terrorist's atomic bomb is planted in New York City, I Robot (2007) with a detective fighting to prevent a takeover of the human race by robots, and Contact (1997) featuring an astronomer who discovers the first real message from an alien civilization. There are no in-person meetings of this class. Students discuss films on the course web site and submit answers to weekly questions via the Internet at times that are individually convenient for each student. E-Mail the course instructor, Dr. Dubeck, at ldubeck@temple.edu for access to the course web site.

Repeatability: This course may not be repeated for additional credits.

PHYS 1021. Introduction to General Physics I. 0 or 4 Credit Hours.
This course is typically offered in Fall, Spring, and Summer I. Open to freshmen and other students in pre-professional programs. Students who are biology majors or in pre-medical programs should take Physics 2021 (0121) instead. Not intended as a preparation for advanced courses in physics. Topics include kinematics, dynamics, work, energy, momentum, static equilibrium, fluids, vibrations, waves, sound, temperature, kinetic theory, heat, and the laws of thermodynamics. NOTE: Students cannot receive credits for both Physics 1011 and 1021. This course can be used to satisfy the university Core Science & Technology First Level (SA) requirement. To determine if this course in combination with another course can satisfy the GenEd Science & Technology requirement, see your advisor. Two sections are required for this course. This course requires registration for a 0.0 credit Laboratory section in addition to the 4.0 credit Lecture & Recitation section. The Laboratory sections corresponding to a course are listed under the same course number as the Lecture & Recitation sections, but have unique section numbers.

Course Attributes: SA
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 1021|Minimum Grade of C-|May not be taken concurrently
OR MATH 1022 to 3080| Required Courses: 1|Minimum Grade of C-|May be taken concurrently
OR MC5 Y|May not be taken concurrently
OR MC6 Y|May not be taken concurrently
OR STAT 1001|Minimum Grade of C-|May not be taken concurrently
OR STT2 Y|May not be taken concurrently
OR STAT 1102|Minimum Grade of C-|May not be taken concurrently
OR STAT 1902|Minimum Grade of C-|May not be taken concurrently.

PHYS 1022. Introduction to General Physics II. 0 or 4 Credit Hours.
This course is typically offered in Fall, Spring, and Summer II. Normally follows Physics 1021 (C085). Open to freshmen and others in pre-professional programs. Students who are biology majors or in pre-medical programs should take Physics 2022 (0122) instead. Topics include electricity, magnetism, optics, and modern physics. NOTE: Students cannot receive credits for both Physics 1012 and 1022. This course can be used to satisfy the university Core Science & Technology Second Level (SB) requirement. To determine if this course in combination with another course can satisfy the GenEd Science & Technology requirement, see your advisor. Two sections are required for this course. This course requires registration for a 0.0 credit Laboratory section in addition to the 4.0 credit Lecture & Recitation section. The Laboratory sections corresponding to a course are listed under the same course number as the Lecture & Recitation sections, but have unique section numbers.

Course Attributes: SB
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
PHYS 1011|Minimum Grade of C-|May not be taken concurrently
OR PHYS 1021|Minimum Grade of C-|May not be taken concurrently
OR PHYS 1061|Minimum Grade of C-|May not be taken concurrently
OR PHYS 2021|Minimum Grade of C-|May not be taken concurrently
OR PHYS 2921|Minimum Grade of C-|May not be taken concurrently.
PHYS 1061. Elementary Classical Physics I. 0 or 4 Credit Hours.
This course is typically offered in Fall, Spring, and Summer I.<p>Primarily for physics, chemistry, engineering, geology, and mathematics majors, but open to others. Topics include elementary vector algebra, one-dimensional motion, particle dynamics, work and energy, conservation of energy, conservation of linear momentum, collisions, rotational kinematics and dynamics, conservation of angular momentum, oscillations, waves, and gravitation. NOTE: Students cannot receive credits for both Physics 1061 and 2021. This course can be used to satisfy the university Core Science & Technology First Level (SA) requirement. To determine if this course in combination with another course can satisfy the GenEd Science & Technology requirement, see your advisor.<p>Two sections are required for this course. This course requires registration for a 0.0 credit Laboratory section in addition to the 4.0 credit Lecture & Recitation section. The Laboratory sections corresponding to a course are listed under the same course number as the Lecture & Recitation sections, but have unique section numbers.
Course Attributes: SA
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 1041|Minimum Grade of C|May be taken concurrently
OR MATH 1941|Minimum Grade of C|May be taken concurrently
OR MATH 1038|Minimum Grade of C|May be taken concurrently
OR MATH 1042|Minimum Grade of C|May be taken concurrently
OR MATH 1942|Minimum Grade of C|May be taken concurrently
OR MATH 1951|Minimum Grade of C|May be taken concurrently
OR MATH 2043 to 3080| Required Courses:1|Minimum Grade of C|May be taken concurrently
OR MA06 Y|May not be taken concurrently.

PHYS 1062. Elementary Classical Physics II. 0 or 4 Credit Hours.
This course is typically offered in Fall, Spring, and Summer II.<p>Primarily for physics, chemistry, engineering, geology, and mathematics majors, but open to others. Topics include temperature, heat and the first law of thermodynamics, kinetic theory of gases, entropy and the second law of thermodynamics, electrical charges, the electric field, Gauss's Law, electrostatic potential, capacitors and dielectrics, current, resistance, the magnetic field, Ampere's Law, Faraday's Law, inductance, geometrical optics, and interference and diffraction of light. NOTE: Students cannot receive credits for both Physics 1062 and 2022. This course can be used to satisfy the university Core Science & Technology Second Level (SB) requirement. To determine if this course in combination with another course can satisfy the GenEd Science & Technology requirement, see your advisor.<p>Two sections are required for this course. This course requires registration for a 0.0 credit Laboratory section in addition to the 4.0 credit Lecture & Recitation section. The Laboratory sections corresponding to a course are listed under the same course number as the Lecture & Recitation sections, but have unique section numbers.
Course Attributes: SB
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(PHYS 1061|Minimum Grade of C|May not be taken concurrently
OR PHYS 2021|Minimum Grade of C|May not be taken concurrently
OR PHYS 2921|Minimum Grade of C|May not be taken concurrently
AND (MATH 1042|Minimum Grade of C|May not be taken concurrently
OR MATH 1942|Minimum Grade of C|May not be taken concurrently
OR MATH 1951|Minimum Grade of C|May not be taken concurrently
OR MATH 2043 to 3080| Required Courses:1|Minimum Grade of C|May be taken concurrently).

PHYS 1083. Directed Reading/Study. 1 to 4 Credit Hour.
This course is typically offered in Fall, Spring, and Summer I.<p>Independent study in physics. NOTE: This course may be repeated for credit.
Repeatability: This course may be repeated for additional credit.

PHYS 2021. General Physics I. 0 or 4 Credit Hours.
This course is typically offered in Fall, Spring, and Summer I.<p>Topics include mechanics, gravitation, energy conservation, fluids and waves. Biological applications discussed where appropriate. NOTE: Students cannot receive credits for both Physics 1061 and 2021. Primarily for biology majors, but open to others.<p>Two sections are required for this course. This course requires registration for a 0.0 credit Laboratory section in addition to the 4.0 credit Lecture & Recitation section. The Laboratory sections corresponding to a course are listed under the same course number as the Lecture & Recitation sections, but have unique section numbers.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 1042|Minimum Grade of C|May not be taken concurrently
OR MATH 1942|Minimum Grade of C|May not be taken concurrently
OR MATH 1951|Minimum Grade of C|May not be taken concurrently
OR MATH 2043 to 3080| Required Courses:1|Minimum Grade of C|May be taken concurrently.
**PHYS 2022. General Physics II. 0 or 4 Credit Hours.**

This course is typically offered in Fall, Spring, and Summer II.<p>Normally follows Physics 2021 (0121). Topics include electricity and magnetism, optics, atomic, molecular, and nuclear physics. Biological applications discussed where appropriate. NOTE: Students cannot receive credits for both Physics 1062 and 2022. Primarily for biology majors but open to others.<p>Two sections are required for this course. This course requires registration for a 0.0 credit Laboratory section in addition to the 4.0 credit Lecture & Recitation section. The Laboratory sections corresponding to a course are listed under the same course number as the Lecture & Recitation sections, but have unique section numbers.

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**

( PHYS 1061|Minimum Grade of C-|May not be taken concurrently
OR PHYS 2921|Minimum Grade of C-|May not be taken concurrently
AND ( MATH 1042|Minimum Grade of C-|May not be taken concurrently
OR MATH 1942|Minimum Grade of C-|May not be taken concurrently
OR MATH 1951|Minimum Grade of C-|May not be taken concurrently
OR MATH 2043 to 3080| Required Courses:1|Minimum Grade of C-|May be taken concurrently).

**PHYS 2083. Directed Reading/Study. 2 to 4 Credit Hours.**

This course is typically offered in Fall, Spring, Summer I and Summer II.<p>Undergraduate independent study in physics. NOTE: This course may be repeated for credit.

**Repeatability:** This course may be repeated for additional credit.

**PHYS 2101. Classical Mechanics. 3 Credit Hours.**

This course is typically offered in Spring.<p>Newton's laws of motion, one-dimensional motion, second order differential equations, harmonic oscillators (damped, forced), vector analysis, conservation laws, three-dimensional motion, central forces, motion in electromagnetic fields, collisions, center-of-mass transformations, two-body problem, numerical/computer solutions, coupled oscillators. Rigid body rotation, statics, elasticity, fluid equilibrium, gravitation.

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**

( PHYS 1062|Minimum Grade of C-|May not be taken concurrently
OR PHYS 2022|Minimum Grade of C-|May not be taken concurrently
OR PHYS 2922|Minimum Grade of C-|May not be taken concurrently
AND ( MATH 2043|Minimum Grade of C-|May not be taken concurrently).

**PHYS 2501. Computing for Scientists. 3 Credit Hours.**

This course is typically offered in Fall.<p>An overview of computer systems, hardware, and software. Designing, writing, debugging, and testing programs using realistic scientific problems. Programming with style and structure. Displaying results in graphical form. Numerical methods, data analysis and simulation. Use of C programming language and Mathematica.

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**

( PHYS 1062|Minimum Grade of C-|May not be taken concurrently
OR PHYS 2022|Minimum Grade of C-|May not be taken concurrently
OR PHYS 2922|Minimum Grade of C-|May not be taken concurrently
AND ( MATH 1042|Minimum Grade of C-|May not be taken concurrently
OR MATH 1942|Minimum Grade of C-|May not be taken concurrently
OR MATH 1951|Minimum Grade of C-|May not be taken concurrently
OR MATH 2043 to 3080| Required Courses:1|Minimum Grade of C-|May be taken concurrently).

**PHYS 2502. Mathematical Physics. 4 Credit Hours.**

This course is typically offered in Spring.<p>Infinite series, determinants and matrices, ordinary differential equations, vector analysis, curvilinear coordinate systems, Fourier series, properties of Legendre and Bessel functions, partial differential equations. Laboratory portion of course provides training in use of Mathematica, an integrated environment for technical computing, to solve problems in mathematical physics. NOTE: No prior computer experience is necessary.

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**

( PHYS 1062|Minimum Grade of C-|May not be taken concurrently
OR PHYS 2022|Minimum Grade of C-|May not be taken concurrently
OR PHYS 2922|Minimum Grade of C-|May not be taken concurrently
AND ( MATH 2043|Minimum Grade of C-|May not be taken concurrently).
PHYS 2796. Introduction to Modern Physics. 4 Credit Hours.
This course is typically offered in Spring. The course will provide an introduction to the special theory of relativity and quantum mechanics, with emphasis of their applications to atomic, molecular and solid state physics. The course is calculus based and writing intensive; it relies heavily on problem solving and technical writing.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
( PHYS 1062|Minimum Grade of C-|May not be taken concurrently
OR PHYS 2022|Minimum Grade of C-|May not be taken concurrently
OR PHYS 2922|Minimum Grade of C-|May not be taken concurrently)
AND ( MATH 2043|Minimum Grade of C-|May not be taken concurrently).

PHYS 2921. Honors General Physics I. 0 or 4 Credit Hours.
This course is typically offered in Fall. This is the honors version of Physics 2021. Topics include mechanics, gravitation, energy conservation, fluids and waves. Biological applications discussed where appropriate. Two sections are required for this course. This course requires registration for a 0.0 credit Laboratory section in addition to the 4.0 credit Lecture & Recitation section. The Laboratory sections corresponding to a course are listed under the same course number as the Lecture & Recitation sections, but have unique section numbers.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 1042|Minimum Grade of C-|May not be taken concurrently
OR MATH 1942|Minimum Grade of C-|May not be taken concurrently
OR MATH 1951|Minimum Grade of C-|May not be taken concurrently
OR MATH 2043 to 3080| Required Courses:1|Minimum Grade of C-|May be taken concurrently.

PHYS 2922. Honors General Physics II. 0 or 4 Credit Hours.
This course is typically offered in Spring. This is the honors version of Physics 2022 and normally follows Physics 2921. Topics include electricity and magnetism, optics, atomic, molecular, and nuclear physics. Biological applications discussed where appropriate. Two sections are required for this course. This course requires registration for a 0.0 credit Laboratory section in addition to the 4.0 credit Lecture & Recitation section. The Laboratory sections corresponding to a course are listed under the same course number as the Lecture & Recitation sections, but have unique section numbers.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
( PHYS 1061|Minimum Grade of C-|May not be taken concurrently
OR PHYS 2021|Minimum Grade of C-|May not be taken concurrently
OR PHYS 2921|Minimum Grade of C-|May not be taken concurrently)
AND ( MATH 1042|Minimum Grade of C-|May not be taken concurrently
OR MATH 1942|Minimum Grade of C-|May not be taken concurrently
OR MATH 1951|Minimum Grade of C-|May not be taken concurrently
OR MATH 2043 to 3080| Required Courses:1|Minimum Grade of C-|May be taken concurrently.

PHYS 3083. Directed Reading/Study. 3 Credit Hours.
This course is typically offered in Fall, Spring, Summer I and Summer II. This course offers the opportunity for more advanced independent study. NOTE: This course may be repeated for credit.
Repeatability: This course may be repeated for additional credit.
PHYS 3091. Research Methods. 3 Credit Hours.
This course is typically offered in Spring. Research Methods is required for all of the TUteach with Teaching majors. It is one of several content courses specially designed to meet the needs of future teachers. Sections meet two hours per week for non-traditional, interactive lectures and two hours per week for lab. The course is cross-listed in Biology, Chemistry, Earth and Environmental Science, and Physics. The goals of the course are (1) to provide students with the tools that scientists use to solve scientific problems; (2) to give students the opportunity to use these tools in a laboratory setting; (3) to make students aware of how scientists communicate with each other through peer-reviewed scientific literature; and (4) to enable students to understand how scientists develop new knowledge and insights, the most important of which are eventually presented in textbooks and taught in conventional science classes. Students design and carry out four independent inquiries, which they write up and present in the manner that is common in the scientific community. The inquiries incorporate mathematics and the various science disciplines, thus the team of instructors teaching this course have expertise in different disciplines and are available to supervise all students as they work on their inquiries in the lab. The combination of Research Methods and the TUteach course “Perspectives on Science and Mathematics” (Philosophy 2196) provides prospective science and mathematics teachers with an in-depth understanding of how the scientific enterprise works. NOTE: Physics 3091 is only available for major credit in the Physics with Teaching BS program.

College Restrictions: Must be enrolled in one of the following Colleges: Science & Technology
Repeatability: This course may be repeated for additional credit.

Pre-requisites:
SCTC 1289|Minimum Grade of C-|May not be taken concurrently.

PHYS 3101. Analytical Mechanics. 3 Credit Hours.
This course is typically offered in Fall. Moving coordinate systems, three-body problems, partial differential equations, wave propagation (strings, membranes, fluids), boundary value problems, normal modes, fluid equations of motion, viscosity; virtual work, Lagrange’s equations, Hamilton’s equations; angular momentum of a rigid body, inertia tensor, Euler’s equations, Euler angles, tops and gyroscopes.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
PHYS 2101|Minimum Grade of C-|May not be taken concurrently.

PHYS 3301. Electricity and Magnetism. 4 Credit Hours.
This course is typically offered in Fall. Electrostatics, magnetostatics, microscopic interpretation of polarization P and magnetization M, electrostatic and magnetostatic energy, Faraday’s Law, self and mutual inductance, magnetic circuits; integral and differential forms of Gauss, Ampere, and Faraday laws; AC circuits; introduction to the displacement current and Maxwell's equations. Laboratory portion of the course provides investigation on DC and AC circuits, bridge circuits, sources of emf, Hall effect, and operational amplifier circuits.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(Phys 1062|Minimum Grade of C-|May not be taken concurrently)
OR PHYS 2022|Minimum Grade of C-|May not be taken concurrently
OR PHYS 2922|Minimum Grade of C-|May not be taken concurrently
AND (MATH 2043|Minimum Grade of C-|May not be taken concurrently).

PHYS 3302. Classical Electromagnetism. 3 Credit Hours.
This course is typically offered in Spring. Solutions to the equations of Poisson and Laplace; multipole expansions; electrostatic and magnetostatic energy, forces, and torques; Maxwell's equations; the wave equation; radiation fields, Poynting's Theorem, microwave and optical waveguides.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(Phys 3301|Minimum Grade of C-|May not be taken concurrently)
AND (PHYS 2502|Minimum Grade of C-|May not be taken concurrently
OR MATH 4041|Minimum Grade of C-|May not be taken concurrently).

PHYS 3701. Introduction to Quantum Mechanics. 3 Credit Hours.
This course is typically offered in Spring. Dual nature of light and matter, de Broglie waves, Schrodinger equation, one-dimensional systems, Hermitian operators, eigenfunctions and eigenvalues. Spin and isospin. Two- and three-dimensional systems. Approximation methods. Theory of scattering.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(Phys 2701|Minimum Grade of C-|May not be taken concurrently)
OR PHYS 2796|Minimum Grade of C-|May not be taken concurrently
AND (PHYS 2502|Minimum Grade of C-|May not be taken concurrently
OR MATH 4041|Minimum Grade of C-|May not be taken concurrently).

PHYS 4091. Undergraduate Research. 2 to 3 Credit Hours.
This course is typically offered in Fall, Spring, Summer I and Summer II. This course offers the opportunity for undergraduate research in physics.

Repeatability: This course may be repeated for additional credit.
PHYS 4101. Thermodynamics and Kinetic Theory. 3 Credit Hours.
This course is typically offered in Fall. First, second, and third laws, thermodynamic potentials, kinetic theory, and applications to simple systems. The basic ideas of statistical mechanics.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(PHYS 1062|Minimum Grade of C-|May not be taken concurrently
OR PHYS 2022|Minimum Grade of C-|May not be taken concurrently
OR PHYS 2922|Minimum Grade of C-|May not be taken concurrently)
AND (MATH 2043|Minimum Grade of C-|May not be taken concurrently).

PHYS 4301. Electronics. 3 Credit Hours.
This course is typically offered in Spring of odd years. Basic circuit ideas, Thevenin/Norton theorems, input/output impedance, diodes, transistors, feedback, operational amplifiers, elements of digital electronics, transducers for physical measurements. NOTE: Course offered on odd-numbered years.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
PHYS 3301|Minimum Grade of C-|May not be taken concurrently.

PHYS 4302. Optics. 3 Credit Hours.
The emphasis of this course is on physical and laser optics. Topics include review of geometric optics, matrix methods in paraxial optics, fiber optics, wave equations, superposition and interference of light, diffraction, polarization of light, coherence, laser operation, characteristics of laser beams and selected modern optics applications.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
PHYS 2701|Minimum Grade of C-|May not be taken concurrently
OR PHYS 2796|Minimum Grade of C-|May not be taken concurrently
OR CHEM 3301|Minimum Grade of C-|May not be taken concurrently
OR CHEM 3302|Minimum Grade of C-|May not be taken concurrently.

PHYS 4701. Introduction to Solid State Physics. 3 Credit Hours.
Elementary theory of the solid state. Survey of mechanical, thermal, optical, electrical, and magnetic properties of solids. NOTE: Course offered on even-numbered years.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
PHYS 3701|Minimum Grade of C-|May not be taken concurrently.

PHYS 4702. Introduction of Atomic, Nuclear, and Particle Physics. 3 Credit Hours.
Properties atomic structure, atomic spectra, selection rules, atoms in electric and magnetic fields; nuclear properties, radioactive decays, nuclear reactions, fission and fusion, and fundamental properties of elementary particles and their interactions.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
PHYS 3701|Minimum Grade of C-|May not be taken concurrently.

PHYS 4796. Experimental Physics. 3 Credit Hours.
An intermediate laboratory course with an introduction to data analysis and error estimation. Students independently perform two or three experiments, with suitable reports. NOTE: Capstone writing course.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
PHYS 2701|Minimum Grade of C-|May not be taken concurrently
OR PHYS 2796|Minimum Grade of C-|May not be taken concurrently.

Political Science (POLS)
Courses

POLS 0825. Quantitative Methods in the Social Sciences. 4 Credit Hours.
Psychological, political, social, and economic arguments and knowledge frequently depend on the use of numerical data. A psychologist might hypothesize that I.Q. is attributable to environmental or genetic factors; a politician might claim that hand gun control legislation will reduce crime; a sociologist might assert that social mobility is more limited in the United States than in other countries, and an economist might declare that globalization lowers the incomes of U.S. workers. How can we evaluate these arguments? Using examples from psychology, sociology, political science, and economics, students will examine how social science methods and statistics help us understand the social world. The goal is to become critical consumers of quantitative material that appears in scholarship, the media, and everyday life. NOTE: This course fulfills the Quantitative Literacy (GQ) requirement for students under GenEd and a Quantitative Reasoning (QA or QB) requirement for students under Core. Students cannot receive credit for this course if they have successfully completed ANTH 0825, PSY 0825, or SOC 0825/0925.

Course Attributes: GQ

Pre-requisites:
MATH 0701|Minimum Grade of C-|May not be taken concurrently
OR MC3 Y|May not be taken concurrently
OR MC4 Y|May not be taken concurrently
OR MC5 Y|May not be taken concurrently
OR MC6 Y|May not be taken concurrently.

POLS 0829. The History & Significance of Race in America. 3 Credit Hours.
Why were relations between Native Americans and whites violent almost from the beginning of European settlement? How could slavery thrive in a society founded on the principle that “all men are created equal”? How comparable were the experiences of Irish, Jewish, and Italian immigrants, and why did people in the early 20th century think of them as separate “races”? What were the causes and consequences of Japanese Americans’ internment in military camps during World War II? Are today’s Mexican immigrants unique, or do they have something in common with earlier immigrants? Using a variety of written sources and outstanding documentaries, this course examines the racial diversity of America and its enduring consequences. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Duplicate Credit Warning: Students may take only one of the following courses for credit; all other instances will be deducted from their credit totals: African American Studies 0829, Anthropology 0829, Geography and Urban Studies 0829, History 0829, Political Science 0829, Sociology 0829, 0929, 1376, 1396, R059, or X059.

Course Attributes: GD

POLS 0832. Politics of Identity in America. 3 Credit Hours.
Gay or straight. Black or white. Male or female. What do these different group identities mean to Americans? How do they influence our politics? Should we celebrate or downplay our diversity? This course explores how we think about others and ourselves as members of different groups and what consequences it has for how we treat one another. Our fundamental social identities can be a source of power or of powerlessness, a justification for inequality or for bold social reform. Students learn about the importance of race, class, gender and sexual orientation across a variety of important contexts, such as the family, workplace, schools, and popular culture and the implications these identities have on our daily lives. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they have successfully completed History 0832, SOC 0832 or Women’s Studies 0832/0932.

Course Attributes: GD

POLS 0859. The Making of American Society: Melting Pot or Culture Wars?. 3 Credit Hours.
Terrorism, illegal immigration, gay marriage, religious conflict, political in-fighting, corporate corruption, racial animosities, civil liberties assaults, media conglomeration, Wal-Mart goes to China and the rich get richer. America in the 21st century is a contentious society. How did we get to this place in time? Examine what makes American society distinctive from other advanced industrial democracies as we study the philosophical origins of America, the development of social and economic relationships over time, and the political disputes dominating contemporary American life. The course relies heavily on perspectives from History, Sociology and Political Science to explain the challenges facing contemporary American society. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: AMST 0859, History 0859, PHIL 0859, or SOC 0859.

Course Attributes: GU

Repeatability: This course may not be repeated for additional credits.
POLS 0862. Development & Globalization. 3 Credit Hours.

Use historical and case study methods to study the differences between rich and poor nations and the varied strategies available for development in a globalizing world. Examine the challenges facing developing countries in historical and contemporary context and analyze the main social, cultural, and political factors that interact with the dynamic forces of the world economy. These include imperialism/colonialism, state formation, labor migration, demographic trends, gender issues in development, religious movements and nationalism, the challenges to national sovereignty, waves of democratization, culture and mass media, struggles for human rights, environmental sustainability, the advantages and disadvantages of globalization, and movements of resistance. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: History 0862, GUS 0862, POLS 0962, or SOC 0862/0962.

Course Attributes: GG

Repeatability: This course may not be repeated for additional credits.

POLS 0864. War and Peace. 3 Credit Hours.

Total war, weapons of mass destruction, genocide. These were not solely inventions of the 20th century nor are they the natural consequences of a violent human nature. Leaders, armies, and the strategies they pursue are rooted in their social and political context. Weapons are the products of not merely technological but also historical and cultural development. Battles occur on a political and historical terrain. Learn how ancient ideology, medieval technology, modern propaganda, and more have changed how humans wage war and make peace. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: History 0864/0964.

Course Attributes: GG

Repeatability: This course may not be repeated for additional credits.

POLS 0866. World Affairs. 3 Credit Hours.

We live in a global age when events beyond our borders significantly affect our lives. Sharpen your understanding of international developments, including wars, economic globalization, wealth and poverty, the spread of democracy, environmental degradation, and global pandemics. This course offers an introduction to the study of world affairs that gives you the conceptual tools to deepen your understanding of how major historical and current trends in the world affect your life and that of others around the globe. Readings include historical documents, classic texts in the study of international relations, and current perspectives on the state of the world from multiple disciplinary perspectives. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: History 0866, GUS 0866 or POLS 0966.

Course Attributes: GG

Repeatability: This course may not be repeated for additional credits.

POLS 0868. World Society in Literature and Film. 3 Credit Hours.

Learn about a particular national culture - Russian, Indian, French, Japanese, Italian, for example, each focused upon in separate sections of this course - by taking a guided tour of its literature and film. You don't need to speak Russian, Hindu, French or Japanese to take one of these exciting courses, and you will gain the fresh, subtle understanding that comes from integrating across different forms of human expression. Some of the issues that will be illuminated by looking at culture through the lens of literature and film: Family structures and how they are changing, national self-perceptions, pivotal moments in history, economic issues, social change and diversity. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: Arabic 0868/0968, Asian Studies 0868, Chinese 0868/0968, English 0868/0968, French 0868/0968, German 0868/0968, Hebrew 0868, Italian 0868/0968, Japanese 0868/0968, Jewish Studies 0868, Korean 0868, LAS 0868/0968, Political Science 0968, Russian 0868/0968, or Spanish 0868/0968.

Course Attributes: GG

Repeatability: This course may not be repeated for additional credits.

POLS 0962. Honors Fate, Hope, and Action: Globalization Today. 3 Credit Hours.

Use historical and case study methods to study the differences between rich and poor nations and the varied strategies available for development in a globalizing world. Examine the challenges facing developing countries in historical and contemporary context and analyze the main social, cultural, and political factors that interact with the dynamic forces of the world economy. These include imperialism/colonialism, state formation, labor migration, demographic trends, gender issues in development, religious movements and nationalism, the challenges to national sovereignty, waves of democratization, culture and mass media, struggles for human rights, environmental sustainability, the advantages and disadvantages of globalization, and movements of resistance. (This is an Honors course.) NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: SOC 0862/0962, History 0862, POLS 0962, or GUS 0862.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR

Course Attributes: GG, HO

Repeatability: This course may not be repeated for additional credits.
POLS 0966. Honors World Affairs. 3 Credit Hours.
We live in a global age when events beyond our borders significantly affect our lives. Sharpen your understanding of international developments, including wars, economic globalization, wealth and poverty, the spread of democracy, environmental degradation, and global pandemics. This course offers an introduction to the study of world affairs that gives you the conceptual tools to deepen your understanding of how major historical and current trends in the world affect your life and that of others around the globe. Readings include historical documents, classic texts in the study of international relations, and current perspectives on the state of the world from multiple disciplinary perspectives. (This is an Honors course.) NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: GUS 0866, History 0866 or POLS 0866.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GG, HO
Repeatability: This course may not be repeated for additional credits.

POLS 0968. Honors World Society in Literature & Film. 3 Credit Hours.
Learn about a particular national culture - Russian, Indian, French, Japanese, Italian, for example, each focused upon in separate sections of this course - by taking a guided tour of its literature and film. You don’t need to speak Russian, Hindi, French or Japanese to take one of these exciting courses, and you will gain the fresh, subtle understanding that comes from integrating across different forms of human expression. Some of the issues that will be illuminated by looking at culture through the lens of literature and film: Family structures and how they are changing, national self-perceptions, pivotal moments in history, economic issues, social change and diversity. (This is an Honors course.) NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: Arabic 0868/0968, Asian Studies 0868, Chinese 0868/0968, English 0868/0968, French 0868/0968, German 0868/0968, Hebrew 0868, Italian 0868/0968, Japanese 0868/0968, Jewish Studies 0868, Korean 0868, LAS 0868/0968, Political Science 0868, Russian 0868/0968, or Spanish 0868/0968.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GG, HO
Repeatability: This course may not be repeated for additional credits.

POLS 1009. Discovering Political Science. 1 Credit Hour.
The course is designed to introduce students to the discipline, career opportunities, and the faculty in the political science department. In addition, the course will acquaint students with related social science departments and the University. NOTE: The course meets twice a week for one-half of the semester. This is a one-credit course for students considering Political Science as a major and for Political Science majors.
Repeatability: This course may not be repeated for additional credits.

POLS 1101. The American Political System. 3 Credit Hours.
An introduction to American politics. Focuses on the values, institutions, and processes of politics and government in the United States. Introduces the concepts and techniques of political science. NOTE: (1) This course is required of all Political Science majors. (2) This course can be used to satisfy the university Core American Culture (AC) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: AC
Repeatability: This course may not be repeated for additional credits.

POLS 1102. American Political System. 1 Credit Hour.
An introduction to American politics. Focuses on the values, institutions, and processes of politics and government in the United States.
Repeatability: This course may not be repeated for additional credits.

POLS 1103. The Individual, Race, and American Political Life. 3 Credit Hours.
This course focuses on the relationships between individuals and their government in the United States, investigating how government has handled the issue of insuring individual equality under democracy. It will explore the ways in which the exclusion and incorporation of various groups in American society have been affected by race and class. NOTE: (1) Political Science majors should consult with an advisor about enrolling in this course. (2) This course can be used to satisfy the university Core Studies in Race and Individual & Society (RN) requirements. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: RN
Repeatability: This course may not be repeated for additional credits.

POLS 1201. Foreign Governments and Politics. 3 Credit Hours.
This course considers the values, institutions and processes of politics and government in selected developing and developed countries in Europe, Asia, Africa, and Latin America. NOTE: (1) For both non-majors and majors. (2) This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: IS
Repeatability: This course may not be repeated for additional credits.
POLS 1301. International Politics. 3 Credit Hours.
This course is an introduction to the nature of the international system, the determinants and instruments of foreign policy, and the problems of international conflict and cooperation. NOTE: This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: IS
Repeatability: This course may not be repeated for additional credits.

POLS 1911. Honors Introduction to American Politics. 3 Credit Hours.
An introduction to American politics. Focuses on the values, institutions, and processes of politics and government in the United States. Introduces the concepts and techniques of political science. NOTE: This course can be used to satisfy the university Core American Culture (AC) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: AC, HO
Repeatability: This course may not be repeated for additional credits.

POLS 1921. Honors Foreign Governments and Politics. 3 Credit Hours.
This course considers the values, institutions and processes of politics and government in selected developing and developed countries in Europe, Asia, Africa, and Latin America. NOTE: (1) For both non-majors and majors. (2) This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO, IS
Repeatability: This course may not be repeated for additional credits.

POLS 1931. Honors International Politics. 3 Credit Hours.
This course is an introduction to the nature of the international system, the determinants and instruments of foreign policy, and the problems of international conflict and cooperation. NOTE: This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO, IS
Repeatability: This course may not be repeated for additional credits.

POLS 1996. Honors Introduction to Political Philosophy. 3 Credit Hours.
Honors seminar focusing on an introduction to the ideas and arguments of several political philosophers, such as Aristotle, Plato, Hobbes, and Marx, as well as an exploration of how such ideas relate to the contemporary world.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO, WI
Repeatability: This course may not be repeated for additional credits.

POLS 2000. Special Topics. 3 Credit Hours.
Topics vary from semester to semester. Please check with the faculty advisor for a course description and topic.
Repeatability: This course may be repeated for additional credit.

POLS 2101. American Federalism. 3 Credit Hours.
Federalism in its modern form is perhaps the single most important theoretical contribution the American system of government has made to the history of political thought. This course will examine this concept, its manifestation, and the effect this federal practice has had on the American political system.
Repeatability: This course may not be repeated for additional credits.

POLS 2102. American State and Local Politics. 3 Credit Hours.
This course considers government and politics of subnational units including states, counties, cities, towns, and townships in urban, suburban, and rural areas. Further topics include the relationship of state and local policy to citizens, other governmental units, and the American political system.
Repeatability: This course may not be repeated for additional credits.

POLS 2103. U.S. Public Policy Making. 3 Credit Hours.
This course examines selected policy areas in a variety of national settings and the relationship of political cultures and policymaking structures to policy outputs.
Repeatability: This course may not be repeated for additional credits.
POLS 2107. Capital Internship Seminar. 3 Credit Hours.
This is a required course for students accepted into the Pennsylvania Capital Semester program. Class lectures and readings will focus on the larger private and governmental context for organizations where interns are placed, specifically the interaction between the state executive branch; legislature and the legislative process; news media, nonprofits, advocacy organizations, lobbying or trade associations; and local economic development organizations. Guest lecturers, who are experts in their fields, will be invited to speak on course topics.
**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
POLS 1101|Minimum Grade of C-|May not be taken concurrently.

POLS 2108. Local Government and Community Advocacy. 3 Credit Hours.
Philadelphia is utilized as a case study to understand the nature of government and community advocacy and conflict. The class opens with an introduction to the different issues of local government, transitions to a discussion of the organization of Philadelphia local government and its politics, and ends with an analysis of the legislative and budget processes. At the conclusion of the semester, students will engage in an active learning project that illustrates Philadelphia’s public policy process.
**Repeatability:** This course may not be repeated for additional credits.

POLS 2140. Special Topics in Urban Politics. 3 Credit Hours.
Specific topics rotate from semester to semester. See Political Science faculty advisor (and notation on the Course Schedule) for specific information.
**Repeatability:** This course may be repeated for additional credit.

POLS 2201. Comparative Politics: Developing Nations. 3 Credit Hours.
This course describes and analyzes political patterns in the Third World. It provides a descriptive overview, analyzes domestic political trends within the context of the global system, and reviews current trends.
**Repeatability:** This course may not be repeated for additional credits.

POLS 2202. Power and the Poet. 3 Credit Hours.
Students read short stories and poetry written by dissident authors in the Soviet period and the post-Soviet period to understand the social and political context of authoritarianism and post-authoritarian cultural control, dissent, and the power of literature. Many of the works on the reading list were never published officially in the Soviet Union, but rather were works published in samizdat (unofficial or underground publication) or tamizdat (published abroad and smuggled back into the USSR). The course ends with the reading of a contemporary Russian novel for which the author was put on trial in 2004. Students also read some background on the historical, political, social and economic context of Soviet literature.
**Repeatability:** This course may not be repeated for additional credits.

POLS 2203. Contemporary Politics of Europe. 3 Credit Hours.
This course explores the institutions established in West European nations intended to preserve social stability, produce economic prosperity, and guarantee democracy, asking whether these goals are complementary or contradictory. A country-by-country examination of post-war political development in Britain, France, Germany, Italy, and Sweden. Emphasis on the political problems of the present. Accordingly, the course closes with an examination of the European integration process and the sweeping changes of East Europe affecting all of Europe.
**Repeatability:** This course may not be repeated for additional credits.

POLS 2212. Eastern Europe, Russia and the West. 3 Credit Hours.
Study of the relationships between western nations and the changing politics of Eastern European nations.
**Repeatability:** This course may not be repeated for additional credits.

POLS 2231. Comparative Political Systems in Latin America. 3 Credit Hours.
A comparative consideration of selected Latin American political systems.
**Repeatability:** This course may not be repeated for additional credits.

POLS 2255. Comparative Public Policy. 3 Credit Hours.
The seminar will focus on the factors that explain political outcomes and their consequences in comparative perspective. Three basic issues we explore are: 1) How do policies differ?; 2) Why do policies differ?; and 3) What impact do the different policies have? Scholars have divergent views regarding which factors account for different policies and analyses of their impact is regularly colored by ideological position that may or may not have anything to do with the real policy goals. The topics that we will study include: What is the role of political leaders during transitions to democracy or during the passage of difficult legislation in democratic politics? Under what circumstances can a corrupt polity be prosperous and an honest one poor? Is there a relationship between religion and a country's economic success? Are diamonds and oil a blessing or a curse for a country's economy? Why did some mature economies respond differently to the global financial crisis of 2007-2009? Some of the countries we will be studying include: Chile, England, France, Spain, Singapore, United States, and Venezuela.
**Repeatability:** This course may not be repeated for additional credits.

POLS 2301. Theories of War and Peace. 3 Credit Hours.
This course explores the problem of war and peace from both empirical and theoretical perspectives. Sources of war and peace studied include: the balance of power, deterrence, arms races, misperception, hegemony, nationalism, international institutions, democracy, law, and economic interdependence.
**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
POLS 1301|Minimum Grade of C-|May not be taken concurrently
OR POLS 1931|Minimum Grade of C-|May not be taken concurrently.
POLS 2311. Post-Cold War Security. 3 Credit Hours.
This course examines the debate over the changing meaning of security and the contemporary international security environment. Topics include: the nature of security, the international environment, postmodern terrorism, information warfare, global economic instability, the persistence of American hegemony, quasi-states, and the possible demise of the nation-state.

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
POLS 1301|Minimum Grade of C-|May not be taken concurrently
OR POLS 1931|Minimum Grade of C-|May not be taken concurrently.

POLS 2314. Politics of International Law. 3 Credit Hours.
Formerly known as POLS 3396, International Legal Order. Students who have received credit for POLS 3396 will not earn additional credits for this course. The historical development of international law in its relation to the evolution of the world political system, with analysis of issues of the contemporary world order such as warfare, political and economic development, human rights, and the environment.

**Repeatability:** This course may not be repeated for additional credits

POLS 2321. Politics of the Global Economy. 3 Credit Hours.
This course studies competing explanations for the evolution and operations of the international political economy from the origins of the industrial era in the late 18th century through the “information economy” of the 21st. It focuses on four functional areas: international trade in goods and services, the management of currency exchange and international monetary policy, the pattern and flow of investment capital, and the pattern and structure of global production.

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
POLS 1301|Minimum Grade of C-|May not be taken concurrently
OR POLS 1931|Minimum Grade of C-|May not be taken concurrently.

POLS 2331. International Organization. 3 Credit Hours.
This course considers the development and current roles of regional and universal international organizations with an emphasis on the United Nations. The major international conflicts of recent decades in the organizational context will also be examined.

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
POLS 1301|Minimum Grade of C-|May not be taken concurrently
OR POLS 1931|Minimum Grade of C-|May not be taken concurrently.

POLS 2341. U.S. Foreign Policy. 3 Credit Hours.
Analysis of U.S. foreign policy from three perspectives: (1) competing explanations for patterns, tendencies and events in U.S. foreign policy; (2) history of U.S. foreign policy from independence to the end of the Cold War, (3) issues in contemporary U.S. foreign policy in light of the first and second-hand perspectives.

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
POLS 1301|Minimum Grade of C-|May not be taken concurrently
OR POLS 1931|Minimum Grade of C-|May not be taken concurrently.

POLS 2351. Japan and the Changing World Order. 3 Credit Hours.
This course looks at Japanese politics from a variety of perspectives within the comparative framework of other nations and their political development within a changing global order.

**Repeatability:** This course may not be repeated for additional credits

POLS 2431. Modern Political Philosophy. 3 Credit Hours.
Close study of works by one or more modern political philosophers, stressing their relevance to an understanding of contemporary politics.

**Repeatability:** This course may not be repeated for additional credits

POLS 2432. American Political Thought. 3 Credit Hours.
This course examines significant political ideas from the American colonial period to the present and the influences of these ideas on contemporary American political institutions.

**Repeatability:** This course may not be repeated for additional credits.

POLS 2441. Democracy, Capitalism, and Socialism. 3 Credit Hours.
An examination of some of the major political ideologies dominant in the 20th century and of the tensions and points of convergence between and among them.

**Repeatability:** This course may not be repeated for additional credits.

POLS 2496. Introduction to Political Philosophy. 3 Credit Hours.
Reading of selected works by several classical and modern political philosophers, such as Aristotle, Hobbes, and Marx; study of their relevance to contemporary political issues. NOTE: Capstone writing course in the major.

**Course Attributes:** WI

**Repeatability:** This course may not be repeated for additional credits.
POLS 2503. Evidence and Knowledge. 3 Credit Hours.
This course introduces students to the fundamental concepts that underlie the evaluation of empirical evidence. The focus will be on the design of research, rather than the analysis of data. Major themes covered in the course include: measurement, causality, uncertainty, the scientific method, and the methodological debates that animate political science research.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
POLS 1101|Minimum Grade of C-|May not be taken concurrently
OR POLS 1911|Minimum Grade of C-|May not be taken concurrently
OR POLS 1201|Minimum Grade of C-|May not be taken concurrently
OR POLS 1921|Minimum Grade of C-|May not be taken concurrently
OR POLS 1301|Minimum Grade of C-|May not be taken concurrently
OR POLS 1931|Minimum Grade of C-|May not be taken concurrently
OR POLS 1102|Minimum Grade of C-|May not be taken concurrently.

POLS 2996. Honors: Introduction to Political Philosophy. 3 Credit Hours.
Honors seminar focusing on an introduction to the ideas and arguments of several political philosophers, such as Aristotle, Plato, Hobbes, and Marx, as well as an exploration of how such ideas relate to the contemporary world.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO, WI
Repeatability: This course may not be repeated for additional credits.

POLS 3082. Independent Study. 3 Credit Hours.
Students must make arrangements to work with a political science faculty member, and seek the approval of the undergraduate chair before enrolling under this course number.
Repeatability: This course may be repeated for additional credit.

POLS 3101. The American Presidency. 3 Credit Hours.
The role of the chief executive, the American presidency, in the political process.
Repeatability: This course may not be repeated for additional credits.

POLS 3102. The Legislative Process. 3 Credit Hours.
Covers the legislative process of both the U.S. Congress and state legislatures. Includes the lawmaking process, legislative organization, leadership and policymaking, lobbying and elections, and the careers and characteristics of legislators.
Repeatability: This course may not be repeated for additional credits.

POLS 3103. The American Supreme Court. 3 Credit Hours.
An examination of judicial decision making and the interrelationships between the Court and other aspects of the political process.
Repeatability: This course may not be repeated for additional credits.

POLS 3105. American Party System. 3 Credit Hours.
The evolution and organization of political parties in the United States, including nominating systems, campaigns, election laws, types of ballots, and electoral reform techniques.
Repeatability: This course may not be repeated for additional credits.

POLS 3107. State Politics and Policy. 3 Credit Hours.
This course examines the American states from a comparative and historical perspective. The role of the states in relation to the federal government will also be an important theme. The class will consider the central institutions of the states, including governors, legislatures and courts, as well as political parties, interest groups and the media. The course will also focus on several areas of public policy in which the states play a pivotal role.
Repeatability: This course may not be repeated for additional credits.

POLS 3111. Media and the Political Process. 3 Credit Hours.
This course considers the relationship between the mass media and American politics, government regulation of the mass media, media coverage of public affairs, political effects of entertainment programming, and the uses and influence of the media in the election process. Both print and broadcast media will be considered.
Repeatability: This course may not be repeated for additional credits.

POLS 3112. American Public Opinion. 3 Credit Hours.
Topics for study include: development of public opinion and political ideology in the U.S.; the social psychology of political attitudes; the role of the mass media and the news in the formation of political opinion; and the influence of public opinion upon government policy.
Repeatability: This course may not be repeated for additional credits.

POLS 3113. Campaigns, Elections, and the Media. 3 Credit Hours.
Role of elections in contemporary American society. Special attention to parties and mass media as participants in campaigns and to factors affecting voting behavior of the mass public and the linkages voting provides between the public and policy formation.
Repeatability: This course may not be repeated for additional credits.
POLS 3121. American Constitutional Principles I. 3 Credit Hours.
Constitutional bases of American system of government as interpreted primarily by reading and analyzing Supreme Court opinions and understanding
them in their political, economic, andhistoric context. Course focuses largely on how constitutional meaning is determined, and judicial development
of national powers of judicial review, the power to regulate commerce, separation of powers, federalism, taxation, powers of the President, and foreign
affairs and war powers.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
POLS 1101|Minimum Grade of C-|May not be taken concurrently.

POLS 3122. Constitutional Interpretation. 3 Credit Hours.
Focusing primarily on the U.S. Constitution, this course asks what a constitution is, and considers the various ways in which constitutions are
interpreted, the historical development of interpretive practices and the broader political and historical contexts in which such practices arise and
are applied and contested. It particularly examines "strict construction," "judicial activism," originalism, textualism, and various "living constitution"
approaches, and examines and applies qualitative data analysis to select original sources.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(POLS 1101|Minimum Grade of C-|May not be taken concurrently)
AND (POLS 3103|Minimum Grade of C-|May not be taken concurrently
OR POLS 3121|Minimum Grade of C-|May not be taken concurrently
OR POLS 3123|Minimum Grade of C-|May not be taken concurrently
OR PHIL 3243|Minimum Grade of C-|May not be taken concurrently).

POLS 3123. American Constitutional Principles II: Civil Rights in America. 3 Credit Hours.
Civil rights in America, including the Constitutional protections of freedom of speech, press, assembly, and religion.
Repeatability: This course may not be repeated for additional credits.

POLS 3124. Politics, Rights and Sexual Orientation. 3 Credit Hours.
This course examines the emergence and development of the movement to secure rights for gays, lesbians and bisexuals; how gays, lesbians and
bisexuals are socially constructed and the influence this has on political discourse; how political issues that are relevant to the lives of gays and lesbians
reach the political agenda; and the patterns of conflict and cooperation that exist among actors in and outside of government over issues such as
employment discrimination, marriage, child adoption, and military service.
Repeatability: This course may not be repeated for additional credits.

POLS 3125. Interest Group Politics. 3 Credit Hours.
Over the past 30 years, the system of interest group representation in Washington has witnessed a rapid expansion. Conventional wisdom views these
groups as obstructions to American democracy, but limiting their freedoms threatens "government by the people." Cases to be studied may include:
Senior citizen groups, the farm lobby, the Christian Coalition, the unemployment workers movement, and the power of business in America.
Repeatability: This course may not be repeated for additional credits.

POLS 3131. Urban Politics and Problems. 3 Credit Hours.
This course presents an overview of the politics of urban areas: electoral politics, government structure, race, finance, education, housing,
neighborhoods, and economic and historical forces on politics in urban areas.
Repeatability: This course may not be repeated for additional credits.

POLS 3132. Urban Politics. 3 Credit Hours.
This course is part of a six-credit course sequence comprised of a weekly seminar (POLS 3132) and a field placement component (POLS 4781).
The course is intended to provide students who are interested in working with youth (aged 14-18) and on community and policy issues, with the
understanding, training, and education that such work requires. The seminar will focus on issues of education, criminal justice, and media as they
relate to youth in Philadelphia and beyond. Students will gain a better understanding of Philadelphia and its communities and develop research, critical
thinking, facilitation, teamwork, and organizing skills. For the internship component, students will be placed in a youth civic engagement program
run by the UCCP at Temple University (www.temple.edu/uccp). NOTE: This course can be used to satisfy the university Core Studies in Race (RS)
requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the
university GenEd requirements. See your advisor for further information.
Course Attributes: RS
Repeatability: This course may not be repeated for additional credits.

POLS 3133. Popular Culture and the City. 3 Credit Hours.
This course will examine how the city is depicted in films and literature, exploring such prominent political topics as anti-urbanism; political machines,
corruption, and reform; industrialization and immigrant life; post-industrialism and urban decline. Attention will also be given to the physical city and
spatial use as expressions of dominant political and cultural values.
Repeatability: This course may not be repeated for additional credits.
POLS 3134. The Politics of Inequality. 3 Credit Hours.
Who are the poor? Should they be helped? Who should help them? These questions are complicated because people are more aware of the individual costs of taxation than they are of the collective benefits of an educated work force. This course will evaluate how the U.S. government has traditionally divided the poor between the deserving and the undeserving poor and which groups have been left out and why.
Repeatability: This course may not be repeated for additional credits.

POLS 3151. Public Policy Analysis. 3 Credit Hours.
This course considers selected contemporary public policy issues. The course begins with an examination of the national political-economic context within which major policy issues arise and then turns to the analysis of the roots and policy alternatives on several major issues. Issues may concern health, energy, education, employment, welfare, and the regulation of business.
Repeatability: This course may not be repeated for additional credits.

POLS 3152. U.S. Environmental Policy. 3 Credit Hours.
An analytical examination of the development and execution of governmental policies in such areas as air and water pollution control, control of atomic energy, and planning of space exploration program.
Repeatability: This course may not be repeated for additional credits.

POLS 3153. The Politics of Poverty. 3 Credit Hours.
This course examines the nature and causes of poverty, the impact of public opinion and racial attitudes on poverty and welfare, the role of government officials in shaping anti-poverty and welfare reform policies, and welfare claiming as a form of political participation. The course evaluates the effectiveness of existing policies to combat poverty and whether proposed policies might be effective.
Repeatability: This course may not be repeated for additional credits.

POLS 3154. Health Policy. 3 Credit Hours.
Surveys major public health problems and policy interventions in the United States with an emphasis on their normative, political and economic dimensions. Examines the interplay of governmental institutions, business, and organized interests in formulating and implementing health policy.
Repeatability: This course may not be repeated for additional credits.

POLS 3155. Business and Public Policy. 3 Credit Hours.
Reviews history of U.S. government and business, and the major governmental institutions dealing with business, with special attention paid to monetary policy and the Federal Reserve, fiscal policy, the federal budget, and particular issues connected with it such as deficits, Social Security, the tax structure, overall inequality, and other current issues. Also looks at the World Trade Organization and NAFTA, their structure and overall advantages and disadvantages to the U.S.
Repeatability: This course may not be repeated for additional credits.

POLS 3161. Public Administration. 3 Credit Hours.
This course studies basic concepts and approaches to public management and public policymaking in public administration.
Repeatability: This course may not be repeated for additional credits.

POLS 3196. Urban Politics & Problems. 3 Credit Hours.
A course that introduces students to political science methodological approaches to the study of the various aspects of urban politics in American cities.
NOTE: This course can be used to satisfy a university Core Studies in Race and Writing Intensive (WR) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: WR
Repeatability: This course may not be repeated for additional credits.

POLS 3197. Political Fiction. 3 Credit Hours.
Moral dilemmas and unintended burlesques, flawed heroes and vainglorious fools, ambitious men and seductive women are the stuff of both literature and politics. These elements are brought to life in novels about American politics and political thought. Students in this writing intensive course will write brief essays and a course paper on novels by authors that include Henry Adams, Mark Twain, Herman Melville, Henry James, Robert Penn Warren, Graham Greene, Ward Just, and William Kennedy.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

POLS 3201. Nationalism, Ethnicity, and Politics. 3 Credit Hours.
When the U.S. was founded as the first modern nation-state, it set in motion a global transformation of the state system that has still to run its course. The class will study, with the aid of film, the causes, theories, and projections of this development.
Repeatability: This course may not be repeated for additional credits.

POLS 3202. Politics & Religion. 3 Credit Hours.
What sorts of relationships exist between the world of politics and that of religious beliefs and practices that co-exist and often compete for dominance in various political systems?
Repeatability: This course may not be repeated for additional credits.
POLS 3203. Comparative Politics of Democratization. 3 Credit Hours.
Democracy is among the oldest concepts in politics, yet it is also one of the most elusive. This course surveys some of the classic debates over the meanings of democracy, and explores the contemporary processes of democratization that have swept the globe since the 1970s. While particular geographical emphasis will be placed on Europe, Latin America, and Africa, no prior familiarity with these regions is necessary to successfully complete this course.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
POLS 1201|Minimum Grade of C-|May not be taken concurrently
OR POLS 1921|Minimum Grade of C-|May not be taken concurrently.

POLS 3211. Politics & Society in Modern Italy. 3 Credit Hours.
An examination of Italy's political development in a historical framework, and in comparison to other nations, especially those of Europe.
Repeatability: This course may not be repeated for additional credits.

POLS 3212. British Government and Politics. 3 Credit Hours.
This course combines historical and thematic approaches to British politics. We begin with an overview of the post-imperial, capitalist state before discussing key institutions: constitution, Parliament, executive, parties, and European Union. To help understand change in popular politics we compare the 1983 and 2005 general election campaigns. Finally, we consider key issues: economic inequality, ethnic conflict, social order, and democratic accountability.
Repeatability: This course may not be repeated for additional credits.

POLS 3213. Post-Communist Politics. 3 Credit Hours.
This course examines core themes in the study of post-Communist politics in Russia and Eastern Europe. The course begins by exploring the nature of socialism, why it fell, and the various legacies of this system. The rest of the course covers issues of democratic transformation, economic reform, state and nation building, and the role of international influences.
Repeatability: This course may not be repeated for additional credits.

POLS 3241. Mideast Politics. 3 Credit Hours.
This course will introduce students to the various political systems in the region we now call the Middle East. Of particular concern will be historical roots of the political tensions that exist in our contemporary world.
Repeatability: This course may not be repeated for additional credits.

POLS 3251. China: State and Society. 3 Credit Hours.
This course surveys contemporary Chinese politics and political economy, recognizing the roots in China's long history. The emphasis is on the process of converting the Maoist socialist system into a modern market system, integrated into the global system, and the political implications of these changes. Note: Prior to fall 2010, the course title was "China: Politics and Revolution."
Repeatability: This course may not be repeated for additional credits.

POLS 3252. East Asia and the United States. 3 Credit Hours.
This course introduces Japan and its distinctive model of political economy. The course then reviews how this model has been copied by many other countries in Asia. The course also includes an analysis of Asia's international economic and political relations, especially with the United States.
Repeatability: This course may not be repeated for additional credits.

POLS 3265. International Environmental Policy. 3 Credit Hours.
International negotiations and agreements on environmental problems, and comparisons of domestic environmental policymaking among selected countries. Special attention to negotiations on atmospheric and oceanic policies, international regulation of nuclear materials, and environmental aspects of international trade agreements.
Repeatability: This course may not be repeated for additional credits.

POLS 3296. Politics of Modern Capitalism. 3 Credit Hours.
Since the early 1970s, all advanced industrial democracies have faced challenges in adjusting to a changing international economy. We will examine how different countries, including the United States, Japan, Britain, France, and Germany, have tried to meet these challenges. The main question guiding the course is: why do countries respond to roughly similar problems in different ways, and what do these responses reveal about politics in these countries? Topics covered will include macroeconomic policy, trade and industrial policies, industrial relations, business-government relations, and the welfare state.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.
POLS 3331. Politics of the European Union. 3 Credit Hours.
The European Union is perhaps the most remarkable experiment in international governance of the past century. This course examines the EU in its dual aspects: as a process of international or regional integration, tying existing nation-states into an “ever-closer Union of peoples”; and as a polity or political system with its own institutions, policies, and policy processes. 
Repeatability: This course may not be repeated for additional credits
Pre-requisites: 
(POLS 1201|Minimum Grade of C-|May not be taken concurrently)
OR POLS 1921|Minimum Grade of C-|May not be taken concurrently)
AND (POLS 1301|Minimum Grade of C-|May not be taken concurrently)
OR POLS 1931|Minimum Grade of C-|May not be taken concurrently).

POLS 3332. Globalization: Politics and Political Economy. 3 Credit Hours.
The course examines the origins and consequences of the modern period (1990-present) of globalization, including its political, economic, social, and cultural dimensions. Central issues to be examined will be the status of the sovereign state, global governance, and patterns of global mobility in production, people, and information.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: 
(POLS 1301|Minimum Grade of C-|May not be taken concurrently)
OR POLS 1931|Minimum Grade of C-|May not be taken concurrently)
AND (POLS 2321|Minimum Grade of C-|May not be taken concurrently).

POLS 3411. Classical Political Philosophy. 3 Credit Hours.
Close study of works by one or more political philosophers, stressing their relevance to an understanding of contemporary politics.
Repeatability: This course may not be repeated for additional credits.

POLS 3421. Theories of Justice. 3 Credit Hours.
This course examines both analytical and historical perspectives of some of the major theories of justice that have been propounded throughout the course of Western history.
Repeatability: This course may not be repeated for additional credits.

POLS 3422. Marxism and Politics. 3 Credit Hours.
A theoretical and historical examination of the role of Marxism in the development of 20th and 21st century political regimes, including West European social democracy, former and present Communist states, and post-colonial societies. Particular focus will be placed on debates within the Marxist tradition and between Marxism and its critics in regard to issues of equality, liberty, and democracy. An attempt will be made to see what aspects (if any) of Marxism remain relevant to the prospect of radical democratic change and to an analysis of the crisis of contemporary global capitalism.
Repeatability: This course may not be repeated for additional credits.

POLS 3441. African American Political Theory. 3 Credit Hours.
This course is an intensive introduction to African American Political Theory. Our goal will be to explicate and evaluate the theoretical claims that have shaped, and continue to shape, black political practice in the United States. The structure of the course is both historical and thematic.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: 
POLS 2496|Minimum Grade of C-|May not be taken concurrently
OR POLS 2996|Minimum Grade of C-|May not be taken concurrently.

POLS 3451. Personality and Politics. 3 Credit Hours.
The democratic and authoritarian personalities and their impact on political behavior.
Repeatability: This course may not be repeated for additional credits.

POLS 3452. Theory and Uses of Power. 3 Credit Hours.
This course considers concepts and major models of power and their applications to American politics.
Repeatability: This course may not be repeated for additional credits.

POLS 3500. Special Topics: Research Preparation Seminar. 3 Credit Hours.
Research preparation courses develop research skills and prepare students for the capstone seminar. The course topics vary depending on the instructor's expertise.
Repeatability: This course may be repeated for additional credit.

POLS 3510. Special Topics: Research Preparation Seminar. 3 Credit Hours.
Research preparation courses develop research skills and prepare students for the capstone seminar. The course topics vary depending on the instructor's expertise.
Repeatability: This course may be repeated for additional credit.

POLS 3520. Special Topics: Research Preparation Seminar. 3 Credit Hours.
Research preparation courses develop research skills and prepare students for the capstone seminar. The course topics vary depending on the instructor's expertise.
Repeatability: This course may be repeated for additional credit.
POLS 3530. Special Topics: Research Preparation Seminar. 3 Credit Hours.
Research preparation courses develop research skills and prepare students for the capstone seminar. The course topics vary depending on the instructor's expertise.
Repeatability: This course may be repeated for additional credit.

POLS 3540. Special Topics: Research Preparation Seminar. 3 Credit Hours.
Research preparation courses develop research skills and prepare students for the capstone seminar. The course topics vary depending on the instructor's expertise.
Repeatability: This course may be repeated for additional credit.

POLS 3550. Special Topics: Research Preparation Seminar. 3 Credit Hours.
Research preparation courses develop research skills and prepare students for the capstone seminar. The course topics vary depending on the instructor's expertise.
Repeatability: This course may be repeated for additional credit.

POLS 3910. Honors Special Topics. 3 Credit Hours.
The focus of this Honors course varies from semester to semester.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.

POLS 3911. Honors Politics in Film and Literature. 3 Credit Hours.
This course examines diverse topics in world politics using three forms of political commentary - film, literature, and academic writings - on each topic. Topics covered may include war, terrorism, development, globalization and workers, political corruption, immigration, racial politics, revolution, and ethnic violence.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.

POLS 3996. Junior Honors Capstone Seminar. 3 Credit Hours.
Only students enrolled in the Honors Certificate or Honors Scholars Programs may register for this seminar. Please check the Political Science Department web site for information about how to apply for the Honors Scholar Program in Political Science (www.temple.edu/polsci/undergraduate/honors/index.htm). This seminar (taught as a combined semester with Political Science 4996) will rotate among selected advanced topics in one of the major fields of Political Science (international relations, American government, political theory, comparative politics, and public policy). The seminar will focus on a close analysis and discussion of assigned readings and a final research paper (as well as other short written assignments). This course satisfies the capstone requirement for the major. NOTE: Check with the course schedule for the topic and instructor for a specific semester.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO, WI
Repeatability: This course may not be repeated for additional credits.

POLS 3997. Junior Honors Capstone Seminar. 3 Credit Hours.
Only students enrolled in the Honors Certificate or Honors Scholars Programs may register for this seminar. Please check the Political Science Department web site for information about how to apply for the Honors Scholar Program in Political Science (www.temple.edu/polsci/undergraduate/honors/index.htm). This seminar (taught as a combined semester with Political Science 4997) will rotate among selected advanced topics in one of the major fields of Political Science (international relations, American government, political theory, comparative politics, and public policy). The seminar will focus on a close analysis and discussion of assigned readings and a final research paper (as well as other short written assignments). NOTE: Check with the course schedule for the topic and instructor for a specific semester.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO, WI
Repeatability: This course may not be repeated for additional credits.

POLS 4110. Seminar in American Government. 3 Credit Hours.
The focus of this seminar varies from semester to semester, but always considers some aspect of U.S. politics in depth.
Repeatability: This course may be repeated for additional credit.

POLS 4121. Women and Politics. 3 Credit Hours.
The goal of this course is to broaden with a comparative perspective our understanding of women's political experiences. We examine a variety of issues concerning the lives of women worldwide, including their economic, political and social contributions, familial roles and status in society. Initially, the course focuses on the evolution of the political, economic, and social status of American women paying particular attention to issues of race, ethnicity, and class that inform but also complicate women's political behavior. We then search for similarities and differences in women's lives that are usually obscured by the status of their countries as either industrialized or non-industrialized, either democratic or non-democratic.
Repeatability: This course may not be repeated for additional credits.

POLS 4130. Seminar in American Government. 3 Credit Hours.
Examines a topic of contemporary interest in American politics and government.
Repeatability: This course may be repeated for additional credit.
POLS 4131. Seminar in Campaign Politics. 3 Credit Hours.
This special seminar is the academic component for experiential learning and is usually offered in the fall of an election year. Students learn about the structure and organization of campaigns, the motivations of candidates, and the consequences of campaign activities by other political actors such as interest groups and political parties. Students will use their internships to identify a thematic subject for research projects.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
POLS 1101|Minimum Grade of C-|May not be taken concurrently.

POLS 4140. Seminar in Urban, State & Local Politics. 3 Credit Hours.
A seminar focusing on various aspects of the political relationships that exist between state and local levels of government.
Repeatability: This course may be repeated for additional credit.

POLS 4150. Seminar in Law & Society. 3 Credit Hours.
Experiential Learning. Students must also register for 4581 (0371). Permission of Instructor or Experiential Learning Coordinator required.
Repeatability: This course may be repeated for additional credit.

POLS 4160. Seminar in Public Administration. 3 Credit Hours.
Exams a topic of contemporary interest in public administration.
Repeatability: This course may be repeated for additional credit.

POLS 4210. Seminar in Comparative Politics. 3 Credit Hours.
Examines a topic of contemporary interest in comparative politics.
Repeatability: This course may be repeated for additional credit.

POLS 4220. Seminar in Comparative Politics. 3 Credit Hours.
Seminar focusing on comparative politics. Topic determined by the instructor.
Repeatability: This course may be repeated for additional credit.

POLS 4310. Seminar in International Politics. 3 Credit Hours.
Seminar focusing on the politics of international relations. Topic determined by the instructor.
Repeatability: This course may be repeated for additional credit.

POLS 4320. Seminar in International Politics. 3 Credit Hours.
Examines a topic of contemporary interest in international politics.
Repeatability: This course may be repeated for additional credit.

POLS 4410. Seminar in Political Philosophy. 3 Credit Hours.
Examines a topic of contemporary interest in political philosophy.
Repeatability: This course may be repeated for additional credit.

POLS 4420. Seminar in Political Philosophy. 3 Credit Hours.
Examines a topic of contemporary interest in political philosophy.
Repeatability: This course may be repeated for additional credit.

POLS 4581. Cooperative Education Project in Political Science I. 3 Credit Hours.
Provides political science majors with work experience relating to their academic training. NOTE: Juniors and seniors with a minimum overall average of 2.0 are accepted subject to approval by the departmental co-op committee chair.
Repeatability: This course may be repeated for additional credit.

POLS 4591. Directed Research and Field Study. 1 Credit Hour.
Supervised individual readings, research projects, and field work. NOTE: Students may not enroll for more than one Directed Research & Field Study course in a single semester. Students are to arrange study with a faculty member in the department of Political Science.
Repeatability: This course may be repeated for additional credit.

POLS 4681. Cooperative Education Project in Political Science II. 3 Credit Hours.
Provides political science majors with work experience relating to their academic training. NOTE: Juniors and seniors with a minimum overall average of 2.0 are accepted subject to approval by the departmental co-op committee chair.
Repeatability: This course may be repeated for additional credit.

POLS 4691. Directed Research and Field Study. 2 Credit Hours.
Supervised individual readings, research projects, and field work. NOTE: Students may not enroll for more than one Directed Research & Field Study course in a single semester. Students are to arrange study with a faculty member in the department of Political Science.
Repeatability: This course may be repeated for additional credit.

POLS 4781. Cooperative Education Project in Political Science III. 3 Credit Hours.
Provides political science majors with work experience relating to their academic training. NOTE: Juniors and seniors with a minimum overall average of 2.0 are accepted subject to approval by the departmental co-op committee chair.
Repeatability: This course may be repeated for additional credit.
POL 4791. Directed Research and Field Study. 2 Credit Hours.
Supervised individual readings, research projects, and field work. NOTE: Students may not enroll for more than one Directed Research & Field Study course in a single semester. Students are to arrange study with a faculty member in the department of Political Science.
Repeatability: This course may be repeated for additional credit.

POL 4891. Directed Research and Field Study. 3 Credit Hours.
Supervised individual readings, research projects, and field work. NOTE: Students may not enroll for more than one Directed Research & Field Study course in a single semester. Students are to arrange study with a faculty member in the department of Political Science.
Repeatability: This course may be repeated for additional credit.

POL 4896. Capstone Seminar in Political Science. 3 Credit Hours.
This topical seminar focuses on a broad theme of theoretical, substantive, or practical interest within a subfield of political science. The specific content will vary with individual instructors. This is a writing-intensive course designed to integrate all the skills learned in the major. Each seminar will focus upon close oral and written analysis of major readings in a particular area of political science. Such analyses will take students beyond basic exegesis of analytic arguments towards critical evaluation of contrasting forms of social science investigation and argument. A research project is required. Required of all majors. To be taken during the senior year.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

POL 4904. Honors Seminar in Campaign Politics. 3 Credit Hours.
Permission of political science Honors Director required. A seminar focusing on political election campaigns in the United States.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.

POL 4920. University Honors Seminar in Comparative Politics. 3 Credit Hours.
Honors version of Political Science 4210 (0310). Open only to University Honors students.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.

POL 4940. University Honors Seminar in Political Philosophy. 3 Credit Hours.
Honors version of Political Science 4410 (0321). Open only to University Honors students.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.

POL 4996. Senior Honors Capstone Seminar. 3 Credit Hours.
Only students enrolled in the Honors Certificate or Honors Scholars Programs may register for this seminar. Please check the Political Science Department web site for information about how to apply for the Honors Scholar Program in Political Science (www.temple.edu/polsci/undergraduate/honors/index.htm). This seminar (taught as a combined semester with Political Science 3996) will rotate among selected advanced topics in one of the major fields of Political Science (international relations, American government, political theory, comparative politics, and public policy). The seminar will focus on a close analysis and discussion of assigned readings and a final research paper (as well as other short written assignments). This course satisfies the capstone requirement for the major. NOTE: Check with the course schedule for the topic and instructor for a specific semester.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO, WI
Repeatability: This course may not be repeated for additional credits.

POL 4997. Senior Honors Capstone Seminar. 3 Credit Hours.
Only students enrolled in the Honors Certificate or Honors Scholars Programs may register for this seminar. Please check the Political Science Department web site for information about how to apply for the Honors Scholar Program in Political Science (www.temple.edu/polsci/undergraduate/honors/index.htm). This seminar (taught as a combined semester with Political Science 3997) will rotate among selected advanced topics in one of the major fields of Political Science (international relations, American government, political theory, comparative politics, and public policy). The seminar will focus on a close analysis and discussion of assigned readings and a final research paper (as well as other short written assignments). NOTE: Check with the course schedule for the topic and instructor for a specific semester.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO, WI
Repeatability: This course may not be repeated for additional credits.

Portuguese (PORT)
Courses

PORT 1001. Basic I. 4 Credit Hours.
Basic Portuguese I is an introductory Portuguese course for students with little or no previous Portuguese experience. The course will develop basic skills for speaking, listening, reading, and writing as well as introduce students to the richness and diversity of Luso-Brazilian cultures. It combines regular classroom instruction and practice with Language Lab sessions dedicated to the use of instructional technology. NOTE: Prior to fall 2009, course title was “Elements I.”
Repeatability: This course may not be repeated for additional credits.

PORT 1002. Basic II. 4 Credit Hours.
Basic Portuguese II is a continuation of the work begun in Basic I. The course further develops basic skills for speaking, listening, reading, and writing, and it continues the introduction to the richness and diversity of Luso-Brazilian cultures. It combines regular classroom instruction and practice with Language Lab sessions dedicated to the use of instructional technology. NOTE: Prior to fall 2009, course title was “Elements II.”
Course Attributes: LA
Repeatability: This course may not be repeated for additional credits
Pre-requisites: PORT 1001|Minimum Grade of C-|May not be taken concurrently.

PORT 1003. Intermediate. 3 Credit Hours.
This is a communicative intermediate Portuguese course. More sophisticated grammar will be introduced and students will continue to develop speaking, listening, reading, and writing competencies. Class work will include discussions, videos, and writing. Students will take a more active role in their own learning process by using computer technology out of class to hone grammar skills and explore the multi-faceted world of Luso-Brazilian culture.
Course Attributes: LB
Repeatability: This course may not be repeated for additional credits
Pre-requisites: PORT 1002|Minimum Grade of C-|May not be taken concurrently.

PORT 1021. Portuguese for Spanish Speakers. 3 Credit Hours.
An intensive Portuguese course intended for students who have completed four semesters of instructional Spanish or have a native or native-like command of the language. There is emphasis on all basic skills for speaking, listening, reading, and writing, in addition to introducing the richness and diversity of Luso-Brazilian cultures. It combines regular classroom instruction and practice with Language Lab sessions dedicated to the use of instructional technology. This course meets the instructional objectives equivalent to Portuguese 1003. NOTE: Prior to fall 2009, course title was “Concentrated Elements.”
Repeatability: This course may not be repeated for additional credits

PORT 1022. Conversational Review. 3 Credit Hours.
The main thrust of this course is oral practice with grammar review for the purpose of improving the non-native student's oral communication skills.
NOTE: Prior to fall 2009, course title was “Intermediate.”
Repeatability: This course may not be repeated for additional credits
Pre-requisites: PORT 1003|Minimum Grade of C-|May not be taken concurrently AND PORT 1021|Minimum Grade of C-|May not be taken concurrently.

PORT 2001. Composition and Conversation. 3 Credit Hours.
The course devotes time to reading comprehension and oral expression, but the main thrust of the course is written expression using appropriate Portuguese grammar.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: PORT 1003|Minimum Grade of C-|May not be taken concurrently.

PORT 2002. Readings in Portuguese. 3 Credit Hours.
This course devotes time to speaking and writing skills, but the main emphasis is reading comprehension and interpretation of texts in Portuguese.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: PORT 2001|Minimum Grade of C-|May not be taken concurrently.

PORT 3101. Readings in Luso-Brazilian Literature. 3 Credit Hours.
Themes in Luso-Brazilian culture in the context of short prose readings, including the short story and the short novel. Emphasis on tools for advanced reading: vocabulary recognition, comprehension of idiomatic expressions, and knowledge of advanced grammar. Includes writing and oral discussion.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: PORT 2001|Minimum Grade of C-|May not be taken concurrently.
PORT 3201. Portuguese-Speaking Cultures. 3 Credit Hours.
Diverse subjects in Brazilian and Portuguese studies fall under this rubric. In addition to readings of original texts, this course incorporates discussions on the central history, politics, society, and cultural aspects related to the foundation and development of both Portugal and Brazil. NOTE: Prior to summer 2015, the course title was "Portuguese and Brazilian Culture and Civilization."
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
PORT 2001 | Minimum Grade of C- | May not be taken concurrently.

PORT 4000. Special Topics in Portuguese. 3 Credit Hours.
This course examines specific topics in contemporary Brazilian and/or Portuguese culture, literature, or linguistics. Course content varies each semester to offer optimum exposure to new areas of study.
Repeatability: This course may be repeated for additional credit.

PORT 4083. Directed Reading. 1 to 3 Credit Hour.
Special readings of Portuguese by arrangement with a Portuguese faculty member.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
PORT 3000 to 3999 | Required Courses: 1 | Minimum Grade of C- | May not be taken concurrently.

PORT 4101. Brazilian Short Story. 3 Credit Hours.
An overview of Brazilian short stories from 1900 to the present. Selected texts introduce students to the work of major Brazilian writers of the genre. While focusing primarily on literary texts, the course will also draw attention to literary movements and major themes.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
PORT 3000 to 3999 | Required Courses: 1 | Minimum Grade of C- | May not be taken concurrently.

PORT 4102. Contemporary Portuguese and/or Brazilian Literature. 3 Credit Hours.
A survey of twentieth-century literary movements in Portuguese and/or Brazilian prose and poetry, such as pre-modernism, modernism, and regionalism with an emphasis on contemporary writers.
Repeatability: This course may not be repeated for additional credits.

ProRanger Program (PRAN)

Courses

PRAN 1085. ProRanger Internship 1. 3 to 9 Credit Hours.
Field training is provided with law enforcement and other areas related to park service management as a seasonal National Park Service Park Ranger. Allows a student to clarify career interests, synthesize prior knowledge from the classroom with direct experience, critically examine the national park system in operation, and sharpen analytic and observational skills. NOTE: Students may register for 3, 6 or 9 credits. Permission required. See http://www.temple.edu/provost/careercenter/proranger/ProrangerPhiladelphia.html.
Repeatability: This course may be repeated for additional credit.

PRAN 1577. Introduction to the ProRanger Program. 2 Credit Hours.
The ProRanger Internship is designed to provide students with first-hand experience working in a national park. While the emphasis of the course is oriented towards gaining practical experience, students are expected to complete a number of academic assignments to complement their work experience and help provide them with a deeper understanding of the larger context regarding their employment. Permission required.
Repeatability: This course may not be repeated for additional credits.

PRAN 2085. ProRanger Internship 2. 3 to 9 Credit Hours.
Field training is provided with law enforcement and other areas related to park service management as a seasonal National Park Service Park Ranger. Allows a student to clarify career interests, synthesize prior knowledge from the classroom with direct experience, critically examine the national park system in operation, and sharpen analytic and observational skills. NOTE: Students may register for 3, 6 or 9 credits. Permission required. See http://www.temple.edu/provost/careercenter/proranger/ProrangerPhiladelphia.html.
Repeatability: This course may be repeated for additional credit.

PRAN 3001. Professional Preparation Seminar for the ProRanger. 1 Credit Hour.
This is a one-credit optional course that will provide students preparing for summer internships with the National Park Service the opportunity to learn and develop professional skills necessary for working in the National Park Service and other federal agencies. It will focus specifically on preparation for summer internships at national park sites and post-graduation employment with the National Park Service.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: ProRanger
Repeatability: This course may not be repeated for additional credits.
PRAN 3085. ProRanger Internship 3. 1 to 3 Credit Hour.
Field training is provided with law enforcement and other areas related to park service management as a seasonal National Park Service Park Ranger. Allows a student to clarify career interests, synthesize prior knowledge from the classroom with direct experience, critically examine the national park system in operation, and sharpen analytic and observational skills. NOTE: Students may register for 1, 2 or 3 credits. Permission required. See http://www.temple.edu/provost/careercenter/proranger/ProrangerPhiladelphia.html.

Repeatability: This course may be repeated for additional credit.

Psychology (PSY)

Courses

PSY 0815. Language in Society. 3 Credit Hours.
How did language come about? How many languages are there in the world? How do people co-exist in countries where there are two or more languages? How do babies develop language? Should all immigrants take a language test when applying for citizenship? Should English become an official language of the United States? In this course we will address these and many other questions, taking linguistic facts as a point of departure and considering their implications for our society. Through discussions and hands-on projects, students will learn how to collect, analyze, and interpret language data and how to make informed decisions about language and education policies as voters and community members. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: ANTH 0815/0915, Asian Studies 0815, Chinese 0815, CSCD 0815, EDUC 0815/0915, English 0815, Italian 0815, Russian 0815, or Spanish 0815.

Course Attributes: GB
Repeatability: This course may not be repeated for additional credits.

PSY 0816. Workings of the Mind. 3 Credit Hours.
In this course we will discuss conscious and unconscious mental processes. We will start by considering the nature of the unconscious mind and will examine evidence for the existence of unconscious processes in memory, problem solving, behavior in social settings, and our attitudes, beliefs, and opinions. We will then study the nature of consciousness from psychological and philosophical perspectives, with a focus on trying to answer the questions of: what is consciousness, what does consciousness do, and why does consciousness exist. For many of the issues we will discuss, there is no scientific consensus regarding the right answer or the most correct theory. Be prepared to think critically and to tolerate perplexity. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed Psychology 0916.

Course Attributes: GB
Repeatability: This course may not be repeated for additional credits.

PSY 0817. Brain Matters. 3 Credit Hours.
One of the last frontiers in science is the brain. We know a great deal about the structure and function of the brain and nervous system, but it is challenging to comprehend fully the complexity of a system made up of 100 billion components that are interacting with one another using tens of trillions of connections that can change and rewire during development and aging. Neuroscience is the multidisciplinary field in which brain research falls. Neuroscience is one of the fastest growing domains in all of science - and good bet for a future career path. Neuroscientists investigate brain function from the level of molecular genetics, to cellular dynamics, to brain anatomy and physiology, to relations between brain, behavior, and cognition, to brain development and aging, to diseases of the brain. In this course, we will touch on knowledge about the brain at all these levels, and more. We will also discuss case studies of brain impairment. NOTE: This course fulfills a Science & Technology (GS) requirement for students under GenEd and Science & Technology Second Level (SB) for students under Core. Students cannot receive credit for this course if they have successfully completed Neuroscience 0817.

Course Attributes: GS
Repeatability: This course may not be repeated for additional credits.

PSY 0818. Human Sexuality. 3 Credit Hours.
Our sexuality is a core part of being human. We often think about sexuality in terms of the physical and reproductive aspects of sex. But our sexuality is complex and dynamic. We will address this dynamic complexity as we explore the physical, psychological, relational, and cultural aspects of sexuality. The goal of this course is to broaden your perspective of human sexuality, and deepen your understanding and awareness of your own sexuality and the many influences on this essential part of yourself. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: SOC 0818/0918.

Course Attributes: GB
Repeatability: This course may not be repeated for additional credits.
PSY 0825. Quantitative Methods in the Social Sciences. 4 Credit Hours.
Psychological, political, social, and economic arguments and knowledge frequently depend on the use of numerical data. A psychologist might hypothesize that I.Q. is attributable to environmental or genetic factors; a politician might claim that hand gun control legislation will reduce crime; a sociologist might assert that social mobility is more limited in the United States than in other countries, and an economist might declare that globalization lowers the incomes of U.S. workers. How can we evaluate these arguments? Using examples from psychology, sociology, political science, and economics, students will examine how social science methods and statistics help us understand the social world. The goal is to become critical consumers of quantitative material that appears in scholarship, the media, and everyday life. NOTE: This course fulfills the Quantitative Literacy (GQ) requirement for students under GenEd and a Quantitative Reasoning (QA or QB) requirement for students under Core. Students cannot receive credit for this course if they have successfully completed ANTH 0825, POLS 0825, or SOC 0825/0925.

Course Attributes: GQ

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
MATH 0701|Minimum Grade of C-|May not be taken concurrently
OR MC3 Y|May not be taken concurrently
OR MC4 Y|May not be taken concurrently
OR MC5 Y|May not be taken concurrently
OR MC6 Y|May not be taken concurrently.

PSY 0916. Honors Workings of the Mind. 3 Credit Hours.
In this course we will discuss conscious and unconscious mental processes. We will start by considering the nature of the unconscious mind and will examine evidence for the existence of unconscious processes in memory, problem solving, behavior in social settings, and our attitudes, beliefs, and opinions. We will then study the nature of consciousness from psychological and philosophical perspectives, with a focus on trying to answer the questions of: what is consciousness, what does consciousness do, and why does consciousness exist. For many of the issues we will discuss, there is no scientific consensus regarding the right answer or the most correct theory. Be prepared to think critically and to tolerate perplexity. (This is an Honors course.) NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed Psychology 0816.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR

Course Attributes: GB, HO

Repeatability: This course may not be repeated for additional credits.

PSY 1001. Introduction to Psychology. 3 Credit Hours.
How do scientists study human behavior? How do others influence our behavior? What is a psychological disorder? These questions and more are reviewed in this course, which covers the basic concepts, methods, theories, and findings in Psychology. Topics include research methods, the nervous system, human development, social psychology, personality, and psychopathology. Duplicate credit warning: Students who have earned credits for PSY 1061 will not earn additional credits for this course.

Repeatability: This course may not be repeated for additional credits.

PSY 1002. Careers in Psychology. 1 Credit Hour.
This course, designed to be taken by students in their first year as a psychology major, introduces students to the psychology major, the main subfields within the discipline of psychology, and the numerous opportunities within the major. It also will inform students of the various career and graduate school options that are available to psychology majors after graduation.

Repeatability: This course may not be repeated for additional credits.

PSY 1003. Statistics for Psychology. 3 Credit Hours.
The purpose of this course is to provide an introduction to statistics in psychology. We will spend the semester learning the concepts and corresponding methods that will allow us to ask the question, "But how do you know that is true?" Statistics are essential in allowing us to assess whether or not an observed phenomenon might have occurred by chance alone. Additionally, we will read psychological journal articles that utilize the statistics we are learning so that we can see how psychologists use and write about statistics.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
MATH 0701|Minimum Grade of C-|May not be taken concurrently
OR MATH 0702|Minimum Grade of C-|May not be taken concurrently
OR MC3 Y|May not be taken concurrently
OR MC4 Y|May not be taken concurrently
OR MC5 Y|May not be taken concurrently
OR MC6 Y|May not be taken concurrently.
PSY 1004. Critical Thinking in Psychology. 3 Credit Hours.
How do you evaluate the strength of a claim made in a magazine, news program, or research article? This course will provide you with basic skills and information to systematically critique claims and research in the popular press and research literature. You will be introduced to basic research concepts, such as correlation vs. causation, common biases, hypotheses, dependent/independent variables, validity, and reliability. You will apply this knowledge to evaluating a wide range of ideas and research in psychology.
Repeatability: This course may not be repeated for additional credits

Pre-requisites:
PSY 1001|Minimum Grade of C-|May not be taken concurrently
OR PSY 1901|Minimum Grade of C-|May not be taken concurrently
OR PSY 1061|Minimum Grade of C-|May not be taken concurrently
OR PSY 1996|Minimum Grade of C-|May not be taken concurrently.

PSY 1009. Discovery Series - Perspectives on Psychology. 1 Credit Hour.
This course, developed for first-year students, sophomores and/or new transfer students is designed to introduce the student to the psychology major, the main sub-fields within the discipline of psychology, and the numerous opportunities within the major. A variety of hands-on experiences will enable students to make informed decisions about their choice of major and about options within their major.
Repeatability: This course may not be repeated for additional credits.

PSY 1061. Psychology as a Social Science. 3 Credit Hours.
This course examines human behavior from the perspective of four major areas. It begins with the study of human development from infancy to adulthood, proceeds to a consideration of the individual existing within social groups, and then examines the study of personality and psychopathology. The course finishes with a discussion of the application of psychological knowledge to areas of societal concern, including psychological therapy, health psychology, and organizational/business psychology. NOTE: (1) Credit will not be given for this course and Psychology C050. (2) This course can be used to satisfy the university Core Individual & Society (IN) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. (3) Duplicate credit warning: Students who have earned credits for PSY 1001 will not earn additional credits for this course.
Course Attributes: IN
Repeatability: This course may not be repeated for additional credits.

PSY 1062. Psychology as a Social Science. 1 Credit Hour.
A companion course to Psychology 1061 (C060) for first-term freshmen. This course provides guidance with the assignments of the core course. Emphasis is on reading, listening, speaking, and writing within the context of the core course. Assistance is also given in the continued development of English-language skills, especially academic reading and the acquisition of a general academic vocabulary. NOTE: Offered at Temple University Japan only.
Repeatability: This course may not be repeated for additional credits.

PSY 1071. Psychology as a Natural Science. 3 Credit Hours.
This course examines human and animal behavior from a natural science perspective, providing the student with a sound basis in the biological determinants of behavior. The course begins with a foundation of neuropsychology, including brain processes, behavior genetics and evolutionary psychology. It continues with an examination of sensation and perception, the processes that provide us with information about the world and that allow us to interpret that information. The study of basic processes of learning, motivation, and emotion is followed by the study of cognitive psychology, including higher learning processes of memory, thinking, and problem solving. NOTE: Credit will not be given for this course and Psychology 0051.
Repeatability: This course may not be repeated for additional credits.

PSY 1110. Topics in Psychology I. 3 Credit Hours.
Individual treatment of issues regarding the inner workings of human behavior. Each offering deals with a specific aspect of behavior and motivation pertaining to life in today's society. Previous topics: women and therapy, exploring human nature, and drugs and the mind. NOTE: Check class schedule for semesters offered.
Repeatability: This course may be repeated for additional credit.

PSY 1113. Psychology and Community. 3 Credit Hours.
How do real and fictional Utopian communities rearrange the usual social order? How do they define gender, deliver care, regulate competition, encourage cooperation, and create social justice? We will read about real and fictional communities. You will learn about intentional communities that have been established in the United States and other parts of the world. Each class member will choose one community to visit and learn about in depth. In some cases you will be able to visit in person, in other cases you can visit online, by e-mail or by phone. We will compare alternative visions of the good life and compare fiction and reality.
Repeatability: This course may not be repeated for additional credits.

PSY 1120. Current Topics in Psychology II. 3 Credit Hours.
This is a second topics course in which selected psychological underpinnings of human behavior are explored. Each topic deals with a specific aspect of behavior and motivation pertaining to life in today's society. NOTE: Check class schedule for semesters offered.
Repeatability: This course may be repeated for additional credit.
PSY 1167. Foundations in Statistical Methods. 3 Credit Hours.
Introduction to statistics in the behavioral and social sciences. Covers quantitative description, probability, and basic methods of statistical inference. Emphasizes critical approach in interpreting applications. NOTE: (1) Math 1013 (C067) and Sociology 1167 (C067) are comparable courses. (2) This course can be used to satisfy the university Core Quantitative Reasoning B (QB) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: QB
Repeatability: This course may not be repeated for additional credits.

PSY 1174. Psychology of Food. 3 Credit Hours.
The course will consider the complex relationship between humans and what they eat. The course will consider the psychology of food at all levels of psychology, from perception (e.g., how smell, sight, sound, feel, and taste influence flavor) to cognition (e.g., how memory influences how much we eat), development (e.g., how food preferences develop), and psychopathology (e.g., what are the causes of eating disorders). The course is open to nonmajors who are interested in learning about psychology and how it can help us understand everyday behaviors. NOTE: Check class schedule for semesters offered.
Repeatability: This course may not be repeated for additional credits.

PSY 1901. Honors: Introduction to Psychology. 3 Credit Hours.
How do scientists study human behavior? How do others influence our behavior? What is a psychological disorder? These questions and more are reviewed in this course, which covers the basic concepts, methods, theories, and findings in Psychology. Topics include research methods, the nervous system, human development, social psychology, personality, and psychopathology.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.

PSY 1996. Honors Psychology as a Social Science. 3 Credit Hours.
Enables Honors students to cover subject matter of Psychology 1061 (C060) while following their own interests through individual projects and readings. NOTE: (1) Check class schedule for semesters offered. (2) This course can be used to satisfy a university Core Individual & Society (IN) and Writing Intensive (WI) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO, IN
Repeatability: This course may not be repeated for additional credits.

PSY 2101. Foundations of Cognitive Psychology. 3 Credit Hours.
Survey of recent research and theory in the areas of verbal learning and cognitive processes. Learning and retention of verbal materials, thinking and problem solving, and the relationship between language and thought.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
PSY 1001|Minimum Grade of C-|May not be taken concurrently
OR PSY 1071|Minimum Grade of C-|May not be taken concurrently
OR PSY 1901|Minimum Grade of C-|May not be taken concurrently
OR PSY 1996|Minimum Grade of C-|May not be taken concurrently
OR PSY 1061|Minimum Grade of C-|May not be taken concurrently.

PSY 2102. Foundations of Evolutionary and Comparative Psychology. 3 Credit Hours.
This course introduces the student to cognition and social behavior from an evolutionary and comparative perspective. The cognitive portion of the course presents the methods employed and results obtained during field observations and laboratory experiments on animal cognitive processes. The social behavior portion will focus on social behaviors found in wild animals with special attention to those also seen in humans. Evolutionary theory, especially as it applies to social behavior, will be presented and the course will overview the methods and findings of the field called evolutionary psychology, which presently investigates selected aspects of human cognition and social behavior. NOTE: Check class schedule for semesters offered.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
PSY 1071|Minimum Grade of C-|May not be taken concurrently
OR PSY 1001|Minimum Grade of C-|May not be taken concurrently
OR PSY 1901|Minimum Grade of C-|May not be taken concurrently
OR PSY 1996|Minimum Grade of C-|May not be taken concurrently
OR PSY 1061|Minimum Grade of C-|May not be taken concurrently.
PSY 2103. Foundations of Learning and Behavior Analysis. 3 Credit Hours.
This course begins with introduction to a system of principles that account for the acquisition and maintenance of both normal and problematic behavior. Building upon this, applied behavior analysis will be illustrated with examples such as useful parenting techniques, the combining of simple into complex skills, interventions for severely problematic behavior, and early interventions for autism. The basics of Pavlovian conditioning will also be included, emphasizing their role in clinical phenomena and in drug addiction. The concluding phase of the course will be concerned with functional analyses of verbal behavior in typical human interactions, as well as in the origins of awareness and self-control.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
PSY 1001|Minimum Grade of C-|May not be taken concurrently
OR PSY 1071|Minimum Grade of C-|May not be taken concurrently
OR PSY 1901|Minimum Grade of C-|May not be taken concurrently
OR PSY 1996|Minimum Grade of C-|May not be taken concurrently
OR PSY 1061|Minimum Grade of C-|May not be taken concurrently.

PSY 2104. Foundations of Sensation and Perception. 3 Credit Hours.
This course will describe how we experience the world. It will describe the biological sensors we use to gather information about the world and the psychological processes involved in interpreting that information. By the end of the course, students should be able to give an answer to the question: How do we see the world? The class will be lecture format with frequent opportunities to ask questions of the immediate material as well as broader questions about how the material may apply to other areas of psychology.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
PSY 1001|Minimum Grade of C-|May not be taken concurrently
OR PSY 1071|Minimum Grade of C-|May not be taken concurrently
OR PSY 1901|Minimum Grade of C-|May not be taken concurrently
OR PSY 1996|Minimum Grade of C-|May not be taken concurrently
OR PSY 1061|Minimum Grade of C-|May not be taken concurrently.

PSY 2168. Inferential Methods in Psychology. 3 Credit Hours.
Concentrates on useful methods for drawing inferences from sample statistics. Included are hypothesis-testing methods for means, proportions, frequencies, and correlations. Analysis of variance methods are covered for one- and two-factor designs.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
PSY 1167|Minimum Grade of C-|May not be taken concurrently.

PSY 2196. Scientific Thinking in Psychology. 4 Credit Hours.
This course examines the scientific method and its application in psychology and other fields. It covers topics such as the philosophical foundations of scientific method, the logic of research methods, specific methodologies and their uses and limitations, the evaluation of research, and research ethics. A major goal of the course is development of the ability to critically evaluate scientific and other information. Students will design, conduct, and evaluate research, do literature searches and learn to write in scientific style. NOTE: This course is for majors and minors only.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(PSY 1061|Minimum Grade of C-|May not be taken concurrently
OR PSY 1996|Minimum Grade of C-|May not be taken concurrently)
AND (PSY 1071|Minimum Grade of C-|May not be taken concurrently)
AND (PSY 1167|Minimum Grade of C-|May not be taken concurrently).

PSY 2201. Foundations of Psychopathology. 3 Credit Hours.
A survey of the principal forms of emotional and behavioral disorders; their causes, symptoms, course, assessment, and treatment. Topics include childhood disturbances, schizophrenia, depression, anxiety, and substance use disorders.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
PSY 1001|Minimum Grade of C-|May not be taken concurrently
OR PSY 1061|Minimum Grade of C-|May not be taken concurrently
OR PSY 1901|Minimum Grade of C-|May not be taken concurrently
OR PSY 1996|Minimum Grade of C-|May not be taken concurrently
OR PSY 1071|Minimum Grade of C-|May not be taken concurrently.
PSY 2301. Foundations of Developmental Psychology. 3 Credit Hours.
Human development across the life span. The role of genetic factors, maturation, learning and socio-cultural factors on the development of motivation, cognitive functions, social and emotional adjustment.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
PSY 1001|Minimum Grade of C-|May not be taken concurrently
OR PSY 1061|Minimum Grade of C-|May not be taken concurrently
OR PSY 1901|Minimum Grade of C-|May not be taken concurrently
OR PSY 1996|Minimum Grade of C-|May not be taken concurrently
OR PSY 1071|Minimum Grade of C-|May not be taken concurrently.

PSY 2401. Foundations of Social Psychology. 3 Credit Hours.
This course will introduce you to the theoretical perspectives, research methods, and empirical findings of social psychology. Social psychology is the scientific study of how people's thoughts, feelings, and behaviors are affected by the real or imagined presence of others. More specifically, the four main goals of this course are for you to learn: the major concepts, research findings, and issues in the field of social psychology; how social psychologists derive and test their theories and hypotheses through research; how subtle situational factors affect behavior; and how social psychology applies to your own life.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
PSY 1001|Minimum Grade of C-|May not be taken concurrently
OR PSY 1061|Minimum Grade of C-|May not be taken concurrently
OR PSY 1901|Minimum Grade of C-|May not be taken concurrently
OR PSY 1996|Minimum Grade of C-|May not be taken concurrently
OR PSY 1071|Minimum Grade of C-|May not be taken concurrently.

PSY 2402. Foundations of Industrial and Organizational Psychology. 3 Credit Hours.
A survey of the application of psychological theory, techniques, and research to industry. Selection, training, motivation, job satisfaction, job evaluation, performance measurements, leadership, and other topics.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
PSY 1001|Minimum Grade of C-|May not be taken concurrently
OR PSY 1061|Minimum Grade of C-|May not be taken concurrently
OR PSY 1901|Minimum Grade of C-|May not be taken concurrently
OR PSY 1071|Minimum Grade of C-|May not be taken concurrently.

PSY 2501. Foundations of Behavioral Neuroscience. 3 Credit Hours.
This course examines the neurobiology of behavior from the level of neuron to complex neural system interactions. Topics range from the neurobiology of sensory perception and movement to the neurobiology of learning and mental illness.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
PSY 1001|Minimum Grade of C-|May not be taken concurrently
OR PSY 1071|Minimum Grade of C-|May not be taken concurrently
OR PSY 1901|Minimum Grade of C-|May not be taken concurrently
OR PSY 1061|Minimum Grade of C-|May not be taken concurrently
OR PSY 1996|Minimum Grade of C-|May not be taken concurrently.

PSY 2502. Foundations of Cognitive Neuroscience. 3 Credit Hours.
The role of the brain in cognition. Neural basis of perception, language, learning, memory, thinking, and creativity. Neural pathology and the consequences for behavior. Neuropsychological assessment techniques.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
PSY 1001|Minimum Grade of C-|May not be taken concurrently
OR PSY 1071|Minimum Grade of C-|May not be taken concurrently
OR PSY 1901|Minimum Grade of C-|May not be taken concurrently
OR PSY 1061|Minimum Grade of C-|May not be taken concurrently
OR PSY 1996|Minimum Grade of C-|May not be taken concurrently.
PSY 2601. Foundations of Health Psychology. 3 Credit Hours.
This course is an overview of the field of health psychology, which focuses on the links between behavior and mental processes and health status and health behaviors. Health psychology is concerned with the promotion and maintenance of health, the prevention of illness, as well as the treatment of illness. Emphasis will be placed on theoretical analysis of health psychology (e.g., theory of planned behavior/reasoned action, health belief model, general adaptation syndrome, locus of control). Clinical applications may include smoking cessation programs, alcohol use interventions, weight control and eating disorders treatment, management of chronic pain and terminal illnesses, improvement of health care utilization and adherence, stress management, and the increasing social support to improve health outcomes.
Repeatability: This course may not be repeated for additional credits.

PSY 2901. Honors: Foundations of Cognitive Psychology. 3 Credit Hours.
Survey of recent research and theory in the areas of verbal learning and cognitive processes. Learning and retention of verbal materials, thinking and problem solving, and the relationship between language and thought.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.

PSY 2931. Honors: Foundations of Developmental Psychology. 3 Credit Hours.
Human development across the life span. The role of genetic factors, maturation, learning and socio-cultural factors on the development of motivation, cognitive functions, social and emotional adjustment.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.

PSY 2991. Honors Research I. 4 Credit Hours.
Topics arranged by student and instructor.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.

PSY 3000. Topics in Psychology. 3 Credit Hours.
Special topics in current developments in the major subdivisions of psychology. NOTE: Check course schedule for topics offered each semester.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(PSY 1167|Minimum Grade of C-|May not be taken concurrently
OR SOC 1167|Minimum Grade of C-|May not be taken concurrently
OR MATH 1013|Minimum Grade of C-|May not be taken concurrently
OR STAT 2101|Minimum Grade of C-|May not be taken concurrently
OR PSY 1004|Minimum Grade of C-|May not be taken concurrently
AND (PSY 2168|Minimum Grade of C-|May not be taken concurrently
OR PSY 1003|Minimum Grade of C-|May not be taken concurrently
OR STAT 2102|Minimum Grade of C-|May not be taken concurrently
OR STAT 2103|Minimum Grade of C-|May not be taken concurrently).
PSY 3002. Evolutionary and Comparative Psychology. 3 Credit Hours.
The course introduces the student to cognition and social behavior from an evolutionary and comparative perspective. The comparative psychology (i.e., animal cognition) portion of the course presents the methods employed and results obtained during field observations and laboratory experiments on animal cognitive processes. Evolutionary theory, especially as it applies to social behavior, will be presented. The social behavior portion of the course will focus on social behaviors found in wild animals with special attention to those also seen in humans. The course will survey the methods and findings of the field called evolutionary psychology, which investigates selected aspects of human cognition and social behavior. The student can expect to obtain basic familiarity with the concepts and findings of those closely-related fields. Duplicate credit warning: Students who have earned credits for PSY 2102 will not earn additional credits for this course.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(PSY 1001|Minimum Grade of C-|May not be taken concurrently)
OR PSY 1901|Minimum Grade of C-|May not be taken concurrently
OR PSY 1061|Minimum Grade of C-|May not be taken concurrently
OR PSY 1996|Minimum Grade of C-|May not be taken concurrently
AND (PSY 1004|Minimum Grade of C-|May not be taken concurrently
OR PSY 1167|Minimum Grade of C-|May not be taken concurrently
OR SOC 1167|Minimum Grade of C-|May not be taken concurrently
OR MATH 1013|Minimum Grade of C-|May not be taken concurrently
OR STAT 2101|Minimum Grade of C-|May not be taken concurrently
AND (PSY 1003|Minimum Grade of C-|May not be taken concurrently
OR PSY 2168|Minimum Grade of C-|May not be taken concurrently
OR STAT 2102|Minimum Grade of C-|May not be taken concurrently
OR STAT 2103|Minimum Grade of C-|May not be taken concurrently
AND (PSY 2000 to 2999| Required Courses:1|Minimum Grade of C-|May not be taken concurrently).

PSY 3003. Advanced Undergraduate Statistics. 3 Credit Hours.
This course is meant to give psychology majors who have already taken a basic course in inferential statistics (e.g., Statistics for Psychology; PSY 1003) exposure to more advanced techniques commonly used in psychological research and to bridge the gap between basic and graduate level statistics for those considering a post-graduate degree in psychology. Topics will include linear regression, repeated-measures ANOVA, multi-factorial ANOVA, and several nonparametric alternatives to “standard” inferential tests. In addition to significance testing, this course will focus on the measurement and interpretation of effect size and power. Students will also learn how to perform data analysis using the SPSS statistical software package.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(PSY 1003|Minimum Grade of C-|May not be taken concurrently)
AND (PSY 1004|Minimum Grade of C-|May not be taken concurrently)
AND (PSY 2000 to 2999| Required Courses:1|Minimum Grade of C-|May not be taken concurrently).

PSY 3005. Affective Neuroscience. 3 Credit Hours.
The brain is not just a thinking machine; it is also a feeling machine. This course explores the neural substrates behind emotions such as love, trust, fear, and pleasure. We will also discuss the relationship between emotions and cognition, the effect of emotions on animal and human behavior, and the biological basis of affective disorders such as anxiety and depression.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(PSY 2501|Minimum Grade of C-|May not be taken concurrently
OR PSY 2502|Minimum Grade of C-|May not be taken concurrently
OR NSCI 2001|Minimum Grade of C-|May not be taken concurrently
AND (PSY 1003|Minimum Grade of C-|May not be taken concurrently).
PSY 3096. Conducting Psychological Research. 3 Credit Hours.
This writing intensive course offers a practical introduction to research methods and the process of conducting research in psychology. Students will perform all of the steps involved in a research study, from formulating an idea and hypothesis to presenting results in a paper and presentation. Ethical considerations relevant to research will be emphasized in the course.

Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(PSY 1001|Minimum Grade of C-|May not be taken concurrently
OR PSY 1901|Minimum Grade of C-|May not be taken concurrently
OR PSY 1061|Minimum Grade of C-|May not be taken concurrently
OR PSY 1071|Minimum Grade of C-|May not be taken concurrently
OR PSY 1996|Minimum Grade of C-|May not be taken concurrently)
AND (PSY 1004|Minimum Grade of C-|May not be taken concurrently
OR PSY 1167|Minimum Grade of C-|May not be taken concurrently
OR SOC 1167|Minimum Grade of C-|May not be taken concurrently
OR MATH 1013|Minimum Grade of C-|May not be taken concurrently
OR STAT 2101|Minimum Grade of C-|May not be taken concurrently
AND (PSY 1003|Minimum Grade of C-|May not be taken concurrently
OR PSY 2102|Minimum Grade of C-|May not be taken concurrently
OR PSY 2103|Minimum Grade of C-|May not be taken concurrently
OR STAT 2102|Minimum Grade of C-|May not be taken concurrently
OR STAT 2103|Minimum Grade of C-|May not be taken concurrently)
AND (PSY 2000 to 2999| Required Courses:1|Minimum Grade of C-|May not be taken concurrently)

PSY 3100. Topics: Brain, Behavior and Cognition. 3 Credit Hours.
Advanced level topics course; topics vary by instructor.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(PSY 2101|Minimum Grade of C-|May not be taken concurrently
OR PSY 2102|Minimum Grade of C-|May not be taken concurrently
OR PSY 2103|Minimum Grade of C-|May not be taken concurrently
OR PSY 2501|Minimum Grade of C-|May not be taken concurrently
OR PSY 2502|Minimum Grade of C-|May not be taken concurrently
OR PSY 2104|Minimum Grade of C-|May not be taken concurrently
OR PSY 2901|Minimum Grade of C-|May not be taken concurrently)
AND (PSY 1004|Minimum Grade of C-|May not be taken concurrently
OR PSY 1167|Minimum Grade of C-|May not be taken concurrently
OR SOC 1167|Minimum Grade of C-|May not be taken concurrently
OR MATH 1013|Minimum Grade of C-|May not be taken concurrently
OR STAT 2101|Minimum Grade of C-|May not be taken concurrently
AND (PSY 1003|Minimum Grade of C-|May not be taken concurrently
OR PSY 2168|Minimum Grade of C-|May not be taken concurrently
OR STAT 2102|Minimum Grade of C-|May not be taken concurrently
OR STAT 2103|Minimum Grade of C-|May not be taken concurrently).
PSY 3131. Problem Solving and Creative Thinking. 3 Credit Hours.
This course will begin with a historical survey of approaches to the study of creativity, concentrating on questions of definition and issues concerning how creativity can be measured. The relationship between creative thinking and problem solving will be discussed. The next section will examine different perspectives that researchers have taken toward the study of creativity. Examples are: (1) genius and madness; (2) developing tests of creative thinking and studying the creative personality; (3) the cognitive view, which considers creative thinking to be a straightforward extension of ordinary problem solving. We will then examine a number of case studies of creative advances, from the areas of invention (Edison, the Wright brothers), the arts (painting, sculpture, literature, poetry, and music), and science, to acquire a database to use to test the theories of the creative process developed earlier. The material in this course will go beyond that ordinarily covered in a psychology course - we will read research in art history, musicology, history and philosophy of science, as well as literature from the psychological study of giftedness, personality and mental testing, and cognitive processes. Course requirements will include written comments on each week’s assigned readings, and a case study of a creative advance in any area of interest to the student. NOTE: Check class schedule for semesters offered.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(PSY 2101|Minimum Grade of C-|May not be taken concurrently
OR PSY 2901|Minimum Grade of C-|May not be taken concurrently
AND (PSY 1004|Minimum Grade of C-|May not be taken concurrently
OR PSY 1167|Minimum Grade of C-|May not be taken concurrently
OR SOC 1167|Minimum Grade of C-|May not be taken concurrently
OR MATH 1013|Minimum Grade of C-|May not be taken concurrently
OR STAT 2101|Minimum Grade of C-|May not be taken concurrently
AND (PSY 1003|Minimum Grade of C-|May not be taken concurrently
OR PSY 2168|Minimum Grade of C-|May not be taken concurrently
OR STAT 2102|Minimum Grade of C-|May not be taken concurrently
OR STAT 2103|Minimum Grade of C-|May not be taken concurrently).

PSY 3132. Human Memory. 3 Credit Hours.
This course provides an in-depth view of human memory. It focuses on the different approaches to research on human memory, including cognitive approaches, experimental approaches, neuroscientific approaches, and developmental (childhood to old age) approaches. Course topics include basic memory processes, the neuropsychology of memory and amnesia, and applied topics in memory research. NOTE: Check class schedule for semesters offered.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(PSY 2101|Minimum Grade of C-|May not be taken concurrently
OR PSY 2901|Minimum Grade of C-|May not be taken concurrently
AND (PSY 1004|Minimum Grade of C-|May not be taken concurrently
OR PSY 1167|Minimum Grade of C-|May not be taken concurrently
OR SOC 1167|Minimum Grade of C-|May not be taken concurrently
OR MATH 1013|Minimum Grade of C-|May not be taken concurrently
OR STAT 2101|Minimum Grade of C-|May not be taken concurrently
AND (PSY 1003|Minimum Grade of C-|May not be taken concurrently
OR PSY 2168|Minimum Grade of C-|May not be taken concurrently
OR STAT 2102|Minimum Grade of C-|May not be taken concurrently
OR STAT 2103|Minimum Grade of C-|May not be taken concurrently).
PSY 3141. Neurobiology and Evolution of Social Behavior. 3 Credit Hours.
This course will present social behavior from an evolutionary and neurobiological perspective. We will survey the many properties of animal social behavior that are now known to be shared by humans and other primates including aggression, dominance, attachment, grief, sympathy, helpfulness, altruism, friendliness, peacemaking, maternal care. The apparent evolutionary history as well as the descriptive characteristics of each social tendency will be studied using data from both field observations and laboratory experiments as available. In those cases where data are available, the course will also present what is known about the neural mechanisms that govern the social behaviors. NOTE: Check class schedule for semesters offered.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(PSY 2102|Minimum Grade of C-|May not be taken concurrently
OR PSY 2502|Minimum Grade of C-|May not be taken concurrently
OR PSY 2501|Minimum Grade of C-|May not be taken concurrently
AND (PSY 1004|Minimum Grade of C-|May not be taken concurrently
OR PSY 1167|Minimum Grade of C-|May not be taken concurrently
OR SOC 1167|Minimum Grade of C-|May not be taken concurrently
OR MATH 1013|Minimum Grade of C-|May not be taken concurrently
OR STAT 2101|Minimum Grade of C-|May not be taken concurrently
AND (PSY 1003|Minimum Grade of C-|May not be taken concurrently
OR PSY 2168|Minimum Grade of C-|May not be taken concurrently
OR STAT 2102|Minimum Grade of C-|May not be taken concurrently
OR STAT 2103|Minimum Grade of C-|May not be taken concurrently).

PSY 3151. Direct Applications of Behavioral Principles. 3 Credit Hours.
Direct hands-on experience, in the shaping and maintaining of novel behavior patterns in the laboratory, will be supplemented by related readings and field trips to educational and social-service agencies where behavioral principles are applied. These experiences will introduce students to functional analysis and its underlying principles, and to the graphical techniques that enable the tracking of skill acquisition of individuals, as well as evaluating their problematic behavior. In addition, each student will carry out an individual project by selecting, analyzing, and arranging for improvement in some behavior that impacts his or her own quality of life.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(PSY 2103|Minimum Grade of C-|May not be taken concurrently
AND (PSY 1004|Minimum Grade of C-|May not be taken concurrently
OR PSY 1167|Minimum Grade of C-|May not be taken concurrently
OR SOC 1167|Minimum Grade of C-|May not be taken concurrently
OR MATH 1013|Minimum Grade of C-|May not be taken concurrently
OR STAT 2101|Minimum Grade of C-|May not be taken concurrently
AND (PSY 1003|Minimum Grade of C-|May not be taken concurrently
OR PSY 2168|Minimum Grade of C-|May not be taken concurrently
OR STAT 2102|Minimum Grade of C-|May not be taken concurrently
OR STAT 2103|Minimum Grade of C-|May not be taken concurrently).

PSY 3152. Experimental Psychopathology. 3 Credit Hours.
This course applies learning principles and research to the understanding and treatment of behavior problems. Presentation of each Pavlovian or operant conditioning principle is accompanied by illustrations of major ways in which the principle has or can be applied to the etiology and/or treatment of behavior problems. The remainder of the course is concerned with major treatment techniques and with coverage of specific behavior problems, ranging from phobic behavior to chronic psychotic behavior. NOTE: Check class schedule for semesters offered.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(PSY 2103|Minimum Grade of C-|May not be taken concurrently
AND (PSY 1004|Minimum Grade of C-|May not be taken concurrently
OR PSY 1167|Minimum Grade of C-|May not be taken concurrently
OR SOC 1167|Minimum Grade of C-|May not be taken concurrently
OR MATH 1013|Minimum Grade of C-|May not be taken concurrently
OR STAT 2101|Minimum Grade of C-|May not be taken concurrently
AND (PSY 1003|Minimum Grade of C-|May not be taken concurrently
OR PSY 2168|Minimum Grade of C-|May not be taken concurrently
OR STAT 2102|Minimum Grade of C-|May not be taken concurrently
OR STAT 2103|Minimum Grade of C-|May not be taken concurrently).
PSY 3161. Research Methods in Perception. 3 Credit Hours.
This course will introduce students to sensation and perception research techniques. Using a hands-on approach, students will learn basic techniques for evaluating what humans see and feel, including some of the methods used in industries for product evaluation. NOTE: Check class schedule for semesters offered.
**Repeatability:** This course may not be repeated for additional credits
**Pre-requisites:**
(PSY 2104|Minimum Grade of C-|May not be taken concurrently)
AND (PSY 1004|Minimum Grade of C-|May not be taken concurrently)
OR PSY 1167|Minimum Grade of C-|May not be taken concurrently
OR MATH 1013|Minimum Grade of C-|May not be taken concurrently
OR STAT 2101|Minimum Grade of C-|May not be taken concurrently
AND (PSY 1003|Minimum Grade of C-|May not be taken concurrently
OR PSY 2168|Minimum Grade of C-|May not be taken concurrently
OR STAT 2102|Minimum Grade of C-|May not be taken concurrently
OR STAT 2103|Minimum Grade of C-|May not be taken concurrently).

PSY 3162. Visual Recognition. 3 Credit Hours.
Humans effortlessly recognize many different types of things. Current research in this area suggests that there are three fundamental types of visual recognition. In a seminar format each type will be discussed in turn. Readings will be primary sources describing the major theories of how humans recognize objects (such as cars, people, and shoes), places (such as rooms, streets, and cities), and events (such as walking, playing baseball, and arguing). NOTE: Check class schedule for semesters offered.
**Repeatability:** This course may not be repeated for additional credits
**Pre-requisites:**
(PSY 2104|Minimum Grade of C-|May not be taken concurrently)
AND (PSY 1004|Minimum Grade of C-|May not be taken concurrently)
OR PSY 1167|Minimum Grade of C-|May not be taken concurrently
OR MATH 1013|Minimum Grade of C-|May not be taken concurrently
OR STAT 2101|Minimum Grade of C-|May not be taken concurrently
AND (PSY 1003|Minimum Grade of C-|May not be taken concurrently
OR PSY 2168|Minimum Grade of C-|May not be taken concurrently
OR STAT 2102|Minimum Grade of C-|May not be taken concurrently
OR STAT 2103|Minimum Grade of C-|May not be taken concurrently).

PSY 3200. Topics: Clinical. 3 Credit Hours.
Advanced level topics course; clinical topics vary by instructor.
**Repeatability:** This course may be repeated for additional credit.
**Pre-requisites:**
(PSY 1004|Minimum Grade of C-|May not be taken concurrently
OR PSY 1167|Minimum Grade of C-|May not be taken concurrently
OR MATH 1013|Minimum Grade of C-|May not be taken concurrently
OR STAT 2101|Minimum Grade of C-|May not be taken concurrently
AND (PSY 1003|Minimum Grade of C-|May not be taken concurrently
OR PSY 2168|Minimum Grade of C-|May not be taken concurrently
OR STAT 2102|Minimum Grade of C-|May not be taken concurrently
OR STAT 2103|Minimum Grade of C-|May not be taken concurrently)
AND (PSY 2000 to 2999| Required Courses:1|Minimum Grade of C-|May not be taken concurrently).

AND (PSY 2000 to 2999| Required Courses:1|Minimum Grade of C-|May not be taken concurrently).
PSY 3221. Clinical Psychology: Research and Practice. 3 Credit Hours.
In this class the student will learn about one subspecialty within psychology, that of clinical psychology. The course will focus on how clinical psychology emerged as a field of mental health research and practice, what clinical psychologists do and the theory behind those activities. Special attention will be paid to psychological assessment and psychotherapy, two of the main activities that clinical psychologists undertake. Students will learn about the purpose of psychological assessment, some examples of the more commonly used psychological assessment instruments, and how psychological assessment guides service provision. Students will also learn about different theoretical orientations in the practice of psychotherapy. Additional topics covered include ethics in this clinical science, contemporary issues in clinical practice (e.g., innovative treatments for mental illness, the impact of managed care, working with special populations), and career opportunities in the field.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(PSY 1004|Minimum Grade of C-|May not be taken concurrently
OR PSY 1167|Minimum Grade of C-|May not be taken concurrently
OR SOC 1167|Minimum Grade of C-|May not be taken concurrently
OR MATH 1013|Minimum Grade of C-|May not be taken concurrently
OR STAT 2101|Minimum Grade of C-|May not be taken concurrently)
AND (PSY 1003|Minimum Grade of C-|May not be taken concurrently
OR PSY 2168|Minimum Grade of C-|May not be taken concurrently
OR STAT 2102|Minimum Grade of C-|May not be taken concurrently
OR STAT 2103|Minimum Grade of C-|May not be taken concurrently)
AND (PSY 2201|Minimum Grade of C-|May not be taken concurrently).

PSY 3222. Psychoanalytic Theory. 3 Credit Hours.
Repeatability: This course may not be repeated for additional credits.

PSY 3223. Child Psychopathology and Treatment. 3 Credit Hours.
This course provides an overview of the major psychological, behavioral, and emotional problems experienced in childhood and adolescence. Organized around - but not limited to - the diagnostic framework of the DSM, the course focuses on current views concerning the phenomenology, etiology (causes), and treatment and prevention of these problems. The major theoretical positions are covered, but the major emphasis is on current empirical findings relevant to the various disorders and problems. Covered issues include conduct problems and delinquency, attention deficit problems, depression and suicide, childhood anxiety problems, mental retardation, learning problems, child maltreatment and abuse, and children's adjustment to family problems.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(PSY 1004|Minimum Grade of C-|May not be taken concurrently
OR PSY 1167|Minimum Grade of C-|May not be taken concurrently
OR SOC 1167|Minimum Grade of C-|May not be taken concurrently
OR MATH 1013|Minimum Grade of C-|May not be taken concurrently
OR STAT 2101|Minimum Grade of C-|May not be taken concurrently)
AND (PSY 1003|Minimum Grade of C-|May not be taken concurrently
OR PSY 2168|Minimum Grade of C-|May not be taken concurrently
OR STAT 2102|Minimum Grade of C-|May not be taken concurrently
OR STAT 2103|Minimum Grade of C-|May not be taken concurrently)
AND (PSY 2201|Minimum Grade of C-|May not be taken concurrently).

PSY 3300. Topics: Developmental. 3 Credit Hours.
Advanced level topics course; developmental topics vary by instructor.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(PSY 1004|Minimum Grade of C-|May not be taken concurrently
OR PSY 1167|Minimum Grade of C-|May not be taken concurrently
OR SOC 1167|Minimum Grade of C-|May not be taken concurrently
OR MATH 1013|Minimum Grade of C-|May not be taken concurrently
OR STAT 2101|Minimum Grade of C-|May not be taken concurrently)
AND (PSY 1003|Minimum Grade of C-|May not be taken concurrently
OR PSY 2168|Minimum Grade of C-|May not be taken concurrently
OR STAT 2102|Minimum Grade of C-|May not be taken concurrently
OR STAT 2103|Minimum Grade of C-|May not be taken concurrently)
AND (PSY 2000 to 2999| Required Courses:1|Minimum Grade of C-|May not be taken concurrently).
PSY 3301. Phases of Development: Infancy. 3 Credit Hours.
Within this course, students focus on a particular phase of development, infancy, for an entire semester. This phase of development presents unique changes and challenges for the developing person. For the scientist, the phase poses unique theoretical perspectives and special methodological challenges. Up-to-date information and directions for future study, application and research are emphasized.

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
(PSY 1004|Minimum Grade of C-|May not be taken concurrently
OR PSY 1167|Minimum Grade of C-|May not be taken concurrently
OR SOC 1167|Minimum Grade of C-|May not be taken concurrently
OR MATH 1013|Minimum Grade of C-|May not be taken concurrently
OR STAT 2101|Minimum Grade of C-|May not be taken concurrently)
AND (PSY 1003|Minimum Grade of C-|May not be taken concurrently
OR PSY 2168|Minimum Grade of C-|May not be taken concurrently
OR STAT 2102|Minimum Grade of C-|May not be taken concurrently
OR STAT 2103|Minimum Grade of C-|May not be taken concurrently)
AND (PSY 2301|Minimum Grade of C-|May not be taken concurrently
OR PSY 2931|Minimum Grade of C-|May not be taken concurrently).

PSY 3303. Psychological Testing: Measuring IQ, Thoughts, Feelings, and Attitudes. 3 Credit Hours.
How do we measure intelligence, thoughts, feelings, and attitudes? This course will provide an overview of psychometric theory, methods, and statistics. Test construction and the psychometric evaluation of tests (e.g., validity, reliability) will be covered in detail. Students also will learn the history of psychometrics, and legal, ethical, and cultural diversity issues related to this topic will be discussed. This course will introduce assessment concepts and methods that will be useful in a wide range of settings, including graduate school and careers in clinical settings, marketing, personnel selection, job performance evaluations, treatment evaluations, forensic applications, and others.

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
(PSY 1001|Minimum Grade of C-|May not be taken concurrently
OR PSY 1901|Minimum Grade of C-|May not be taken concurrently)
AND (PSY 1003|Minimum Grade of C-|May not be taken concurrently)
AND (PSY 2000 to 2999|Required Courses:1|Minimum Grade of C-|May not be taken concurrently).

PSY 3304. Personality, Social and Emotional Development. 3 Credit Hours.
How do we develop as unique individuals? How do we come to relate to others and ourselves? How do we come to feel the way we do about the people we know and the many important things in our lives? Using contemporary research and theory, these core questions are examined. Among the topics to be studied are the development and significance of early attachment relationships, the development of a sense of self, changing family relations, the progression from external to internal self-control, the emergence of prosocial and anti-social behavior, moral development, the development of romantic relationships, and the nature of changing relationships with peers and loved ones. Students will acquire an understanding of the role of early experiences in development, the nature of emotional vulnerability and personality resilience, and the extent to which some behaviors are continuous or discontinuous over time. NOTE: Check class schedule for semesters offered.

**Repeatability:** This course may not be repeated for additional credits

**Pre-requisites:**
(PSY 1004|Minimum Grade of C-|May not be taken concurrently
OR PSY 1167|Minimum Grade of C-|May not be taken concurrently
OR SOC 1167|Minimum Grade of C-|May not be taken concurrently
OR MATH 1013|Minimum Grade of C-|May not be taken concurrently
OR STAT 2101|Minimum Grade of C-|May not be taken concurrently)
AND (PSY 1003|Minimum Grade of C-|May not be taken concurrently
OR PSY 2168|Minimum Grade of C-|May not be taken concurrently
OR STAT 2102|Minimum Grade of C-|May not be taken concurrently
OR STAT 2103|Minimum Grade of C-|May not be taken concurrently)
AND (PSY 2301|Minimum Grade of C-|May not be taken concurrently
OR PSY 2931|Minimum Grade of C-|May not be taken concurrently).
PSY 3305. Cognitive and Language Development. 3 Credit Hours.
This class will discuss theory and evidence concerning how children acquire adult competence in thinking and language. Development is covered from infancy to adolescence. We will consider a wide array of domains and processes in cognitive development, including number, space, theory of mind, reasoning, perception, attention, and memory. Educational and applied implications may be touched on, as well as neuroscience approaches.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(PSY 1004|Minimum Grade of C-|May not be taken concurrently
OR PSY 1167|Minimum Grade of C-|May not be taken concurrently
OR SOC 1167|Minimum Grade of C-|May not be taken concurrently
OR MATH 1013|Minimum Grade of C-|May not be taken concurrently
OR STAT 2101|Minimum Grade of C-|May not be taken concurrently
AND (PSY 1003|Minimum Grade of C-|May not be taken concurrently
OR PSY 2168|Minimum Grade of C-|May not be taken concurrently
OR STAT 2102|Minimum Grade of C-|May not be taken concurrently
OR STAT 2103|Minimum Grade of C-|May not be taken concurrently
AND (PSY 2301|Minimum Grade of C-|May not be taken concurrently
OR PSY 2931|Minimum Grade of C-|May not be taken concurrently).

PSY 3306. Neuroscience of Development and Aging. 3 Credit Hours.
This course will integrate students' knowledge of behavioral and cognitive relationships between young adult neuroanatomy and behavior that they studied in prerequisite courses (Psychology 2501 (0260) - Foundations of Behavioral Neuroscience or Psychology 2502 (0265) - Foundations of Cognitive Neuroscience) with information about the development and aging of behavior, cognition and neuroanatomy and neurophysiology. The initial emphasis in the course will be on embryonic and fetal development of the central nervous system and emergent behavioral plasticity. Sensory and motor development in the fetus will be examined. Postnatal development of the cerebral cortex and developmental outcomes will be explored in the context of environmental phenomena that can amplify or inhibit the organism's adaptive capacity. Normal aging of the brain will be contrasted to neurodegenerative diseases of old age, and the cognitive and behavioral consequences of both normal and non-normal aging will be presented.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(PSY 1004|Minimum Grade of C-|May not be taken concurrently
OR PSY 1167|Minimum Grade of C-|May not be taken concurrently
OR SOC 1167|Minimum Grade of C-|May not be taken concurrently
OR MATH 1013|Minimum Grade of C-|May not be taken concurrently
OR STAT 2101|Minimum Grade of C-|May not be taken concurrently
AND (PSY 1003|Minimum Grade of C-|May not be taken concurrently
OR PSY 2168|Minimum Grade of C-|May not be taken concurrently
OR STAT 2102|Minimum Grade of C-|May not be taken concurrently
OR STAT 2103|Minimum Grade of C-|May not be taken concurrently
AND (PSY 2501|Minimum Grade of C-|May not be taken concurrently
AND (PSY 2502|Minimum Grade of C-|May not be taken concurrently).

PSY 3307. Theories of Development. 3 Credit Hours.
It has been said, "There is nothing more practical than a good theory." How can theories have practical application? Theories serve as windows to the world of science, allowing us to "see" particular facts" and help us explain things that cannot explain themselves. Theories are the hallmark of science, fundamental to organizing our knowledge and allowing us to interpret and question it. In this course, students examine the role of theories in scientific thinking and research and they explore the components of theories unique to developmental psychology. In addition to learning about specific theories, such as those developed by Piaget, Vygotsky, Erikson, Kohlberg, Freud, Wilson, Chomsky, Ainsworth, Skinner and Bandura, students begin to appreciate the origins of theories, the relations between them and their consequences for acquiring future knowledge. NOTE: Check class schedule for semesters offered.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(PSY 1004|Minimum Grade of C-|May not be taken concurrently
OR PSY 1167|Minimum Grade of C-|May not be taken concurrently
OR SOC 1167|Minimum Grade of C-|May not be taken concurrently
OR MATH 1013|Minimum Grade of C-|May not be taken concurrently
OR STAT 2101|Minimum Grade of C-|May not be taken concurrently
AND (PSY 1003|Minimum Grade of C-|May not be taken concurrently
OR PSY 2168|Minimum Grade of C-|May not be taken concurrently
OR STAT 2102|Minimum Grade of C-|May not be taken concurrently
OR STAT 2103|Minimum Grade of C-|May not be taken concurrently
AND (PSY 2301|Minimum Grade of C-|May not be taken concurrently
OR PSY 2901|Minimum Grade of C-|May not be taken concurrently).
PSY 3400. Topics: Social Psychology. 3 Credit Hours.
Advanced level topics course; social psychology topics vary by instructor.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(PSY 1004|Minimum Grade of C-|May not be taken concurrently
OR PSY 1167|Minimum Grade of C-|May not be taken concurrently
OR SOC 1167|Minimum Grade of C-|May not be taken concurrently
OR MATH 1013|Minimum Grade of C-|May not be taken concurrently
OR STAT 2101|Minimum Grade of C-|May not be taken concurrently)
AND (PSY 1003|Minimum Grade of C-|May not be taken concurrently
OR PSY 2168|Minimum Grade of C-|May not be taken concurrently
OR STAT 2102|Minimum Grade of C-|May not be taken concurrently
OR STAT 2103|Minimum Grade of C-|May not be taken concurrently)
AND (PSY 1001|Minimum Grade of C-|May not be taken concurrently
OR PSY 1061|Minimum Grade of C-|May not be taken concurrently
OR PSY 1901|Minimum Grade of C-|May not be taken concurrently
OR PSY 1996|Minimum Grade of C-|May not be taken concurrently
OR PSY 1071|Minimum Grade of C-|May not be taken concurrently)
AND (PSY 2000 to 2999| Minimum Grade of C-|May not be taken concurrently).

PSY 3411. Social Cognition. 3 Credit Hours.
This class provides an overview of social cognition, the study of the cognitive representations and processes that people use to try to make sense of the social world. Topics covered will include social attitudes, the social self, stereotypes, attributions, and social decision-making. Readings, lectures, and discussions will focus on the key research findings, the unique methods, and the implications and applications of social cognition research. NOTE: Check class schedule for semesters offered.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(PSY 1004|Minimum Grade of C-|May not be taken concurrently
OR PSY 1167|Minimum Grade of C-|May not be taken concurrently
OR SOC 1167|Minimum Grade of C-|May not be taken concurrently
OR MATH 1013|Minimum Grade of C-|May not be taken concurrently
OR STAT 2101|Minimum Grade of C-|May not be taken concurrently)
AND (PSY 1003|Minimum Grade of C-|May not be taken concurrently
OR PSY 2168|Minimum Grade of C-|May not be taken concurrently
OR STAT 2102|Minimum Grade of C-|May not be taken concurrently
OR STAT 2103|Minimum Grade of C-|May not be taken concurrently)
AND (PSY 2401|Minimum Grade of C-|May not be taken concurrently).

PSY 3412. Psychological Studies of Social Issues. 3 Credit Hours.
This course examines the causes, consequences, and amelioration of social problems from a social psychological perspective. For instance, unemployment, imprisonment, racial profiling and discrimination, are a few of the topics this course will address. In addition to examining social problems the course will include a search for solutions as illustrated by social visionaries and experimental utopian communities.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(PSY 2401|Minimum Grade of C-|May not be taken concurrently
AND (PSY 1004|Minimum Grade of C-|May not be taken concurrently
OR PSY 1167|Minimum Grade of C-|May not be taken concurrently
OR SOC 1167|Minimum Grade of C-|May not be taken concurrently
OR MATH 1013|Minimum Grade of C-|May not be taken concurrently
OR STAT 2101|Minimum Grade of C-|May not be taken concurrently)
AND (PSY 1003|Minimum Grade of C-|May not be taken concurrently
OR PSY 2168|Minimum Grade of C-|May not be taken concurrently
OR STAT 2102|Minimum Grade of C-|May not be taken concurrently
OR STAT 2103|Minimum Grade of C-|May not be taken concurrently).
PSY 3417. Personnel Psychology. 3 Credit Hours.
This course focuses on the application of psychological theories and principles to issues in personnel selection. Topics include job analysis, recruitment and selection techniques, selection fairness, utility analysis, affirmative action, training and development, and performance appraisal.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(PSY 2402|Minimum Grade of C-|May not be taken concurrently)
AND (PSY 1004|Minimum Grade of C-|May not be taken concurrently)
OR PSY 1167|Minimum Grade of C-|May not be taken concurrently
OR SOC 1167|Minimum Grade of C-|May not be taken concurrently
OR MATH 1013|Minimum Grade of C-|May not be taken concurrently
OR STAT 2101|Minimum Grade of C-|May not be taken concurrently
AND (PSY 1003|Minimum Grade of C-|May not be taken concurrently)
OR PSY 2168|Minimum Grade of C-|May not be taken concurrently
OR STAT 2102|Minimum Grade of C-|May not be taken concurrently
OR STAT 2103|Minimum Grade of C-|May not be taken concurrently.

PSY 3418. Human Performance Improvement. 3 Credit Hours.
This course is an introduction to Human Performance Technology, a rapidly growing field that applies the principles, methods, and empirical generalizations of Behavior Analysis to improving human performance in organizations. Working from a theoretical basis, students will learn how to diagnose performance discrepancies in organizational settings, design and evaluate appropriate behavior-based solutions.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(PSY 1004|Minimum Grade of C-|May not be taken concurrently)
OR PSY 1167|Minimum Grade of C-|May not be taken concurrently
OR SOC 1167|Minimum Grade of C-|May not be taken concurrently
OR MATH 1013|Minimum Grade of C-|May not be taken concurrently
OR STAT 2101|Minimum Grade of C-|May not be taken concurrently
AND (PSY 1003|Minimum Grade of C-|May not be taken concurrently)
OR PSY 2168|Minimum Grade of C-|May not be taken concurrently
OR STAT 2102|Minimum Grade of C-|May not be taken concurrently
OR STAT 2103|Minimum Grade of C-|May not be taken concurrently.

PSY 3561. Psychopharmacology. 3 Credit Hours.
This course will focus on how the brain works on a chemical level. It examines how behavior and environment can change functions of the brain, and how medications and drugs alter brain function. NOTE: Check class schedule for semesters offered.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(PSY 2501|Minimum Grade of C-|May not be taken concurrently)
OR NSCI 2122|Minimum Grade of C-|May not be taken concurrently
AND (PSY 1004|Minimum Grade of C-|May not be taken concurrently)
OR PSY 1167|Minimum Grade of C-|May not be taken concurrently
OR SOC 1167|Minimum Grade of C-|May not be taken concurrently
OR MATH 1013|Minimum Grade of C-|May not be taken concurrently
OR STAT 2101|Minimum Grade of C-|May not be taken concurrently
AND (PSY 1003|Minimum Grade of C-|May not be taken concurrently)
OR PSY 2168|Minimum Grade of C-|May not be taken concurrently
OR STAT 2102|Minimum Grade of C-|May not be taken concurrently
OR STAT 2103|Minimum Grade of C-|May not be taken concurrently.
PSY 3566. Neurobiology of Learning and Memory. 3 Credit Hours.
This course examines the neuroanatomy and neurophysiology underlying the many diverse forms of learning and memory. The course begins with an overview of the structure and function of neural areas responsible for learning, before progressing to an examination of the different processes involved in the acquisition, consolidation, and forgetting of habits, skills, and cognition. Additional topics may include the relation between pharmacology and learning, the impact of disease or trauma, and the neurobiology of social behavior.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(PSY 2502|Minimum Grade of C-|May not be taken concurrently)
AND (PSY 1004|Minimum Grade of C-|May not be taken concurrently)
OR PSY 1167|Minimum Grade of C-|May not be taken concurrently
OR SOC 1167|Minimum Grade of C-|May not be taken concurrently
OR MATH 1013|Minimum Grade of C-|May not be taken concurrently
OR STAT 2101|Minimum Grade of C-|May not be taken concurrently
AND (PSY 1003|Minimum Grade of C-|May not be taken concurrently)
OR PSY 2168|Minimum Grade of C-|May not be taken concurrently
OR STAT 2102|Minimum Grade of C-|May not be taken concurrently
OR STAT 2103|Minimum Grade of C-|May not be taken concurrently).

PSY 3600. Advanced Topics in Health Psychology. 3 Credit Hours.
Special Topics course – topic varies by semester and/or by instructor. Topics offered are all specifically related to Health Psychology. NOTE: Check class schedule for topics offered each semester.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(PSY 1001|Minimum Grade of C-|May not be taken concurrently)
AND (PSY 2601|Minimum Grade of C-|May not be taken concurrently).

PSY 3601. Social Health Psychology. 3 Credit Hours.
Health psychology is concerned with the promotion and maintenance of health, the prevention of illness, as well as the treatment of illness. This course will focus on how social psychological factors affect one's general health, health behaviors, and well-being. Emphasis will be placed on theoretical analysis of social psychological phenomena as they apply to health psychology (e.g., social support and intimate relationships; stigma, prejudice, and discrimination; issues of race, gender, class; health attitudes and persuasion; and the self).
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(PSY 1001|Minimum Grade of C-|May not be taken concurrently)
AND (PSY 2601|Minimum Grade of C-|May not be taken concurrently).

PSY 3602. Clinical Neuropsychology. 3 Credit Hours.
This course will provide background on basic functional anatomy of the central nervous system and neuropsychological theories and methods. The primary focus of the course will be the clinical assessment and treatment of neuropsychological disorders, such as aphasia, agnosia, dementia, and others.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(PSY 1001|Minimum Grade of C-|May not be taken concurrently)
AND (PSY 2000 to 2999|Required Courses:1|Minimum Grade of C-|May not be taken concurrently).

PSY 3603. Clinical Applications of Health Psychology. 3 Credit Hours.
Health psychology is a subfield of psychology that applies psychological theories and techniques to health and wellness and the prevention and treatment of illness and disabling conditions. This advanced undergraduate course will provide an introduction to the clinical applications of health psychology using an interdisciplinary model. Readings, review of research, discussions and an interdisciplinary project will focus on integrating knowledge of the biological, behavioral, emotional, social and cognitive influences on health and health behaviors with the goal of understanding psychological approaches to the prevention and treatment of physical problems and enhancing overall wellness.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(PSY 1001|Minimum Grade of C-|May not be taken concurrently)
AND (PSY 2201|Minimum Grade of C-|May not be taken concurrently)
AND (PSY 2601|Minimum Grade of C-|May not be taken concurrently).
PSY 3615. History and Systems of Psychology. 3 Credit Hours.
The development of psychology from its origins to present. The conceptual bases of the current major psychological systems.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(PSY 1004|Minimum Grade of C-|May not be taken concurrently
OR PSY 1167|Minimum Grade of C-|May not be taken concurrently
OR SOC 1167|Minimum Grade of C-|May not be taken concurrently
OR MATH 1013|Minimum Grade of C-|May not be taken concurrently
OR STAT 2101|Minimum Grade of C-|May not be taken concurrently
AND (PSY 1003|Minimum Grade of C-|May not be taken concurrently
OR PSY 2168|Minimum Grade of C-|May not be taken concurrently
OR STAT 2102|Minimum Grade of C-|May not be taken concurrently
OR STAT 2103|Minimum Grade of C-|May not be taken concurrently
AND (PSY 2000 to 2999) Required Courses:1|Minimum Grade of C-|May not be taken concurrently).

PSY 3620. Topics in Psychology. 3 Credit Hours.
Special Topics course - topic varies by semester and/or by instructor. Topics offered are all from the major divisions of psychology: clinical, developmental, social and BBC (Brain, Behavior & Cognition). NOTE: Check class schedule for topics offered each semester.

Repeatability: This course may be repeated for additional credit.

Pre-requisites:
(PSY 1004|Minimum Grade of C-|May not be taken concurrently
OR PSY 1167|Minimum Grade of C-|May not be taken concurrently
OR SOC 1167|Minimum Grade of C-|May not be taken concurrently
OR MATH 1013|Minimum Grade of C-|May not be taken concurrently
OR STAT 2101|Minimum Grade of C-|May not be taken concurrently
AND (PSY 1003|Minimum Grade of C-|May not be taken concurrently
OR PSY 2168|Minimum Grade of C-|May not be taken concurrently
OR STAT 2102|Minimum Grade of C-|May not be taken concurrently
OR STAT 2103|Minimum Grade of C-|May not be taken concurrently
AND (PSY 1001|Minimum Grade of C-|May not be taken concurrently
OR PSY 1061|Minimum Grade of C-|May not be taken concurrently
OR PSY 1901|Minimum Grade of C-|May not be taken concurrently
OR PSY 1996|Minimum Grade of C-|May not be taken concurrently
OR PSY 1071|Minimum Grade of C-|May not be taken concurrently
AND (PSY 2000 to 2999) Required Courses:1|Minimum Grade of C-|May not be taken concurrently).

PSY 3785. Psychology Internship. 3 Credit Hours.
Work experience in clinical and industrial settings where psychologists are employed eight hours a week under the guidance of an on-site supervisor. Students meet for seminars, and write a paper under the guidance of a Temple coordinator.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits

Repeatability: This course may be repeated for additional credit.

Pre-requisites:
(PSY 1004|Minimum Grade of C-|May not be taken concurrently
OR PSY 1167|Minimum Grade of C-|May not be taken concurrently
OR SOC 1167|Minimum Grade of C-|May not be taken concurrently
OR MATH 1013|Minimum Grade of C-|May not be taken concurrently
OR STAT 2101|Minimum Grade of C-|May not be taken concurrently
AND (PSY 1003|Minimum Grade of C-|May not be taken concurrently
OR PSY 2168|Minimum Grade of C-|May not be taken concurrently
OR STAT 2102|Minimum Grade of C-|May not be taken concurrently
OR STAT 2103|Minimum Grade of C-|May not be taken concurrently
AND (PSY 1001|Minimum Grade of C-|May not be taken concurrently
OR PSY 1061|Minimum Grade of C-|May not be taken concurrently
OR PSY 1901|Minimum Grade of C-|May not be taken concurrently
OR PSY 1996|Minimum Grade of C-|May not be taken concurrently
OR PSY 1071|Minimum Grade of C-|May not be taken concurrently
AND (PSY 2000 to 2999) Required Courses:1|Minimum Grade of C-|May not be taken concurrently).
PSY 3787. Practicum. 3 Credit Hours.
Work experience in clinical and industrial settings where psychologists are employed eight hours a week under the guidance of an on-site supervisor. Students meet for seminars, and write a paper under the guidance of a Temple coordinator.
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(PSY 1004|Minimum Grade of C-|May not be taken concurrently
OR PSY 1167|Minimum Grade of C-|May not be taken concurrently
OR SOC 1167|Minimum Grade of C-|May not be taken concurrently
OR MATH 1013|Minimum Grade of C-|May not be taken concurrently
OR STAT 2101|Minimum Grade of C-|May not be taken concurrently
AND (PSY 1003|Minimum Grade of C-|May not be taken concurrently
OR PSY 2168|Minimum Grade of C-|May not be taken concurrently
OR STAT 2102|Minimum Grade of C-|May not be taken concurrently
OR STAT 2103|Minimum Grade of C-|May not be taken concurrently
AND (PSY 1001|Minimum Grade of C-|May not be taken concurrently
OR PSY 1061|Minimum Grade of C-|May not be taken concurrently
OR PSY 1901|Minimum Grade of C-|May not be taken concurrently
OR PSY 1996|Minimum Grade of C-|May not be taken concurrently
OR PSY 1071|Minimum Grade of C-|May not be taken concurrently
AND (PSY 2000 to 2999|Required Courses:1|Minimum Grade of C-|May not be taken concurrently).

PSY 3791. Collaborative Research I. 1 to 4 Credit Hour.
Faculty advisor needed for research in a particular area. For projects outside Temple University, approval must be obtained through a faculty member who will handle the liaison with the outside institution and ensure uniformity of requirements.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(PSY 3000 to 3999|Required Courses:1|Minimum Grade of C-|May not be taken concurrently
AND (PSY 2168|Minimum Grade of C-|May not be taken concurrently
OR PSY 1003|Minimum Grade of C-|May not be taken concurrently
OR STAT 2102|Minimum Grade of C-|May not be taken concurrently
OR STAT 2103|Minimum Grade of C-|May not be taken concurrently
AND (PSY 1004|Minimum Grade of C-|May not be taken concurrently
OR PSY 1167|Minimum Grade of C-|May not be taken concurrently
OR MATH 1013|Minimum Grade of C-|May not be taken concurrently
OR STAT 2101|Minimum Grade of C-|May not be taken concurrently
AND (PSY 1001|Minimum Grade of C-|May not be taken concurrently
OR PSY 1061|Minimum Grade of C-|May not be taken concurrently
OR PSY 1901|Minimum Grade of C-|May not be taken concurrently
OR PSY 1996|Minimum Grade of C-|May not be taken concurrently
OR PSY 1071|Minimum Grade of C-|May not be taken concurrently).

PSY 3891. Collaborative Research II. 1 to 4 Credit Hour.
Faculty advisor needed for research in a particular area. For projects outside Temple University, approval must be obtained through a faculty member who will handle the liaison with the outside institution and ensure uniformity of requirements.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(PSY 3000 to 3999|Required Courses:1|Minimum Grade of C-|May not be taken concurrently
AND (PSY 2168|Minimum Grade of C-|May not be taken concurrently
OR PSY 1003|Minimum Grade of C-|May not be taken concurrently
OR STAT 2102|Minimum Grade of C-|May not be taken concurrently
OR STAT 2103|Minimum Grade of C-|May not be taken concurrently
AND (PSY 1004|Minimum Grade of C-|May not be taken concurrently
OR PSY 1167|Minimum Grade of C-|May not be taken concurrently
OR MATH 1013|Minimum Grade of C-|May not be taken concurrently
OR STAT 2101|Minimum Grade of C-|May not be taken concurrently
AND (PSY 1001|Minimum Grade of C-|May not be taken concurrently
OR PSY 1061|Minimum Grade of C-|May not be taken concurrently
OR PSY 1901|Minimum Grade of C-|May not be taken concurrently
OR PSY 1996|Minimum Grade of C-|May not be taken concurrently
OR PSY 1071|Minimum Grade of C-|May not be taken concurrently).
PSY 3920. Honors Topics in Psychology. 3 Credit Hours.
Topic varies by semester and/or by instructor. Check course schedule for topics offered each semester.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(PSY 2168|Minimum Grade of C-|May not be taken concurrently
OR PSY 1003|Minimum Grade of C-|May not be taken concurrently
OR STAT 2102|Minimum Grade of C-|May not be taken concurrently
OR STAT 2103|Minimum Grade of C-|May not be taken concurrently)
AND (PSY 1004|Minimum Grade of C-|May not be taken concurrently
OR PSY 1167|Minimum Grade of C-|May not be taken concurrently
OR SOC 1167|Minimum Grade of C-|May not be taken concurrently
OR MATH 1013|Minimum Grade of C-|May not be taken concurrently
OR STAT 2101|Minimum Grade of C-|May not be taken concurrently)
AND (PSY 1001|Minimum Grade of C-|May not be taken concurrently
OR PSY 1061|Minimum Grade of C-|May not be taken concurrently
OR PSY 1901|Minimum Grade of C-|May not be taken concurrently
OR PSY 1996|Minimum Grade of C-|May not be taken concurrently
OR PSY 1071|Minimum Grade of C-|May not be taken concurrently).

PSY 3961. Honors Psychopharmacology. 3 Credit Hours.
This course will focus on how the brain works on a chemical level. It examines how behavior and environment can change functions of the brain, and how medications and drugs alter brain function.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(PSY 2501|Minimum Grade of C-|May not be taken concurrently
OR NSCI 2122|Minimum Grade of C-|May not be taken concurrently
AND (PSY 2168|Minimum Grade of C-|May not be taken concurrently
OR PSY 1003|Minimum Grade of C-|May not be taken concurrently
OR STAT 2102|Minimum Grade of C-|May not be taken concurrently
OR STAT 2103|Minimum Grade of C-|May not be taken concurrently)
AND (PSY 1004|Minimum Grade of C-|May not be taken concurrently
OR PSY 1167|Minimum Grade of C-|May not be taken concurrently
OR SOC 1167|Minimum Grade of C-|May not be taken concurrently
OR MATH 1013|Minimum Grade of C-|May not be taken concurrently
OR STAT 2101|Minimum Grade of C-|May not be taken concurrently)
AND (PSY 1001|Minimum Grade of C-|May not be taken concurrently
OR PSY 1061|Minimum Grade of C-|May not be taken concurrently
OR PSY 1901|Minimum Grade of C-|May not be taken concurrently
OR PSY 1996|Minimum Grade of C-|May not be taken concurrently
OR PSY 1071|Minimum Grade of C-|May not be taken concurrently).

PSY 3991. Honors Research II. 3 Credit Hours.
Topics arranged by student and instructor.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(PSY 2991|Minimum Grade of C-|May not be taken concurrently
AND (PSY 2168|Minimum Grade of C-|May not be taken concurrently
OR PSY 1003|Minimum Grade of C-|May not be taken concurrently
OR STAT 2102|Minimum Grade of C-|May not be taken concurrently
OR STAT 2103|Minimum Grade of C-|May not be taken concurrently)
AND (PSY 1004|Minimum Grade of C-|May not be taken concurrently
OR PSY 1167|Minimum Grade of C-|May not be taken concurrently
OR SOC 1167|Minimum Grade of C-|May not be taken concurrently
OR MATH 1013|Minimum Grade of C-|May not be taken concurrently
OR STAT 2101|Minimum Grade of C-|May not be taken concurrently)
AND (PSY 1001|Minimum Grade of C-|May not be taken concurrently
OR PSY 1061|Minimum Grade of C-|May not be taken concurrently
OR PSY 1901|Minimum Grade of C-|May not be taken concurrently
OR PSY 1996|Minimum Grade of C-|May not be taken concurrently
OR PSY 1071|Minimum Grade of C-|May not be taken concurrently).

PSY 4182. Independent Study in Cognitive Neuroscience I. 3 Credit Hours.
Students do cognitive neuroscience research in the laboratory.
Repeatability: This course may be repeated for additional credit.
PSY 4282. Independent Study in Cognitive Neuroscience II. 3 Credit Hours.
Students do cognitive neuroscience research in the laboratory.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
PSY 4182 | Minimum Grade of C- | May not be taken concurrently.

PSY 4496. Capstone: History of Psychology. 4 Credit Hours.
The focus of this course is on the conceptual bases of the major contemporary systems in psychology. The historical perspective allows students to understand the relationship between different fields in psychology. It encourages students to organize their knowledge, interpret, and question it. Students will work on projects related to their particular interests in psychology, especially as related to career goals. Projects will tie together the historical antecedents of the field of interest and its current status and practice. NOTE: This course is limited to psychology majors in their senior year.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

PSY 4596. Capstone: Fields of Psychology. 4 Credit Hours.
The focus of the course is a topic within one of the fields represented by the Programs in the Psychology Department (Developmental, Clinical, Social, Cognitive, Evolutionary/Comparative, Learning and Behavior Analysis, Neuropsychology, Sensation and Perception). The course might deal with the history of the field, a signature topic in the field, or a topic of considerable contemporary importance. Students selecting this capstone should be planning a career in the field represented. The course will emphasize integration of knowledge in the field and professional preparation. NOTE: This course is limited to psychology majors in their senior year. Check class schedules for semesters offered.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

PSY 4696. Capstone in Psychology. 3 Credit Hours.
The focus of this capstone is a topic important to many fields in psychology. Different topics will be covered in different semesters. The course will allow students to see the linkages between concepts and theories from very different fields and to see how psychology can be applied to problems in many spheres of life. The emphasis on synthesis and application makes this capstone particularly useful for students planning graduate work in psychology and those unsure of the direction they would like to take in psychology. NOTE: This course is limited to psychology majors in their senior year.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
PSY 3096 | Minimum Grade of C- | May not be taken concurrently
OR PSY 2196 | Minimum Grade of C- | May not be taken concurrently.

PSY 4791. Collaborative Research III. 1 to 4 Credit Hour.
Faculty advisor needed for research in a particular area. For projects outside Temple University, approval must be obtained through a faculty member who will handle the liaison with the outside institution and ensure uniformity of requirements.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(PSY 3000 to 3999 | Required Courses: 1 | Minimum Grade of C- | May not be taken concurrently)
AND (PSY 1004 | Minimum Grade of C- | May not be taken concurrently
OR PSY 1167 | Minimum Grade of C- | May not be taken concurrently
OR SOC 1167 | Minimum Grade of C- | May not be taken concurrently
OR MATH 1013 | Minimum Grade of C- | May not be taken concurrently
OR STAT 2101 | Minimum Grade of C- | May not be taken concurrently
AND (PSY 1003 | Minimum Grade of C- | May not be taken concurrently
OR PSY 2168 | Minimum Grade of C- | May not be taken concurrently
OR STAT 2102 | Minimum Grade of C- | May not be taken concurrently
OR STAT 2103 | Minimum Grade of C- | May not be taken concurrently
AND (PSY 1001 | Minimum Grade of C- | May not be taken concurrently
OR PSY 1061 | Minimum Grade of C- | May not be taken concurrently
OR PSY 1901 | Minimum Grade of C- | May not be taken concurrently
OR PSY 1996 | Minimum Grade of C- | May not be taken concurrently
OR PSY 1071 | Minimum Grade of C- | May not be taken concurrently).

PSY 4796. Capstone: Research. 4 Credit Hours.
The focus of this capstone is research and the student works with an individual faculty member on a research project. Permission of a faculty sponsor is required. This capstone is best suited for students with well developed interests who plan to go on to graduate or professional school. NOTE: This course is limited to psychology majors in their senior year with a GPA of 3.5 in psychology and 3.2 overall.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.
PSY 4891. Collaborative Research IV. 1 to 4 Credit Hour.
Faculty advisor needed for research in a particular area. For projects outside Temple University, approval must be obtained through a faculty member who will handle the liaison with the outside institution and ensure uniformity of requirements.
**Repeatability:** This course may be repeated for additional credit.

**Pre-requisites:**
(PSY 3000 to 3999|Required Courses:1|Minimum Grade of C-|May not be taken concurrently)
AND (PSY 1004|Minimum Grade of C-|May not be taken concurrently
OR PSY 1167|Minimum Grade of C-|May not be taken concurrently
OR SOC 1167|Minimum Grade of C-|May not be taken concurrently
OR MATH 1013|Minimum Grade of C-|May not be taken concurrently
OR STAT 2101|Minimum Grade of C-|May not be taken concurrently)
AND (PSY 1003|Minimum Grade of C-|May not be taken concurrently
OR PSY 2168|Minimum Grade of C-|May not be taken concurrently
OR STAT 2102|Minimum Grade of C-|May not be taken concurrently
OR STAT 2103|Minimum Grade of C-|May not be taken concurrently)
AND (PSY 1001|Minimum Grade of C-|May not be taken concurrently
OR PSY 1061|Minimum Grade of C-|May not be taken concurrently
OR PSY 1901|Minimum Grade of C-|May not be taken concurrently
OR PSY 1996|Minimum Grade of C-|May not be taken concurrently
OR PSY 1071|Minimum Grade of C-|May not be taken concurrently).

PSY 4991. Honors Research III. 3 Credit Hours.
Topics arranged by student and instructor.
**Cohort Restrictions:** Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
**Course Attributes:** HO
**Repeatability:** This course may be repeated for additional credit.

PSY 4996. Honors Capstone. 4 Credit Hours.
This capstone is the final class of a four semester honors program in psychology. At this point students have designed a research project and collected and analyzed their data. Here the students write their research in APA style and prepare to submit these manuscripts for publication. Each student participates in a poster session attended by the psychology faculty and other invited guests. NOTE: This course is limited to psychology majors in their senior year who have completed the first three semesters of the psychology honors program.
**Cohort Restrictions:** Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
**Course Attributes:** HO, WI
**Repeatability:** This course may not be repeated for additional credits.

PSY 4998. Honors Research Problems. 4 Credit Hours.
Topics arranged by student and instructor.
**Cohort Restrictions:** Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
**Course Attributes:** HO, WI
**Repeatability:** This course may not be repeated for additional credits.

Public Health (PBHL)

**Courses**

PBHL 1101. Introduction to Public Health. 3 Credit Hours.
This course introduces students to the concepts and models of public health using a historical perspective on the contribution and roles of public health in society. The course introduces the contributions of the five core public health disciplines: epidemiology, biostatistics, environmental health, behavioral sciences/health education, and health services administration. Students learn to identify prevention strategies such as vaccination, screening, counseling, and education interventions and a range of health promotion and disease prevention modalities including environmental-occupational, legal, and policy approaches. Particular attention is directed to addressing health disparities and the role of cultural competency in delivering effective public health services. Public Health majors, minors or students studying in the Public Health concentration must complete this course with a C or better.
**Level Registration Restrictions:** May not be enrolled in one of the following: Graduate
**Repeatability:** This course may not be repeated for additional credits.
PBHL 1103. International Health. 3 Credit Hours.
This course examines avenues of international cooperation in health and explores the most significant health problems and resources in developing and developed countries by focusing on international differences in health status, social/economic/political factors in health care, varied approaches to providing health services, the role of health workers, and the involvement of foundations and multilateral and bilateral agencies. Public Health majors, minors or students studying in the Public Health concentration must complete this course with a C or better. NOTE: This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Level Registration Restrictions: May not be enrolled in one of the following: Graduate
Course Attributes: IS
Repeatability: This course may not be repeated for additional credits.

PBHL 1104. Nutrition and Health. 3 Credit Hours.
This course examines food habits and nutritional needs of young adults. It considers nutritional advertisements, food faddism, fad diets, deficiency diseases, and evaluation of diets. Public Health majors, minors or students studying in the Public Health concentration must complete this course with a C or better.

Level Registration Restrictions: May not be enrolled in one of the following: Graduate
Repeatability: This course may not be repeated for additional credits.

PBHL 1105. Society, Drug, and Alcohol Perspectives. 3 Credit Hours.
This course examines the current use of alcohol and drugs in society and the effects of one's experience with psychoactive chemicals. This course includes historical, physiological, psychological, sociological, and philosophical perspectives. Public Health majors, minors or students studying in the Public Health concentration must complete this course with a C or better.

Level Registration Restrictions: May not be enrolled in one of the following: Graduate
Repeatability: This course may not be repeated for additional credits.

PBHL 1106. Human Sexuality. 3 Credit Hours.
This course explores sexuality and personal lifestyle, including human sexuality as a dimension of health personality; sex roles and sexual identity, the physiological bases of the sex drive, sexual function, and sexual response; and psychological factors related to sexual development and expression. Public Health majors, minors or students studying in the Public Health concentration must complete this course with a C or better.

Level Registration Restrictions: May not be enrolled in one of the following: Graduate
Repeatability: This course may not be repeated for additional credits.

PBHL 1201. Contemporary Health Issues. 3 Credit Hours.
This course explores the basic concepts of health and how they relate to our lifestyles. The student will acquire extensive knowledge of injuries and prevention, cardiovascular disease, cancer, human reproduction, human sexuality and communicable diseases including sexually transmitted diseases and HIV/AIDS. Public Health majors, minors or students studying in the Public Health concentration must complete this course with a C or better.

Level Registration Restrictions: May not be enrolled in one of the following: Graduate
Repeatability: This course may not be repeated for additional credits.

PBHL 1903. Honors Global Health. 3 Credit Hours.
This course examines avenues of international cooperation in health and explores the most significant health problems and resources in developing and developed countries by focusing on international differences in health status, social/economic/political factors in health care, varied approaches to providing health services, the role of health workers, and the involvement of foundations and multilateral and bilateral agencies. Public Health majors, minors or students studying in the Public Health concentration must complete this course with a C or better. NOTE: This course is restricted to Honors students only.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Public Health
Level Registration Restrictions: May not be enrolled in one of the following: Graduate
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.

PBHL 2101. Disease Prevention and Control. 3 Credit Hours.
This course explores selected transactions between individual, environment, and disease agents, and their influence on human diseases, human nature, and human environment. Public Health majors, minors or students studying in the Public Health concentration must complete this course with a C or better.

Level Registration Restrictions: May not be enrolled in one of the following: Graduate
Repeatability: This course may not be repeated for additional credits.
PBHL 2102. Environmental Health. 3 Credit Hours.
This introductory course incorporates not only the common concepts associated with environmental health (such as population dynamics, air pollution, water pollution, and land pollution) but also emerging and controversial issues associated with environmental threats to human health, such as emerging diseases, global warming, and biological and chemical weapons. Emphasis is on biological, chemical, and physical sources of exposures, the effects on human health, and the methods of limiting exposures and effects. Public Health majors, minors or students studying in the Public Health concentration must complete this course with a C or better.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Public Health
Level Registration Restrictions: May not be enrolled in one of the following: Graduate
Repeatability: This course may not be repeated for additional credits

Pre-requisites:
HRPR 1001|Minimum Grade of C|May be taken concurrently
OR PBHL 1101|Minimum Grade of C|May be taken concurrently
OR PBH1 Y|May not be taken concurrently.

PBHL 2201. Health Communication. 3 Credit Hours.
Communication processes and effects are examined from the perspective of interpersonal, intrapersonal, organizational and mass communication. The impact of these types of communication in the health care arena is also discussed. Public Health majors, minors or students studying in the Public Health concentration must complete this course with a C or better.

Level Registration Restrictions: May not be enrolled in one of the following: Graduate
Repeatability: This course may not be repeated for additional credits.

PBHL 2202. Man-Made Disasters: Radiological, Chemical & Biological Terrorism. 3 Credit Hours.
This course is designed to introduce students to the concepts and models of public health preparedness, mitigation, and evaluation in the context of man-made disasters, including radiological, chemical, and biological incidents. The course addresses identified core competencies of emergency preparedness for public health professionals that include: disaster management, risk assessment, risk communication, governmental resources, functional roles, surveillance, and preparedness evaluation. Man-made disasters will be looked at in a historical, environmental, and psychological context in order to elucidate the role of public health in man-made disaster preparedness and evaluation. In addition the role of cultural competency and the needs of special populations will be addressed. Public perception of risk and media views of man-made disasters will be explored. Public Health majors, minors or students studying in the Public Health concentration must complete this course with a C or better. NOTE: This course is only offered online.

Level Registration Restrictions: May not be enrolled in one of the following: Graduate
Repeatability: This course may not be repeated for additional credits.

PBHL 2203. AIDS and Society. 3 Credit Hours.
This course offers the student the opportunity for an in-depth study of one of the most critical public health issues facing society today. Topics include: current HIV/AIDS information as well as exploration of related issues including sexuality, homophobia, and discrimination, research, international/political implications, and worldwide economic effects. Public Health majors, minors or students studying in the Public Health concentration must complete this course with a C or better.

Level Registration Restrictions: May not be enrolled in one of the following: Graduate
Repeatability: This course may not be repeated for additional credits.

PBHL 2204. Diet and Weight Management. 3 Credit Hours.
This course examines modern techniques for weight management and weight loss. Emphasis is on participation in and understanding of programs for weight management, nutrition management, and exercise management. Public Health majors, minors or students studying in the Public Health concentration must complete this course with a C or better.

Level Registration Restrictions: May not be enrolled in one of the following: Graduate
Repeatability: This course may not be repeated for additional credits

Pre-requisites:
PBHL 1104|Minimum Grade of C|May not be taken concurrently
OR PBH2 Y|May not be taken concurrently.

PBHL 2205. Coping with Life Stress Workshop. 3 Credit Hours.
This course focuses on the impact of poorly managed stress on physical and emotional health. Coping skills and strategies for effective stress management are reviewed. Individual stress profiles are developed, emphasizing a holistic view of the individual in a rapidly changing society. Public Health majors, minors or students studying in the Public Health concentration must complete this course with a C or better. NOTE: Lab fee required.

Level Registration Restrictions: May not be enrolled in one of the following: Graduate
Repeatability: This course may not be repeated for additional credits.
PBHL 2206. Holistic Health & Aging. 3 Credit Hours.
Complementary and alternative medicine covers a broad range of healing philosophies, approaches, and therapies. Some are based upon religious or cultural traditions; others are driven by anti-professionalism, and still others, such as chiropractic, are alternative professions, reimbursed and regulated like allopathic medicine, but based upon alternative theories of illness and health. The purpose of this class is to describe the basic principles and practices of a number of alternative therapies. Public Health majors, minors or students studying in the Public Health concentration must complete this course with a C or better.

Level Registration Restrictions: May not be enrolled in one of the following: Graduate
Repeatability: This course may not be repeated for additional credits.

PBHL 2207. Principles of Emergency Management: A Public Health Perspective. 3 Credit Hours.
This course is designed to introduce students to the concepts and models of public health preparedness and response for all hazards emergency management. It will enable health care and allied health professionals, public health professionals, and emergency responders to work together to plan and respond effectively to both natural and man-made disasters. The course will introduce students to the identified core competencies of emergency health preparedness for public health professionals that include functional roles, communication, resource identification, problem-solving, and evaluation. The issues of mental health and special populations will be introduced in an emergency management context. Students will utilize problem-based learning by analyzing actual disaster events and applying the theories, principles, and practices of mitigation, preparedness, response, and recovery. In addition, students will learn about the importance of personal emergency preparedness, which will include the development of their own emergency plan. Public Health majors, minors or students studying in the Public Health concentration must complete this course with a C or better.

Level Registration Restrictions: May not be enrolled in one of the following: Graduate
Repeatability: This course may not be repeated for additional credits.

PBHL 2208. Natural Disasters: Response & Recovery. 3 Credit Hours.
This course is designed to introduce students to the concepts and models of public health response and recovery in the context of natural disasters. It will assist health care and allied health professionals, public health professionals, and emergency responders to work together to respond effectively and to facilitate recovery in a natural disaster. The course will enable students to meet identified core competencies of emergency health preparedness for public health professionals that include functional roles, resource identification, problem solving, and appropriate response. Students will utilize problem-based learning by analyzing actual disaster events and applying the theories, principles, and practices of response and recovery. In addition, students will learn about the issues faced by special populations and how to address these special needs in natural disaster response and recovery. Public Health majors, minors or students studying in the Public Health concentration must complete this course with a C or better.

Level Registration Restrictions: May not be enrolled in one of the following: Graduate
Repeatability: This course may not be repeated for additional credits.

PBHL 2209. Violence and Injury Prevention. 3 Credit Hours.
This course presents the public health perspective on violence and both intentional and unintentional injury. Course topics include information regarding the incidence of injury-related morbidity and mortality in the United States, as well as strategies for the prevention of injury. Public Health majors, minors or students studying in the Public Health concentration must complete this course with a C or better.

Level Registration Restrictions: May not be enrolled in one of the following: Graduate
Repeatability: This course may not be repeated for additional credits.

PBHL 2211. Communication in Health Care Settings. 3 Credit Hours.
Communication processes, issues and problems in health care settings, particularly in the context of changes in health care organizations are covered. Topics include communication between health care consumers and providers, in interdisciplinary health care teams, in self-help and support groups, and across ethnic groups. Public Health majors, minors or students studying in the Public Health concentration must complete this course with a C or better.

Level Registration Restrictions: May not be enrolled in one of the following: Graduate
Repeatability: This course may not be repeated for additional credits.

PBHL 2212. Advanced Human Sexuality. 3 Credit Hours.
This course is an advanced examination of human sexuality as it relates to both sexuality and personal lifestyle. Psychological, sociocultural, political, and biological issues surrounding sex and sexuality are examined in-depth. Public Health majors, minors or students studying in the Public Health concentration must complete this course with a C or better.

Level Registration Restrictions: May not be enrolled in one of the following: Graduate
Repeatability: This course may not be repeated for additional credits

Pre-requisites:
PBHL 1106 Minimum Grade of C May not be taken concurrently
OR PBH4 Y May not be taken concurrently.

PBHL 2213. Trauma and Coping. 3 Credit Hours.
This course provides a general overview of issues surrounding cognitive and affective strategies to help students become aware of trauma-related coping behaviors. Common reactions to trauma would cover emergency situations, on-going trauma and death, dying, and bereavement. Public Health majors, minors or students studying in the Public Health concentration must complete this course with a C or better.

Level Registration Restrictions: May not be enrolled in one of the following: Graduate
Repeatability: This course may not be repeated for additional credits.
PBHL 2214. Power, Politics & Payments in U.S. Healthcare. 3 Credit Hours.
The course provides an overview of the finances and infrastructure on which the U.S. health care system is based as well as a basic overview of the health policy process. Students will learn about private and public health insurance, including Medicare, Medicaid, and SCHIP, as well as discuss the growing problem of uninsured populations. In addition, students will explore the policy process behind our current health system, focusing on the role of the legislative, executive, and judicial systems, as well as special interest groups and the role of public opinion in health policy. Public Health majors, minors or students studying in the Public Health concentration must complete this course with a C or better.
**Level Registration Restrictions:** May not be enrolled in one of the following: Graduate
**Repeatability:** This course may not be repeated for additional credits.

PBHL 2215. Special Populations: Strategic Community Outreach. 3 Credit Hours.
This course is designed to introduce students to the concepts and models of strategic community outreach as it pertains to the special population communities, within the context of emergency management planning, response, and recovery. It assists health care and allied health professionals, public health professionals, and emergency responders to understand how accessible information and technology is part of the community outreach strategy. The course enables students to meet identified core competencies of emergency preparedness for public health and emergency professionals, which include functional roles, resource identification, problem-solving, and appropriate response. Students utilize problem-based learning by analyzing actual and scenario based disaster events and applying the theories, principles, and practices of strategic community outreach pertaining to emergency response and recovery. In addition, students learn about the issues faced by special population communities and how to address these special needs in all hazard response and recovery. Public Health majors, minors or students studying in the Public Health concentration must complete this course with a C or better.
**Level Registration Restrictions:** May not be enrolled in one of the following: Graduate
**Repeatability:** This course may not be repeated for additional credits
**Pre-requisites:**
PBHL 2207 | Minimum Grade of C | May not be taken concurrently.

PBHL 2216. Ethnicity, Culture and Health. 3 Credit Hours.
Students become familiar with the key concepts in public health literature on race and ethnicity and how various aspects of culture influence health. The course also examines how prejudice and discrimination, and neighborhood and community context may contribute to health disparities. Public Health majors, minors or students studying in the Public Health concentration must complete this course with a C or better.
**Field of Study Restrictions:** Must be enrolled in one of the following Fields of study: Public Health
**Level Registration Restrictions:** May not be enrolled in one of the following: Graduate
**Repeatability:** This course may not be repeated for additional credits.

PBHL 2219. Biostatistics and Public Health. 3 Credit Hours.
This course is designed to provide students with a solid background in applied biostatistics in the field of public health. Specifically, the course includes an introduction to the application of biostatistics and a discussion of key statistical tests. Appropriate techniques to measure the extent of disease, the development of disease, and comparisons between groups in terms of the extent and development of disease are discussed. Techniques for summarizing data collected in samples are presented along with limited discussion of probability theory. Procedures for estimation and hypothesis testing are presented for means, for proportions, and for comparisons of means and proportions in two or more groups. Multivariable statistical methods are introduced but not covered extensively in this undergraduate course. Public Health majors, minors or students studying in the Public Health concentration must complete this course with a C or better.
**Level Registration Restrictions:** May not be enrolled in one of the following: Graduate
**Repeatability:** This course may not be repeated for additional credits.

PBHL 2304. HEART Peer Educator Training. 3 Credit Hours.
Peer educators are Temple University students who focus on promoting campus social and educational environments consisting of lower-risk choices, which reflect the attitudes, behaviors, and values of healthy lifestyles. The peer educators are trained to facilitate on-campus as well as off-campus workshops and programs that deal with sexual health, nutrition, and fitness, stress management, tobacco, and other general wellness issues. This class is meant only for those students training to be HEART peer educators. Public Health majors, minors or students studying in the Public Health concentration must complete this course with a C or better. **NOTE:** This course is for HEART Peer Educators only. Prior to fall 2010, the course title was “Health Teaching Techniques for Peer Educators.”
**Level Registration Restrictions:** May not be enrolled in one of the following: Graduate
**Repeatability:** This course may not be repeated for additional credits.
PBHL 3101. Epidemiology. 3 Credit Hours.
This course explores the application of epidemiology practices in public health including using and interpreting data, calculating measures of health status, and identifying various research study designs used in epidemiologic studies. Additionally, the course will apply the steps in epidemiological disease investigation in order to become familiar with the methodology used in studying an epidemic outbreak. Public Health majors, minors or students studying in the Public Health concentration must complete this course with a C or better.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Public Health

Level Registration Restrictions: May not be enrolled in one of the following: Graduate

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(KINS 1223|Minimum Grade of C-|May not be taken concurrently)
AND (KINS 1224|Minimum Grade of C-|May not be taken concurrently)
AND (HRPR 1001|Minimum Grade of C|May not be taken concurrently)
OR PBHL 1101|Minimum Grade of C|May not be taken concurrently
OR PBH1 Y|May not be taken concurrently
AND (PBHL 1104|Minimum Grade of C|May not be taken concurrently)
OR PBH2 Y|May not be taken concurrently
AND (PBHL 1105|Minimum Grade of C|May not be taken concurrently)
OR PBH3 Y|May not be taken concurrently
AND (PBHL 1106|Minimum Grade of C|May not be taken concurrently)
OR PBH4 Y|May not be taken concurrently
AND (PBHL 2219|Minimum Grade of C|May not be taken concurrently).

PBHL 3102. Research Methods. 3 Credit Hours.
This course will cover the basic concepts of public health research, including study designs, human subjects protection, quantitative and qualitative research techniques, and data collection. These concepts will be applied to public health settings and topics. Public Health majors, minors or students studying in the Public Health concentration must complete this course with a C or better.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Public Health

Level Registration Restrictions: May not be enrolled in one of the following: Graduate

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(KINS 1223|Minimum Grade of C-|May not be taken concurrently)
AND (KINS 1224|Minimum Grade of C-|May not be taken concurrently)
AND (HRPR 1001|Minimum Grade of C|May not be taken concurrently)
OR PBHL 1101|Minimum Grade of C|May not be taken concurrently
OR PBH1 Y|May not be taken concurrently
AND (PBHL 1104|Minimum Grade of C|May not be taken concurrently)
OR PBH2 Y|May not be taken concurrently
AND (PBHL 1105|Minimum Grade of C|May not be taken concurrently)
OR PBH3 Y|May not be taken concurrently
AND (PBHL 1106|Minimum Grade of C|May not be taken concurrently)
OR PBH4 Y|May not be taken concurrently
AND (PBHL 2219|Minimum Grade of C|May not be taken concurrently).

PBHL 3103. Counseling Techniques for Health Professionals. 3 Credit Hours.
This course introduces counseling techniques used by health professionals working with individuals and groups. Public Health majors, minors or students studying in the Public Health concentration must complete this course with a C or better.

Level Registration Restrictions: May not be enrolled in one of the following: Graduate

Repeatability: This course may not be repeated for additional credits.
PBHL 3104. Professional Seminar in Public Health I. 3 Credit Hours.
This course is an introduction to various professional issues including, but not limited to, multiculturalism, professional organizations, and ethics as well as professional behavior in public health settings. Public Health majors, minors or students studying in the Public Health concentration must complete this course with a C or better. NOTE: This course should only be taken the semester before going out on the first internship, PBHL 3185.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Public Health
Level Registration Restrictions: May not be enrolled in one of the following: Graduate
Co-requisites: PBHL 3105
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(HRPR 2103|Minimum Grade of C|May be taken concurrently)
AND (KINS 1223|Minimum Grade of C|May not be taken concurrently)
AND (KINS 1224|Minimum Grade of C|May not be taken concurrently)
AND (HRPR 1001|Minimum Grade of C|May not be taken concurrently)
OR PBHL 1101|Minimum Grade of C|May not be taken concurrently
OR PBH1 Y|May not be taken concurrently
AND (PBHL 1104|Minimum Grade of C|May not be taken concurrently)
OR PBH2 Y|May not be taken concurrently
AND (PBHL 1105|Minimum Grade of C|May not be taken concurrently)
OR PBH3 Y|May not be taken concurrently
AND (PBHL 1106|Minimum Grade of C|May not be taken concurrently)
OR PBH4 Y|May not be taken concurrently
AND (PBHL 2101|Minimum Grade of C|May be taken concurrently)
OR PBH5 Y|May not be taken concurrently
AND (PBHL 2102|Minimum Grade of C|May be taken concurrently)
OR PBH6 Y|May not be taken concurrently
AND (PBHL 2219|Minimum Grade of C|May not be taken concurrently)
AND (PBHL 3101|Minimum Grade of C|May be taken concurrently).

PBHL 3105. The Teaching-Learning Process. 3 Credit Hours.
The health teaching process explores the science and art of teaching. Included in this course are the beginning skills that begin the development of being an effective facilitator/teacher/presenter in a variety of settings: planning, teaching and evaluating lessons, and writing measurable objectives. This course focuses on learning and applying various teaching methods and strategies to the content of the discipline and practicing these skills in a controlled environment with high school students from an alternative high school from the School District of Philadelphia. Public Health majors, minors or students studying in the Public Health concentration must complete this course with a C or better. NOTE: This course includes a weekly one-hour practicum.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Public Health
Level Registration Restrictions: May not be enrolled in one of the following: Graduate
Co-requisites: PBHL 3104
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(HRPR 2103|Minimum Grade of C|May be taken concurrently)
AND (KINS 1223|Minimum Grade of C|May not be taken concurrently)
AND (KINS 1224|Minimum Grade of C|May not be taken concurrently)
AND (HRPR 1001|Minimum Grade of C|May not be taken concurrently)
OR PBHL 1101|Minimum Grade of C|May not be taken concurrently
OR PBH1 Y|May not be taken concurrently
AND (PBHL 1104|Minimum Grade of C|May not be taken concurrently)
OR PBH2 Y|May not be taken concurrently
AND (PBHL 1105|Minimum Grade of C|May not be taken concurrently)
OR PBH3 Y|May not be taken concurrently
AND (PBHL 1106|Minimum Grade of C|May not be taken concurrently)
OR PBH4 Y|May not be taken concurrently
AND (PBHL 2101|Minimum Grade of C|May be taken concurrently)
OR PBH5 Y|May not be taken concurrently
AND (PBHL 2102|Minimum Grade of C|May be taken concurrently)
OR PBH6 Y|May not be taken concurrently
AND (PBHL 2219|Minimum Grade of C|May not be taken concurrently)
AND (PBHL 3101|Minimum Grade of C|May be taken concurrently).
PBHL 3185. Internship I. 4 Credit Hours.
This course is a field placement experience at an agency in which students are involved with ongoing public health projects and programs. Public Health majors, minors or students studying in the Public Health concentration must complete this course with a C or better.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Public Health

Level Registration Restrictions: May not be enrolled in one of the following: Graduate

Repeatability: This course may be repeated for additional credit.

Pre-requisites:
(CIS 1055|Minimum Grade of C-|May not be taken concurrently)
AND (KINS 1223|Minimum Grade of C-|May not be taken concurrently)
AND (KINS 1224|Minimum Grade of C-|May not be taken concurrently)
AND (HRPR 1001|Minimum Grade of C|May not be taken concurrently)
OR PBHL 1101|Minimum Grade of C|May not be taken concurrently)
OR PBH1 Y|May not be taken concurrently)
AND (PBHL 1104|Minimum Grade of C|May not be taken concurrently)
OR PBH2 Y|May not be taken concurrently)
AND (PBHL 1105|Minimum Grade of C|May not be taken concurrently)
OR PBH3 Y|May not be taken concurrently)
AND (PBHL 1106|Minimum Grade of C|May not be taken concurrently)
OR PBH4 Y|May not be taken concurrently)
AND (PBHL 2219|Minimum Grade of C|May not be taken concurrently)
AND (PBHL 3101|Minimum Grade of C|May be taken concurrently)
AND (PBHL 3496|Minimum Grade of C|May not be taken concurrently).

PBHL 3208. International Health Study Abroad. 6 Credit Hours.
This course involves study abroad in Costa Rica related to public health. Public Health majors, minors or students studying in the Public Health concentration must complete this course with a C or better.

Level Registration Restrictions: May not be enrolled in one of the following: Graduate

Co-requisites: PBHL 4391

Repeatability: This course may not be repeated for additional credits.

PBHL 3382. Independent Study in Public Health. 1 to 6 Credit Hour.
Students in this course pursue supervised independent projects on issues related to public health. Public Health majors, minors or students studying in the Public Health concentration must complete this course with a C or better. NOTE: Registration must be preapproved by faculty before registration.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Public Health

Level Registration Restrictions: May not be enrolled in one of the following: Graduate

Repeatability: This course may be repeated for additional credit.

PBHL 3496. Introduction to Public Health Programs. 3 Credit Hours.
An overview of public health programs, functions, services, and interactions within and between public and private sector agencies on local, state, and national levels. Emphasis is given to completing needs assessments of community issues and designing innovative community programs to meet consumer needs. The course includes writing a fictional grant proposal. Public Health majors, minors or students studying in the Public Health concentration must complete this course with a C or better. NOTE: This course is the first part of two semester, writing intensive capstone. Precedes PBHL 3596.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Public Health

Level Registration Restrictions: May not be enrolled in one of the following: Graduate

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(KINS 1223|Minimum Grade of C-|May not be taken concurrently)
AND (KINS 1224|Minimum Grade of C-|May not be taken concurrently)
AND (HRPR 1001|Minimum Grade of C|May not be taken concurrently)
OR PBHL 1101|Minimum Grade of C|May not be taken concurrently)
OR PBH1 Y|May not be taken concurrently)
AND (PBHL 1104|Minimum Grade of C|May not be taken concurrently)
OR PBH2 Y|May not be taken concurrently)
AND (PBHL 1105|Minimum Grade of C|May not be taken concurrently)
OR PBH3 Y|May not be taken concurrently)
AND (PBHL 1106|Minimum Grade of C|May not be taken concurrently)
OR PBH4 Y|May not be taken concurrently)
AND (PBHL 2219|Minimum Grade of C|May not be taken concurrently).
PBHL 3596. Public Health Program Administration. 3 Credit Hours.
A continuation of Introduction to Public Health Programs, this course emphasizes understanding the steps necessary to market and administer a successful health program. Public Health majors, minors or students studying in the Public Health concentration must complete this course with a C or better.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Public Health
Level Registration Restrictions: May not be enrolled in one of the following: Graduate
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
PBHL 3496|Minimum Grade of C|May not be taken concurrently.

PBHL 4185. Internship II. 8 Credit Hours.
This is a semester-long field-based placement where students apply academic learning to demonstrate competencies associated with entry-level practice. Public Health majors, minors or students studying in the Public Health concentration must complete this course with a C or better.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Public Health
Level Registration Restrictions: May not be enrolled in one of the following: Graduate
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(PBHL 3185|Minimum Grade of C|May not be taken concurrently
AND PBHL 3596|Minimum Grade of C|May not be taken concurrently).

PBHL 4391. Directed Research in Public Health. 3 Credit Hours.
This course involves study abroad in Costa Rica related to public health. Public Health majors, minors or students studying in the Public Health concentration must complete this course with a C or better.
Level Registration Restrictions: May not be enrolled in one of the following: Graduate
Co-requisites: PBHL 3208
Repeatability: This course may be repeated for additional credit.

PBHL 4991. Honors Directed Research: Prevention Research in Public Health. 3 Credit Hours.
This course is designed to provide students with an opportunity to participate in a project carried out by a research team as a research assistant. Students participate in a range of activities on the project, depending on their schedules, their aptitude with particular tasks, and the project needs at various times. Public Health majors, minors or students studying in the Public Health concentration must complete this course with a C or better. NOTE: Registration must be preapproved by faculty.
Level Registration Restrictions: May not be enrolled in one of the following: Graduate
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.

Real Estate (RE)

Courses

RE 3501. Real Estate Fundamentals. 3 Credit Hours.
A survey of real estate transactions, financing, marketing, land use control, and theories of urban development. Designed to acquaint the student with the language, principles, and laws that govern the real estate enterprise. The underlying concepts of land, property rights and the means, methods, and laws that govern the conveyance of these rights. NOTE: This course is required for the Real Estate Licensing examination.
Repeatability: This course may not be repeated for additional credits.

RE 3502. Real Estate Practice. 3 Credit Hours.
Required for the Real Estate Licensing examination, this course will explore the laws relating to the creation and transfer of interests in land including the Agreement of Sale, deeds and leases. It will also discuss the recording system for deeds, mortgages, title searches and title insurance, financing, the appraisal process, closing procedures for residential and commercial real estate, the Real Estate Settlement Procedures Act, listing agreements, and the licensing law for real estate brokers and salespersons. NOTE: This course is required for the Real Estate Licensing examination.
Repeatability: This course may not be repeated for additional credits.
Religion (REL)

Courses

REL 0802. Race & Identity in Judaism. 3 Credit Hours.
Investigate the relationship between race and Judaism from Judaism's early period through today, looking both at how Jews have understood their own racial identity and how others have understood Jews' racial identity. You will explore the idea of racial identity in Judaism in order to examine the complex network of connections between racism and anti-Semitism, as you read primary and secondary texts in Jewish philosophy and history and in the study of race and racism. We hope to illuminate these complex issues as well as to engage with them on a personal and political level, examining the relationship between issues of race, religion, identity, and social justice and injustice, and inquiring into how we, as informed citizens in a global society, can affect change for the better. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: Jewish Studies 0802/0902 or Religion 0902.

Course Attributes: GD

Repeatability: This course may not be repeated for additional credits.

REL 0803. The Art of Sacred Space. 3 Credit Hours.
Where do people go to communicate with the divine? Explore with us where and how people of the many different cultures of the Greco-Roman world communicated with their gods. Why are graves and groves considered sacred space? When is a painting or sculpture considered sacred? Whom do the gods allow to enter a sacred building? Can a song be a prayer or a curse? How can dance sway the gods? Why do gods love processions and the smell of burning animals? The journey through sacred space in Greco-Roman antiquity will engage your senses and your intellect, and will reveal a mindset both ancient and new. NOTE: This course fulfills the Arts (GA) requirement for students under GenEd and Arts (AR) for students under Core. Students cannot receive credit for this course if they have successfully completed GRC 0803/0903, or ARTH 0803.

Course Attributes: GA

Repeatability: This course may not be repeated for additional credits.

REL 0811. Asian Behavior & Thought. 3 Credit Hours.
We incessantly engage ourselves in doing things. We are beings-at-doing. We define ourselves by the kind of actions we perform. How we act or conduct ourselves is shaped by the kind of self we construct for ourselves. And that self is shaped by the society into which we happen to be born.

Self-identity, which is socially and culturally constructed by our experiences and interactions with others, carries a personal as well as an interpersonal meaning. Learn the four Asian paradigmatic cases of self-identity and examine your self in light of them. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: ASST 0811, CRIT 0811, PHIL 0811, Chinese 0811, Japanese 0811 or Religion 0911.

Course Attributes: GB

Repeatability: This course may not be repeated for additional credits.

REL 0833. Race & Poverty in the Americas. 3 Credit Hours.
The transatlantic slave trade was one of the most brutal and momentous experiences in human history. Attitudes toward Latino, Caribbean, African, and Asian immigrants in the United States today can only be fully understood in the contexts of slavery and the "structural racism," "symbolic violence" (not to mention outright physical violence), and social inequalities that slavery has spawned throughout the region. Although focusing primarily on the United States, we will also study the present entanglements of poverty and race in Brazil, Haiti, and other selected nations of "The New World," placing the U.S. (and Philadelphia in particular) experience in this historical context. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they have successfully completed REL 0933, LAS 0833/0933, ANTH 0833, or SOC 0833.

Course Attributes: GD

Repeatability: This course may not be repeated for additional credits.

REL 0863. Religion in the World. 3 Credit Hours.
Learn about the major religious traditions found worldwide today: Hinduism, Buddhism, Judaism, Christianity, Islam, and several indigenous traditions. Examine the beliefs, practices, and values of these groups in order to understand the worldviews and ways of life of the people who practice them. Our interdisciplinary analysis and interpretation of specific examples of religious experience will help shed light on the overall meaning of religion and human existence. We will carefully consider examples while also focusing on particular thematic issues, like cosmology and ritual. Develop appreciation for the religious vibrancy and diversity that exist in human cultures while you actively engage in the learning process through class presentation, class participation, paper-writing, and a self-selected field trip. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Duplicate Credit Warning: Students may take only one of the following courses for credit; all other instances will be deducted from their credit totals: Religion 0863, 0963, 1101, C053, Asian Studies 0863, Critical Languages 0863, or Philosophy 0863.

Course Attributes: GG

Repeatability: This course may not be repeated for additional credits.
REL 0876. Religion in Philadelphia. 3 Credit Hours.
The argument is sometimes made that religion in dense urban spaces is characteristically very different from religion as it appears elsewhere. A study of religion in Philadelphia provides numerous ways to explore that idea, especially since the city encompasses a variety of ethnic and immigrant groups, encouraging the generation of new and hybrid forms of religious life that are less possible in smaller populations. Learn how ideas of toleration and freedom, the urban environment, and immigration helped to define the role of religion in the life of this city. Study various religious traditions as they are manifested in the greater Philadelphia area and look at the influences religion has had on the fabric of Philadelphia’s history and cultural life including politics, art, education, journalism and popular culture. You will visit and write about various religious sites and institutions. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Duplicate Credit Warning: Students cannot receive credit for Religion 0876 if they have successfully completed Religion 0976, 1003, 1903, C052, H092, History 0876 or 0976.
Course Attributes: GU
Repeatability: This course may not be repeated for additional credits.

REL 0902. Honors Race & Identity in Judaism. 3 Credit Hours.
Investigate the relationship between race and Judaism from Judaism’s early period through today, looking both at how Jews have understood their own racial identity and how others have understood Jews’ racial identity. You will explore the idea of racial identity in Judaism in order to examine the complex network of connections between racism and anti-Semitism, as you read primary and secondary texts in Jewish philosophy and history and in the study of race and racism. We hope to illuminate these complex issues as well as to engage with them on a personal and political level, examining the relationship between issues of race, religion, identity, and social justice and injustice, and inquiring into how we, as informed citizens in a global society, can affect change for the better. (This is an Honors course.) NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: Jewish Studies 0802/0902 or Religion 0802.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GD, HO
Repeatability: This course may not be repeated for additional credits.

REL 0911. Honors Asian Behavior & Thought: Four Asian Models Shaping Your Action. 3 Credit Hours.
We incessantly engage ourselves in doing things. We are beings-at-doing. We define ourselves by the kind of actions we perform. How we act or conduct ourselves is shaped by the kind of self we construct for ourselves. And that self is shaped by the society into which we happen to be born.
Self-identity, which is socially and culturally constructed by our experiences and interactions with others, carries a personal as well as an interpersonal meaning. Learn the four Asian paradigmatic cases of self-identity and examine your self in light of them. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: ASST 0811, CRIT 0811, PHIL 0811, Chinese 0811, Japanese 0811 or Religion 0811.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GB, HO
Repeatability: This course may not be repeated for additional credits.

REL 0933. Honors Race & Poverty in the Americas. 3 Credit Hours.
The transatlantic slave trade was one of the most brutal and momentous experiences in human history. Attitudes toward Latino, Caribbean, African, and Asian immigrants in the United States today can only be fully understood in the contexts of slavery and the “structural racism,” “symbolic violence” (not to mention outright physical violence), and social inequalities that slavery has spawned throughout the region. Although focusing primarily on the United States, we will also study the present entanglements of poverty and race in Brazil, Haiti, and other selected nations of “The New World,” placing the U.S. (and Philadelphia in particular) experience in this historical context. (This is an Honors course.) NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they have successfully completed REL 0833, LAS 0833/0933, ANTH 0833, or SOC 0833.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GB, HO
Repeatability: This course may not be repeated for additional credits.

REL 0957. Honors Sport & Leisure in American Society. 3 Credit Hours.
In this course, we explore the complexity and diversity of American society through the study of sport and leisure. How does the way we play or watch sports reflect, and contribute to, American values? We will also pay careful attention to the globalization of sport and the role of U.S. sports in the world today. Issues of religion, race, ethnicity, gender, age, disability, and socio-economic class will be prominently featured. There will also be a primary focus on raising ethical questions through a discussion of case studies based on real events. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed AAS 0857, SOC 0857 or STHM 0857.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GU, HO
Repeatability: This course may not be repeated for additional credits.
REL 0963. Honors Religion in the World. 3 Credit Hours.
Learn about the major religious traditions found worldwide today: Hinduism, Buddhism, Judaism, Christianity, Islam, and several indigenous traditions. Examine the beliefs, practices, and values of these groups in order to understand the worldviews and ways of life of the people who practice them. Our interdisciplinary analysis and interpretation of specific examples of religious experience will help shed light on the overall meaning of religion and human existence. We will carefully consider examples while also focusing on particular thematic issues, like cosmology and ritual. Develop appreciation for the religious vibrancy and diversity that exist in human cultures while you actively engage in the learning process through class presentation, class participation, paper-writing, and a self-selected field trip. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Duplicate Credit Warning: Students may take only one of the following courses for credit; all other instances will be deducted from their credit totals: Religion 0863, 0963, 1101, C053, Asian Studies 0863, Critical Languages 0863, or Philosophy 0863.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GG, HO
Repeatability: This course may not be repeated for additional credits.

REL 0976. Honors Religion in Philadelphia. 3 Credit Hours.
The argument is sometimes made that religion in dense urban spaces is characteristically very different from religion as it appears elsewhere. A study of religion in Philadelphia provides numerous ways to explore that idea, especially since the city encompasses a variety of ethnic and immigrant groups, encouraging the generation of new and hybrid forms of religious life that are less possible in smaller populations. Learn how ideas of toleration and freedom, the urban environment, and immigration helped to define the role of religion in the life of this city. Study various religious traditions as they are manifested in the greater Philadelphia area and look at the influences religion has had on the fabric of Philadelphia’s history and cultural life including politics, art, education, journalism and popular culture. You will visit and write about various religious sites and institutions. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Duplicate Credit Warning: Students cannot receive credit for Religion 0976 if they have successfully completed Religion 0976, 1003, 1903, C052 or H092, History 0876 or 0976.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GU, HO
Repeatability: This course may not be repeated for additional credits.

REL 1001. Religion and Society. 3 Credit Hours.
Religion and Society serves as the introductory course that all majors and minors in Religion must take. This course deals with such issues as: What is the nature of religion? What impact does it have on personal identity, social life, and political structures? What ethical issues arise out of the tensions between religion and society? Emphasis on contemporary Western society and forms of religion. Some historical background provided. NOTE: This course can be used to satisfy the university Core Individual & Society (IN) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: IN
Repeatability: This course may not be repeated for additional credits.

REL 1002. Racial Justice: A Religious Mandate for Obedience and Revolt. 3 Credit Hours.
This introductory course on race and religion examines the emergence and development of religious faith and social protest thought, in order to propose critical options that foster emancipatory practices in the contemporary struggle for racial justice. NOTE: This course can be used to satisfy the university Core Studies in Race (RS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: RS
Repeatability: This course may not be repeated for additional credits.

REL 1003. Religion in America. 3 Credit Hours.
A historical and sociological study of practices and beliefs of various religious groups that have shaped American culture, with special attention to ethnic and racial minorities, and to women, as well as to traditional main-line groups and newer movements. NOTE: This course can be used to satisfy the university Core American Culture (AC) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: AC
Repeatability: This course may not be repeated for additional credits.

REL 1004. Religion and the Arts. 3 Credit Hours.
Focuses on the artistic expression of theological themes in a given religious tradition. Students explore the varieties of art in that tradition, learning to recognize the plastic (architecture, sculpture, metal), visual (painting, glass, fabric), and musical art forms. Analyzing how these forms function in prayer, liturgy, and theology is of primary importance. In addition, the fundamental questions of how the religion deals with the tension between iconic/aniconic, eternal/finite, and divine/human are covered. Course also deals with what religious art means in a secular context. NOTE: This course can be used to satisfy the university Core Arts (AR) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: AR
Repeatability: This course may not be repeated for additional credits.
REL 1005. Introduction to Asian Religions. 1 Credit Hour.
A companion course to Religion 1102 (C050) for first-term freshmen. This course provides guidance with the assignments of the core course. Emphasis is on reading, listening, speaking, and writing within the context of the core course. Assistance is also given in the continued development of English-language skills, especially academic reading and the acquisition of a general academic vocabulary. NOTE: Offered at Temple University Japan only.
Repeatability: This course may not be repeated for additional credits.

REL 1101. Introduction to World Religions. 3 Credit Hours.
Introduction to the major world religions (Hinduism, Buddhism, Taoism, Confucianism, Judaism, Christianity, Islam) as a way of coming to know and appreciate the world-views of other cultures. Attention to beliefs, values, and practices of these religions as ways of dealing with the issues basic to human life. NOTE: This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: IS
Repeatability: This course may not be repeated for additional credits.

REL 1102. Introduction to Asian Religions. 3 Credit Hours.
Introduction to the major Asian religious, philosophical, and cultural traditions (Hinduism, Buddhism, Confucianism, Taoism, Shinto) with emphasis on the cultural roots of each religious tradition, the analysis of its principal teachings and practices, and the major cultural expressions in religious art, ritual, poetry, music, and scriptures. NOTE: This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. In addition to meeting the university Core International Studies requirement, this course meets the Non-Western/Third World IS requirement for Communication Sciences majors. Please note the recent update to the Core IS requirement at www.temple.edu/vpus/resources/coreupdates.htm#coreisupdate.
Course Attributes: IS
Repeatability: This course may not be repeated for additional credits.

REL 1401. Introduction to Western Religions. 3 Credit Hours.
This course will study the major Western religious beliefs, values, and practices from their origins in Africa, Europe, and the Near East through the rise and development of the culturally and religiously related traditions of Judaism, Christianity, and Islam. Attention will also be given to the influence of Western religious ideas and institutions upon issues and movements in the contemporary world scene. NOTE: This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: IS
Repeatability: This course may not be repeated for additional credits.

REL 1901. Introduction to Western Religions. 3 Credit Hours.
Introduction to the major Asian religious, philosophical, and cultural traditions (Hinduism, Buddhism, Confucianism, Taoism, Shinto) with emphasis on the cultural roots of each religious tradition, the analysis of its principal teachings and practices, and the major cultural expressions in religious art, ritual, poetry, music, and scriptures. NOTE: This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. In addition to meeting the university Core International Studies requirement, this course meets the Non-Western/Third World IS requirement for Communication Sciences majors. Please note the recent update to the Core IS requirement at www.temple.edu/vpus/resources/coreupdates.htm#coreisupdate.
Course Attributes: IS
Repeatability: This course may not be repeated for additional credits.

REL 1902. Honors Introduction to Asian Religions. 3 Credit Hours.
Introduction to the major Asian religious, philosophical, and cultural traditions (Hinduism, Buddhism, Confucianism, Taoism, Shinto) with emphasis on the cultural roots of each religious tradition, the analysis of its principal teachings and practices, and the major cultural expressions in religious art, ritual, poetry, music, and scriptures. NOTE: This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. In addition to meeting the university Core International Studies requirement, this course meets the Non-Western/Third World IS requirement for Communication Sciences majors. Please note the recent update to the Core IS requirement at www.temple.edu/vpus/resources/coreupdates.htm#coreisupdate.
Course Attributes: IS
Repeatability: This course may not be repeated for additional credits.

REL 1903. Honors Religion in America. 3 Credit Hours.
A historical and sociological study of practices and beliefs of various religious groups that have shaped American culture, with special attention to ethnic and racial minorities, and to women, as well as to traditional main-line groups and newer movements. NOTE: This course can be used to satisfy the university Core American Culture (AC) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: AC, HO
Repeatability: This course may not be repeated for additional credits.

REL 2000. Topics in Religious Studies I. 3 Credit Hours.
The topic for this course changes each semester. Consult the instructor or an advisor in the Religion Department for specific details.
Repeatability: This course may be repeated for additional credit.

REL 2001. Women in Religion and Society. 3 Credit Hours.
A study of both the roles and understanding of women in major premodern and modern religious traditions, particularly of the West, including an investigation of the authoritative writings and practices of the various traditions.
Repeatability: This course may not be repeated for additional credits.
REL 2002. Religion and Human Sexuality East & West. 3 Credit Hours.
The goal of this course is to examine the attitudes and practices of the major world religions regarding human sexuality. Topics to be covered will include marriage and procreation, and such controversial issues as abortion, homosexuality and sexual activity outside of marriage. Note: Religion and Human Sexuality is taught as a cross-listed course in Religion, Women's Studies, and LGBT Studies. Students may receive credit for only one of the following courses: REL 2002, LGBT 2002, WMST 2202.
Repeatability: This course may not be repeated for additional credits.

REL 2003. Religion and the Arts. 3 Credit Hours.
This course is designed to explore the nexus of Religion and Art both philosophically and aesthetically. Various theories of aesthetics will be analyzed and compared. Focuses on the artistic expression of theological themes in a given religious tradition. Students explore the varieties of art in that tradition, learning to recognize the plastic (architecture, sculpture, metal), visual (painting, glass, fabric), and musical art forms. Analyzing how these forms function in prayer, liturgy, and theology is of primary importance. In addition, the fundamental questions of how the religion deals with the tension between iconic/aniconic, eternal/finite, and divine/human are covered. Course also deals with what religious art "means" in a secular context. [Duplicate Credit Warning: The prior number for this course was Religion 4002; students who successfully completed that version of the course will not earn additional credit for this version.]
Repeatability: This course may not be repeated for additional credits.

REL 2006. Death and Dying. 3 Credit Hours.
This course focuses upon dying and bereavement in today's cultural and medical environment, and then on death, mourning and immortality from the perspectives of the world's religious traditions. We will examine psychological, ethical and philosophical perspectives on the process of dying, care for the dying, and issues of mourning. What are the principle beliefs and practices about personal identity, the nature of God or ultimate reality, death and post-death existence?
Repeatability: This course may not be repeated for additional credits.

REL 2007. Religion in Film. 3 Credit Hours.
This course will approach the features and problems of Religion in Eastern and Western societies through the medium of film and/or film as a medium for performing religion. The course, depending on who teaches, will ask students to consider the relationships among and between film, ritual, belief, myth, and communal engagement even as it looks at how specific traditions are depicted on screen. Students will view works by filmmakers representing a global spectrum and examine how these films provide insights into these larger issues regarding popular culture, art, performance and specific religious traditions and societies. Students will be required to watch one film per week (on their own time; films will be made available via DVD on reserve or through special internet streaming resources); this will be accompanied by two regular class sessions where the film, assigned readings and the range of critical issues regarding the film's connection to world religious traditions will be discussed. The goal of the course is to provide students with the intellectual tools to "read" films as vehicles for social and religious expressions, and to come to a more thorough understanding of how experiences and perceptions cross various cultural and religious boundaries.
Repeatability: This course may not be repeated for additional credits.

REL 2101. Indian Philosophies and Religions. 3 Credit Hours.
An introduction to the foundations, the nature, and the principles of classical Hinduism. An introduction to the fundamentals of Buddhism and Jainism. (Formerly known as Religions of India.)
Repeatability: This course may not be repeated for additional credits.

REL 2102. Introduction to Buddhism. 3 Credit Hours.
Introduction to the historical development of Buddhism in relation to other East Asian religions. Topics include the Four Noble Truths of basic Buddhism and the Hinayana-Mahayana controversy over the Buddhist Dharma and practice, as well as the development of Buddhist thought throughout Asia.
Repeatability: This course may not be repeated for additional credits.

REL 2201. Chinese Religions - Confucius to Mao. 3 Credit Hours.
Critical study of the development of Chinese religions from the time of Confucius to Mao, including the problem of ideological continuity in contemporary China (Maoist Marxism versus Confucianism).
Repeatability: This course may not be repeated for additional credits.

REL 2301. Introduction to Zen Buddhism. 3 Credit Hours.
This course surveys the historical development of Zen Buddhism as it unfolds in India, China, and Japan, and focuses on the examination of the nature of satori experience. It analyzes its existential meaning from perspectives of therapy, Zen practice, and philosophy.
Repeatability: This course may not be repeated for additional credits.

REL 2401. Religion in the Ancient Near East. 3 Credit Hours.
This course will explore the religion of the pre-Biblical Near East. We will read texts from Akkadian, Egyptian, Ugaritic, Phoenician, and Mesopotamian cultures and civilizations. Special emphasis will be put on the differences and competing aspects of these religions with Israelite religion.
Repeatability: This course may not be repeated for additional credits.

REL 2402. Foundations of Judaism. 3 Credit Hours.
In this course students will explore Judaism from a variety of perspectives: historical, religious, literary, artistic, and cultural. What constitutes "Judaism" in a variety of contemporary expressions will be an organizing question for the class.
Repeatability: This course may not be repeated for additional credits.
REL 2403. What Is Judaism?. 3 Credit Hours.
Introduction to the variety of rituals, customs, and practices of the Jewish people in a historical context. Compares and contrasts liberal and traditional Jewish religion with Zionism. Contemporary Jewish novels, poetry, and drama.
Repeatability: This course may not be repeated for additional credits.

REL 2405. Introduction to Afro-Jewish Studies. 3 Credit Hours.
This course will introduce students to the study of African and African-Diaspora Jews. Students will examine and critically assess the various past and present methods used to study Africana Jewish communities. The research and readings will provide students with a basic introduction to Afro-Jewish history, culture and religion. It will also analyze the effects of race and racism on the construction of Afro-Jewish identities.
Repeatability: This course may not be repeated for additional credits.

REL 2406. Introduction to the Bible. 3 Credit Hours.
Introduction to the Hebrew Bible (Old Testament). What is the Bible? Where did it come from? How can there be so many different interpretations of the Bible? This course provides an examination of the historical, archeological, literary, and religious backgrounds of the Old Testament.
Repeatability: This course may not be repeated for additional credits.

REL 2407. The Body and The Bible. 3 Credit Hours.
This course will explore how the Hebrew Bible and other ancient Near Eastern literature use the body to conceptualize issues of ethnicity, gender, sexuality, age, disability, social class, religious expression and so on. Other issues considered in this course include the portrayal of divine bodies, the social, cultural, and literary significance of bodily changes and practices, the costuming of the body, disguising one’s appearance, and passing as a member of another identity group. We will examine a number of these issues both in their ancient Near Eastern context and throughout the history of biblical interpretation. The course will be structured around readings of both recent biblical scholarship on these topics and the biblical texts discussed in this scholarship.
Repeatability: This course may not be repeated for additional credits.

REL 2408. Jewish Secular Thought and Culture from Spinoza to Seinfeld: A History of Jewish Secularism. 3 Credit Hours.
Non-religious Jews come in all shapes and sizes: political radicals, philosophers, scientists, psychoanalysts, feminists, stand-up comics. Secular Jews helped establish the modern age, gave voice to the critique of religion, pushed for separation of Church and State, developed a vibrant Yiddish culture and founded the State of Israel. This course is a survey of issues in modern Jewish history from the philosophical critique of the Bible to tensions between religious and secular Jews in Israel. We will pay close attention to the thinkers who helped frame the transformations of Jewish self-understanding in the West: Spinoza, Mendelsohn, Marx, Freud, Einstein, Arendt…and Seinfeld. [Duplicate Credit Warning: The prior title for this course was "Jewish Secularism/Jewish Civilization I"; students who successfully completed that version of the course will not earn additional credits for this course.]
Repeatability: This course may not be repeated for additional credits.

REL 2409. Secular Jewish Utopian Politics / Jewtopias: The Jewish Romance with Communism, Zionism, and America. 3 Credit Hours.
What is Jewish politics? Jews were involved with three grand political cultures in the 20th century: The Zionist Movement, Communism, and Liberal Democracy. The new “Promised Lands” for Jews in Europe, Russia, Israel, and America were secular and utopian. Through literature, manifesto, fiction and film this course will examine each of these movements and explore the dark side of the attempts to create perfect social justice—how those visionary dreams were tempered if not shattered. Readings will include: Theodor Herzl, Arthur Koestler, Michael Chabon, Michael Walzer, and Tony Kushner’s Angels in America. [Duplicate Credit Warning: The prior title for this course was "Jewish Secularism/Jewish Civilization II"; students who successfully completed that version of the course will not earn additional credits for this course.]
Repeatability: This course may not be repeated for additional credits.

REL 2447. Kabbalah and Mysticism. 3 Credit Hours.
Introduction to the basic concepts, worldview and psychology of the Kabbalah. Mystical experiences and spiritual practices of the Kabbalists are situated within the context of comparative mysticism.
Repeatability: This course may not be repeated for additional credits.

REL 2496. Introduction to the Bible. 3 Credit Hours.
Introduction to the Hebrew Bible (Old Testament). What is the Bible? Where did it come from? How can there be so many different interpretations of the Bible? This course provides an examination of the historical, archeological, literary, and religious backgrounds of the Old Testament. This course is designed as a Writing Course for the University, so the assignments will reflect the writing requirements.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

This class explores the rich and diverse literature of Early Christianity, as Christianity emerged in the social/religious context of second Temple Judaism in the Roman Empire and in Palestine in the first century, when Jesus was born. Students will study the entire spectrum of early Christian literature, including the New Testament as well as other views of Jesus in Gnostic tracts. We will also talk about various writings of first century Fathers of the Church that did not make it into the New Testament, such as the letters of Clement and Barnabas. As such the class covers both literary and historical topics of the first and early second century when Christianity emerged in the Roman world. (Former course title: Introduction to New Testament)
Repeatability: This course may not be repeated for additional credits.
REL 2502. Jesus in the Media. 3 Credit Hours.
This class will explore the ever-changing identity of Jesus in both academic and popular culture. The class will study Jesus in the Gospels first, as a foundation for further analysis. The class then moves to the images of Jesus in various media today: award-winning novels, academic “Jesus” books, and films. We shall address these questions: who is Jesus for each one? why does each author/director emphasize different teachings or aspects of Jesus? what is their ultimate purpose? (Former course title: Jesus in the Gospels)
Repeatability: This course may not be repeated for additional credits.

REL 2596. What Is Christianity?. 3 Credit Hours.
The development of the Christian religion from the Bible to today. What are the principal beliefs of Christianity? How did they come to be so? What have been the major criticisms of Christianity? How can we understand the variety of Christian churches as they face the modern world?
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

REL 2602. Islam in America. 3 Credit Hours.
This course deals with Islam in the United States, including the history, practice, lifestyles, and experiences of American Muslims. Islam in America is presented in all its variety, with special attention to Philadelphia, which is a major center of American Islam. The contribution of both African American Muslim movements and recent immigrant Muslim groups is covered.
Repeatability: This course may not be repeated for additional credits.

REL 2606. Introduction to Islam. 3 Credit Hours.
A general survey of the religion of Islam, including history, beliefs, sacred texts (Qur’ân and Hadîth) and their interpretation, religious law, Sûfism, philosophy, art, and science. Particular attention also is given to actual Muslim practice and to Islam as a way of life.
Repeatability: This course may not be repeated for additional credits.

REL 2701. Introduction to African American Religion. 3 Credit Hours.
Examines African American religion in the context of four periods of African American history: the exercise of slave religious leadership in the “invisible church”; during the post-Emancipation period (1863-1900), the development of institutionalized Black religion, that is, the Black church; in the period of northern immigration (1916-1945), the evolution of many aspects of Black liturgy - especially Black gospel music; and the civil rights struggle of the 1960s and ’70s.
Repeatability: This course may not be repeated for additional credits.

REL 2702. Religion in Contemporary Africa. 3 Credit Hours.
This course draws upon leading scholarly literature on religion in post-colonial Sub-Saharan Africa. Substantive examples will be drawn from South Africa, Ghana, Senegal, Uganda, Rwanda, and Congo to understand the role of religion in the creation of and the struggle against poverty, political turmoil, civil war, and the AIDS epidemic.
Repeatability: This course may not be repeated for additional credits.

REL 2900. Honors Topics in Religious Studies I. 3 Credit Hours.
For description, see the Honors section of the course schedule of the semester.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.

REL 2996. Honors Death and Dying. 3 Credit Hours.
Concepts, attitudes, and practices associated with death and dying in the major religious traditions and in literature, philosophy, and psychology. Contemporary implications for related fields such as medicine, psychiatry, social work, and education.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO, WI
Repeatability: This course may not be repeated for additional credits.

REL 3000. Topics in Religious Studies II. 3 Credit Hours.
Arranged each semester, please consult with the instructor.
Repeatability: This course may be repeated for additional credit.

REL 3001. Earth Ethics. 3 Credit Hours.
What ethical relationship do human beings have to the natural world? What cultural and religious values, conceptions, and assumptions have shaped human interactions with the environment? Through also examining practical issues such as sustainability, technology, and urban living, students will assess individual life-styles and alternative visions of the good life on planet Earth.
Repeatability: This course may not be repeated for additional credits.

REL 3002. Philosophy of Religion. 3 Credit Hours.
Issues in philosophy of religion, including the nature of religion, the relation between reason and faith, concepts of God and proofs of the existence of God, religious and mystical experience, the nature of religious language, the problem of evil, the relation of religion to morality, concepts of death and immortality, conflicting truth-claims of different religions, and interreligious dialogue.
Repeatability: This course may not be repeated for additional credits.
REL 3003. Religion and Psychology. 3 Credit Hours.
Course examines major psychological thinkers' views on religion's origins, functions, and meanings. What personality factors create and sustain religiousness? Some attention to the formation of new religious groups as well as individual spiritual life.
Repeatability: This course may not be repeated for additional credits.

REL 3004. Religion and Science. 3 Credit Hours.
This course offers a historical examination of the relationship of religion and science, leading up to current debates. A variety of views are considered, ranging from those who have viewed the relationship in terms of conflict, to those who see the two as operating in separate spheres, to those who believe that each influences the other in important and often beneficial ways.
Repeatability: This course may not be repeated for additional credits.

REL 3005. Martyrs and Suicides: Religion and Self-Chosen Death. 3 Credit Hours.
This course investigates the way religious traditions have both extolled and condemned self-chosen deaths, and how they have drawn lines that carefully distinguish the honorable and heroic from the cowardly, sinful, and crazy among those who choose their own deaths. This topic will be examined from within a variety of traditions, using a range of methods: theological, philosophical, historical, social scientific.
Repeatability: This course may not be repeated for additional credits.

REL 3011. Monks, Masters, and Magicians: Religion in Premodern Chinese Literature. 3 Credit Hours.
This course offers an introduction into the rich heritage of Chinese literature before 1911 with a focus on religious culture. We will follow Buddhist nuns and monks, Daoist masters and Confucian scholars on their adventures through 2000 years of Chinese history. Thematically, the class will focus on texts that show how Chinese religious traditions (Confucianism, Daoism, and Buddhism) were depicted in secular literature, but will also include narrative religious texts. From 3rd century miracle tales, to the classical novels of the Ming and Qing dynasties, we will look at Chinese religion through the lens of literature. Next to the readings themselves, we will cover more general aspects such as the relationship of literature to historical facts and notions of genre and motif as they apply to China.
Repeatability: This course may not be repeated for additional credits.

REL 3082. Independent Study. 3 Credit Hours.
Individual research project with a specific faculty member. Permission of the professor the student wishes to work with must be given in writing, and registration is completed in the Religion Department.
Repeatability: This course may be repeated for additional credit.

REL 3101. Yoga & Tantric Mysticism. 3 Credit Hours.
This course introduces the students to the history, philosophy, literature, and culture of Classical Indian Yoga and Tantra traditions.
Repeatability: This course may not be repeated for additional credits.

REL 3102. Buddhist Philosophy. 3 Credit Hours.
This course surveys philosophical dimensions of Buddhism. We will discuss several important issues that are raised in Buddhist texts and analyze their logic, implications, and relevance. Among the topics we will discuss are ontology (what is), epistemology (how we know), and normative ethics (what we should do), which in Buddhist terms gets expressed as: view, meditation, and action. Although there is no prerequisite for this course, this class will be demanding: you will be required to read and analyze primary texts in translation that are challenging and foreign (linguistically, conceptually, and philosophically). Since this course is thematically-driven, the readings draw from across time and space (i.e., the spectrum of the Buddhist world, historically and geographically). At the end of the course, we will do a close reading of a polemical twentieth-century text in order to look deeper into a single Buddhist philosophical tradition within a particular cultural and historical context. Active participation in this course will give you a general knowledge of Buddhist philosophy, as well as a taste of the complexity and diversity of Buddhist philosophical traditions.
Repeatability: This course may not be repeated for additional credits.

REL 3201. I-Ching, Tao, and Ch'an/Zen. 3 Credit Hours.
This course covers selected topics in the history of Taoist ideas and religious practice, which have broadly influenced China for two and a half millennia. Discussion topics include: symbols and divination; the philosophy of Lao-tzu and Chuang-tzu; the interaction between Taoism and Ch'an/Zen Buddhism; the Taoist/Ch'an influence on the Chinese literary tradition and ideals of beauty; the Taoist view on ch'i energy, meditation, sexuality, and the good life; and Taoism/Zen in America today.
Repeatability: This course may not be repeated for additional credits.

REL 3222. Sociology of Religion. 3 Credit Hours.
This course examines the role of religion in constructing human realities. It emphasizes how human understandings of the world and of reality are constructed socially through collective action with religion playing a prominent role. It looks at how religion influences individual and collective action; the intersection of religion with politics and media; religion's connection to race, gender, class, and sexual orientation; and the connection between religion and science.
Repeatability: This course may not be repeated for additional credits.

REL 3301. Japanese Religions. 3 Credit Hours.
An introduction to Japanese religions, their origins and development in the social, cultural, and intellectual history of Japan. Religions covered are: Shinto, Japanese Buddhism, folk religions, Japanese Confucianism, and the New Religions. Some attention to the expression of Japanese spirituality in the fine arts, martial arts, festivals, and rituals.
Repeatability: This course may not be repeated for additional credits.
REL 3302. Japanese Buddhism. 3 Credit Hours.
This course is an introduction to Japanese Buddhism, covering some of the major Buddhist figures including Kukai, Dogen, Shinran, Hakuin, Takuan, and Myoe. In order to understand how Japanese Buddhism accepted Indian and Chinese Mahayana Buddhism, the course traces some of the prominent conceptual frameworks of Mahayana Buddhism which were developed in India and China. The methodological orientation of the course is philosophical or intellectual.
Repeatability: This course may not be repeated for additional credits.

REL 3401. Modern Trends in Judaism. 3 Credit Hours.
This course will examine Modern and Contemporary visions and versions of Jews, Judaism and Jewish cultural expression. It will present a combination of sociological, philosophical and historical accounts of how Judaism is performed and understood in the Modern and Contemporary period. Content will vary as the course is taught thematically looking at key trends in the period in various locations across the globe.
Repeatability: This course may not be repeated for additional credits.

REL 3403. Biblical Archaeology. 3 Credit Hours.
An introduction to the history, theory, and methods of Near Eastern Archaeology and its relation to Biblical Studies. Tracing the history of Biblical Archaeology from its roots in the treasure hunters of the 18th century down to the present, we will examine the changing philosophy of archaeology, and the evolving techniques of excavation, by studying several sites and archaeologists.
Repeatability: This course may not be repeated for additional credits.

REL 3404. Dead Sea Scrolls. 3 Credit Hours.
This class will introduce the students to the texts found in Qumran and their implications for the fields of Biblical studies and New Testament studies. In addition to reading the texts, the students will be introduced to archeology and the technological innovations that science has brought to bear in the reconstruction of the texts and in their publication.
Repeatability: This course may not be repeated for additional credits.

REL 3405. Judaism and Literature. 3 Credit Hours.
Readings of various Jewish literatures focusing on America and issues of immigration and cultural assimilation.
Repeatability: This course may not be repeated for additional credits.

REL 3407. Jews, America and Sports. 3 Credit Hours.
While Jews are often seen as "the people of the book," they are also a "people of the body." This course will locate sports in the history and sociology of American Jewish life. The first section will look at the history of Jews in relationship to athletics and body image. The course will then focus on the American experience to understand sports in the American context, looking not only at the major sports that Jews have been involved with (baseball, boxing, basketball and track), but also how immigration, urbanization, gambling, assimilation, and anti-Semitism have played roles in how Jews have been involved in sports. We will examine questions about ethnicity and race, gender (both masculinity and women's participation) and class, and the business of sport. A third section will examine the arena of international affairs, especially the 1936 Olympics, and the role of sports in Israel, and the Israel-America relations as experienced through U.S. participation in the Maccabiah games. We will end by looking at sports in the Jewish imagination and the life of contemporary Jews through a study of business, literature and life experience. The course will encourage students to think in new ways about the Jewish connection to sports. It will require weekly writing assignments and several projects in the Philadelphia Jewish community.
Repeatability: This course may not be repeated for additional credits.

REL 3411. The Philosophies of Judaism. 3 Credit Hours.
Close study of works by one or more Jewish and political philosophers, stressing their relevance to an understanding of contemporary politics and issues of Jewish identity, culture, and religion.
Repeatability: This course may not be repeated for additional credits.

REL 3501. History of Christianity. 3 Credit Hours.
This semester-long course will cover the beginnings of Christianity from its Jewish roots in the 1st century and finish in the 12th century. We will take geographic, theological, cultural, and institutional approaches to the study of the history of Christianity. The course will explore issues of the formation of the New Testament, heresies and doctrines, asceticism and monasticism, and the differences political power had on various Christian groups.
Repeatability: This course may not be repeated for additional credits.

REL 3502. Global Pentecostalism. 3 Credit Hours.
The meteoric rise of Pentecostalism throughout the world in the twentieth and twenty-first centuries has been so impressive that some scholars speak of it as a "new Reformation." This course is a comparative historical and anthropological investigation of this important development in world Christianity, with specific substantive units of analysis drawn globally and locally; i.e., from Africa, Asia, and Latin American and from Philadelphia.
Repeatability: This course may not be repeated for additional credits.

REL 3601. The Islamic State. 3 Credit Hours.
This course examines both the classical theory and modern theory and practice of self-described Islamic states in the modern world. Main focus is on the Middle Eastern area.
Repeatability: This course may not be repeated for additional credits.

REL 3602. Women in Islam. 3 Credit Hours.
This course will explore the issues confronting women in the religion of Islam and how the surrounding cultures, Indian, Arab, Egyptian, American, Eastern European, Indonesian, African (to name a few) react to these issues. Topics of Feminism, Imperialism, Westernization, and endemic religious culture will organize the course. The syllabus will include Islamic female and male authors on these topics.
Repeatability: This course may not be repeated for additional credits.
REL 3603. Islamic Mysticism. 3 Credit Hours.
Introduction to the doctrines, practices, and history of Sufism. Analysis of the nature of mystical experience and Sufi principles. The course also includes a survey of Sufi literature and will discuss the brotherhoods, their relationship with orthodoxy, and al-Ghazali's synthesis.
Repeatability: This course may not be repeated for additional credits.

REL 3701. Traditional Religions of Africa. 3 Credit Hours.
This course is an interdisciplinary analysis and evaluation of selected readings on African religions that have not only survived but migrated across several continents, attracting a growing following in the contemporary societies of North America, the Caribbean, and Latin America.
Repeatability: This course may not be repeated for additional credits.

REL 3702. African Religions and New World Culture. 3 Credit Hours.
African religion and culture continues to exist in the religious and cultural life of African Americans. Using an interdisciplinary approach, we will examine African American religion, folklore, literature, music, and communication in order to assess the continuation and transformation of African culture in the world-view of African Americans.
Repeatability: This course may not be repeated for additional credits.

REL 3801. Contemporary Religious Thinkers. 3 Credit Hours.
This course explores work of various thinkers from different World Religions organized around themes of cosmology, theology, ethics, mysticism, and global politics. NOTE: Students who received credit for REL 3901, the Honors version of this course, may not receive additional credit for 3801.
Repeatability: This course may not be repeated for additional credit.

REL 3882. Independent Study. 2 Credit Hours.
Individual research project with a specific faculty member.
Repeatability: This course may be repeated for additional credit.

REL 3900. Honors Topics in Religious Studies. 3 Credit Hours.
The topic of this course changes each semester that it is taught, since different professors teach it. Check the course offerings online each semester.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.

REL 3901. Honors Contemporary Religious Thinkers. 3 Credit Hours.
This course explores work of various thinkers from different World Religions organized around themes of cosmology, theology, ethics, mysticism, and global politics. NOTE: Students who received credit for REL 3901, the non-honors version of this course, may not receive additional credit for 3901.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.

REL 3904. Honors Earth Ethics. 3 Credit Hours.
What is, or should be, our relation to the natural world? Especially since we are presently living in a modern urban environment, have we perhaps outgrown nature? Is it something we have mastered? Is it primarily a luxury of sorts that we can go to for periodic enjoyment or relaxation? On the other hand, why do we seem to be in a burgeoning environmental crisis? Is it just greed? Too many people? Insufficient technology? How did we get to where we are? Or more immediately--and perhaps deeply--what fundamental beliefs, attitudes, and values shape our everyday actions, how we perceive and use (or misuse) the earth? What creative alternatives can we find, and how can we apply them? In addressing these kinds of questions we will explore both Western and Asian ways of conceiving and interacting with the natural world, past and present. Our approach will also be interdisciplinary, including materials from art, film and literature, as well a range of academic disciplines. NOTE: This is an University Honors course.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.

REL 4000. Topics in Religious Studies I. 2 Credit Hours.
The topic for this course changes each semester. Consult the instructor or an advisor in the Religion Department for specific details.
Repeatability: This course may be repeated for additional credit.

REL 4001. Existentialism: Secular and Religious. 3 Credit Hours.
This course will explore Existentialism from its beginnings in the 19th and 20th century through its changes and different directions in contemporary society. Authors such as Sartre, Camus, Dostoyevsky, Rorty, Stout, and others will be read.
Repeatability: This course may not be repeated for additional credits.

REL 4003. Comparative Mysticism East and West. 3 Credit Hours.
In this class the students will be introduced to the mysticism of certain eastern religions and certain western religions, which will be determined by the instructor. They will be chosen from Japanese Buddhism, Hinduism, Eastern Orthodoxy, Catholicism, Judaism, Islam. The students will read primary texts from these traditions. Understanding the practice of mysticism in these traditions, as well as the theoretical systems that support these practices -- in a comparative framework -- will organize the readings and the lectures for the semester.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
REL 0802 to 4002| Required Courses:1|Minimum Grade of C-|May not be taken concurrently.
Course Descriptions

REL 4010. Topics in Religious Studies. 3 Credit Hours.
The topic changes each semester. See the course schedule for the topic in a specific semester.
Repeatability: This course may be repeated for additional credit.

REL 4082. Independent Study. 3 Credit Hours.
Individual research project with a specific faculty member. Permission of the professor the student wishes to work with must be given in writing, and registration is completed in the Religion Department.
Repeatability: This course may be repeated for additional credit.

REL 4096. Capstone Seminar in Religion. 3 Credit Hours.
This course is designed to be the final culminating class experience for undergraduate Religion majors at Temple. The topic of the course is: “Theories of Religion and Secularism.” The course first will consider the history of the terminology, ideology, and underlying theories about religion and those concepts that religion has been defined against from ancient times to the present, but mainly concentrating on modern western discourses, which are those that have primarily informed the prevailing definitions. Second, we will consider various theories currently challenging or seeking to modify this received tradition of religious studies. In doing this, we will also consider the relations of the field of religious studies with other academic fields as well as with current public discourses, especially those in our country, but also to some extent those in the rest of the world. NOTE: Capstone course in major. Typically offered only in Spring semester. Students must have completed at least 5 major courses prior to taking this course.
Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

REL 4406. Secular Study of Ancient Jewish History: Between the Torah and the Talmud. 3 Credit Hours.
Ancient Jewish history is usually narrated as if Jews went directly from Torah to Talmud, with nothing in between. Such an account privileges the authoritative religious developments and the leadership first, of the priests who collared the core of the Torah, and second, of the early Rabbis, who collared the Mishnah, the earliest strata of the Talmud. This course explores the explosive and intriguing history between these two religious moments, and in doing so, rejects the religious chronology as the basis of historiography. The history and textual materials from these periods in Jewish History raise many of the perennial themes that have come to inform Jewish social life over the centuries. In fact, during this period in which Jews first become Jews, these issues arise for the first time: exile, political decentralization, disagreements between Jews about what constitutes the parameters of the Jewish community; peoplehood, nation, and the boundaries of group identity, intermarriage, conversion, and the movement of Jewish identity from a territory-based definition to an ethnic definition, to a definition based in piety.
Repeatability: This course may not be repeated for additional credits.

REL 4411. Secularism: Jewish and Muslim Women. 3 Credit Hours.
In its three-hundred-year history as a Western concept, secularism is often defined as the opposite of religion. Religious women have alternately found western secularism to be a source of liberation (as it grants them greater civil rights) and a source of oppression (as it putatively shrinks the religious sphere). In creating feminisms through Jewish and Muslim experience, feminisms that are both secular and religious, these religious women have complicated the meanings of secularism. They have also challenged the notion that feminism is necessarily secular. This course looks at examples of Jewish and Muslim women's lives and feminist thought in the US, Europe, and the Middle East. The course will compare and contrast the feminism of these two groups of religious women, in order to more fully understand the role of concepts like secularism, feminism, and religion.
Repeatability: This course may not be repeated for additional credits.

REL 4882. Independent Study. 1 to 4 Credit Hour.
Individual study with a specific faculty member. Permission of the professor the student wishes to work with must be given in writing, and registration is completed in the Religion Department.
Repeatability: This course may be repeated for additional credit.

REL 4900. Honors Topics in Religious Studies II. 3 Credit Hours.
For description, see the Honors section of the course schedule of the semester.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.

REL 4901. Honors Comparative Philosophy of Religion. 3 Credit Hours.
An introduction to comparative philosophy of religion, Asian and Western. After asking what is meant by "comparative philosophy of religion," we will focus on comparative philosophical study of basic concepts and issues in Western and Asian religious traditions. For example: concepts of divine or ultimate reality; arguments for the existence of an ultimate reality; the relation of faith and reason; critiques of religion; the problem of evil; concepts of personal destiny and immortality; the relation of religion to morality; religious and mystical experience; the nature of religious language; the problem of conflicting truth-claims and religious pluralism.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.

Risk Management and Insurance (RMI)
Courses

RMI 0822. Investing for the Future. 4 Credit Hours.
This class will teach you about seemingly complicated financial topics in a very comprehensible manner that will help you make informed financial decisions to ensure a secure financial future. We begin with identification of common financial problems among the "young, fabulous and broke" and how to avoid them. After thinking about life and financial priorities, we address why thinking about retirement now must be at the top of your list. We examine how to compute your retirement needs and how to get there, primarily with a focus on investing in common stock. You will learn how to think smart about big ticket purchases such as cars, housing, and graduate/professional education. Finally we will make sure you understand how to create a safety net to protect your future. NOTE: This course fulfills the Quantitative Literacy (GQ) requirement for students under GenEd and a Quantitative Reasoning (QA or QB) requirement for students under Core. Students cannot receive credit for this course if they have successfully completed ECE 0822, FIN 0822, or FIN 0922.

Course Attributes: GQ
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 0701 to 4999| Required Courses:1|Minimum Grade of C-|May not be taken concurrently
OR MC3 Y|May not be taken concurrently
OR MC4 Y|May not be taken concurrently
OR MC5 Y|May not be taken concurrently
OR MC6 Y|May not be taken concurrently
OR STA1 Y|May not be taken concurrently
OR STA2 Y|May not be taken concurrently
OR STT3 Y|May not be taken concurrently.

RMI 2101. Introduction to Risk Management. 3 Credit Hours.
Introduction to the study of risk management and insurance. Principal casualty risks to which organizations are exposed, including those involved in employee benefits. Means of identification, evaluation, and treatment of these risks are analyzed, with the methods of treatment including insurance, risk retention, self-insurance, and loss control.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(ECON 1101|Minimum Grade of C-|May not be taken concurrently
OR ECON 1901|Minimum Grade of C-|May not be taken concurrently
OR ECON 1102|Minimum Grade of C-|May not be taken concurrently
OR ECON 1902|Minimum Grade of C-|May not be taken concurrently
AND (STAT 1001|Minimum Grade of C-|May not be taken concurrently
OR STA2 Y|May not be taken concurrently
OR STT2 Y|May not be taken concurrently
OR STAT 1102|Minimum Grade of C-|May not be taken concurrently
OR STAT 1902|Minimum Grade of C-|May not be taken concurrently
OR MATH 1022|Minimum Grade of C-|May not be taken concurrently
OR MATH 1031|Minimum Grade of C-|May not be taken concurrently
OR MATH 1041|Minimum Grade of C-|May not be taken concurrently
OR MATH 1941|Minimum Grade of C-|May not be taken concurrently
OR MATH 1038|Minimum Grade of C-|May not be taken concurrently
OR STT3 Y|May not be taken concurrently).

RMI 2102. Professional Development in Risk Management and Insurance. 1 Credit Hour.
This course is a continuation of the skills that were learned in Business Administration 2101. The class will further prepare students for internships and permanent placement in the areas of Risk Management and Actuarial Science. Emphasis on networking, career planning, interview preparation, and job search strategies. Students will attend the department's corporate seminar series as well. NOTE: This course can only be taken by students in the Risk Management and Insurance or Actuarial Science majors.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Actuarial Science, Risk Management and Insurance
College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(RMI 2101|Minimum Grade of C-|May not be taken concurrently
OR RMI 2901|Minimum Grade of C-|May not be taken concurrently
OR RM01 Y|May not be taken concurrently
AND (BA 2101|Minimum Grade of C-|May not be taken concurrently).
RMI 2501. Fundamentals of Personal Financial Planning. 3 Credit Hours.
Managing your finances is an important and needed skill in society today. This course explores the areas needed to manage household and personal finances. This non-technical course will prepare students to make more informed decisions in a complicated financial world, enabling them to reach their financial goals. Some of the topics explored will include but are not limited to: creating and managing budgets, taxes, savings, estate planning, retirement goals, major purchases, risk management and insurance planning, credit cards, loans, investments, and interest rates.


Repeatability: This course may not be repeated for additional credits.

RMI 2901. Honors Introduction to Risk Management. 3 Credit Hours.
This is the Honors version of Risk Management and Insurance 2101. NOTE: Open only to business-designated Honors students, or with special permission of the Program Director. May be used to satisfy the risk management and insurance requirement of the Fox School of Business and Management.


Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(ECON 1101|Minimum Grade of C-|May not be taken concurrently
OR ECON 1901|Minimum Grade of C-|May not be taken concurrently
OR ECON 1102|Minimum Grade of C-|May not be taken concurrently
OR ECON 1902|Minimum Grade of C-|May not be taken concurrently

AND (STAT 1001|Minimum Grade of C-|May not be taken concurrently
OR STA2 Y|May not be taken concurrently
OR STT2 Y|May not be taken concurrently
OR MATH 1022|Minimum Grade of C-|May not be taken concurrently
OR MATH 1031|Minimum Grade of C-|May not be taken concurrently
OR MATH 1041|Minimum Grade of C-|May not be taken concurrently
OR MATH 1941|Minimum Grade of C-|May not be taken concurrently
OR MATH 1038|Minimum Grade of C-|May not be taken concurrently
OR MATH 1941|Minimum Grade of C-|May not be taken concurrently
OR STAT 1102|Minimum Grade of C-|May not be taken concurrently
OR STAT 1902|Minimum Grade of C-|May not be taken concurrently
OR STT3 Y|May not be taken concurrently
OR STT3 Y|May not be taken concurrently)

RMI 3501. Life and Health Insurance and Employee Benefits. 3 Credit Hours.
The purpose of this course is to expose students to the design, financing, and structure of employer provided benefit plans. Virtually every employer offers some type of employee benefits in addition to salary as compensation for their employees. These have received increasing attention in recent years for several reasons including increased government regulation of employee benefit plans, increased cost of providing these benefits and increasing complexity of preserving favorable income tax treatment for these plans. We will primarily examine those benefits commonly known as Health and Welfare Benefits. These include the traditional benefits such as life, health and disability insurance in addition to dental, vision and prescription drug plans, HMOs, PPOs and other managed care systems. Emphasis will be on the design and structure of these plans, current problems and issues associated with the provision of these benefits. NOTE: This course is required for all Risk Management & Insurance majors and must be completed with a minimum grade of C.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
RMI 2101|Minimum Grade of C|May not be taken concurrently
OR RMI 2901|Minimum Grade of C|May not be taken concurrently
OR RM01 Y|May not be taken concurrently.
RMI 3502. Property and Liability Insurance Coverages. 3 Credit Hours.
This course evaluates property, net income, and liability loss exposures, analysis of insurance contracts, and specific insurance coverages designed to handle the above exposures. NOTE: This course is required for all Risk Management & Insurance majors and must be completed with a minimum grade of C.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatable: This course may not be repeated for additional credits
Pre-requisites:
RMI 2101|Minimum Grade of C|May not be taken concurrently
OR RMI 2901|Minimum Grade of C|May not be taken concurrently
OR RM01 Y|May not be taken concurrently.

RMI 3503. Retirement Plans. 3 Credit Hours.
Contemporary fundamentals of pension plans. Major subject areas covered include history and development, plan design, actuarial aspects (costs and funding), investment of plan assets, and plan termination insurance. Provides an understanding of the types of individual account retirement plans available. Discussed are profit-sharing plans, thrift and savings plans, cash or deferred arrangements, employee stock ownership and stock bonus plans, individual retirement accounts, simplified employee pensions, tax-deferred annuities, and executive retirement arrangements. Certain functional areas applicable to all types of retirement plans such as taxation, plan installation, disclosure, and fiduciary aspects are also discussed. NOTE: This course is one of two courses satisfying the Technology Requirement for Risk Management & Insurance majors.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatable: This course may not be repeated for additional credits
Pre-requisites:
RMI 3501|Minimum Grade of C|May not be taken concurrently.

RMI 3504. Property and Liability Insurance Functions. 3 Credit Hours.
Functional insurance areas of rate making, underwriting, marketing, loss control, and claims are studied. Insurance company financial structure and operations analysis are included.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatable: This course may not be repeated for additional credits
Pre-requisites:
RMI 3502|Minimum Grade of C|May not be taken concurrently.

RMI 3505. Actuarial Applications in Risk Management and Insurance. 3 Credit Hours.
Applies theoretical models to insurance problems and is the real-world counterpart to theories discussed in actuarial science, risk management, and insurance courses. The course is divided into two parts: (1) statistical applications and (2) finance and economic applications. Discusses probability distributions frequently used to model losses and inferences which can be made from claims data (e.g., goodness-of-fit and experience rating). The finance section includes application of portfolio theory to the value of the firm (with and without insurance) to reinsurance decisions and captive insurance situations. NOTE: This course is one of two courses satisfying the Technology Requirement for Risk Management & Insurance majors. RMI 3505 also satisfies the Technology Requirement for students double majoring in Risk Management & Insurance and Finance.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatable: This course may not be repeated for additional credits
Pre-requisites:
(RMI 2101|Minimum Grade of C|May not be taken concurrently
OR RMI 2901|Minimum Grade of C|May not be taken concurrently
OR RM01 Y|May not be taken concurrently
AND (STAT 2102|Minimum Grade of C-|May not be taken concurrently
OR STAT 2902|Minimum Grade of C-|May not be taken concurrently
OR STAT 2103|Minimum Grade of C-|May not be taken concurrently
OR STAT 2903|Minimum Grade of C-|May not be taken concurrently
OR STAT 2104|Minimum Grade of C-|May not be taken concurrently
AND (FIN 3101|Minimum Grade of C-|May not be taken concurrently
OR FIN 3901|Minimum Grade of C-|May not be taken concurrently
OR FIN 3503|Minimum Grade of C-|May not be taken concurrently
OR AS 2503|Minimum Grade of C-|May not be taken concurrently
OR FIN3 Y|May not be taken concurrently).
RMI 3511. Social Insurance and Public Policy. 3 Credit Hours.
This course will introduce you to the fundamentals of economic and insurance theories related to government intervention in insurance markets. In the first part of the course we will use basic microeconomic principles to analyze concepts such as scarcity of resources, tools of positive and normative analysis, supply and demand for insurance, requirements of an insurable risk and their violations as well as the economic view of government and reasons for government intervention in private markets. This part of the course will cover theories related to both the supply and demand for insurance. In addition we will explore the nature of economic security and insecurity, the basic principles of social insurance and comparisons of social versus private insurance. We will also learn and analyze, health, healthcare, and alternative theories of the demand for health insurance in order to compare and contrast private and national health insurance. We will then evaluate various social insurance programs using the tools of analysis we have developed in the course. In particular we will focus on OASDI (Social Security), Medicare, Medicaid and National Healthcare.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatability: This course may not be repeated for additional credits.

RMI 3519. Insurance, Benefits and Retirement Planning. 3 Credit Hours.
This course equips you with an understanding of personal insurance products to promote your understanding of individual risk management in the process of wealth protection and retirement planning and strategies. Additionally, time will also be devoted to insurance products available through the traditional employee benefits offerings. Finally, the tools for retirement planning are introduced and strategies to meet individual goals are incorporated including employer sponsored, government, and individual plans.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: (FIN 3519) (Minimum Grade of C)(May not be taken concurrently)
AND (RMI 2101) (Minimum Grade of C)(May not be taken concurrently)
OR RMI 2901) (Minimum Grade of C)(May not be taken concurrently).

RMI 3567. International Risk Management. 3 Credit Hours.
This course is designed to provide an in-depth understanding of risk management and insurance from an international perspective. Enterprise risk management is examined in a global economy, with an emphasis on risk management for multinational corporations. Topics covered in this course also include an extensive review and comparison of life insurance, non-life insurance and reinsurance markets throughout the world, and the financial service integration globally.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatability: This course may not be repeated for additional credits
Pre-requisites: (RMI 3501) (Minimum Grade of C)(May not be taken concurrently)
AND RMI 3502) (Minimum Grade of C)(May not be taken concurrently)
OR AS 3596) (Minimum Grade of C)(May be taken concurrently).

RMI 3580. Special Topics - Risk Management & Insurance. 3 Credit Hours.
Special topics in current developments in the field of risk management and insurance.
College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatability: This course may be repeated for additional credit.
Pre-requisites: RMI 2101) (Minimum Grade of C)(May not be taken concurrently)
OR RMI 2901) (Minimum Grade of C)(May not be taken concurrently)
OR RM01 Y) (May not be taken concurrently.

RMI 3581. Field Experience in Risk Management and Insurance. 3 Credit Hours.
Students undertake a research project that integrates their current work experience with their classroom experience at Temple University. The results are reported in a paper prepared under the supervision of a faculty member. NOTE: Arrangements are made through the Department of Risk Management and Insurance. This course is open to Risk Management & Insurance and Actuarial Science majors only. This course may NOT be used as a course toward the Risk Management & Insurance or Actuarial Science major.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatability: This course may be repeated for additional credit.
Pre-requisites: RMI 2101) (Minimum Grade of C)(May not be taken concurrently)
OR RMI 2901) (Minimum Grade of C)(May not be taken concurrently)
OR RM01 Y) (May not be taken concurrently.

RMI 3582. Independent Study. 1 to 6 Credit Hour.
Readings and/or papers under the supervision of a faculty member. Individually arranged each semester.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Actuarial Science, Risk Management and Insurance
College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatability: This course may be repeated for additional credit.
Pre-requisites: RMI 2101) (Minimum Grade of C)(May not be taken concurrently)
OR RMI 2901) (Minimum Grade of C)(May not be taken concurrently)
OR RM01 Y) (May not be taken concurrently.
RMI 3682. Independent Study. 1 to 6 Credit Hour.
Readings and/or papers under the supervision of a faculty member. Individually arranged each semester.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Actuarial Science, Risk Management and Insurance

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School

Repeatability: This course may be repeated for additional credit.

Pre-requisites:
RMI 2101|Minimum Grade of C|May not be taken concurrently
OR RMI 2901|Minimum Grade of C|May not be taken concurrently
OR RM01 Y|May not be taken concurrently.

RMI 3999. Honors Thesis I. 1.5 Credit Hour.
The first of a two-part sequence of courses in which independent research is conducted under the supervision of a thesis advisor from the Risk Management & Insurance department resulting in a substantial piece of original research, roughly 30 to 50 pages in length upon completion of Risk Management & Insurance 4999. The student must publicly present his/her findings at a Temple University Research Forum session or the equivalent during one of the two semesters during which these courses are undertaken.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

RMI 4596. Advanced Topics in Health and Welfare Employee Benefits. 3 Credit Hours.
The goals of this course are to expose students to certain advanced topics in the design of health and welfare employee benefit plans; to improve the ability of students to work in groups and teams on common projects; to improve the writing ability of students through the use of a term paper completed by each student and the completion of a case study written with a group; and to improve the oral presentation skills of students through a presentation of the results of their particular case study. We will examine several major advanced issues in the operation and design of health and welfare employee benefit plans. These include the design and use of group term and permanent life insurance products, group disability income insurance, advanced alternative funding arrangements such as experience rating and minimum premium arrangements, cafeteria and flexible benefit plans under Section 125, benefits provided under the Transportation Equity Act (TEA) and miscellaneous benefits such as leave benefits such as FMLA and PTO. NOTE: This course is one of two capstone courses for Risk Management & Insurance majors. Students must earn a grade of C in this course if they are using it to fill the writing intensive course requirement for their degree.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Risk Management and Insurance

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
RMI 3501|Minimum Grade of C|May not be taken concurrently.

RMI 4597. Global Corporate Risk Management. 3 Credit Hours.
This course examines the risk management process in detail and its application in a global/international firm. It will apply principled holistic risk management (pure and speculative risk) and why organizations have risk managers. Discussion will include the administrative and strategic aspects of global corporate risk management examining how a risk manager operates within a complex organization. The application of sophisticated and cutting edge risk management tools will be discussed such as risk mapping, loss forecasting, application of total quality management principles, integrated risk financing, financial reinsurance, captives/risk retention groups, and benchmarking. The course does examine the specific issues of managing risk internationally and other pertinent issues faced by risk managers. NOTE: This course must be taken in the graduating semester, after the majority of major courses have been taken. This course is one of two capstone courses for Risk Management & Insurance majors.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Risk Management and Insurance

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
RMI 3504|Minimum Grade of C|May not be taken concurrently.

RMI 4999. Honors Thesis II. 1.5 Credit Hour.
Independent research conducted under the supervision of a thesis advisor from the Risk Management & Insurance Department resulting in a substantial piece of original research, roughly 30 to 50 pages in length. Student must publicly present his/her findings at a Temple University Research Forum session or the equivalent if this was not done in Risk Management 3999.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Risk Management and Insurance

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

Pre-requisites:
RMI 3999|Minimum Grade of C|May not be taken concurrently.

Russian (RUS)
Courses

RUS 0815. Language in Society. 3 Credit Hours.
How did language come about? How many languages are there in the world? How do people co-exist in countries where there are two or more languages? How do babies develop language? Should all immigrants take a language test when applying for citizenship? Should English become an official language of the United States? In this course we will address these and many other questions, taking linguistic facts as a point of departure and considering their implications for our society. Through discussions and hands-on projects, students will learn how to collect, analyze, and interpret language data and how to make informed decisions about language and education policies as voters and community members. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: ANTH 0815, CRIT 0815, History 0815, Italian 0815, PSY 0815, or Spanish 0815.

Course Attributes: GB
Repeatability: This course may not be repeated for additional credits.

RUS 0831. Immigration and the American Dream. 3 Credit Hours.
As a Temple student, you go to school and live in a city full of immigrants. Perhaps your own relatives were immigrants to the United States. But have you ever listened to their stories? With an historical and sociological framework as a basis, we will take an in-depth and more personal look at the immigrant experience as expressed through the immigrants' own voices in literature and film. Topics explored include: assimilation, cultural identity and Americanization, exploitation and the American Dream, ethnic communities, gender, discrimination and stereotyping. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: ANTH 0831, CRIT 0831, History 0831, Italian 0831/0931, SOC 0831, or SPAN 0831/0931.

Course Attributes: GD
Repeatability: This course may not be repeated for additional credits.

RUS 0868. World Society in Literature & Film. 3 Credit Hours.
Learn about a particular national culture by taking a guided tour of its literature and film. In this course, you'll learn about contemporary Russia. You don't need to speak Russian to take this exciting course, and you will gain the fresh, subtle understanding that comes from integrating across different forms of human expression. Some of the issues that will be illuminated by looking at culture through the lens of literature and film include family structures and how they are changing, national self-perceptions, pivotal moments in history, economic issues, social change and diversity. Each course section focuses on a specific country or culture. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: Arabic 0868/0968, Asian Studies 0868, Chinese 0868/0968, English 0868/0968, French 0868/0968, German 0868/0968, Hebrew 0868, Italian 0868/0968, Japanese 0868/0968, Jewish Studies 0868, Korean 0868, LAS 0868/0968, Political Science 0868/0968, Russian 0868, or Spanish 0868/0968.

Course Attributes: GG
Repeatability: This course may not be repeated for additional credits.

RUS 0871. Arts in Cultural Context. 4 Credit Hours.
View the arts as an expression of cultural identity as it occurs across the globe. Each semester, we will focus on a particular world region or country, including but not limited to Russia, Japan, and Latin America. The exploration of cultural identity begins with an overview of the region or country's historical and religious influences and then studies the culture's arts, including the visual arts (painting, sculpture), musical traditions, literature (folktales, national mythology), the vernacular arts (crafts, storytelling), film and theater. You will take field trips or have experiences that will allow you to encounter the region's arts firsthand, and to develop a blended understanding of a people's cultural identity and the larger world. NOTE: This course fulfills the Arts (GA) requirement for students under GenEd and Arts (AR) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: Arabic 0871, Asian Studies 0871 or Hebrew 0871.

Course Attributes: GA
Repeatability: This course may not be repeated for additional credits.

RUS 0896. Honors World Society in Literature & Film. 3 Credit Hours.
Learn about contemporary Russia by taking a guided tour of its literature and film. You don't need to speak Russian to take this course, and you will gain the fresh, subtle understanding that comes from integrating across different forms of human expression. Some of the issues that will be illuminated by looking at culture through the lens of literature and film include: Family structures and how they are changing, national self-perceptions, pivotal moments in history, economic issues, social change and diversity. (This is an Honors course.) NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: Arabic 0896/0996, Asian Studies 0896, Chinese 0896/0996, English 0896/0996, French 0896/0996, German 0896/0996, Hebrew 0896, Italian 0896/0996, Japanese 0896/0996, Jewish Studies 0896, Korean 0896, LAS 0896/0996, Political Science 0896/0996, Russian 0896, or Spanish 0896/0996.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GG, HO
Repeatability: This course may not be repeated for additional credits.
RUS 1001. First-Year Russian I. 5 Credit Hours.
Students acquire skills to communicate in Russian on a variety of topics in predictable situations. Classroom work focuses on listening, speaking, reading and writing as students build their mastery of vocabulary and grammar. Emphasis is on communication in a cultural context. This course is not appropriate for students who speak or spoke Russian in their home environments; students with family background in Russian are directed to take Russian 3003 (Heritage Russian I) or Russian 3004 (Heritage Russian II). Students who can speak Russian comfortably, but cannot read or write in Russian take Russian 3003; students with some literacy skills in Russian may be prepared to take Russian 3004.
Repeatability: This course may not be repeated for additional credits.

RUS 1002. First-Year Russian II. 5 Credit Hours.
This 5-credit class focuses on communication in a cultural context. Students will improve listening, reading, speaking and writing skills while expanding their vocabulary.
Course Attributes: LA
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
RUS 1001|Minimum Grade of C-|May not be taken concurrently
OR LCRU C1002|May not be taken concurrently
OR LCRU B1002|May not be taken concurrently
OR LCRU EXMPT|May not be taken concurrently.

RUS 1004. Intensive First-Year Russian. 10 Credit Hours.
This is an intensive course for those students who wish to take first-year Russian but missed the fall semester option of Russian 1001 (0051). This course meets 10 hours per week and students have 3-4 hours of homework per night. By the end of the semester, students complete the entire sequence of first-year Russian (equivalent to Russian 1001-1002 / 0051-0052) and are prepared to enter second-year Russian in the following fall semester.
Repeatability: This course may not be repeated for additional credits.

RUS 1082. Independent Study in Russian Language. 1 to 5 Credit Hour.
This course is an independent study in Russian language for students not yet ready to take on the more advanced independent study of Russian 3082. It is designed to provide a bridge for students who transfer in to Temple and need some work to improve their Russian to be able to join an existing Russian language course. This course is NOT available to students who can be placed into an existing course and is NOT open to enrollment except by consent of the instructor.
Repeatability: This course may be repeated for additional credit.

RUS 1201. Russian Culture. 3 Credit Hours.
Students in this course will study the historical origins of Russian culture and the modern manifestations of this rich culture. At the beginning of the 19th century, Russian culture had not established itself in the world canon in music or literature and had made only a tiny impression in the canon of world art. By the beginning of the 20th century, Russian masters had gained world renown in music, literature, dance, theater, painting, and in the newest art form, film. This course will describe the historical origins of this remarkable cultural transformation and explain how Russian culture has become an inextricably integral part of human culture. Students may not earn credit for both Russian 0871 and Russian 1201.
Repeatability: This course may not be repeated for additional credits.

RUS 2001. Second-Year Russian I. 5 Credit Hours.
Students completing this course acquire skills they need to communicate with native speakers of Russian on a variety of topics in predictable situations. Students in this course work on listening, speaking, reading, and writing skills as they improve their mastery of Russian vocabulary and grammar. Classroom and homework activities emphasize contemporary standard Russian in its cultural and historical contexts. Materials from the Internet supplement textbook-based activities. NOTE: Students who took Russian 0051/0052 prior to the 2006-2007 academic year should see an advisor before registering for this course.
Course Attributes: LB
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
RUS 1002|Minimum Grade of C-|May not be taken concurrently
OR RUS 1004|Minimum Grade of C-|May not be taken concurrently
OR LCRU EXMPT|May not be taken concurrently.

RUS 2002. Second-Year Russian II. 5 Credit Hours.
Students completing the 2nd semester of this 2-semester sequence (Russian 2001/2002) acquire the skills they need to communicate with native speakers of Russian on a variety of topics in predictable situations. In this course students continue to work on listening, speaking, reading, and writing skills as they improve mastery of Russian vocabulary and grammar. Classroom and homework activities emphasize contemporary standard Russian in its cultural and historical contexts. Materials from the Internet, especially news articles from the Russian press, supplement textbook-based activities. NOTE: Students who took Russian C061 (2001) before fall 2007 should consult with an advisor before registering for this course.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
RUS 2001|Minimum Grade of C-|May not be taken concurrently.
RUS 2101. Contemporary Russia in Literature and Film. 3 Credit Hours.
Students read short stories and novels and watch recent Russian films to understand the cultural and historical context in which Russia finds itself today. NOTE: This course is taught in English and includes required film screenings. All readings are in translation; all films are shown with English subtitles.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
RUS 2002|Minimum Grade of C-|May not be taken concurrently.

RUS 2102. Russian Short Story in English. 2 Credit Hours.
Readings of selected masterpieces by authors such as Tolstoy, Dostoevsky, Turgenev, Pushkin, Leskov, Chekhov, Gorky, and Bunin. Analysis and discussion.
Repeatability: This course may not be repeated for additional credits.

RUS 2103. The Power and the Poet. 3 Credit Hours.
Students in this course read controversial Russian literary texts, written from the late 18th century through the beginning of the 21st century, which brought upon their authors political or social censure from the Russian or Soviet state. As we read and discuss these texts in their cultural and historical contexts, we consider the stylistic, narrative and other features of each text that may have attracted such unfavorable attention. The course concludes with a comparative discussion of the place of the writer in society. NOTE: The course includes readings both of poetry and prose fiction; the word poet in the course title is designed to evoke the broader image of the writer in Russian society.
Repeatability: This course may not be repeated for additional credits.

RUS 2105. Echoes of Terror in Russian Culture. 3 Credit Hours.
Students will read and study literary works (novels, short stories, poetry), memoirs and feature and documentary films depicting Stalin's terror (from the murder of Kirov in 1934 to the death of Stalin in 1953) and its impact on Russian and Soviet society after that period. Students will come to understand the enormity of these historical events by reading, discussing, and analyzing the texts and the films, drawing connections between the Soviet historical and cultural contexts and historical events elsewhere in the world (e.g., Nazi Germany, Apartheid South Africa, Cambodia, Rwanda, Darfur) about the legacy of totalitarian rule.
Repeatability: This course may not be repeated for additional credits.

RUS 2106. Russian Comedy. 3 Credit Hours.
Students will apply a theoretical framework of comedy to exploring Russian works of fiction, drama and film, as well as to other performances (e.g., folk songs and dances, stand-up comedians' monologues) to gain a deeper understanding of the Russian sense of humor and its place in Russian culture.
Repeatability: This course may not be repeated for additional credits.

RUS 2107. History of Russian Film. 3 Credit Hours.
Students will study the history of the Russian cinema, viewing nearly 30 films spanning the period from 1900 to the present day.
Repeatability: This course may not be repeated for additional credits.

RUS 2108. Women's Voices in Russian Culture. 3 Credit Hours.
In this course we will study the depiction of women's voices in Russian culture (memoirs, fiction, feature and documentary films, research in both anthropology and sociology), by female and male authors, researchers, and filmmakers in the context of a larger study of women in Russian culture. Our course will start with an historical survey, but focus most closely on Russian women in the 20th century. No knowledge of Russian is required; all works are read in translation or viewed with subtitles.
Repeatability: This course may not be repeated for additional credits.

RUS 2109. Jewish Voices in Russian Culture. 3 Credit Hours.
In this course we will study the Jewish experience in the Russian Empire, the Soviet Union, and Post-Soviet Russia, with an emphasis on the 20th century, debunking many of the myths with which many students may have been familiar from the film "Fiddler on the Roof." We will read, in translation, excerpts from memoirs, works of literature and history, and view films, with subtitles by Jewish and non-Jewish scholars, authors, poets, and filmmakers about what Russians have called "The Jewish Question" for more than two centuries. We will also take up issues of anti-Semitism and xenophobia and consider them in the context of European and American history. This course requires no knowledge of Russian, Yiddish, or Hebrew; all works are read in translation or viewed with subtitles.
Repeatability: This course may not be repeated for additional credits.

RUS 2111. 19th Century Slavic Literature in English. 3 Credit Hours.
Survey of Slavic literature; reading of representative works from Bulgarian, Croatian, Czech, Polish, Russian, Serbian, and Ukrainian literature.
Repeatability: This course may not be repeated for additional credits.

RUS 2112. Modern Slavic Literature in English. 3 Credit Hours.
Survey of East, West, and South Slavic literature; reading of representative works from Bulgarian, Croatian, Czech, Polish, Russian, Serbian, and Ukrainian literature.
Repeatability: This course may not be repeated for additional credits.
RUS 2901. Honors Modern Russia in Literature and Film. 3 Credit Hours.
Students in this course will read a wide range of literary and critical texts and view films from before, during (1985-1991) and after (1991-present) the Perestroika Era in Russia in order to gain an understanding of Russian cultural history and trends during and after the collapse of the Soviet Union. This is an HONORS course.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.

RUS 2915. Russian History in Literature and Film. 3 Credit Hours.
Students will read and study a short history of Russia and then read literary works and watch films depicting various periods, topics, events, figures, and issues in Russian history. No knowledge of Russian is required; all works are read in translation or viewed with subtitles.
Repeatability: This course may not be repeated for additional credits.

RUS 2121. Russian Cities. 3 Credit Hours.
In this course we will study the Russian city, analyzing the nexus of physical geography, climate, natural resources, ethnography, history, commerce, politics and culture on the development of urban centers in Russia. The study of Moscow and St. Petersburg will occupy much of our attention in this course, but we will also examine Russia's medieval cities ("the Golden Ring"), as well as cities in Siberia and the Far East. We will read works from the disciplines of geography, history, anthropology, and sociology, as well as works of fiction; we will also view Russian films in which a city (or the city) plays an important role. No knowledge of Russian is required; all works will be read in translation or viewed with subtitles.
Repeatability: This course may not be repeated for additional credits.

RUS 2415. Russian History in Literature and Film. 3 Credit Hours.
Students will read and study a short history of Russia and then read literary works and watch films depicting various periods, topics, events, figures, and issues in Russian history. No knowledge of Russian is required; all works are read in translation or viewed with subtitles.
Repeatability: This course may not be repeated for additional credits.

RUS 3014. Social and Economic Transformation in Russia. 3 Credit Hours.
Students will study the transformation of Russian society and the Russian economy, focusing on the 20th and 21st centuries. We will closely examine Russian economic transitions from a market to a planned economy (in the 1920s and 1930s) and from a planned economy back to a market economy (after 1991), as well as analyses of the Russian economy and society in periods of great stress (civil war, collectivization, famine, terror, war and occupation, arms race). We will also read memoirs and works of prose fiction and watch films in order to learn about the consequences of economic decisions on the lives of actual Russian citizens. The course will culminate with interviews with Russian businessmen visiting the United States. No knowledge of Russian required; all works read in translation or viewed with subtitles.
Repeatability: This course may not be repeated for additional credits.

RUS 3001. Third-Year Russian I. 4 Credit Hours.
Students completing Russian 3001 will improve their listening, speaking and writing skills (the latter in the context of both formal and informal letter writing). Upon completion of this course, they will be prepared to function in predictable situations in Russia on study abroad or tourist travel. Perhaps most importantly, students completing this course will improve their understanding of Russian cultural perspectives on the world. In this course students will read important Russian cultural texts (e.g., poetry by Pushkin), newspaper articles, and popular Russian fiction, analyzing both for cultural and linguistic patterns. Students will be graded on their performance on quizzes, oral and written tests, written papers, and presentations.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: RUS 2002|Minimum Grade of C-|May not be taken concurrently.

RUS 3002. Third-Year Russian II. 4 Credit Hours.
Students completing Russian 3002 will build on skills gained in listening, speaking and writing skills (the latter in the context of both formal and informal letter writing) in Russian 3001. In this course we will pay special attention to syntactical structures typically found in written discourse. Upon completion of this course, they will be prepared to function in predictable situations in Russia on study abroad or tourist travel. Perhaps most importantly, students completing this course will improve their understanding of Russian cultural perspectives on the world. In this course students will read important Russian cultural texts (e.g., poetry by Akhmatova), newspaper articles, and popular Russian fiction, analyzing both for cultural and linguistic patterns. Students will be graded on their performance on quizzes, oral and written tests, written papers, and presentations.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: RUS 3001|Minimum Grade of C-|May not be taken concurrently.
RUS 3003. Heritage Russian I. 3 Credit Hours.
This course is the first of two for students who speak or spoke Russian in their homes but do not know how to read and/or write in Russian. Students taking this course learn how to read and write in Russian; the course assumes no literacy skills in Russian. The course will help students build on their oral fluency in Russian to develop literacy in Russian. The focus is on the acquisition of contemporary standard Russian (CSR) in the Moscow dialect. Students who speak other dialects in their home environments will be encouraged to recognize the difference between their home dialect and CSR and acquire CSR in order to use it in professional settings. One of the most important aspects of this work is to develop sensitivity towards informal and formal speech and writing styles, since students without a formal educational experience in Russian may have little training to speak and write in formal (professional) contexts. NOTE: This course is for students who grew up speaking Russian in their home environment.
Repeatability: This course may not be repeated for additional credits

Pre-requisites:
RUS 3003|Minimum Grade of C-|May not be taken concurrently.

RUS 3004. Heritage Russian II. 3 Credit Hours.
This course is the second of two designed for students who grew up in a Russian-speaking home and may have had some or much of their primary education in a Russian-language school. The course will help these students build on their oral fluency in Russian to develop literacy in Russian. The focus is on the acquisition of contemporary standard Russian (Moscow dialect). Students who speak other dialects in their home environments will be encouraged to recognize the difference between their home dialect and CSR and acquire CSR in order to use it in professional settings. One of the most important aspects of this work is to develop sensitivity towards informal and formal speech and writing styles, since students without a formal educational experience in Russian may have little training to speak and write in formal (professional) contexts. NOTE: This course is for native Russian speakers.
Repeatability: This course may not be repeated for additional credits

Pre-requisites:
RUS 3003|Minimum Grade of C-|May not be taken concurrently.
RUS 3001|Minimum Grade of C-|May not be taken concurrently.

RUS 3082. Independent Study. 1 to 3 Credit Hour.
Arranged each semester. Please consult with the instructor. NOTE: Permission of instructor required. Considered only for extraordinary reasons.
Repeatability: This course may be repeated for additional credit.

Pre-requisites:
RUS 3002|Minimum Grade of C-|May not be taken concurrently.

RUS 3201. Service Learning in Russian I. 2 Credit Hours.
Students spend 3 hours a week interacting in Russian with Russian speakers in the Philadelphia community in a service learning placement through agencies such as Lutheran Child and Family Services or Jewish Social Services. Course requires vocabulary quizzes, reflection in electronic diary and course forum, course meetings, oral presentations.
Repeatability: This course may not be repeated for additional credits

Pre-requisites:
RUS 3001|Minimum Grade of C-|May not be taken concurrently.

RUS 3202. Service Learning in Russian II. 2 Credit Hours.
Students who have completed one service learning course may take this course and spend 3 hours a week interacting in Russian with Russian speakers in the Philadelphia community in a service learning placement. Heritage speakers of Russian majoring in Russian are required to take this course as part of their major curriculum. This course requires two reflection papers in Russian.
Repeatability: This course may not be repeated for additional credits

Pre-requisites:
RUS 3201|Minimum Grade of C-|May not be taken concurrently.

RUS 3265. Internship in Russian. 1 to 4 Credit Hour.
Students will be placed in an internship setting in which they will use their Russian in the workplace. This course will provide students with extended exposure to authentic Russian in professional contexts. Students will listen to, read, and write authentic Russian business communications and enhance their understanding of the styles characteristic of such communications. Students are graded on their attendance at the internship site, their electronic reflections (journal), a midterm reflective essay, a final presentation, and a portfolio of samples of their work from the internship site. In some cases, students may be assigned grammar and syntax exercises to help them master structures necessary for written communications at their internship site. NOTE: By special authorization only.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Russian
Repeatability: This course may be repeated for additional credit.

Pre-requisites:
RUS 3001|Minimum Grade of C-|May not be taken concurrently
OR RUS 3003|Minimum Grade of C-|May not be taken concurrently.

RUS 3501. Russian for Business and Travel. 3 Credit Hours.
Intensive work in spoken and written Russian needed by business executives and other travelers. Vocabulary, idiomatic usage and special terminology for professional needs. Cultural aspects, practice in personal contact and letter writing.
Repeatability: This course may not be repeated for additional credits

Pre-requisites:
RUS 2002|Minimum Grade of C-|May not be taken concurrently.
RUS 4001. Fourth-Year Russian I. 3 Credit Hours.
Students will acquire the skills they need to communicate with native speakers of Russian on a variety of topics in predictable situations. In this course, students will work on listening, speaking, reading, and writing skills as they build their mastery of Russian vocabulary and grammar. Classroom and homework activities will emphasize contemporary standard Russian in its cultural and historical contexts. Materials from the internet will supplement textbook-based activities. NOTE: Students majoring in Russian are required to take Russian 4097 instead of Russian 4001.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(RUS 3001|Minimum Grade of C-|May not be taken concurrently
OR RUS 3002|Minimum Grade of C-|May not be taken concurrently
AND (RUS 3003|Minimum Grade of C-|May not be taken concurrently
OR RUS 3004|Minimum Grade of C-|May not be taken concurrently).

RUS 4002. Fourth-Year Russian II. 3 Credit Hours.
Survey of Russian culture and civilization from its beginnings to the present.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
RUS 4001|Minimum Grade of C-|May not be taken concurrently.

RUS 4097. Fourth-Year Russian I: Composition & Conversation. 3 Credit Hours.
Oral and written work, based on selected texts, with special attention to difficult topics. NOTE: Capstone course. Required for concentration in Russian.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
RUS 3002|Minimum Grade of C-|May not be taken concurrently
OR RUS 3004|Minimum Grade of C-|May not be taken concurrently.

RUS 4101. Contemporary Russia in Literature and Film: Russian Trailer Section. 4 Credit Hours.
This course meets with the English-language lecture Contemporary Russia in Literature and Film. Students taking the Russian trailer section of this course must attend the English-language lectures 3 hours per week, but also have a fourth hour in Russian with the instructor. Students in this Russian trailer section read all the texts for this course in Russian and discuss them in Russian with one another and the instructor. They also write two papers of 7-10 pages in length in Russian on short stories or films they have read or watched that were not presented to the larger lecture course in translation. Students who took either Russian 2101 or Russian 0868 are not eligible to take Russian 4101 due to overlap in content.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Russian
Repeatability: This course may not be repeated for additional credits.
Pre-requisites:
RUS 3001|Minimum Grade of C-|May not be taken concurrently
OR RUS 3003|Minimum Grade of C-|May not be taken concurrently.

RUS 4103. The Power and the Poet (in Russian). 4 Credit Hours.
Students in this course will read controversial Russian literary texts, written from the late 18th century through the beginning of the 21st century, which brought upon their authors political or social censure from the Russian or Soviet state. As we read and discuss these texts in their cultural and historical contexts, we will consider the stylistic, narrative and other features of each text that may have attracted such unfavorable attention. The course will conclude with a comparative discussion of the place of the writer in society. NOTE: The course includes readings both of poetry and prose fiction; the word poet in the course title is designed to evoke the broader image of the writer in Russian society. Students who took either Russian 2103 or Political Science 2202 are not eligible to take Russian 4101 due to overlap in content.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
RUS 3001|Minimum Grade of C-|May not be taken concurrently.

RUS 4104. Russian History in Literature and Film (in Russian). 4 Credit Hours.
Students will read and study a short history of Russia and then read literary works and watch films depicting various periods, topics, events, figures, and issues in Russian history. The fourth class hour of this course will be conducted in Russian; most readings and all papers will be assigned in Russian. Students who took either Russian 2415, Russian 2915, History 2415, or History 2915 are not eligible to take Russian 4104 due to overlap in content.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
RUS 3001|Minimum Grade of C-|May not be taken concurrently
OR RUS 3003|Minimum Grade of C-|May not be taken concurrently.
RUS 4105. Echoes of Terror in Russian Culture (in Russian). 4 Credit Hours.
Students will read novels, short stories, memoirs, and historical essays and view films about Stalin's terror (1934-1941 and again 1946-1953) and its impact in Russia and the Soviet Union. NOTE: Fourth hour conducted in Russian; all readings in Russian; all tests and papers in Russian. Students who took Russian 2105 or Sociology 2105 are not eligible to take Russian 4105 due to overlap in content.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
RUS 3001|Minimum Grade of C-|May not be taken concurrently
OR RUS 3003|Minimum Grade of C-|May not be taken concurrently.

RUS 4106. Russian Comedy (in Russian). 4 Credit Hours.
Students will apply a theoretical framework of comedy to exploring Russian works of fiction, drama and film, as well as to other performances (e.g., folk songs and dances, stand-up comedians’ monologues) to gain a deeper understanding of the Russian sense of humor and its place in Russian culture. Readings of texts will be in Russian. NOTE: Fourth hour conducted in Russian; all readings in Russian; all tests and papers in Russian. Students who took Russian 2106 are not eligible to take Russian 4106 due to overlap in content.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
RUS 3001|Minimum Grade of C-|May not be taken concurrently
OR RUS 3003|Minimum Grade of C-|May not be taken concurrently.

RUS 4107. History of Russian Film (in Russian). 4 Credit Hours.
Students will study the history of the Russian cinema, viewing nearly 30 films spanning the period from 1900 to the present day. Students enrolled in this course will be assigned readings in Russian, will write papers and exams in Russian, and will have one class meeting per week in Russian. NOTE: Class conducted in Russian.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
RUS 3001|Minimum Grade of C-|May not be taken concurrently
OR RUS 3003|Minimum Grade of C-|May not be taken concurrently.

RUS 4108. Women's Voices in Russian Culture (in Russian). 4 Credit Hours.
In this course we will study the depiction of women’s voices in Russian culture (memoirs, fiction, feature and documentary films, research in both anthropology and sociology), by female and male authors, researchers, and filmmakers in the context of a larger study of women in Russian culture. Our course will start with an historical survey, but focus most closely on Russian women in the 20th century. This course meets with Russian 2108: three hours in class will be conducted in English for students in both Russian 2108 and Russian 4108; the fourth class hour, for Russian 4108 alone, will be conducted in Russian. Students will do substantial reading in Russian and will write an extended paper in Russian.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
RUS 3001|Minimum Grade of C-|May not be taken concurrently
OR RUS 3003|Minimum Grade of C-|May not be taken concurrently.

RUS 4109. Jewish Voices in Russian Culture (in Russian). 4 Credit Hours.
In this course we will study the Jewish experience in the Russian Empire, the Soviet Union, and Post-Soviet Russia, with an emphasis on the 20th century, debunking many of the myths with which many students may have been familiar from the film "Fiddler on the Roof." We will read, in Russian, excerpts from memoirs, works of literature and history, and view films, with subtitles by Jewish and non-Jewish scholars, authors, poets, and filmmakers about what Russians have called "The Jewish Question" for more than two centuries. We will also take up issues of anti-Semitism and xenophobia and consider them in the context of European and American history. NOTE: Class conducted in Russian. Readings, papers and tests in Russian.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
RUS 3001|Minimum Grade of C-|May not be taken concurrently
OR RUS 3003|Minimum Grade of C-|May not be taken concurrently.

RUS 4111. Pushkin. 3 Credit Hours.
Reading and analysis of selected major works.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
RUS 2002|Minimum Grade of C-|May not be taken concurrently.

RUS 4112. Tolstoy. 3 Credit Hours.
Study and analysis of selected major works.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
RUS 2002|Minimum Grade of C-|May not be taken concurrently.
RUS 4113. Dostoevsky. 3 Credit Hours.
Reading and analysis of selected major works.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
RUS 2002|Minimum Grade of C-|May not be taken concurrently.

RUS 4114. Russian Novel. 3 Credit Hours.
Reading and analysis of selected major works.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
RUS 2002|Minimum Grade of C-|May not be taken concurrently.

RUS 4115. Russian Drama. 3 Credit Hours.
Reading and analysis of selected Russian plays.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
RUS 2002|Minimum Grade of C-|May not be taken concurrently.

RUS 4116. Russian Poetry. 3 Credit Hours.
Analysis of the major works of Russian poets.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
RUS 2002|Minimum Grade of C-|May not be taken concurrently.

RUS 4121. Russian Cities (in Russian). 4 Credit Hours.
In this course we will study the Russian city, analyzing the nexus of physical geography, climate, natural resources, ethnography, history, commerce, politics and culture on the development of urban centers in Russia. The study of Moscow and St. Petersburg will occupy much of our attention in this course, but we will also examine Russia's medieval cities ("the Golden Ring"), as well as cities in Siberia and the Far East. We will read works from the disciplines of geography, history, anthropology, and sociology, as well as works of fiction; we will also view Russian films in which a city (or the city) plays an important role. NOTE: Class conducted in Russian. Readings, papers and tests in Russian.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
RUS 3001|Minimum Grade of C-|May not be taken concurrently
OR RUS 3003|Minimum Grade of C-|May not be taken concurrently.

RUS 4182. Advanced Independent Study in Russian Literature. 1 to 3 Credit Hour.
Supervised reading, research, and reports on an advanced level in Russian language, literature or civilization. NOTE: Considered only for extraordinary reasons.
Repeatability: This course may be repeated for additional credit.

RUS 4198. Writing with Russian Sources. 5 Credit Hours.
This course meets with other 4100-level culture courses and the content (readings, films, etc.) are derived from the other 4100-level culture course. Students in this class focus their attention on developing the skills to incorporate Russian sources in papers written in English, using the appropriate citation style (e.g., MLA, APA) and master the art of marshalling evidence from one language (Russian) in argument composed in another language (English).
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(RUS 3001|Minimum Grade of C-|May not be taken concurrently
AND RUS 3002|Minimum Grade of C-|May not be taken concurrently).

RUS 4282. Advanced Independent Study in Russian Literature. 1 to 3 Credit Hour.
Supervised reading, research, and reports on an advanced level in Russian language, literature or civilization. NOTE: Considered only for extraordinary reasons.
Repeatability: This course may be repeated for additional credit.

RUS 4382. Advanced Independent Study in Russian Area Studies. 1 to 3 Credit Hour.
This course, available only by consent of the instructor, is for students who want to do advanced-level research in Russian studies (e.g., history, politics, society). To be eligible for this course, students must demonstrate advanced Russian language skills typical of those demonstrated by students in 4000-level Russian language courses.
Repeatability: This course may be repeated for additional credit.
RUS 4483. Advanced Directed Readings in Russian Area Studies. 1 to 3 Credit Hour.
Students enroll in this course only with special permission from the instructor. In this course, students do advanced directed readings in Russian area studies, using Russian press and other Russian-language sources to explore Russia through disciplines such as anthropology, geography, history, political science, sociology, as well as contemporary business.
Repeatability: This course may be repeated for additional credit.

School Psychology (SPSY)

Courses

SPSY 0828. The Meaning of Madness. 3 Credit Hours.
What is madness? Insanity? Mental illness? Who decides where the line between madness and normalcy is drawn? How have ideas about madness changed over time? Can the same behaviors be considered “insane” in one culture but “normal” in another? What is “stigma” and how does it affect individuals with mental illnesses? This course will explore biological, social, and cultural factors that influence mental illness, perceptions of individuals with mental illness, and treatments of mental illness over time and across cultural groups. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed SPSY 0928.
Course Attributes: GB
Repeatability: This course may not be repeated for additional credits.

SPSY 0928. Honors The Meaning of Madness. 3 Credit Hours.
What is madness? Insanity? Mental illness? Who decides where the line between madness and normalcy is drawn? How have ideas about madness changed over time? Can the same behaviors be considered “insane” in one culture but “normal” in another? What is “stigma” and how does it affect individuals with mental illnesses? This course will explore biological, social, and cultural factors that influence mental illness, perceptions of individuals with mental illness, and treatments of mental illness over time and across cultural groups. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed SPSY 0828.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GB, HO
Repeatability: This course may not be repeated for additional credits.

SPSY 2271. Introduction to School Psychology. 3 Credit Hours.
This course serves as an introduction to the discipline of school psychology. As such, a primary focus of this course will be to learn about the field of school psychology, particularly the role and function of a school psychologist. We will explore a scientist-practitioner model of practice that is based on the current best practice model in the field. As such, a focus will be on the application of psychological principles to improve learning for all students. Emphasis will be placed on research-based models of prevention that help to improve outcomes for individual students and classrooms as well as overall schools and school districts. This course will focus on the role and function of school psychologists, paying particular attention to the three main pillars of practice: assessment, intervention, and consultation. Core topics will include systems-based service delivery, assessment, learning theory, effective interventions (academic, behavioral, and social), culturally competent practice, effective instruction, data-based decision making, and collaborative consultation.
Repeatability: This course may not be repeated for additional credits.

SPSY 3000. Topics in School Psychology I. 3 Credit Hours.
This course covers special topics of interest to students in a broad range of educational contexts. The topics will vary each semester depending on the population being served.
Repeatability: This course may be repeated for additional credit.

School of Business and Mgmnt (SBM)

Courses

SBM 3585. Diamond Peer Teachers - Internship I. 1 Credit Hour.
The Diamond Peer Teachers Program provides students with a mentored university-level teaching experience in their major. Course requirements include participation in the three-day pre-semester Teaching Institute and regular participation in the Peer Teachers support group throughout the semester. Peer Teachers provide supplemental instruction in first- and second-year courses, promote student engagement, and model successful study habits and academic preparedness for students with whom they work. For Diamond Peer Teachers only.
College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatability: This course may be repeated for additional credit.
SBM 3586. Diamond Peer Teachers - Internship II. 1 Credit Hour.
The Diamond Peer Teachers Program provides students with a mentored university-level teaching experience in their major. Course requirements include participation in the three-day pre-semester Teaching Institute and regular participation in the Peer Teachers support group throughout the semester. Peer Teachers provide supplemental instruction in first- and second-year courses, promote student engagement, and model successful study habits and academic preparedness for students with whom they work. For Diamond Peer Teachers only.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatability: This course may be repeated for additional credit.

School of Environmental Design (SED)

Courses

SED 3385. Diamond Peer Teachers - Internship I. 1 Credit Hour.
The Diamond Peer Teachers Program provides students with a mentored university-level teaching experience in their major. Course requirements include participation in the three-day pre-semester Teaching Institute and regular participation in the Peer Teachers support group throughout the semester. Peer Teachers provide supplemental instruction in first- and second-year courses, promote student engagement, and model successful study habits and academic preparedness for students with whom they work. For Diamond Peer Teachers only.
Repeatability: This course may be repeated for additional credit.

SED 3386. Diamond Peer Teachers - Internship II. 1 Credit Hour.
The Diamond Peer Teachers Program provides students with a mentored university-level teaching experience in their major. Course requirements include participation in the three-day pre-semester Teaching Institute and regular participation in the Peer Teachers support group throughout the semester. Peer Teachers provide supplemental instruction in first- and second-year courses, promote student engagement, and model successful study habits and academic preparedness for students with whom they work. For Diamond Peer Teachers only.
Repeatability: This course may be repeated for additional credit.

School of Tourism & Hosp Mgt (STHA)

Courses

STHA 3485. Diamond Peer Teachers - Internship I. 1 Credit Hour.
The Diamond Peer Teachers Program provides students with a mentored university-level teaching experience in their major. Course requirements include participation in the three-day pre-semester Teaching Institute and regular participation in the Peer Teachers support group throughout the semester. Peer Teachers provide supplemental instruction in first- and second-year courses, promote student engagement, and model successful study habits and academic preparedness for students with whom they work. For Diamond Peer Teachers only.
Repeatability: This course may be repeated for additional credit.

STHA 3486. Diamond Peer Teachers - Internship II. 1 Credit Hour.
The Diamond Peer Teachers Program provides students with a mentored university-level teaching experience in their major. Course requirements include participation in the three-day pre-semester Teaching Institute and regular participation in the Peer Teachers support group throughout the semester. Peer Teachers provide supplemental instruction in first- and second-year courses, promote student engagement, and model successful study habits and academic preparedness for students with whom they work. For Diamond Peer Teachers only.
Repeatability: This course may be repeated for additional credit.

Science Education (Elementary) (SCEE)

Courses

SCEE 3151. Teaching Science: N-6. 3 Credit Hours.
An introductory, activity-oriented approach to materials and methodology appropriate to teaching science in kindergarten through sixth grade. Emphasis on development of inquiry techniques and the constructivist theory of learning stressed in most of the newer early childhood and elementary science programs. Practical application through experiences with children.

College Restrictions: Must be enrolled in one of the following Colleges: Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDcy
Co-requisites: ELED 3387, MAEE 3141
Repeatability: This course may not be repeated for additional credits.

Science Education (Secondary) (SCES)
Courses

SCES 2189. Classroom Interactions. 3 Credit Hours.
This course continues the process of preparing students to teach mathematics and science in upper elementary and secondary settings. The specific objectives of this course are to: 1) demonstrate to students how learning theories (from the “Knowing and Learning” course) manifest themselves in instructional settings (usually classrooms), allow students to design and implement instructional activities from their own understanding of knowing and learning mathematics and science, and evaluate the outcomes of those activities based on evidence from student artifacts, and 2) provide students with frameworks for thinking about equity issues in the classroom and larger school setting and their effects on learning and provide students with strategies for teaching diverse students equitably. The culminating activities of the course are the opportunities for students to teach in a high school and to learn whether they enjoy and are good at it. While in “Knowing and Learning” students study the meaning behind understanding a particular content area from an individual perspective, in “Classroom Interactions” the perspective shifts to studying how classroom events might promote or discourage learning mathematics and science and student equity. A major component of the “Classroom Interactions” course is the opportunity for students to reflect on and evaluate their own work as teachers.

Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(EDUC 2179|Minimum Grade of C-|May be taken concurrently)
AND (SCTC 1289|Minimum Grade of C-|May not be taken concurrently
OR SCTC 1389|Minimum Grade of C-|May not be taken concurrently).

SCES 3146. The Teaching of Science in Secondary Schools. 3 Credit Hours.
For students beginning their classes in science teaching at the secondary level. This course must be taken before student teaching. Role of science education in the secondary curriculum, and sources of material and content for teaching physical, biological, earth sciences and environmental sciences are covered.

College Restrictions: Must be enrolled in one of the following Colleges: Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY
Co-requisites: EDUC 4389

Repeatability: This course may not be repeated for additional credits.

SCES 4146. Teaching Science in Secondary Schools II. 3 Credit Hours.
This course serves as the second science education course. In this course, we will continue to use ideas generated in SCES 3146, such as meaningful understanding, how children’s ideas progress as they become more sophisticated, and designing instruction around inquiry experiences, in order to take a deeper look at curriculum, instruction and learning at the secondary level. In addition, we will cover the following ideas: (1) units of instruction, as well as the relationships among units, (2) connections to other fields, specifically math and models as a way to understand more sophisticated science ideas, (3) relationships among big ideas in science (and across science courses), (4) the learning environment (i.e. level of task, management-motivation-instruction connections), and (5) accounting for language, culture and social backgrounds in science teaching/learning. Throughout the semester, we will examine and reflect on science content, field experiences, unit planning and curricula, video vignettes, connections to help us meet the objectives.

NOTE: Background clearances required.

College Restrictions: Must be enrolled in one of the following Colleges: Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY
Co-requisites: EDUC 4389

Repeatability: This course may not be repeated for additional credits.

SCES 4189. Project-Based Instruction. 3 Credit Hours.
“Project-Based Instruction” (PBI) is the capstone course in the sequence of required education courses and is required before TUtach students take Education 4688: “Student Teaching in Secondary Education.” PBI is the course in which the major themes of the TUtach program - integrated content of mathematics and science learning, infusion of technology in representation, analysis, modeling, assessment and contextualization of the content, field-based experiences, and equity - converge into an exciting and intellectually challenging culminating experience. When students complete PBI, they are fully prepared for Student Teaching. Whereas in “Classroom Interactions,” students gain experience designing a sequence of several lessons that they teach to a high school class, in PBI, students design full units of connected lessons - a skill that is required in Student Teaching. PBI also provides students with the experience of managing lessons and students outside a classroom, in a field setting. Despite its name, PBI emphasizes choosing from a variety of appropriate teaching styles, depending on the type of material and the learning objective, with project-based instruction being just one possible alternative. In addition, PBI requires students to incorporate various technologies into the units they plan.

Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: TUtach

Repeatability: This course may be repeated for additional credit.

Pre-requisites:
(PRAX 100999|May not be taken concurrently
AND SCES 2189|Minimum Grade of C-|May not be taken concurrently).

Science, Secondary Education (SCSE)
Courses

SCSE 3147. The Scientific Industry for Teachers. 3 Credit Hours.
This course exposes science teachers to industry and industrial related operations in situ where teachers can see and learn how science and scientific principles that they teach in their classrooms are applied in non-academic settings and how our economy is affected by these industries. Teachers will meet and talk with non-academic scientists, to observe them “at the bench,” in action to learn the importance of the use of the laboratory and modern technology in applying the very principles that they, the teachers, teach in their classes.

College Restrictions: Must be enrolled in one of the following Colleges: Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY
Repeatability: This course may not be repeated for additional credits.

Secondary Education (SECE)

Courses

SECE 3796. Differentiated Literacy Instruction in the Disciplines, 7-12. 3 Credit Hours.
This course examines ways in which secondary teachers can support students’ struggles with reading and writing in the disciplines, including Mathematics, History (Social Studies), the Sciences, Foreign Language, and English. How can we teach all students the concepts, facts, and skills that they need to do well in our discipline? What kinds of reading and writing issues can inhibit students’ progress? How do we identify the kinds of difficulties that different text organizations may pose for students? What must a high school student learn to do to read and write appropriately in English, History, Science, and so on? How can we address these issues without taking time away from teaching our discipline? What kinds of reading and writing tasks can we use as resources for helping students to learn in our discipline? How do the current state and national emphases on standards and teacher accountability affect our responsibilities in the classroom? The answers to these questions have deep implications for the instructional activities that we will develop to enable all children to use reading and writing as tools for learning in our fields. This is also the Capstone Writing-Intensive Course in the Major. The course immerses you in the kinds of literate activities practiced in our profession. It examines the ways that reading and writing vary across the disciplines included in this course. NOTE: This course was previously called “Reading Problems in the Secondary School.”

College Restrictions: Must be enrolled in one of the following Colleges: Education
Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

SECE 4688. Student Teaching in Secondary Education. 9 to 11 Credit Hours.
Involves a school placement where students demonstrate their knowledge of and competence in teaching. Students work with a certified cooperating teacher and are supervised by a Temple University faculty member. NOTE: All coursework must be completed before taking this course. There is a $50 fee associated with all sections of this course. Student Teaching Applications are now online at http://education.temple.edu/ofp/studentteaching. Obtain your advisor’s signature and return the completed application to the Student Teaching coordinator in 150 Ritter Hall.

College Restrictions: Must be enrolled in one of the following Colleges: Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY
Co-requisites: SECE 4801
Repeatability: This course may not be repeated for additional credits.

SECE 4801. Senior Seminar and Performance Assessment in Secondary Education. 3 Credit Hours.
Students will be involved in experiences that prepare them for making the transition from college to the practice setting, and engage in activities that foster professionalism in school and community settings. The senior performance assessment, a requirement for teacher certification students, is also a part of the course. NOTE: This is a required course for all teacher certification candidates, which is taken during the student teaching semester.

College Restrictions: Must be enrolled in one of the following Colleges: Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY
Co-requisites: SECE 4688
Repeatability: This course may not be repeated for additional credits.

Slavic Languages & Literature (SLVC)

Courses

SLVC 2111. 19th Century Slavic Literature in English. 3 Credit Hours.
Survey of Slavic literature; reading of representative works from Bulgarian, Croatian, Czech, Polish, Russian, Serbian, and Ukrainian literature.
Repeatability: This course may not be repeated for additional credits.
SLVC 2112. Modern Slavic Literature in English. 3 Credit Hours.
Survey of East, West, and South Slavic literature; reading of representative works from Bulgarian, Croatian, Czech, Polish, Russian, Serbian, and Ukrainian literature.
Repeatability: This course may not be repeated for additional credits.

SLVC 3182. Independent Study. 1 to 3 Credit Hour.
Arranged each semester. Please consult with the instructor.
Repeatability: This course may be repeated for additional credit.

Social Studies Ed (Elementary) (SSEE)

Courses
SSEE 3161. Teaching of Social Studies: N-6. 3 Credit Hours.
This course addresses issues and methods in teaching social studies at the elementary level. The emphasis is on teaching for understanding, social justice, and investigating resources and curriculum in social studies.
College Restrictions: Must be enrolled in one of the following Colleges: Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY
Repeatability: This course may not be repeated for additional credits.

Social Studies Ed (Secondary) (SSES)

Courses
SSES 3278. Methods and Materials in Secondary Social Studies. 3 Credit Hours.
The course focuses on instructional materials and teaching strategies for teaching history and secondary social studies. There is an emphasis on social justice and teaching with documents. Students are required to complete a resource file, unit of study, and several short papers. Also, students will complete the Intermediate Performance assessment in this course.
College Restrictions: Must be enrolled in one of the following Colleges: Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY
Co-requisites: EDUC 4389
Repeatability: This course may not be repeated for additional credits.

SSES 4278. Teaching for Understanding in Secondary Social Studies. 3 Credit Hours.
This course builds on the foundation prepared in SSES 3278: Issues Teaching Secondary Social Studies. The purpose is to develop an understanding of teaching the four major content areas of the social studies (history, geography, economics, civics and government). The goal is to help prepare candidates to teach these areas in terms of designing curriculum and assessment; adapting strategies from the field; and considering innovative ways to teach by drawing on available resources. The course will cover the important theories of social education and the developmental course of learning history, economics, civics, geography, psychology, sociology, and anthropology. Woven throughout the class will be a discussion of culture and diversity as adolescents encounter the world and prepare for full citizenship and to enter the workforce. SSES 4278 includes a 1-credit field experience. Students are expected to participate in level two fieldwork in a school setting for 30 hours that addresses one or more of the content areas of social studies (history, geography, economics, civics, psychology, anthropology, and/or sociology). Through field experiences, readings, projects and papers, and class discussions the following questions will be addressed: How will we prepare adolescents for a world in which respect for the environment, diversity, and the principles of democracy have become increasingly important? How can activities be developed that embody the principles of adolescents' concept development in the social studies? How can we create learning experiences that include and value all students' backgrounds? NOTE: Clearances required.
College Restrictions: Must be enrolled in one of the following Colleges: Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY
Co-requisites: EDUC 4389
Repeatability: This course may not be repeated for additional credits.

Social Work - Undergraduate (SSWU)
Courses

SSWU 0822. Human Behavior and the Photographic Image. 3 Credit Hours.
How do photographs become more than just a pile of disparate images? Is there more to photography than that single "decisive moment" in the hunt and capture of an image? How do photographers comment on issues that are important to them? How can photographs tell a story? Is there a way one can use the art of photography to elicit change? In this class, students will use their digital cameras to investigate individual photographs, as well as series of photographs. We will look at photography in its historical context -- at the advent of documentary photography and photojournalism, and at narrative photography in its more contemporary form, as photographers use it to chronicle their own lives and to tell a story. Through the exercises of looking at and making photographic images, several core concepts of social work, along with theories of human behavior in the social environment, will be introduced. Students will learn not only about the place photography holds in our culture, but our culture itself, and the students' place in that culture. Students will critically analyze published photographs, as well as photographs made during the class. The semester will culminate in a class exhibition where students will be given the opportunity to present their photographs to the public, demonstrating their understanding of human behavior in the social environment. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed GAD 0822.

Course Attributes: GB
Repeatability: This course may not be repeated for additional credits.

SSWU 1001. Introduction to Social Welfare and Human Services. 3 Credit Hours.
The course provides an opportunity for students to test their interest in the social work profession by introducing them to the wide range of areas in which social workers practice and the skills, knowledge, and values required in each area. Topics covered include the history of social welfare, the profession of social work, generalist social work practice, poverty and public welfare, emotional/behavioral problems and counseling, family problems and services to families, sexual orientation, sexual concerns, and sex counseling, drug abuse and drug treatment programs, crime, juvenile delinquency, and correctional services, issues in education and school social work, social work in the workplace, racism, ethnocentrism, sexism, aging and gerontological services, health and medical social services, physical and mental disabilities, mental retardation, and family planning. NOTE: Open to non-majors, majors and minors.

Repeatability: This course may not be repeated for additional credits.

SSWU 1002. Communication in Social Work Practice. 3 Credit Hours.
Communication is a major component of all social work practice across all systems levels. This course provides students with opportunities to develop knowledge, values, and skills necessary for effective communication in social work practice with individuals, families, groups, communities, organizations, and in policy arenas. Verbal, nonverbal, and written communication skills are essential for effective social work practice. Understanding and application of these communication skills are stressed in this course. NOTE: Open to majors and minors.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Social Work, Social Work - Undergraduate
Repeatability: This course may not be repeated for additional credits.

SSWU 2003. The History and Values of Social Welfare. 3 Credit Hours.
This course provides an overview of the events that have influenced the provision of social services to people in the United States. The course considers the historical, political, economic, and cultural contexts in which social work and social welfare policy have evolved. Important historical events include the Elizabethan Poor Laws, the Progressive Era, the Great Depression, New Deal, Social Security Act, Civil Rights Movement, War on Poverty, the Reagan Revolution, and the policies of the Clinton, Bush and Obama administrations. The course considers the unique characteristics of the welfare system in the United States and compares it to systems in other countries. It also identifies current dilemmas facing the welfare state and efforts to further decrease the role of the federal government in social welfare programs. NOTE: This course can be used to satisfy the university Core American Culture (AC) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Social Work, Social Work - Undergraduate
Course Attributes: AC
Repeatability: This course may not be repeated for additional credits.

SSWU 2004. Social Welfare in the United States. 3 Credit Hours.
This course is the second half of a two-course sequence concerned with social welfare policy. The course is centered on the analysis of social problems and social policies in the United States. It addresses competing values, interest groups, conceptual approaches and processes involved in policymaking including implementation and evaluation. The course considers the ways in which policymakers have addressed human needs in specific areas. Topics include: different ways of defining poverty; the two major forms of income maintenance in the United States (social insurance and public assistance); health (both biomedical and social); substance abuse, hunger, and the service needs of children, older people, and those with disordered mental states. 

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Social Work, Social Work - Undergraduate
Repeatability: This course may not be repeated for additional credits

Pre-requisites:
SSWU 2003|Minimum Grade of C-|May not be taken concurrently.

SSWU 3000. Special Topics in Social Work. 1 to 3 Credit Hour.
This course is designed to explore contemporary issues in social work practice. The design of this course provides students with an opportunity to develop knowledge of specific emerging and current social work issues or specific social work practice topics. The variable course credit allows instructors to design a wide range of courses that focus on diverse topics relevant for social work students.

Repeatability: This course may be repeated for additional credit.
SSWU 3005. Helping Processes in Social Work I. 3 Credit Hours.
In this course, students are introduced to the value base, knowledge and skills of the social work profession as well as the importance of the interplay between the individual and the social environment. The course introduces students to the generalist model of social work practice, which includes practice with individuals, families, groups, communities, and organizations. It explores theories, skills, values, and professional self development in community practice and issues that affect service delivery, such as racism, sexism, heterosexism, and classism. Focus is placed on populations at risk, diversity, and issues of social and economic justice as they relate to work with clients, the social service delivery system, and society as a whole. Students begin to examine their own abilities for social work as a discipline and a career and also engage in community and agency experiences outside of class.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Social Work, Social Work - Undergraduate
Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
Co-requisites: SSWU 3015
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(PSY 1061|Minimum Grade of C-|May not be taken concurrently
OR PSY 1001|Minimum Grade of C-|May not be taken concurrently)
AND (SOC 1176|Minimum Grade of C-|May not be taken concurrently).

SSWU 3006. Helping Processes in Social Work II. 3 Credit Hours.
This course builds upon the beginning foundation of professional social work introduced in Social Work 3005. The focus of this continuing course, however, is on individual, family, and group practice. The course continues to examine the forms of oppression and injustice, populations at risk, diversity, and human rights as they relate to work with people in client status, the social service delivery system, and society as a whole.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Social Work, Social Work - Undergraduate
Co-requisites: SSWU 3016
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
SSWU 3005|Minimum Grade of C-|May not be taken concurrently.

SSWU 3007. Human Behavior in the Social Environment. 3 Credit Hours.
This course is designed to explore the theoretical knowledge base of social work in relation to human behavior and human development within the context of the social environment. The theories of human behavior that undergird the practice of social work are presented. The course also explores the role of human behavior theory, its limitations and strengths, and its contribution to our knowledge of human development and human behavior throughout the life course. The person-in-environment perspective is given special emphasis. The mutual influence of transactions between individuals, families, communities, social institutions and societies are explored using a social systems perspective. Interrelationships among biological, psychological, social and cultural systems as they affect and are affected by human behavior are studied using a number of interdisciplinary theoretical approaches such as systems theory, concepts from ego psychology and role theory. NOTE: (1) Biology 1001, Kinesiology 1223, Psychology 1061 and Sociology 1176 are listed as both prerequisites and co-requisites because they may be taken as either. (2) This course can be used to satisfy the university Core Individual & Society (IN) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Social Work, Social Work - Undergraduate
Course Attributes: IN
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(BIOL 1001|Minimum Grade of C-|May be taken concurrently
OR KINS 1223|Minimum Grade of C-|May be taken concurrently)
AND (PSY 1061|Minimum Grade of C-|May be taken concurrently
OR PSY 1001|Minimum Grade of C-|May be taken concurrently)
AND (SOC 1176|Minimum Grade of C-|May be taken concurrently).
SSWU 3009. Human Behavior and the Social Environment: Communities and Organizations. 3 Credit Hours.
This course examines the practice of social service delivery within its organizational and environmental contexts. Social services are delivered within organizations that have varying degrees of economic, political and cultural complexity. Professional and organizational values and expectations are constantly in dynamic tension with each other. The course explores the impact of these tensions on the quality and quantity of services and addresses the professional social worker's role as a proactive force partnering with clients to advocate for services and systems improvement.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Social Work, Social Work - Undergraduate
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Social Work
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(SSWU 1001|Minimum Grade of C-|May not be taken concurrently
AND SSWU 1002|Minimum Grade of C-|May not be taken concurrently
AND SSWU 2003|Minimum Grade of C-|May not be taken concurrently
AND SSWU 2004|Minimum Grade of C-|May not be taken concurrently
AND SSWU 3005|Minimum Grade of C-|May not be taken concurrently
AND SSWU 3006|Minimum Grade of C-|May not be taken concurrently
AND SSWU 3016|Minimum Grade of C-|May not be taken concurrently).

SSWU 3010. Special Topics in Social Work. 1 to 3 Credit Hour.
This course is designed to explore contemporary issues in social work practice. The design of this course provides students with an opportunity to develop knowledge of specific emerging and current social work issues or specific social work practice topics. The variable course credit allows instructors to design a wide range of courses that focus on diverse topics relevant for social work students.

Repeatability: This course may be repeated for additional credit.

SSWU 3011. The Social Worker in the Group. 3 Credit Hours.
This course examines the dynamics of the small group. Different theoretical conceptualizations of the role of the social worker in the group are discussed. Concepts such as group norms, roles, and leadership are examined. There is a special focus on work with community groups.

Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
Repeatability: This course may not be repeated for additional credits.

SSWU 3015. Lab for Helping Processes in Social Work I. 1 Credit Hour.
Students will experience several field experiences through which they can engage in selective service tasks, develop an understanding of human service organizations and of the social service delivery system. Through these experiences they will have the opportunity to test their own suitability for social work as a career.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Social Work, Social Work - Undergraduate
Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
Co-requisites: SSWU 3005
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(PSY 1061|Minimum Grade of C-|May not be taken concurrently
OR PSY 1001|Minimum Grade of C-|May not be taken concurrently)
AND (SOC 1176|Minimum Grade of C-|May not be taken concurrently).

SSWU 3016. Lab for Helping Processes in Social Work II. 1 Credit Hour.
Students will arrange a service learning experience through Temple University's Office of Community Service. Through this experience students will begin to develop an understanding of the social service delivery system at multiple levels, as they engage in selected service tasks and continue to assess their own suitability for social work as a career.

Co-requisites: SSWU 3006
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
SSWU 3005|Minimum Grade of C-|May not be taken concurrently.

SSWU 3096. Institutional Racism. 3 Credit Hours.
This course is designed to introduce and sensitize students to the forms, practices, and effects of racism. The course examines the historical foundations of racism as an ideology, various racial theories and theories of racism, and the practices that perpetuate institutional systems which continue to limit the opportunities afforded to persons of color. Specifically, it emphasizes the role of institutional racism in education, human services, housing, law, business, and prisons. The complex interplay among racism and other institutionalized systems of oppression (e.g., sexism, ageism, heterosexism, ethnocentrism, and anti-Semitism) are explored throughout the semester. NOTE: This is a Writing Intensive course.

Department restrictions: Must be enrolled in one of the following Departments: CPHSW: Social Work
Field of Study Restrictions: Must be enrolled in one of the following Majors: Social Work, Social Work - Undergraduate
Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.
SSWU 4000. Special Topics in Social Work. 1 to 3 Credit Hour.
This special topics course can explore a range of issue areas of importance to social work and give students an opportunity to study topics that are not a
standard part of the curriculum. Each semester, an instructor can create a course in an area they see as particularly relevant. This course may meet the
Social Work Elective requirement. Students who are seriously interested in the content must meet with the instructor to obtain authorization to register.
Repeatability: This course may be repeated for additional credit.

SSWU 4001. Seminar in Social Work Practice. 3 Credit Hours.
This course is the first semester of a two-semester integrative practice course for senior Social Work majors. Students use the seminar format to learn
empowerment based social work practice skills and to apply the social work curricular areas of human behavior in the social environment, social welfare
policy, and research. The background acquired from the Core or General Education curriculum and the content of the professionally related courses
are used to inform social work practice. An important focus of the senior seminar is the agency environment in which the students practice. The formal
and informal systems in which students do their fieldwork comprise the foci of the senior seminar classes. The classroom instructor is the liaison for the
students’ fieldwork agencies. This maximizes the opportunity to create an intense, supportive, and integrative educational experience. Students stay in
the same section and field agency throughout both fall and spring semesters. Previously acquired skills are enhanced while new skills are developed
so that students acquire the competencies for beginning generalist social work practice at all levels with systems of all sizes. NOTE: It is recommended
that students take SSWU 3096, Institutional Racism, before entering this Senior Seminar, but if this is not possible, it may be taken in the fall semester of
senior year.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Social Work, Social Work - Undergraduate
Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Co-requisites: SSWU 4396
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(SSWU 1002|Minimum Grade of C-|May not be taken concurrently
AND SSWU 2003|Minimum Grade of C-|May not be taken concurrently
AND SSWU 2004|Minimum Grade of C-|May not be taken concurrently
AND SSWU 3005|Minimum Grade of C-|May not be taken concurrently
AND SSWU 3006|Minimum Grade of C-|May not be taken concurrently
AND SSWU 3007|Minimum Grade of C-|May not be taken concurrently).

SSWU 4002. Seminar in Social Work Practice. 3 Credit Hours.
This course is the second semester of a two-semester integrative practice course for senior social work majors. Students use the seminar format to
learn empowerment based social work practice skills and to apply the social work curricular areas of human behavior in the social environment, social
welfare policy, and research. The background acquired from the Core or General Education curriculum and the content of the professionally related
courses are used to inform social work practice. An important focus of both the Social Work 4001 and Social Work 3009 is the agency environment in
which the students practice. The realities of the formal and informal systems in which students do their fieldwork are constant foci of the senior seminar
classes. The classroom instructor is the liaison for the students’ fieldwork agencies. This maximizes the opportunity to create an intense, supportive and
integrative educational experience. Students stay in the same section and field agency throughout both fall and spring semesters. Previously acquired
skills are enhanced while new skills are developed so that students acquire the competencies for beginning generalist social work practice at all levels
with systems of all sizes.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Social Work, Social Work - Undergraduate
Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
SSWU 4001|Minimum Grade of C-|May not be taken concurrently.

SSWU 4187. Social Work Field Practicum I. 5 Credit Hours.
This first semester of a two-semester practicum offers the opportunity to practice social work in selected social agencies. The student spends 200
supervised hours in the field. This generalist experience provides students the opportunity to apply the knowledge, skills, and values learned in research,
policy, human behavior, and practice classes. It allows them to connect social work theory with practice and to develop increasing depth in knowledge
and skills. These include the development of communication, problem-solving, and networking skills within various focal systems and demonstration of
purposeful use of self within a culturally competent empowerment model of practice. NOTE: For details on the field placement process, refer to the Field
Education Manual available from the Field Education Office.
Co-requisites: SSWU 4001, SSWU 4396
Repeatability: This course may be repeated for additional credit.
SSWU 4287. Social Work Field Practicum II. 5 Credit Hours.
This second semester of a two-semester practicum offers the opportunity to practice social work in selected social agencies. The student spends 200 supervised hours in the field. This generalist experience provides students the opportunity to apply the knowledge, skills, and values learned in Research, Policy, Human Behavior, and Practice classes. It allows them to connect social work theory with practice and to develop increasing depth in knowledge and skills. These include the development of communication, problem-solving, and networking skills within various focal systems and demonstration of purposeful use of self within a culturally competent empowerment model of practice.

**Co-requisites:** SSWU 4002, SSWU 4407
**Repeatability:** This course may be repeated for additional credit.

**Pre-requisites:**
(SSWU 4001|Minimum Grade of C-|May not be taken concurrently
AND SSWU 4187|Minimum Grade of C-|May not be taken concurrently
AND SSWU 4396|Minimum Grade of C-|May not be taken concurrently).

SSWU 4301. Women and Social Policy. 3 Credit Hours.
This course examines policy issues that have a major influence on the agency and well-being of women. It identifies values, attitudes, and belief systems about females that have contributed both to the problems women and girls experience and to the conceptualization and implementation of related policy responses in political, social, and economic areas. Policy areas covered include economic status, labor force participation, family, caregiving, reproduction, substance abuse, violence, health, mental health, and international issues affecting women.

**Field of Study Restrictions:** Must be enrolled in one of the following Fields of study: Social Work, Social Work - Undergraduate

**Class Restrictions:** Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits

**Repeatability:** This course may not be repeated for additional credits.

SSWU 4302. Emotional Disorders in Children and Adolescents. 3 Credit Hours.
This course provides students with a knowledge base in emotional and behavioral difficulties of children and adolescents from the perspective of social work. Students become familiar with the current literature in the field of child mental health. This includes knowledge about specific emotional and behavioral problems, theoretical perspectives for understanding child mental health and populations at risk, and current practices with children and families.

**Field of Study Restrictions:** Must be enrolled in one of the following Fields of study: Social Work, Social Work - Undergraduate

**Class Restrictions:** Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits

**Repeatability:** This course may not be repeated for additional credits.

SSWU 4303. Social Work with the Homeless. 3 Credit Hours.
This course provides a framework for the analysis of social policies and programs related to the social problems of homelessness in the United States. Although the focus of the course is on contemporary issues of homelessness, the approach includes an historical perspective in order to explore the enduring legacy of early interventions and approaches to the relief and social control of marginalized populations. The implications of differing viewpoints and alternative problem definitions for policy and service delivery are considered. The course explores shifts in housing policies. Additionally, employment programs are discussed in some detail to demonstrate their impact on the increasing numbers of Americans who are homeless.

**Field of Study Restrictions:** Must be enrolled in one of the following Fields of study: Social Work, Social Work - Undergraduate

**Class Restrictions:** Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits

**Repeatability:** This course may not be repeated for additional credits.

SSWU 4304. HIV/AIDS and Social Work: Prevention and Practice. 3 Credit Hours.
This course provides a comprehensive overview of HIV/AIDS, including biomedical, psychological, sociological, and global considerations for prevention and care. The course is intended to familiarize students with current knowledge for culturally competent direct social work practice with HIV-positive individuals and their families. In addition, attention is focused on organizational, community, and policy-level responses to AIDS. Specific topics include medical and cultural origins of HIV; multilevel prevention strategies and barriers to their enactment, including stigma; legal and ethical aspects of prevention, testing, and treatment; psychosocial issues for families of HIV-positive persons, including the implications of grieving, death, and dying; clinical skills in assisting HIV-positive clients/patients; ways to assess comprehensiveness of services offered in and for varying communities; social workers' varying roles in responding to AIDS as a social and health problem; and current research and policy implications of the illness. NOTE: Includes a minimum of 12 hours of volunteer work related to HIV/AIDS.

**Field of Study Restrictions:** Must be enrolled in one of the following Fields of study: Social Work, Social Work - Undergraduate

**Class Restrictions:** Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits

**Repeatability:** This course may not be repeated for additional credits.

SSWU 4305. Health Care Policy. 3 Credit Hours.
This course traces the evolution of health care policy in the United States and the changing roles of social workers in health care over time. A range of specific issues are discussed including access to care, quality of care, cost and financing of care as well as specific topics such as health disparities, AIDS, homelessness, and health care in prisons. The course also considers the way selected other countries have organized their health systems, the values that have informed their decisions, and the trade-offs reflected.

**Field of Study Restrictions:** Must be enrolled in one of the following Fields of study: Social Work, Social Work - Undergraduate

**Class Restrictions:** Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits

**Repeatability:** This course may not be repeated for additional credits.
SSWU 4306. Child Welfare Policy. 3 Credit Hours.
This course will explore the historical, philosophical, legal, social, political, and economic influences on the development of child welfare services. Selected aspects of children's lives will be examined to understand and analyze the state of children in the United States and the effects of state intervention in the lives of children and their families. A range of services from family supports to foster care, kinship care, adoption, and family preservation will be examined. Issues of access and equity, gender, differential needs and treatment of children based on race, socioeconomic status, and family type will frame the analyses. Comparisons between the U.S. and other countries will be made to address changes for the future.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Social Work, Social Work - Undergraduate
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may not be repeated for additional credits.

SSWU 4307. Alcohol and Substance Abuse. 3 Credit Hours.
This course provides students with current information about alcohol and other substance abuse. Using ecosystems and family systems frameworks, information is presented regarding the bio-psycho-social impact of alcohol and other substance abuse on individual and family functioning. Particular attention is given to treatment options and resources for change.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Social Work, Social Work - Undergraduate
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may not be repeated for additional credits.

SSWU 4308. Social Transformation. 3 Credit Hours.
This is an exploration of theories of social transformation with particular focus on analyzing and addressing societal oppression and injustice. Course topics include dynamics of empowerment and self-determination, social movements and collective action, and the risks and rewards of being a change agent. Emphasis is on participatory learning and practical application in social work and human service settings.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Social Work, Social Work - Undergraduate
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may not be repeated for additional credits.

SSWU 4309. Societal Responses to Aging. 3 Credit Hours.
This course explores public and private resources, the need for social and political action, the network of services to meet the needs of individuals and their families, present policies and practice in income maintenance, health, housing, safety, and social status. Public-private sponsorship, cost, accountability, benefit levels and administration are also explored. Student social action projects are completed and expanded.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Social Work, Social Work - Undergraduate
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may not be repeated for additional credits.

SSWU 4311. Law and Practice of Human Services. 3 Credit Hours.
This course provides an introduction to the law as it affects the human services professional and the practice of social work. The course provides an overview of major areas of the law as they relate to juveniles, families, and the elderly. It also includes a review of professional responsibilities including informed consent, privileged communication, malpractice laws and the building of effective social work/legal terms.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Social Work, Social Work - Undergraduate
Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may not be repeated for additional credits.

SSWU 4312. Loss and Grief. 3 Credit Hours.
This course examines the dynamics of loss, the stress of grief and mourning, societal attitudes about death, and cultural variations in dealing with loss and bereavement practices. The course aims to help students explore and examine personal meanings about loss and to prepare them to be responsive and helpful as social workers working with those experiencing loss and grief. Class sessions combine cognitive and experiential material.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Social Work, Social Work - Undergraduate
Repeatability: This course may not be repeated for additional credits.

SSWU 4316. Alvuk and Substance Abuse. 3 Credit Hours.
This course provides students with current information about alcohol and other substance abuse. Using ecosystems and family systems frameworks, information is presented regarding the bio-psycho-social impact of alcohol and other substance abuse on individual and family functioning. Particular attention is given to treatment options and resources for change.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Social Work, Social Work - Undergraduate
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may not be repeated for additional credits.

SSWU 4321. Law and Practice of Human Services. 3 Credit Hours.
This course provides an introduction to the law as it affects the human services professional and the practice of social work. The course provides an overview of major areas of the law as they relate to juveniles, families, and the elderly. It also includes a review of professional responsibilities including informed consent, privileged communication, malpractice laws and the building of effective social work/legal terms.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Social Work, Social Work - Undergraduate
Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may not be repeated for additional credits.

SSWU 4328. Independent Study in Social Welfare. 1 to 6 Credit Hour.
In this course, a program is developed by instructor and student to permit the study of issues of interest to the student and relevant to social welfare and social work. Students must meet with the faculty member within the first week of the term and agree on the topic area(s), readings, graded assignments, and due dates. NOTE: Registration for this course requires prior consent from the faculty member with whom the student wishes to study. An academic advisor will register the student once the instructor has agreed and the student communicates this information to the advisor. Also, a study plan must be submitted and preapproved by the instructor and the director of the BSW Program.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Social Work - Undergraduate
Repeatability: This course may be repeated for additional credit.
SSWU 4396. Introduction to Social Research. 3 Credit Hours.
An introduction to the philosophy, concepts, principles, and methods of empirical research in the social and behavioral sciences. Characteristic stages and formats of social research are reviewed, with the primary aim of developing beginning competence in the critical assessment of published research and use of research techniques.
Co-requisites: SSWU 4001
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
PSY 1167 | Minimum Grade of C- | May not be taken concurrently
OR MATH 1013 | Minimum Grade of C- | May not be taken concurrently
OR SOC 1167 | Minimum Grade of C- | May not be taken concurrently
OR STAT 2101 | Minimum Grade of C- | May not be taken concurrently.

SSWU 4407. Evaluating Programs and Practice in Social Work. 3 Credit Hours.
This course is designed to introduce students to the range of activities and methods included in program evaluation. These are examined in the larger context within which programs exist, the specific stage of program development, and the ends to which information is to be used. Students will learn the historical context of accountability and development of program evaluation; the nature, substance and role of evaluation research; the inherent and contextual constraints and potentialities of program evaluation; the role and use of program evaluation in relation to planning, administration, and social policy; the relationship between program evaluation and practice at the individual and program levels; and the options available in doing program evaluation.
Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Social Work
Co-requisites: SSWU 4002, SSWU 4287
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(SSWU 3009 | Minimum Grade of C- | May not be taken concurrently)
AND (SSWU 4001 | Minimum Grade of C- | May not be taken concurrently)
AND (SSWU 4396 | Minimum Grade of C- | May not be taken concurrently)
AND (SSWU 4187 | Minimum Grade of C- | May not be taken concurrently).

SSWU 4482. Independent Study in Social Work. 1 to 6 Credit Hour.
In this course, a program is developed by instructor and student to permit the study of issues of interest to the student and relevant to social welfare and social work. Students must meet with the faculty member within the first week of the term and agree on the topic area(s), readings, graded assignments, and due dates. NOTE: Registration for this course requires prior consent from the faculty member with whom the student wishes to study. An academic advisor will register the student once the instructor has agreed and the student communicates this information to the advisor. Also, a study plan must be submitted and preapproved by the instructor and the director of the BSW program.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Social Work, Social Work - Undergraduate
Repeatability: This course may be repeated for additional credit.

Sociology (SOC)

Courses

SOC 0817. Youth Cultures. 3 Credit Hours.
Do you listen to hip hop, spend all your time in Second Life, dress up like a cartoon character and go to anime fairs, or go skateboarding every day with your friends? Then you're part of the phenomenon called youth culture. Often related to gender, race, class and socio-economic circumstances, youth cultures enable young people to try on identities as they work their way to a clearer sense of self. Empowered by new technology tools and with the luxury of infinite virtual space, young people today can explore identities in ways not available to previous generations. Students in this class will investigate several youth cultures, looking closely at what it means to belong. They will also come to appreciate how the media and marketing construct youth identities and define youth cultures around the world. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed ANTH 0817, ASST 0817 or EDUC 0817/0917.
Course Attributes: GB
Repeatability: This course may not be repeated for additional credits.

SOC 0818. Human Sexuality. 3 Credit Hours.
Our sexuality is a core part of being human. We often think about sexuality in terms of the physical and reproductive aspects of sex. But our sexuality is complex and dynamic. We will address this dynamic complexity as we explore the physical, psychological, relational, and cultural aspects of sexuality. The goal of this course is to broaden your perspective of human sexuality, and deepen your understanding and awareness of your own sexuality and the many influences on this essential part of yourself. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: PSY 0818, SOC 0918.
Course Attributes: GB
Repeatability: This course may not be repeated for additional credits.
SOC 0825. Quantitative Methods in the Social Sciences. 4 Credit Hours.
Psychological, political, social, and economic arguments and knowledge frequently depend on the use of numerical data. A psychologist might hypothesize that I.Q. is attributable to environmental or genetic factors; a politician might claim that hand gun control legislation will reduce crime; a sociologist might assert that social mobility is more limited in the United States than in other countries, and an economist might declare that globalization lowers the incomes of U.S. workers. How can we evaluate these arguments? Using examples from psychology, sociology, political science, and economics, students will examine how social science methods and statistics help us understand the social world. The goal is to become critical consumers of quantitative material that appears in scholarship, the media, and everyday life. NOTE: This course fulfills the Quantitative Literacy (GQ) requirement for students under GenEd and a Quantitative Reasoning (QA or QB) requirement for students under Core. Students cannot receive credit for this course if they have successfully completed SOC 0925, POLS 0825, PSY 0825, or ANTH 0825.

Course Attributes: GQ

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
MATH 0701 | Minimum Grade of C- | May not be taken concurrently
OR MC3 Y | May not be taken concurrently
OR MC4 Y | May not be taken concurrently
OR MC5 Y | May not be taken concurrently
OR MC6 Y | May not be taken concurrently.

SOC 0829. The History & Significance of Race in America. 3 Credit Hours.
Why were relations between Native Americans and whites violent almost from the beginning of European settlement? How could slavery thrive in a society founded on the principle that "all men are created equal"? How comparable were the experiences of Irish, Jewish, and Italian immigrants, and why did people in the early 20th century think of them as separate "races"? What were the causes and consequences of Japanese Americans' internment in military camps during World War II? Are today's Mexican immigrants unique, or do they have something in common with earlier immigrants? Using a variety of written sources and outstanding documentaries, this course examines the racial diversity of America and its enduring consequences. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Duplicate Credit Warning: Students may take only one of the following courses for credit; all other instances will be deducted from their credit totals: African American Studies 0829, Anthropology 0829, Geography and Urban Studies 0829, History 0829, Political Science 0829, Sociology 0829, 0929, 1376, 1396, R059, or X059.

Course Attributes: GD

Repeatability: This course may not be repeated for additional credits.

SOC 0831. Immigration and the American Dream. 3 Credit Hours.
As a Temple student, you go to school and live in a city full of immigrants. Perhaps your own relatives were immigrants to the United States. But have you ever listened to their stories? With an historical and sociological framework as a basis, we will take an in-depth and more personal look at the immigrant experience as expressed through the immigrants' own voices in literature and film. Topics explored include: assimilation, cultural identity and Americanization, exploitation and the American Dream, ethnic communities, gender, discrimination and stereotyping. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: ANTH 0831, CRIT 0831, History 0831, Italian 0831/0931, Russian 0831, or SPAN 0831/0931.

Course Attributes: GD

Repeatability: This course may not be repeated for additional credits.

SOC 0832. Politics of Identity in America. 3 Credit Hours.
Gay or straight. Black or white. Male or female. What do these different group identities mean to Americans? How do they influence our politics? Should we celebrate or downplay our diversity? This course explores how we think about others and ourselves as members of different groups and what consequences it has for how we treat one another. Our fundamental social identities can be a source of power or of powerlessness, a justification for inequality or for bold social reform. Students learn about the importance of race, class, gender and sexual orientation across a variety of important contexts, such as the family, workplace, schools, and popular culture and the implications these identities have on our daily lives. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they have successfully completed POLS 0832, History 0832 or Women's Studies 0832/0932.

Course Attributes: GD

Repeatability: This course may not be repeated for additional credits.

SOC 0833. Race & Poverty in the Americas. 3 Credit Hours.
The transatlantic slave trade was one of the most brutal and momentous experiences in human history. Attitudes toward Latino, Caribbean, African, and Asian immigrants in the United States today can only be fully understood in the contexts of slavery and the "structural racism," "symbolic violence" (not to mention outright physical violence), and social inequalities that slavery has spawned throughout the region. Although focusing primarily on the United States, we will also study the present entanglements of poverty and race in Brazil, Haiti, and other selected nations of "The New World," placing the U.S. (and Philadelphia in particular) experience in this historical context. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they have successfully completed REL 0833/0933, ANTH 0833, or LAS 0833/0933.

Course Attributes: GD

Repeatability: This course may not be repeated for additional credits.
SOC 0835. Ethnicity and the Immigrant Experience in the U.S.. 3 Credit Hours.
How do immigrants learn to become American? How does living an ethnic identity vary for different groups? When does ethnicity become a chosen identity or an unwanted label? How do we learn to value some aspects of ethnicity but not others? What are markers of ethnicity? How do language, food, music, family, and community work to provide authenticity to the American immigrant experience? How does ethnicity combat the tidal social expectations to conform to the dominant culture? Using a variety of written materials including novels that explore the ethnic identity of different groups, this course raises questions about how ethnicity and American identity are connected. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Duplicate Credit Warning: Students may take only one of the following courses for credit; all other instances will be deducted from their credit totals: Sociology 0835, 0935, 1476, 1496, R064, X064.
Course Attributes: GD
Repeatability: This course may not be repeated for additional credits.

SOC 0848. American Revolutions. 3 Credit Hours.
From the first encounters with Native Americans to the present, a series of pivotal moments have had an enduring influence on American society, culture, and politics. In each class, three modules will focus on three pivotal moments, such as King Philip's War, Nat Turner's Rebellion, the Scopes trial, the Civil Rights movement, the women's movement, the emergence of Elvis Presley, the sexual revolution, the rise of environmentalism, the Reagan Revolution, and 9-11. In each module, students will first place the main subject of the module in context, and then seek to understand how it changed American society. The last week of each module will be devoted to a consideration of how the subject of that module has become part of American collective memory. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: AMST 0848, ANTH 0848, GUS 0848, or History 0848.
Course Attributes: GU
Repeatability: This course may not be repeated for additional credits.

SOC 0849. Dissent in America. 3 Credit Hours.
Throughout American history individuals and groups of people, have marched to the beat of a different drummer, and raised their voices in strident protest. Study the story and development of dissent in America. How has dissent shaped American society? In addition to studying the historical antecedents of dissent students will have first-hand experience visiting and studying a present-day dissent organization in the Philadelphia area to investigate connections between the history of dissent and the process of making dissenting opinion heard today. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed English 0849/0949 or History 0849/0949.
Course Attributes: GU
Repeatability: This course may not be repeated for additional credits.

SOC 0851. Gender in America. 3 Credit Hours.
Being a man or a woman means feeling like a man or a woman. People display gender by learning the routines and expectations associated with being male or female. How do people learn gender? How does living in a gendered society lead to differences in power and opportunities between men and women? How do race, ethnicity and sexuality affect the way gender is experienced for these different groups? How does gender acquire such important meaning in terms of identity and behavior? Using a variety of written materials including novels that explore gender identity construction, this course looks at how gender has become such a prominent feature of life in America. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Duplicate Credit Warning: Students may take only one of the following courses for credit; all other instances will be deducted from their credit totals: Sociology 0851, 1676, 1696, C081, X081, Women's Studies 0851, 1676, 1696, C081, X081.
Course Attributes: GU
Repeatability: This course may not be repeated for additional credits.

SOC 0857. Sport & Leisure in American Society. 3 Credit Hours.
Explore the complexity and diversity of American society through the study of sport and leisure. To what extent does the way we play or spectate sports, the way we plan or experience leisure time, reflect American values? As we trace a brief history of the United States through the lens of sport and leisure, we will observe how concepts of freedom, democracy and equality are tested through time. Issues of race, ethnicity, gender, age, disability, and socio-economic class will be prominent as we observe American ideals both upheld and contradicted in the context of the way Americans recreate. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed AAS 0857, STHM 0857 or REL 0957.
Course Attributes: GU
Repeatability: This course may not be repeated for additional credits.
SOC 0858. The American Economy. 3 Credit Hours.
Should the federal government more forcefully engage health care issues, or are its current obligations a hidden time bomb facing the federal budget? Should we be concerned about the outsourcing of U.S. jobs? Is the minimum wage too low, or will increases in the minimum simply lead to greater unemployment? Students will engage these and other pressing issues, write position papers advocating specific actions that governments or firms should take, and debating these recommendations. While economic theory is not the centerpiece of this course, students will learn enough economic theory to be able to discuss policy in an informed manner. They will also be introduced to important sources of "economic" information, from government web sites to major publications. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed ECON 0858.
Course Attributes: GU
Repeatability: This course may not be repeated for additional credits.

SOC 0859. The Making of American Society: Melting Pot or Culture Wars?. 3 Credit Hours.
Terrorism, illegal immigration, gay marriage, religious conflict, political in-fighting, corporate corruption, racial animosities, civil liberties assaults, media conglomeration, Wal-Mart goes to China and the rich get richer. America in the 21st century is a contentious society. How did we get to this place in time? Examine what makes American society distinctive from other advanced industrial democracies as we study the philosophical origins of America, the development of social and economic relationships over time, and the political disputes dominating contemporary American life. The course relies heavily on perspectives from History, Sociology and Political Science to explain the challenges facing contemporary American society. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: AMST 0859, History 0859, PHIL 0859, or POLS 0859.
Course Attributes: GU
Repeatability: This course may not be repeated for additional credits.

SOC 0861. Urban Dynamics: Global, Regional, and Local Connections. 3 Credit Hours.
U.S. cities in the 21st century face enormous challenges as globalization shapes flows of people, capital, information, resources, and ideas/culture in an increasingly interconnected, yet geographically dispersed world. The course asks: What is globalization? How are different people’s lives in cities shaped by these flows? How do gender, age, race/ethnicity, class, and citizenship status affect people’s experiences in different urban contexts? How do urban interventions - from public policy to social movements - advance social justice across groups, places, and spaces? Topics include economic and political restructuring, the globalization of ethnic/racial relations, citizenship and public space, the spatial dynamics of uneven development, and urban inequalities. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: CRP 0861 or GUS 0861.
Course Attributes: GU
Repeatability: This course may not be repeated for additional credits.

SOC 0862. Development & Globalization. 3 Credit Hours.
Use historical and case study methods to study the differences between rich and poor nations and the varied strategies available for development in a globalizing world. Examine the challenges facing developing countries in historical and contemporary context and analyze the main social, cultural, and political factors that interact with the dynamic forces of the world economy. These include imperialism/colonialism, state formation, labor migration, demographic trends, gender issues in development, religious movements and nationalism, the challenges to national sovereignty, waves of democratization, culture and mass media, struggles for human rights, environmental sustainability, the advantages and disadvantages of globalization, and movements of resistance. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: SOC 0962, History 0862, POLS 0862/0962, or GUS 0862.
Course Attributes: GG
Repeatability: This course may not be repeated for additional credits.

SOC 0867. World Regions and Cultures: Diversity & Interconnections. 3 Credit Hours.
How does the process of globalization impact people in different culture regions? Explore this central question through readings, discussions, mapping exercises, field trips to Philadelphia sites and special events that celebrate the international flavor of the city. Focusing on four regions, we will learn how people cope with environmental problems like desertification, population growth, rapid migration to cities, and ethnic and religious clashes. We will investigate why some areas are mired in poverty and violence while others experience a growing economy and peaceful politics. For each region we will read case studies illustrating both cultural continuity and change. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Duplicate Credit Warning: Students may take only one of the following courses for credit; all other instances will be deducted from their credit totals: Anthropology 0867, 1061, CO61 Geography and Urban Studies 0867, or Sociology 0867.
Course Attributes: GG
Repeatability: This course may not be repeated for additional credits.
SOC 0918. Honors Human Sexuality. 3 Credit Hours.
Our sexuality is a core part of being human. We often think about sexuality in terms of the physical and reproductive aspects of sex. But our sexuality is complex and dynamic. We will address this dynamic complexity as we explore the physical, psychological, relational, and cultural aspects of sexuality. The goal of this course is to broaden your perspective of human sexuality, and deepen your understanding and awareness of your own sexuality and the many influences on this essential part of yourself. (This is an Honors course.) NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: PSY 0818, SOC 0818.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GB, HO
Repeatability: This course may not be repeated for additional credits.

SOC 0925. Honors Quantitative Methods in the Social Sciences. 4 Credit Hours.
Psychological, political, social, and economic arguments and knowledge frequently depend on the use of numerical data. A psychologist might hypothesize that I.Q. is attributable to environmental or genetic factors; a politician might claim that hand gun control legislation will reduce crime; a sociologist might assert that social mobility is more limited in the United States than in other countries, and an economist might declare that globalization lowers the incomes of U.S. workers. How can we evaluate these arguments? Using examples from psychology, sociology, political science, and economics, students will examine how social science methods and statistics help us understand the social world. The goal is to become critical consumers of quantitative material that appears in scholarship, the media, and everyday life. (This is an Honors course.) NOTE: This course fulfills the Quantitative Literacy (GQ) requirement for students under GenEd and a Quantitative Reasoning (QA or QB) requirement for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: SOC 0825, POLS 0825, PSY 0825, or ANTH 0825.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GQ, HO
Repeatability: This course may not be repeated for additional credits

Pre-requisites:
MATH 0701|Minimum Grade of C-|May not be taken concurrently
OR MC3 Y|May not be taken concurrently
OR MC4 Y|May not be taken concurrently
OR MC5 Y|May not be taken concurrently
OR MC6 Y|May not be taken concurrently

SOC 0929. Honors: The History & Significance of Race in America. 3 Credit Hours.
Why were relations between Native Americans and whites violent almost from the beginning of European settlement? How could slavery thrive in a society founded on the principle that “all men are created equal”? How comparable were the experiences of Irish, Jewish, and Italian immigrants, and why did people in the early 20th century think of them as separate “races”? What were the causes and consequences of Japanese Americans’ internment in military camps during World War II? Are today’s Mexican immigrants unique, or do they have something in common with earlier immigrants? Using a variety of written sources and outstanding documentaries, this course examines the racial diversity of America and its enduring consequences. (This is an Honors course.) NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Duplicate Credit Warning: Students may take only one of the following courses for credit; all other instances will be deducted from their credit totals: African American Studies 0829, Anthropology 0829, Geography and Urban Studies 0829, History 0829, Political Science 0829, Sociology 0829, 0929, 1376, 1396, R059, or X059.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GD, HO
Repeatability: This course may not be repeated for additional credits.

SOC 0935. Honors Ethnicity and the Immigrant Experience in the U.S.. 3 Credit Hours.
How do immigrants learn to become American? How does living an ethnic identity vary for different groups? When does ethnicity become a chosen identity or an unwanted label? How do we learn to value some aspects of ethnicity but not others? What are markers of ethnicity? How do language, food, music, family and community work to provide authenticity to the American immigrant experience? What happens to ethnicity with assimilation to the American way of life? Can ethnicity combat the tidal social expectations to conform to the dominant culture? Using a variety of written materials including novels that explore the ethnic identity of different groups, this course raises questions about how ethnicity and American identity are connected. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Duplicate Credit Warning: Students may take only one of the following courses for credit; all other instances will be deducted from their credit totals: Sociology 0835, 0935, 1476, 1496, R064, X064.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GD, HO
Repeatability: This course may not be repeated for additional credits.
SOC 0962. Honors Fate, Hope, and Action: Globalization Today. 3 Credit Hours.
Use historical and case study methods to study the differences between rich and poor nations and the varied strategies available for development in a globalizing world. Examine the challenges facing developing countries in historical and contemporary context and analyze the main social, cultural, and political factors that interact with the dynamic forces of the world economy. These include imperialism/colonialism, state formation, labor migration, demographic trends, gender issues in development, religious movements and nationalism, the challenges to national sovereignty, waves of democratization, culture and mass media, struggles for human rights, environmental sustainability, the advantages and disadvantages of globalization, and movements of resistance. (This is an Honors course.) NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: SOC 0862, History 0862, POLS 0862/0962, or GUS 0862.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GG, HO
Repeatability: This course may not be repeated for additional credits.

SOC 1167. Social Statistics. 3 Credit Hours.
The objective of this course is to enhance data comprehension and explain statistical information. The emphasis is on applications, with examples taken from a variety of sources including the mass media. The course covers the uses and interpretation of descriptive statistics, the requirements of valid statistical sampling, the bases of statistical inference, and the analysis of cross-tabular data. NOTE: (1) This course is not open to students who have taken Mathematics 1013 (C067) or Psychology 1167 (C067). (2) This course can be used to satisfy the university Core Quantitative Reasoning B (QB) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: QB
Repeatability: This course may not be repeated for additional credits
Pre-requisites: MATH 0701 | Minimum Grade of C | May not be taken concurrently
OR MC3 Y | May not be taken concurrently
OR MC4 Y | May not be taken concurrently
OR MC5 Y | May not be taken concurrently
OR MC6 Y | May not be taken concurrently.

SOC 1176. Introduction to Sociology. 3 Credit Hours.
This course provides an introduction to the systematic analysis of societies. How do societies evolve and change, what we can learn from comparing them, how do they make us into the kinds of people we are, and which facts either sustain or shatter everyday life? What do deviance, bureaucracy, racial discrimination, inequality, sexual and social conflict have in common? Students learn about themselves by exploring the hidden roots of the world around them. NOTE: SOC 1176 can be used to satisfy the university Core Individual & Society (IN) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. <p>Duplicate credit warning: Students who have received credit for Sociology 1976 or 1576 (or its equivalent in transfer) may not receive additional credits for this course.
Course Attributes: IN
Repeatability: This course may not be repeated for additional credits.

SOC 1277. Comparative Societal Development. 3 Credit Hours.
Such questions as “What is National Development?” and “How do we define the ‘Good Society’?” are discussed. We will emphasize developing nations in our study of different models of development. Our readings include testimonies of families who struggle to survive in the difficult conditions of the Third World as well as writings which challenge the consumption goals of developed countries. Such topics as agrarian reform, migration and urbanization, class structure, globalization, and revolutions are discussed. NOTE: This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: IS
Repeatability: This course may not be repeated for additional credits.

SOC 1376. The Sociology of Race and Racism. 3 Credit Hours.
The primary focus of this course is on the historical and contemporary significance of race in American society. It includes an analysis of the historical development of racism as an ideology. It examines how this ideology has influenced the structure of social relations in the United States, as well as relationships between and within nations around the world. Additionally, it examines the development and logic of scientific racism and the transformation of these arguments into more subtle cultural symbols. It analyzes the importance of racism in structuring social inequality and how the social meanings of racial categories are changed. This class has a strong emphasis on sociological theories as they relate to the analysis of race and ethnic relations. The goal of the course is to provide students with an understanding of the independent role of race in society and its significance in the ordering of political and economic institutions in the United States. NOTE: This course can be used to satisfy the university Core Studies in Race and Individual & Society (RN) requirements. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: RN
Repeatability: This course may not be repeated for additional credits.
SOC 1396. The Sociology of Race and Racism. 3 Credit Hours.
The primary focus of this course is on the historical and contemporary significance of race in American society. It includes an analysis of the historical development of racism as an ideology. It examines how this ideology has influenced the structure of social relations in the United States, as well as relationships between and within nations around the world. Additionally, it examines the development and logic of scientific racism and the transformation of these arguments into more subtle cultural symbols. It analyzes the importance of race in structuring social inequality and how the social meanings of racial categories are changed. This class has a strong emphasis on sociological theories as they relate to the analysis of race and ethnic relations. The goal of the course is to provide students with an understanding of the independent role of race in society and its significance in the ordering of political and economic institutions in the United States. NOTE: This course can be used to satisfy a university Core Studies in Race and American Culture (RU) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: RU
Repeatability: This course may not be repeated for additional credits.

SOC 1476. American Ethnicity. 3 Credit Hours.
The history, cultures, and communities of racial and ethnic minorities in America are examined. Particular attention is paid to identifying the unique position and contribution of various groups to American culture in different historical periods. The course is based upon sociological and historical research, as well as novels and short stories documenting the lives of different groups. NOTE: This course can be used to satisfy the university Core Studies in Race and American Culture (RU) requirements. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: RU
Repeatability: This course may not be repeated for additional credits.

SOC 1496. American Ethnicity. 3 Credit Hours.
The history, cultures, and communities of racial and ethnic minorities in America are examined. Particular attention is paid to identifying the unique position and contribution of various groups to American culture in different historical periods. The course is based upon sociological and historical research, as well as novels and short stories documenting the lives of different groups. NOTE: This course can be used to satisfy a university Core Studies in Race, Writing Intensive, and American Culture (XC) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: XC
Repeatability: This course may not be repeated for additional credits.

SOC 1576. Introduction to Sociology for Health Professions. 3 Credit Hours.
This course offers an introduction to the discipline of sociology. Focused on a systematic study of social life, the discipline of sociology offers distinctive concepts and methods to understand human beings and the societies they inhabit. The primary operating principle of sociology is to shift analytic emphasis---common to the health professions---from individual characteristics to the characteristics of broader social contexts, groups, and institutions. This Introduction to Sociology is specifically intended for those with interests in the health professions. We apply each topic we study to issues in health and medicine, pairing general sociology readings with readings specifically on health and medicine. Students preparing for the revised MCAT (2015) are especially encouraged to take this course. <p>Duplicate credit warning: Students who have received credit for SOC 1176 or SOC 1976 Introduction to Sociology (or its equivalent in transfer) may not receive additional credits for this course.

Repeatability: This course may not be repeated for additional credits.

SOC 1676. Men and Women in American Society. 3 Credit Hours.
The course examines gender roles in the United States. It includes how children learn to be boys and girls within their families, through play, from the media, and in schools. It includes the way men and women learn to interact together in personal relationships and work. It examines the benefits of being a man in our society and attempts to understand how and why this advantage works. The focus is on how society shapes the lives of children and adults in gendered ways, how we all participate in creating gendered differences, and how we can bring about change. NOTE: This course can be used to satisfy the university Core American Culture (AC) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: AC
Repeatability: This course may not be repeated for additional credits.

SOC 1696. Men and Women in American Society. 3 Credit Hours.
The course examines gender roles in the United States. It includes how children learn to be boys and girls within their families, through play, from the media, and in schools. It includes the way men and women learn to interact together in personal relationships and work. It examines the benefits of being a man in our society and attempts to understand how and why this advantage works. The focus is on how society shapes the lives of children and adults in gendered ways, how we all participate in creating gendered differences, and how we can bring about change. NOTE: This course can be used to satisfy a university Core American Culture (AC) and Writing Intensive (WI) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: AC
Repeatability: This course may not be repeated for additional credits.
SOC 1947. Introduction to Sociology. 1 Credit Hour.
This course provides an introduction to the systematic analysis of societies. How do societies evolve and change, what we can learn from comparing them, how do they make us into the kinds of people we are, and which facts either sustain or shatter everyday life? What do deviance, bureaucracy, racial discrimination, inequality, sexual and social conflict have in common? Students learn about themselves by exploring the hidden roots of the world around them.
Repeatability: This course may not be repeated for additional credits.

SOC 1967. Honors Social Statistics. 3 Credit Hours.
The objective of the course is on understanding data and explaining statistical information. The emphasis is on applications, with examples taken from a variety of sources including the mass media. The course covers the uses and interpretation of descriptive statistics, the requirements of valid statistical sampling, the bases of statistical inference, and the analysis of cross-tabular data. NOTE: (1) This course is not open to students who have taken Mathematics 1013 (C067) or Psychology 1167 (C067). (2) This course can be used to satisfy the university Core Quantitative Reasoning B (QB) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO, QB
Repeatability: This course may not be repeated for additional credits.

SOC 1976. Honors Introduction to Sociology. 3 Credit Hours.
This course provides an introduction to the systematic analysis of societies. How do societies evolve and change, what we can learn from comparing them, how do they make us into the kinds of people we are, and which facts either sustain or shatter everyday life? What do deviance, bureaucracy, racial discrimination, inequality, sexual and social conflict have in common? Students learn about themselves by exploring the hidden roots of the world around them. NOTE: SOC 1976 can be used to satisfy the university Core Individual & Society (IN) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. - Duplicate credit warning: Students who have received credit for Sociology 1176 or 1576 (or its equivalent in transfer) may not receive additional credits for this course.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO, IN
Repeatability: This course may not be repeated for additional credits.

SOC 1977. Honors Comparative Societal Development. 3 Credit Hours.
Such questions as "What is National Development?" and "How do we define the 'Good Society'?" are discussed. We will emphasize developing nations in our study of different models of development. Our readings include testimonies of families who struggle to survive in the difficult conditions of the Third World as well as writings which challenge the consumption goals of developed countries. Such topics as agrarian reform, migration and urbanization, class structure, globalization, and revolutions are discussed. NOTE: This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO, IS
Repeatability: This course may not be repeated for additional credits.

SOC 2105. Echoes of Terror. 3 Credit Hours.
Students will read and study literary works (novels, short stories, poetry) and feature and documentary films depicting Stalin's terror (from the murder of Kirov in 1934 to the death of Stalin in 1953) and its impact on Russian and Soviet society after that period. Students will come to understand the enormity of these historical events by reading, discussing, and analyzing the texts and the films, drawing connections between the Soviet historical and cultural contexts and historical events elsewhere in the world (e.g., Nazi Germany, Apartheid South Africa, Cambodia, Rwanda, Darfur) about the legacy of totalitarian rule.
Repeatability: This course may not be repeated for additional credits.

SOC 2111. Sociology of Sports. 3 Credit Hours.
This course analyzes sports as a socializing agent and as a set of cultural, social, economic and political institutions. The course will begin with a distinction between play, sports, and organized sports. We will then look at the role of sports in childhood and adolescence, with a particular emphasis on gender and sports. Next, we examine the role of sports in collegiate life and finally at the professional level. As a course in sociology, this class will examine the connections between sports and race, gender, social class, politics, and the economy.
Repeatability: This course may not be repeated for additional credits.

SOC 2122. Global Sports. 3 Credit Hours.
This course centers on the globalization of sports. It views sports as a set of cultural, social, economic and political institutions and practices and asks the following orienting questions: 1) "How have forces of globalization changed the world of sport?" and 2) "What do the changes in sport teach us about globalization processes more generally?" The course will cover the structure, organization, and culture of globalized sport. Topics include: the business of global sports, the flow of labor and capital in global sports, the impact of culture on sport and sport on culture, the role of communication, transportation, and technology in the globalization of sport.
Repeatability: This course may not be repeated for additional credits.
SOC 2128. Men and Masculinity. 3 Credit Hours.
This course examines the impact of the male role on men and women. The first part of the course considers varying theoretical approaches to masculinity, including biological and moral essentialism and social constructionism. The second part of the course covers such topics as the role of play and sports in boyhood socialization, fathering, men and intimacy, homophobia and its connection of the male role, and current social movements related to masculinity. The course also considers the impact of class and race on masculinity.
Repeatability: This course may not be repeated for additional credits.

SOC 2130. Selected Topics in Sociology. 3 Credit Hours.
The topics will vary and cover areas not covered by the current roster of classes. Students should consult with the instructor for details.
Repeatability: This course may be repeated for additional credit.

SOC 2145. Marriage and the Family. 3 Credit Hours.
Duplicate Course: This course is not open to students who have taken Sociology 3245 (0245). This course examines the history and contemporary condition of public and private families with a focus on American trends. We explore the way social issues involving the family have changed over time, class variations and racial/ethnic variations in American families, the division of labor and social power within families, intimate relations and communication patterns within households, and the impact of family dynamics for social functioning outside the home. We also devote a portion of our time to applying the material to an understanding of where our own families fit into this material, and to relating our own family autobiographies to the broader social history of American families.
Repeatability: This course may not be repeated for additional credits.

SOC 2163. Area Studies: Latin American Development. 3 Credit Hours.
This course examines patterns of socioeconomic and political development in different parts of Latin America. Topics to be studied include: agrarian reforms, patterns of industrialization and urbanization, financial dependency, military regimes, revolutionary movements, and transitions to democracy.
NOTE: This course is taught in Spanish for the LASS program.
Repeatability: This course may not be repeated for additional credits.

SOC 2166. Money: Who Has It, Who Doesn't, Why It Matters. 3 Credit Hours.
This course looks at the sociological issues surrounding money as a mechanism and medium of exchange. The course covers history of money and the development of finance. The course also explores the role of money in shaping lives: friendship patterns, life chances, educational opportunities, and health and well-being. Students will learn about structural changes in the economy that stem from the globalization of money. Students who have earned credit for Sociology 1166 will not earn additional credit for this course.
Repeatability: This course may not be repeated for additional credits.

SOC 2168. Sociology of Popular Culture. 3 Credit Hours.
Popular culture is ubiquitous in contemporary life, in the forms of television, books, radio, internet, music, video games, and film. It has been accused of making us more violent and less healthy, more biased and less participatory in society. Popular culture has also been celebrated for making art democratic and giving voice to a wider range of people. This course surveys what we know about the social effects of popular culture including issues like representations and stereotypes, media consolidation, and the impact of new technologies.
Repeatability: This course may not be repeated for additional credits.

SOC 2171. Sociology of Law. 3 Credit Hours.
This class looks at what is both special and ordinary about legal systems. The law's features and the scope of its functions in society are examined and compared with other institutions, and with legal systems in societies and periods other than our own. It considers legal institutions as a product of actions and interactions of both specialists and ordinary citizens. Additionally, it examines the role of the law as a potential vehicle and agent of change. It gives practical sociological introduction to the professional study of law.
Repeatability: This course may not be repeated for additional credits.

SOC 2179. Racial and Ethnic Stratification. 3 Credit Hours.
This course focuses on the elements of racial and ethnic stratification as they appear in the United States and other nations. It outlines the concepts that shape the sub-field of race and ethnic relations, in addition to examining how sociologists have theorized about racial and ethnic hierarchies and their role in the organization and distribution of social resources. Through an analysis of the historical and contemporary circumstances of selected communities in the United States, it seeks to reveal which theory best explains the experience of particular communities and which best explains societal patterns of inequality. Additionally, the course examines racial and ethnic relations in other nations and as a global phenomenon in an effort to reveal the common elements of racial inequality regardless of national identity. NOTE: This course can be used to satisfy the university Core Studies in Race (RS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: RS
Repeatability: This course may not be repeated for additional credits.

SOC 2522. The Sociology of Self. 3 Credit Hours.
What is self-awareness? Why do we come to see ourselves the way we do? Do animals also have selves? What are the differences between human selves and animal selves? What is the self for or why does it matter? If you are wondering about these questions and would like to participate in the search for answers to these questions, this course is for you. In this course, we read about the origins of the self, self-awareness in animals and humans, and examine the forces that shape the way we see ourselves. The ultimate goal of this course is to promote a deeper understanding of oneself and a better relationship with others.
Repeatability: This course may not be repeated for additional credits.
SOC 2530. Selected Topics in Medical Sociology. 3 Credit Hours.
The topics will vary and cover medical topics not in the current roster of classes. Please consult with the instructor for details. Health Track students can use this course to fulfill the requirement for four health-related courses.
Repeatability: This course may be repeated for additional credit.

SOC 2552. Health and Disease in American Society. 3 Credit Hours.
In this course, students research health and disease in the United States, placing special emphasis on the historical changes in the ideas of health and disease and the nature of the responses to illness in society. We examine social/political influences on morbidity and mortality and the experiences of subgroups of the population with illness and with the medical systems they must confront. Finally, we discuss the problems associated with financing health care, with making and implementing health policy, and the issues raised by the growing field of bio-ethics. The course contains instruction in several research methods including the calculation of rates, standardization, and the construction and reading of tables. We also focus throughout the course on how the authors of the readings know what they report: for example, what methods did they use. Finally, students do a small well-defined research project for their semester paper.
Repeatability: This course may not be repeated for additional credits.

SOC 2553. Sociology of Aging. 3 Credit Hours.
As the baby boomers approach retirement in the U.S., the social context of aging is becoming a larger focus of popular and media attention. Many social structures and institutions impact the experience of aging in the U.S. These include the government and its policies toward support in old age, health care institutions, communities, and families. There are also a growing number of institutions devoted to the needs of older Americans, such as political organizations, lifestyle communities, healthcare facilities, and recreation organizations. This course will explore how social structures and organizations influence the experience of aging in the U.S., with comparisons to other nations where relevant. This course will also look at inequalities in the experience of aging by race, class, and gender, particularly.
Repeatability: This course may not be repeated for additional credits.

SOC 2565. Racial Science, Health, and Medicine. 3 Credit Hours.
Race and scientific medicine are powerful forces shaping the modern world. This course charts the origins and emergence of these two forces in the 17th century and explores how they have informed each other and continue to form each other in the 21st century. Topics include slavery and medicine, eugenics and racial science, genocide and the rise of medical ethics, disease and distinctiveness, racial disparities in health, and the status of race in the era of genomics.
Repeatability: This course may not be repeated for additional credits.

SOC 2572. Sex & Society. 3 Credit Hours.
Sex is at the forefront of many legislative, cultural and personal debates. This course uses sociological perspectives to examine several key areas of conflict in the sexual culture war, including sex education in American schools, global public health policies and contraception, changing definitions of marriage and family, abortion rights, the personal and national impact of prenatal testing and reproductive technologies, and the growing concern over issues such as sexual violence on college campuses, child pornography, and sex trafficking.
Repeatability: This course may not be repeated for additional credits.

SOC 2575. Science, Technology & Society. 3 Credit Hours.
This course examines the relationships between science, technology, and society, and focuses on the social, historical, and cultural contexts that shape these relationships. Students are introduced to the history of human technological development, how it has been shaped by historical and cultural contexts, and how it has, in turn, influenced the social world. The course will also examine the ways in which scientific facts are established among the public. This course is intended for sociology students interested in better understanding the technological and scientific dimensions of the social world. It is also intended for students in physical and natural sciences and engineering fields interested in the social dimension and implications of their work.
Repeatability: This course may not be repeated for additional credits.

SOC 2922. Honors Global Sports. 3 Credit Hours.
This course centers on the globalization of sports. It views sports as a set of cultural, social, economic and political institutions and practices and asks the following orienting questions: 1) "How have forces of globalization changed the world of sport?" and 2) "What do the changes in sport teach us about globalization processes more generally?" The course will cover the structure, organization, and culture of globalized sport. Topics include: the business of global sports, the flow of labor and capital in global sports, the impact of culture on sport and sport on culture, the role of communication, transportation, and technology in the globalization of sport.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.
SOC 2979. Honors Racial & Ethnic Stratification. 3 Credit Hours.
This course focuses on the elements of racial and ethnic stratification as they appear in the United States and other nations. It outlines the concepts that shape the sub-field of race and ethnic relations, in addition to examining how sociologists have theorized about racial and ethnic hierarchies and their role in the organization and distribution of social resources. Through an analysis of the historical and contemporary circumstances of selected communities in the United States, it seeks to reveal which theory best explains the experience of particular communities and which best explains societal patterns of inequality. Additionally, the course examines racial and ethnic relations in other nations and as a global phenomenon in an effort to reveal the common elements of racial inequality regardless of national identity. NOTE: (1) This is an Honors course. (2) This course can be used to satisfy the university Core Studies in Race (RS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO, RS
Repeatability: This course may not be repeated for additional credits.

SOC 3082. Independent Study. 1 to 4 Credit Hour.
This course involves an intensive study in a specific area of sociology. The proposal outlining the work to be completed must be filed in the department office and with the undergraduate chair before the end of the first two weeks of the semester. NOTE: This class may not be used as a substitute for required sociology courses.
Repeatability: This course may be repeated for additional credit.

SOC 3176. Sociology of Education. 3 Credit Hours.
Did you know that SAT scores, and other standardized tests, vary by parents' education? In this course we examine the many ways students' social positions shape educational experiences and educational outcomes. We learn about the ways in which students' race, gender, and social class origins shape school experiences. We also examine an important question: how much does education provide a pathway for social mobility for American children? We will also address a number of other topics including current proposals for improving American education. Students will engage with a local high school by aiding high school seniors with senior graduation projects.
Repeatability: This course may not be repeated for additional credits.

SOC 3185. Internship in Sociology. 4 Credit Hours.
Students spend a semester working in a public or private agency or organization where they gain sociologically relevant experience and participate in applied sociological research. Interns will learn about a substantive sociological issue through reading, writing, and hands-on experience. Students will be required to write a term paper that includes a review of the sociological literature relevant to the internship and an analysis of the data they gathered.
Repeatability: This course may be repeated for additional credit.

SOC 3201. Statistical Methods in Sociology. 4 Credit Hours.
Duplicate Course: This course is not open to students who have taken Psychology 2168 (0122). This course provides a non-mathematical introduction to descriptive statistics and statistical inference. Computer-based, the course provides instruction on ideas such as statistical independence, sampling distributions, the central limit theorem, and the use of interpretation of confidence intervals. The course also provides instruction in correlation and regression analysis. NOTE: This course can be used to satisfy the university Core Quantitative Reasoning B (QB) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: QB
Repeatability: This course may not be repeated for additional credits.

SOC 3207. People and Places of Philadelphia. 3 Credit Hours.
This course focuses upon the development of Philadelphia as a City of Neighborhoods. We examine the city's history, the changing location and type of economic activities, and the corresponding development and emergence of communities. Included is the analysis of the industrial working class areas of Kensington and Manayunk, the immigrant way station of South Philadelphia, the higher status bedroom suburbs, and the gentrifying center city neighborhoods. Racial integration, neighborhood transition, and community conflict are examined in terms of their historical contexts.
Repeatability: This course may not be repeated for additional credits.

SOC 3208. Globalization, Development, and Labor in East Asia. 3 Credit Hours.
This undergraduate course will introduce students to the major perspectives and debates in social sciences on globalization, development, and labor in East Asia, primarily focusing on China, Japan, South Korea, and Taiwan. We will examine: What is globalization and how is it affecting countries in East Asia? What are different development strategies and paths pursued in those countries? How have workplaces changed and how have workers fared in East Asia under globalization? What roles have different kinds of labor unions played? How have workers responded, economically and politically? We will also discuss the social and political origins of "East Asian Miracle" and the impact of the rise of China on the region and the world. Through lectures, discussions, small group projects, and documentary films, students will be engaged with key theoretical debates and develop their own perspectives and research skills on these themes.
Repeatability: This course may not be repeated for additional credits.
SOC 3209. Immigrant America: Belonging and Integration. 3 Credit Hours.
This course addresses central questions relating to the new immigrants entering the United States since the 1960s. It examines: 1) why people move and the policies by which foreign “outsiders” become integrated; 2) what determines the economic, political, cultural, linguistic and psychological adaptation processes of different types of immigrants and refugees, and of their children; 3) the changing ethnic and generational composition of the American population; 4) the influence of gender and race on immigrant identities; 5) the struggle of second-generation youth with their backgrounds; and 6) new meanings around sexuality and romance emerging in transnational families that straddle generations and international borders.
Repeatability: This course may not be repeated for additional credits.

SOC 3214. Latinos, Race and Ethnicity. 3 Credit Hours.
This course examines the complexity of Latino identity in the U.S. The course will analyze the ways in which pan-ethnic (Latino/a, Hispanic, etc.), geographical (South Americans, Central Americans, Caribbeans, etc.), national (Mexican, Puerto Rican, Cuban, Dominican, etc.), regional and intra-ethnic identifications impinge on the way Latinos and Latinas understand who they are in relation to the different others they build in their process of identity construction. The course seeks to make the connections between the macro social organization of race and ethnic categories and the micro social interactions that shape the race and ethnic experience of Latinos in the U.S.
Repeatability: This course may not be repeated for additional credits.

SOC 3218. Socialization. 3 Credit Hours.
Socialization is the process by which individuals become members of society. We look at this process as ongoing, starting in infancy and continuing through adulthood. This implies constant re-socialization and discussion of the ways early childhood learning influences adult lives. This research-intensive course is organized around the important socialization agents of family, friends, school, work, and the differences in socialization and therefore life histories by race, gender, and social class. Students undertake individual research on the socialization of children as they begin grade school. This involves developing a research question, developing questionnaires, simulating interviews, and analyzing the findings. The course includes instruction on each phase of the research.
Repeatability: This course may not be repeated for additional credits.

SOC 3219. Globalization: Causes, Promises and Discontents. 3 Credit Hours.
This course focuses on the latest wave of globalization - its basic causes, the benefits it promises, and the discontents it produces in its way. We will follow both a politico-economic approach to the globalization process and pay attention to the issues of cultural globalization (for example, the debate over the formation of a global hegemonic culture). The course will explore the previous two phases of capitalist industrialization (competitive and Fordist/oligopolistic) before moving to the present third phase which has been variably called Post-industrial, Informatic, or, simply, Global. We will study in detail the post-World War II causes of rapid globalization from both a neo-classical and a neo-Marxist perspective, and analyze the assessments and predictions they make regarding its benefits (e.g. economic growth) and/or costs (e.g. growing North-South gap, effects on environment). We will pay attention to the effects of globalization on American society - cities, jobs, the safety net, immigration, gender and race, public and private debt, etc. Finally the course will cover the economic, environmental, and cultural consequences of globalization for the Third World and the reactions (including the forms of Jihad) of the Third World. We will end with a discussion of the emerging geostrategic triad of the U.S., European Union, and East Asia (led by China) and the various scenarios about social, political, and cultural changes in the next 30-50 years.
Field of Study Restrictions: May not be enrolled in one of the following Majors: English
Repeatability: This course may not be repeated for additional credits.

SOC 3221. Global Development. 3 Credit Hours.
This course is an introduction to the sociology of economic development and social, political, and cultural change. We will study the concepts, theories, historical processes, and issues regarding the interrelations and transformations of the social groups, economies, political systems, and cultures of developing societies - and their relationships with developed countries - over time. Thus, our focus will be on developing countries, our scope will be global and long-term, our perspective will be sociological but interdisciplinary, and our methodology will be historical-comparative. The primary questions we will address are: What is development? How do “developing societies” differ from “developed societies”? What are the relationships of “developing” and “developed” societies? How can we best approach an understanding of why the historical experiences of “developing” countries seem to differ so much from those of “developed” countries? In the first half of the course, we will focus on understanding, largely through case studies, the main theories of development: modernization theory, dependency, world-system analysis, and neoliberalism. In the second half of the course, we will expand our empirical and theoretical understanding by examining development and globalization, gender, ethnicity, ecology, and global social movements. NOTE: Course formerly called “Sociology of International Development.”
Repeatability: This course may not be repeated for additional credits.

SOC 3222. Sociology of Religion. 3 Credit Hours.
This course examines the role of religion in constructing human realities. It emphasizes how human understandings of the world and of reality are constructed socially through collective action with religion playing a prominent role. It looks at how religion influences individual and collective action; the intersection of religion with politics and media; religion’s connection to race, gender, class, and sexual orientation; and the connection between religion and science.
Repeatability: This course may not be repeated for additional credits.

SOC 3223. East to America: The Sociology of Asian Americans. 3 Credit Hours.
The purpose of this course is to explore contemporary issues for Asian Americans through a sociological lens. To do so, we will place contemporary Asian American experiences within the larger social context by examining the social, political, and economic institutions that have shaped the Asian American experience. As such, students will explore sociological concepts of immigration, adaptation, and assimilation while also examining issues of race, ethnic conflict, education, gender, sexuality, social movements, and media representations.
Repeatability: This course may not be repeated for additional credits.
SOC 3230. Selected Topic in Sociology. 3 Credit Hours.
The topics will vary and cover areas not covered by the current roster of classes. Please consult with the instructor for details.

Repeatability: This course may be repeated for additional credit.

SOC 3231. Jerusalem: The Politics of Space. 3 Credit Hours.
Jerusalem is the epicenter of the Israeli-Palestinian conflict and the focus of international debate among major world leaders. Understanding space in Jerusalem is central to understanding the Israeli-Palestinian conflict and assessing the viability of solutions. This course will examine the politics underlying key developments in Jerusalem including the West Bank, East Jerusalem, the Old City, the City of David, the Mount of Olives, the security barrier/wall/fence, and land annexed by Israel after the 1967 war. The focus on these developments will ultimately explain how space is a major source of political social, and economic inequality as we explore just what is Jerusalem for Jews, Moslems, and Christians.

Repeatability: This course may not be repeated for additional credits.

SOC 3240. Selected Topic in Sociology. 3 Credit Hours.
The topics will vary and cover areas not covered by the current roster of classes. Please consult with the instructor for details.

Repeatability: This course may be repeated for additional credit.

SOC 3242. Constructing Race and Ethnicity. 3 Credit Hours.
This course examines the social construction of race and ethnicity in the United States. It investigates the use of race and ethnicity as institutionalized, official categories that shape individual identity and experience, as well as opportunities and resource distribution. The course will analyze the formal procedures and informal interactions that define race and ethnicity as socially meaningful categories for individuals and groups. The course seeks to make the connections between the macro social organization of race and ethnic categories and the micro social interactions that shape race and ethnic experience.

Repeatability: This course may not be repeated for additional credits.

SOC 3243. Social Movements and Conflict. 3 Credit Hours.
The central theme of the course is conflict as a basic social process and the organization of mass movements to alter political and social conditions. A variety of social movements are studied: reformist and revolutionary movements; nationalist, messianic, and populist movements; identity politics and issue-oriented movements. Organizational strategies and ideological orientations of the movements are also examined.

Repeatability: This course may not be repeated for additional credits.

SOC 3244. Computers, the Internet and Human Interaction. 3 Credit Hours.
For most of human history, humans have interacted with one another only in the context of corporeal copresence, where they meet face to face in a common physical locale. Now, modern communications technologies, which include the Internet, enable human individuals to contact one another from separate locations in real time. The purpose of this course is to study the ways in which individuals interact with one another under non face-to-face conditions of co-location, and the effects that the new modes of human interaction produce on communities, interpersonal relationships, and the psychological wellbeing of the individuals. Besides reading and discussion, you will have the opportunity to engage in sociological research on the uses and effects of web sites, bulletin boards, chat rooms, and other online social domains. Through these activities, you will gain a better understanding of online human interaction and its impact on individuals and society.

Repeatability: This course may not be repeated for additional credits.

SOC 3245. Comparative Family Studies. 3 Credit Hours.
Duplicate Course: This course is not open to students who have taken Sociology 2145 (0145). This class surveys many topics in the field of family studies: the history of the American family as an institution; families in cross-cultural setting; ethnic and class variations in American families; the state and public policy as it relates to family formation; sexuality, intimate relations and parenting; the division of labor and social power within families; and more. Students conduct a semester-long project developing and analyzing, with sociological concepts, a three-generational genogram (family tree) of one or several families. This project involves interviewing family members and comparing these families to kinship trends studied in the course. We use genograms for researching how our own family histories fit into the broader social history of American families.

Repeatability: This course may not be repeated for additional credits.

SOC 3247. Ideology and Social Change in Japan. 3 Credit Hours.
A sociological look at the conditions which have contributed to Japan’s emergence as a world economic force. How do culture, social organization, life style, ideology, and global politics affect Japan’s rapid rise to power? Is Japan a closed society? What significance do factors such as racism, religion, education, family, the military, class, and population changes hold for understanding what has happened in Japan and in Japan’s relations with outsiders, particularly the U.S.? What significance does this analysis have for the future of Sociology in the U.S.?

Repeatability: This course may not be repeated for additional credits.

SOC 3249. Social Inequality. 3 Credit Hours.
In this course, we examine a number of the fundamental dimensions of inequality in our society. Among the questions raised are: 1) How great are the inequalities by class, race and ethnicity, and gender? 2) What is the nature of this inequality? Where does it come from? How deeply does it affect the lives of individuals? 3) How do these dimensions of equality interact? This course stresses participation, group work, and personal research on topics of interest to the student.

Repeatability: This course may not be repeated for additional credits.

SOC 3250. Selected Topic in Sociology. 3 Credit Hours.
The topics will vary and cover areas not covered by the current roster of classes. Please consult with the instructor for details.

Repeatability: This course may be repeated for additional credit.
SOC 3251. Urban Sociology. 3 Credit Hours.
Urban sociology asks how the physical and built environments, technology, population growth and shifts, governmental policy, and cultural and social organization shape the location and course of the development of urban areas. It focuses on urban America, although there is frequent reference to the development of urban areas elsewhere in the world in order to highlight commonalities and differences in the forces which structure urban life. Students research and write a sociological history of a block and census tract in the Philadelphia metropolitan area. It may be a history of the one in which they grew up, in which they now live, or another in which they have an interest. The objective is to combine quantitative and qualitative data to trace how and why the selected area developed as it did. A student will typically combine data drawn from several censuses with archival records to depict how the area changed in the context of the larger evolution of the community in which it is located.
Repeatability: This course may not be repeated for additional credits.

SOC 3253. Housing and Inequality. 3 Credit Hours.
This course examines 1) the institutional origins of an American housing culture and how that culture is supported financially and politically; 2) a range of issues associated with housing, specifically renters (working poor and acutely poor), homeless people, and homeowners; 3) housing subsidies as well as the recent policy effort to solve problems of poverty through homeownership; 4) the relationship between race, income and location, focusing on the "geography of opportunity;" and 5) mechanisms for rethinking how housing policy may be reorganized in the U.S.
Repeatability: This course may not be repeated for additional credits.

SOC 3256. Political Sociology. 3 Credit Hours.
This course analyzes the social basis of political institutions and political action, stressing the importance of both in the life of communities and individuals. Our emphasis is on the influence of social classes, professional and occupational groups, political parties, social movement organizations, and other notable interest groups have on the political system. We discuss the formation and organization of political activity and its varied outcomes.
Repeatability: This course may not be repeated for additional credits.

SOC 3258. Women and Work. 3 Credit Hours.
Women's work will be defined in the fullest sense. We will examine the gender division of labor in society and changes in women's paid and unpaid work from both historical and cross-cultural perspectives. We will discuss trends in women's employment and the rewards of women's work by race, marital status, etc., and trends in household work and child care. Reasons for women's expanded opportunities and persistent barriers will be explored.
Repeatability: This course may not be repeated for additional credits.

SOC 3259. Women and Poverty. 3 Credit Hours.
This course focuses on women's poverty in the U.S. and the social welfare policies designed to address it. We begin with an overview of poverty in the U.S., ways to measure poverty, and how to read census tables on poverty and income. We then dive into the history of the welfare state in America, starting with the Poorhouse Era and moving through 1996's welfare reform legislation. The second part of the course addresses major issues and themes in poverty scholarship: the culture of poverty thesis, low-wage work, teenage motherhood effects, marriage and single motherhood, social capital, and neighborhood effects. We conclude with a comparative analysis of U.S. and international welfare states.
Repeatability: This course may not be repeated for additional credits.

SOC 3261. Research Design and Methods. 4 Credit Hours.
This course is an introduction to the logic and methods of social research. We examine the issues, including internal, external, and construct validity, that arise in doing and evaluating both quantitative and qualitative research. The laboratory time involves both computer applications and instruction in the use of the library for research.
Repeatability: This course may not be repeated for additional credits.

SOC 3267. Sociology of Music: Nation, Race, Class and Gender in Argentina and Brazil. 3 Credit Hours.
The initial developments of the sociology of music were linked to the work of scholars who played pivotal roles in the history of sociology, such as Max Weber and Theodor Adorno. The sociology of Latin American music usually followed the theoretical developments occurring in the industrialized countries of the West, but, at the same time, it was characterized by a peculiar twist in the way it understood the complex relationship between music and society. In this course we delve into this important literature and grapple with the social and cultural foundations of music, with particular emphasis on the relationship between music and society in Brazil and Argentina. Due to the complex social organization of these two countries in terms of race, ethnicity, regionalisms, class, gender and religion, the course will explore the articulation of that complexity in the way people use music in their everyday life to understand who they are and what to do in the context of an ever changing social reality.
Repeatability: This course may not be repeated for additional credits.

SOC 3279. Racial & Ethnic Stratification. 3 Credit Hours.
This course focuses on the elements of racial and ethnic stratification as they appear in the United States and other nations. It outlines the concepts that shape the sub-field of race and ethnic relations, in addition to examining how sociologists have theorized about racial and ethnic hierarchies and their role in the organization and distribution of social resources. Through an analysis of the historical and contemporary circumstances of selected communities in the United States, it seeks to reveal which theory best explains the experience of particular communities and which best explains societal patterns of inequality. Additionally, the course examines racial and ethnic relations in other nations and as a global phenomenon in an effort to reveal the common elements of racial inequality regardless of national identity.
Repeatability: This course may not be repeated for additional credits.
SOC 3396. Development of Sociological Thought. 3 Credit Hours.
Theory is the narrative account, the explanatory framework, that underlies and grounds all knowledge. Sociological theories are accounts of the fundamental principles and relationships that organize society. This course focuses on the most successful sociological theories, emphasizing the work of scholars, mostly European and American, who contributed the most influential ideas to modern sociology. Attention is also paid to the social and historical context in which the major theories emerged.

Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

SOC 3430. Selected Topics in Sociology. 3 Credit Hours.
The topics will vary and cover areas not covered by the current roster of classes. Please consult with the instructor for details.

Repeatability: This course may be repeated for additional credit.

SOC 3511. Sociology of the Environment. 3 Credit Hours.
This course will introduce you to the sociology of the environment, the study of the interrelationships of human social systems and ecosystems, with a primary focus on their social aspects. We will examine environmental sociology’s primary perspectives, focusing on how social systems can be rearranged to ensure environmental justice and sustainability.

Repeatability: This course may not be repeated for additional credits.

SOC 3521. Global Health. 3 Credit Hours.
This course offers an introduction to the institutional, economic, epidemiological, ideological, and political forces in the field of international health. It is designed for students who seek to understand the interacting influence of micro and macro forces such as culture, class, gender, race, institutional policies and globalization on health in an international context. While comparative reference will be made to North American and European countries, the major emphasis will be on the health conditions in India, Asia, Latin America, Africa and the Caribbean, and increasingly, some Eastern European countries. Note: This course was formerly known as International Health.

Repeatability: This course may not be repeated for additional credits.

SOC 3525. Urban Health. 3 Credit Hours.
Cities are home to half the world’s population and urban populations are rapidly growing. Yet we know too little about why some urban populations are quite healthy and others quite sick and why some live long and others die young. This course blends medical sociology with population health science to explore these and other important questions in urban health. The focus is on U.S. cities with additional examples drawn from global cities. Attention will also be given to rural and urban and suburban differences in health, disease, and mortality. The goal is to better understand if and how cities might become places where people can live longer, healthier, and happier lives.

Repeatability: This course may not be repeated for additional credits.

SOC 3530. Selected Topics in Medical Sociology. 3 Credit Hours.
The topics will vary and cover medical topics not in the current roster of classes. Please consult with the instructor for details. Health Track students can use this course to fulfill the requirement for four health-related courses.

Repeatability: This course may be repeated for additional credit.

SOC 3546. Sexuality and Gender. 3 Credit Hours.
This course examines the ways men and women develop sexual identities as a result of their membership in society. It looks at how this has changed over the course of Western history and at the differences in sexual identity from culture to culture. We focus on the differences in sexual identities of men and women, and the advantages this brings to men. We also examine the overwhelming heterosexual imperative in our society. Students research these and other topics such as differences in sexual expression by race, and the influence of the media on how we understand the meaning and expression of sex. The research requirement for the course involves an analysis of sexual scripts, the production and reproduction of these scripts, and the impact of the messages on different types of viewers. Instruction is provided on film analysis.

Repeatability: This course may not be repeated for additional credits.

SOC 3559. Health and Reproduction. 3 Credit Hours.
The course will focus on health and human reproduction in the United States. We will view reproduction as both a biological and social event and will be particularly concerned with the medical and health aspects of reproduction. Decisions about childbearing, the medicalization of childbearing, fecundity, birth control, fetal and neonatal health, maternal health and new reproductive technologies are among the topics that will be considered in this research-intensive course. The course will also cover technical, methodological and statistical issues arising in the study of reproduction.

Repeatability: This course may not be repeated for additional credits.

SOC 3565. Sociology of the Body. 3 Credit Hours.
What do bodies tell us about ourselves and about others? Does our speaking voice show our class background? Why might someone who is “black” or “white” in the United States not be considered so in another country? Who decides what a healthy body is? In this course, we will look at the body, not simply as a physical object, but as a physical medium that is molded by social forces and interpreted through a cultural lens. Our bodies are simultaneously sites of personal embodiment and subject to external classification and social control. We will examine some of the ways bodies are significant markers of social categories, analyzing the link between the body and personal identity, and consider how identity is enacted through bodily practices and modification.

Repeatability: This course may not be repeated for additional credits.
SOC 3575. Population Studies. 3 Credit Hours.
This course tackles a large and important question: What impact does population growth and change have on our lives? In this class, we examine how populations across the world are studied using censuses and surveys. The class explores three basic demographic processes: fertility, mortality, and migration, and how these processes vary internationally. Further, we focus on how the structure and characteristics of particular populations impact individual members. Finally, we uncover the demographic foundations of international contemporary social issues like the aging of the population in North America, Europe, and Japan, the AIDS epidemic in Thailand and Africa, as well as the U.S., changing household structures in the U.S. and Europe, and environmental change across the globe. Students learn both important concepts in demography and the methods used to study international populations.
Repeatability: This course may not be repeated for additional credits.

SOC 3582. Independent Study in Medical Sociology. 1 to 4 Credit Hours.
This course involves an intensive study in a specific area of sociology. The proposal outlining the work to be completed must be filed in the department office and with the undergraduate chair before the end of the first two weeks of the semester. NOTE: This class may not be used as a substitute for required sociology courses.
Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may be repeated for additional credit.

SOC 3585. Internship in Medical Sociology. 3 Credit Hours.
This course will give students an opportunity to experience working in a health-related setting. Students taking this internship course will be expected to use their sociological skills in understanding and analyzing the setting in which the experiential learning takes place. An internship requires an individual contract with a faculty member in the Department of Sociology.
Repeatability: This course may be repeated for additional credit.

SOC 3930. Honors Special Topics. 3 Credit Hours.
The topics will vary and cover areas not covered by the current roster of classes. Students should consult with the instructor for details.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.

SOC 3931. Honors - Jerusalem: The Politics of Space. 3 Credit Hours.
Jerusalem is the epicenter of the Israeli-Palestinian conflict and the focus of international debate among major world leaders. Understanding space in Jerusalem is central to understanding the Israeli-Palestinian conflict and assessing the viability of solutions. This course will examine the politics underlying key developments in Jerusalem including the West Bank, East Jerusalem, the Old City, the City of David, the Mount of Olives, the security barrier/wall/fence, and land annexed by Israel after the 1967 war. The focus on these developments will ultimately explain how space is a major source of political social, and economic inequality as we explore just what is Jerusalem for Jews, Moslems, and Christians. NOTE: This is an honors course.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.

SOC 3945. Honors Comparative Kinship Studies. 3 Credit Hours.
We shall survey many topics encompassed in the field of family studies. While we shall consider the history of the American family as an institution with its ethnic and class variations, we shall not make the mistake of treating American kinship patterns as the international norm. Among the sub-themes of kinship we shall consider are: the state and public policy as it relates to family formation; sexuality, intimate relations and parenting; the division of labor and social power within families; and their variations across the globe. We'll also devote a portion of our time to applying the material to an understanding of where our own families fit into this material. That is, we will relate our own and classmates' family biographies to the broader social history of American families. Applying theoretical concepts to real cases is often the most effective way of understanding them and examining their usefulness and plausibility. This assignment can offer you deep insights into how your family of origin has influenced your orientation to the world and how your ancestry fits into general trends in family formation in the post-war period as long as you make the necessary investment of sincerity, effort and time.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.

SOC 3947. Honors Ideology & Social Change in Japan. 3 Credit Hours.
This course provides a sociological look at the conditions which have contributed to Japan's emergence as a world economic force. How do culture, social organization, life style, ideology, and global politics affect Japan's rapid rise to power? Is Japan a closed society? What significance do factors such as racism, religion, education, family, the military, class, and population changes hold for understanding what has happened in Japan and in Japan's relations with outsiders, particularly the U.S.? What significance does this analysis have for the future of Sociology in the U.S.?
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may not be repeated for additional credits.
SOC 4001. Qualitative Research. 4 Credit Hours.
One important source of sociological evidence focuses on the meaning of events in daily life. This course is designed to provide the student with skills to evaluate qualitative research studies. More importantly, this class also teaches students to conduct research in a variety of techniques including participant observation, in-depth interviewing, and the analyses of documents. All students will carry out a research project during the semester under the direction of the instructor.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(SOC 3201|Minimum Grade of C-|May not be taken concurrently
AND SOC 3261|Minimum Grade of C-|May not be taken concurrently).

SOC 4002. Data Analysis. 4 Credit Hours.
This course is designed to teach the logic and method of data analysis. We start with a specified research question, find some data that are pertinent to this question, and analyze them. The analysis proceeds first by studying the univariate statistical distributions of relevant variables, then moves on to bivariate and multivariate methods. Students write about their research question; emphasis is placed on the interaction between the results of data analysis and the revision of the research question. NOTE: This is a research-intensive course.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(SOC 3201|Minimum Grade of C-|May not be taken concurrently
AND SOC 3261|Minimum Grade of C-|May not be taken concurrently).

SOC 4096. Senior Seminar. 3 Credit Hours.
The goal of this course is to teach you how to use the sociological skills you have learned to make the transition to the next steps of your life. This will involve making decisions about your occupational goals, and collecting evidence on how realistic these are and how you might go about achieving them. We will learn about global and local trends in the economy and the labor market. As part of this, each of you will collect data on the occupation in which you have a particular interest. We will then learn how to do a self-assessment of skills and interests and you will learn how to advertise these on a web site. Finally, you will interview persons working in the occupation of your choice and match your skills with the ones they brought to their job. NOTE: This is the capstone writing intensive course. This course is taken in the semester before graduation, and is open to sociology majors only.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Sociology

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Spanish (SPAN)

Courses

SPAN 0815. Language in Society. 3 Credit Hours.
How did language come about? How many languages are there in the world? How do people co-exist in countries where there are two or more languages? How do babies develop language? Should all immigrants take a language test when applying for citizenship? Should English become an official language of the United States? In this course we will address these and many other questions, taking linguistic facts as a point of departure and considering their implications for our society. Through discussions and hands-on projects, students will learn how to collect, analyze, and interpret language data and how to make informed decisions about language and education policies as voters and community members. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: ANTH 0815/0915, Asian Studies 0815, Chinese 0815, CSCD 0815, EDUC 0815/0915, English 0815, Italian 0815, PSY 0815, or Russian 0815.

Course Attributes: GB

Repeatability: This course may not be repeated for additional credits.

SPAN 0825. Jewish Diaspora in Latin America. 3 Credit Hours.
The coupling of the terms "Jew" and "Latino" or "Jewish" and "Latin American" still elicits surprise and disbelief, especially among those who grew accustomed to identifying "Jewish" with "Eastern European." In this course we will study the presence of Jews in Latin America, and the relationships between Jews and non-Jews in different Latin American countries. Using a variety of written sources, mainly literary and historical narratives, as well as music and cinema, we will discuss issues of identity, immigration, assimilation, Diaspora and nationalism. Class materials and discussions will be in English translation.

Course Attributes: GG

Repeatability: This course may not be repeated for additional credits.
SPAN 0826. Bilingual Communities. 3 Credit Hours.
What is the relationship between language and identity? How do bilinguals sort between their two languages and cultures to form their identity? In bilingual cultures, is one language always dominant? What happens when a language or dialect is distinct from the dominant language or dialect of the greater society? Why did language resurgence efforts fail in Ireland but succeed in Catalonia, Spain? Why does Guarani enjoy greater protection in Paraguay than Mayan dialects in Guatemala? Is it possible to legislate language behavior? The course explores issues of power and solidarity where two languages or dialects are in contact: How are these cultural identities expressed through choice of language? The geographical areas studied include the US, Canada, Latin America, Europe, and Africa. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed Spanish 0926.
Course Attributes: GB
Repeatability: This course may not be repeated for additional credits.

SPAN 0831. Immigration and the American Dream. 3 Credit Hours.
As a Temple student, you go to school and live in a city full of immigrants. Perhaps your own relatives were immigrants to the United States. But have you ever listened to their stories? With an historical and sociological framework as a basis, we will take an in-depth and more personal look at the immigrant experience as expressed through the immigrants’ own voices in literature and film. Topics explored include: assimilation, cultural identity and Americanization, exploitation and the American Dream, ethnic communities, gender, discrimination and stereotyping. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: ANTH 0831, CRIT 0831, History 0831, Italian 0831/0931, Russian 0831, SOC 0831, or SPAN 0931.
Course Attributes: GD
Repeatability: This course may not be repeated for additional credits.

SPAN 0837. Eating Cultures. 3 Credit Hours.
You are what you eat, they say, but what, precisely, determines our eating habits and what, exactly, do they say about us? How do these habits influence our relations with others in our communities and beyond? Eating is an activity common to all human beings, but how do the particularities and meanings attributed to this activity vary across different times and places? Using literature, visual media, cookbooks, food-based art, and advertisements as our starting point, we will examine how food perception, production, preparation, consumption, exchange, and representation structure individual and communal identities, as well as relations among individuals and communities around the globe. Our focus on this most basic of needs will allow us to analyze how food conveys and limits self-expression and creates relationships as well as delimits boundaries between individuals and groups. Materials will be drawn from a wide range of disciplines including, but not limited to, literary and gender studies, psychology, anthropology, history, sociology, and economics. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed English 0837 or Spanish 0937.
Course Attributes: GB
Repeatability: This course may not be repeated for additional credits.

SPAN 0868. World Society in Literature & Film. 3 Credit Hours.
Learn about a particular national culture - Russian, Indian, French, Japanese, Italian, Spanish, Latin American, for example, each focused upon in separate sections of this course - by taking a guided tour of its literature and film. You don’t need to speak Spanish, Russian, Hindi, French or Japanese to take one of these exciting courses, and you will gain the fresh, subtle understanding that comes from integrating across different forms of human expression. Some of the issues that will be illuminated by looking at culture through the lens of literature and film: Family structures and how they are changing, national self-perceptions, pivotal moments in history, economic issues, social change and diversity. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: Arabic 0868/0968, Asian Studies 0868, Chinese 0868/0968, English 0868/0968, French 0868/0968, German 0868/0968, Hebrew 0868, Italian 0868/0968, Japanese 0868/0968, Jewish Studies 0868, Korean 0868, LAS 0868/0968, Political Science 0868/0968, Russian 0868/0968, or Spanish 0968.
Course Attributes: GG
Repeatability: This course may not be repeated for additional credits.

SPAN 0926. Honors Bilingual Communities. 3 Credit Hours.
What is the relationship between language and identity? How do bilinguals sort between their two languages and cultures to form their identity? In bilingual cultures, is one language always dominant? What happens when a language or dialect is distinct from the dominant language or dialect of the greater society? Why did language resurgence efforts fail in Ireland but succeed in Catalonia, Spain? Why does Guarani enjoy greater protection in Paraguay than Mayan dialects in Guatemala? Is it possible to legislate language behavior? The course explores issues of power and solidarity where two languages or dialects are in contact: How are these cultural identities expressed through choice of language? The geographical areas studied include the US, Canada, Latin America, Europe, and Africa. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed Spanish 0826.
Course Attributes: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Repeatability: This course may not be repeated for additional credits.
SPAN 0931. Honors Immigration and the American Dream. 3 Credit Hours.
As a Temple student, you go to school and live in a city full of immigrants. Perhaps your own relatives were immigrants to the United States. But have you ever listened to their stories? With an historical and sociological framework as a basis, we will take an in-depth and more personal look at the immigrant experience as expressed through the immigrants' own voices in literature and film. Topics explored include: assimilation, cultural identity and Americanization, exploitation and the American Dream, ethnic communities, gender, discrimination and stereotyping. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: ANTH 0831, CRIT 0831, History 0831, Italian 0831/0931, Russian 0831, SOC 0831, or SPAN 0831.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GD, HO
Repeatability: This course may not be repeated for additional credits.

SPAN 0937. Honors Eating Cultures. 3 Credit Hours.
You are what you eat, they say, but what, precisely, determines our eating habits and what, exactly, do they say about us? How do these habits influence our relations with others in our communities and beyond? Eating is an activity common to all human beings, but how do the particularities and meanings attributed to this activity vary across different times and places? Using literature, visual media, cookbooks, food-based art, and advertisements as our starting point, we will examine how food perception, production, preparation, consumption, exchange, and representation structure individual and communal identities, as well as relations among individuals and communities around the globe. Our focus on this most basic of needs will allow us to analyze how food conveys and limits self-expression and creates relationships as well as delimits boundaries between individuals and groups. Materials will be drawn from a wide range of disciplines including, but not limited to, literary and gender studies, psychology, anthropology, history, sociology, and economics. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed English 0837 or Spanish 0837.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GB, HO
Repeatability: This course may not be repeated for additional credits.

SPAN 0968. Honors World Society in Literature & Film. 3 Credit Hours.
Learn about a particular national culture - Russian, Indian, French, Japanese, Italian, Spanish, Latin American, for example, each focused upon in separate sections of this course - by taking a guided tour of its literature and film. You don't need to speak Spanish, Russian, Hindu, French or Japanese to take one of these exciting courses, and you will gain the fresh, subtle understanding that comes from integrating across different forms of human expression. Some of the issues that will be illuminated by looking at culture through the lens of literature and film: Family structures and how they are changing, national self-perceptions, pivotal moments in history, economic issues, social change and diversity. (This is an Honors course.) NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: Arabic 0868/0968, Asian Studies 0868, Chinese 0868/0968, English 0868/0968, French 0868/0968, German 0868/0968, Hebrew 0868, Italian 0868/0968, Japanese 0868/0968, Jewish Studies 0868, Korean 0868, LAS 0868/0968, Political Science 0868/0968, Russian 0868/0968, or Spanish 0868.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GG, HO
Repeatability: This course may not be repeated for additional credits.

SPAN 1001. Basic I. 4 Credit Hours.
Basic Spanish I is an introductory Spanish course for students with little or no previous Spanish experience. The course will develop basic skills for speaking, listening, reading, and writing as well as introduce students to the richness and diversity of Spanish-speaking cultures. Daytime sections on Main Campus combine regular classroom instruction and practice with Language Lab sessions dedicated to the use of instructional technology. Other sections provide all instruction in the regular classroom.

Course Attributes: LA
Repeatability: This course may not be repeated for additional credits.

SPAN 1002. Basic II. 4 Credit Hours.
Basic Spanish II is a continuation of the work begun in Basic I. The course further develops basic skills for speaking, listening, reading, and writing, and it continues the introduction to the richness and diversity of Spanish-speaking cultures. Daytime sections on Main Campus combine regular classroom instruction and practice with Language Lab sessions dedicated to the use of instructional technology. Other sections provide all instruction in the regular classroom.

Course Attributes: LA
Repeatability: This course may not be repeated for additional credits

Pre-requisites:
SPAN 1001|Minimum Grade of C-|May not be taken concurrently
OR SPAN 1901|Minimum Grade of C-|May not be taken concurrently
OR LCSP C1002|May not be taken concurrently
OR LCSP B1002|May not be taken concurrently
OR LCSP C1003|May not be taken concurrently
OR LCSP B1003|May not be taken concurrently
OR LCSP EXMPT|May not be taken concurrently.
SPAN 1003. Intermediate. 3 Credit Hours.
Intermediate Spanish is a communicative course. More sophisticated grammatical concepts will be introduced and students will continue to develop speaking, listening, reading, and writing competencies. Class work will include discussions, videos, and writing. Students will take a more active role in their own learning process by using computer technology out of class to hone grammar skills and explore the multi-faceted world of Hispanic culture.
Course Attributes: LB
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
SPAN 1002|Minimum Grade of C-|May not be taken concurrently
OR SPAN 1902|Minimum Grade of C-|May not be taken concurrently
OR LCSP C1003|May not be taken concurrently
OR LCSP B1003|May not be taken concurrently
OR LCSP EXMPT|May not be taken concurrently.

SPAN 1011. Heritage Spanish I. 3 Credit Hours.
Designed for the needs of heritage speakers of Spanish with little or no formal training in Spanish. Spelling, accentuation, and standard sentence-level grammar plus opportunities for Spanish conversation. NOTE: Prior to summer 2015, the course title was "Language Skills for Spanish Speakers."
Repeatability: This course may not be repeated for additional credits.

SPAN 1901. Honors Basic I. 4 Credit Hours.
Basic Spanish I is an introductory Spanish course for students with little or no previous Spanish experience. The course will develop basic skills for speaking, listening, reading, and writing as well as introduce students to the richness and diversity of Spanish-speaking cultures. Daytime sections on Main Campus combine regular classroom instruction and practice with Language Lab sessions dedicated to the use of instructional technology. Other sections provide all instruction in the regular classroom.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO, LA
Repeatability: This course may not be repeated for additional credits.
Pre-requisites:
SPAN 1901|Minimum Grade of C-|May not be taken concurrently.

SPAN 1902. Honors Basic II. 4 Credit Hours.
Basic Spanish II is a continuation of the work begun in Basic I. The course further develops basic skills for speaking, listening, reading, and writing, and it continues the introduction to the richness and diversity of Spanish-speaking cultures. Daytime sections on Main Campus combine regular classroom instruction and practice with Language Lab sessions dedicated to the use of instructional technology. Other sections provide all instruction in the regular classroom.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO, LA
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
SPAN 1901|Minimum Grade of C-|May not be taken concurrently.

SPAN 1903. Honors Intermediate. 3 Credit Hours.
Intermediate Spanish is a communicative course. More sophisticated grammatical concepts will be introduced and students will continue to develop speaking, listening, reading, and writing competencies. Class work will include discussions, videos, and writing. Students will take a more active role in their own learning process by using computer technology out of class to hone grammar skills and explore the multi-faceted world of Hispanic culture.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO, LB
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
SPAN 1902|Minimum Grade of C-|May not be taken concurrently.

SPAN 2001. Conversational Review. 3 Credit Hours.
The main thrust of this course is oral practice with grammar review for the purpose of improving the non-native student's oral communication skills.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
SPAN 1003|Minimum Grade of C-|May not be taken concurrently
OR SPAN 1903|Minimum Grade of C-|May not be taken concurrently
OR LCSP EXMPT|May not be taken concurrently.
SPAN 2002. Hispanic Readings. 3 Credit Hours.
This course devotes time to speaking and writing skills, but the main emphasis is reading comprehension and interpretation of texts in Spanish.
**Repeatability:** This course may not be repeated for additional credits
**Pre-requisites:**
SPAN 1003|Minimum Grade of C-|May not be taken concurrently.

SPAN 2011. Heritage Spanish II. 3 Credit Hours.
This course enhances and strengthens control of standard Spanish grammar and orthography through the study of representative samples of essays, prose, poetry, business letters, formal written communiqués, etc., in Spanish. Develops vocabulary recognition and writing skills focusing on the paragraph and the short essay. NOTE: Prior to summer 2015, the course title was "Advanced Skills for Spanish Speakers."
**Repeatability:** This course may not be repeated for additional credits
**Pre-requisites:**
SPAN 1011|Minimum Grade of C-|May not be taken concurrently.

SPAN 2096. Composition. 3 Credit Hours.
This course devotes time to reading comprehension and oral expression, but the main thrust of the course is written expression using appropriate Spanish grammar and orthography. NOTE: Prior to fall 2009, the course title was "Composition and Conversation."
**Course Attributes:** WI
**Repeatability:** This course may not be repeated for additional credits
**Pre-requisites:**
SPAN 2001|Minimum Grade of C-|May not be taken concurrently
OR SPAN 2901|Minimum Grade of C-|May not be taken concurrently
OR SPAN 2002|Minimum Grade of C-|May not be taken concurrently
OR SPAN 2902|Minimum Grade of C-|May not be taken concurrently.

SPAN 2098. Advanced Intensive Practice in the Four Skills. 9 Credit Hours.
The nine-credit Advanced Intensive Practice in the Four Skills course of the Latin American Studies Semester (LASS) is designed to help students develop writing skills through a variety of analytical and creative assignments. To accomplish this goal the course reviews grammatical structures previously studied and introduces other new structures. Students will work on strategies for correcting errors, and on improving the organization and clarity of their own writing. Oral participation in this class is very important: we will discuss the texts we read in order to analyze their content, structure, and aesthetics. These texts will also help students to expand their vocabulary and improve their spelling. Only Spanish will be spoken in class. Duplicate Credit warning—previously known as Spanish 2076.
**Course Attributes:** WI
**Repeatability:** This course may not be repeated for additional credits.

SPAN 2201. Catalan Language for Spanish Speakers. 3 Credit Hours.
This course is devoted to the study of Catalan language. The goal of the course is to introduce students to the vocabulary, grammar and language usage of Catalan. It is a comprehensive overview of Catalan grammar, in combination with the development of listening, reading, writing and oral communication skills. Moreover, it introduces students to the richness and diversity of Catalan culture. It is intended for students with a background in Spanish (i.e., they have completed four semesters of instructional Spanish or have native or native-like command of the language). Thus, it is a transition course between the two languages.
**Repeatability:** This course may not be repeated for additional credits.

SPAN 2901. Honors Conversational Review. 3 Credit Hours.
The main thrust of this course is oral practice with grammar review for the purpose of improving the non-native student's oral communication skills.
**Cohort Restrictions:** Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
**Course Attributes:** HO
**Repeatability:** This course may not be repeated for additional credits
**Pre-requisites:**
SPAN 1003|Minimum Grade of C-|May not be taken concurrently
OR LCSP EXMPT|May not be taken concurrently.

SPAN 2902. Honors Hispanic Readings. 3 Credit Hours.
This course devotes time to speaking and writing skills, but the main emphasis is reading comprehension and interpretation of texts in Spanish.
**Cohort Restrictions:** Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
**Course Attributes:** HO
**Repeatability:** This course may not be repeated for additional credits
**Pre-requisites:**
SPAN 1003|Minimum Grade of C-|May not be taken concurrently.
SPAN 3001. Advanced Composition & Conversation. 3 Credit Hours.
Continued development of conversation and writing skills. Special attention is given to advanced areas of Spanish grammar appropriate for oral argumentation and expository writing and also to distinctions between formal and informal usage.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
SPAN 2096|Minimum Grade of C-|May not be taken concurrently
OR SPAN 2098|Minimum Grade of C-|May not be taken concurrently.

SPAN 3002. Hispanic Readings II. 3 Credit Hours.
Themes in Hispanic culture in the context of short prose readings, including the short story and the short novel. Emphasis on tools for advanced reading: vocabulary recognition, comprehension of idiomatic expressions, and knowledge of advanced grammar. Includes writing and oral discussion.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
SPAN 2096|Minimum Grade of C-|May not be taken concurrently
OR SPAN 2098|Minimum Grade of C-|May not be taken concurrently.

SPAN 3003. Advanced Grammar for Communication. 3 Credit Hours.
Emphasizes advanced grammar (including distinctions of tense, aspect and mood; reflexive and passive usage; and pronoun selection). Attention is paid to Spanish/English contrasts. Grammar skills are developed in conversation and in reading and writing. Students are also introduced to linguistic concepts that will help them make their own judgments about grammar and pronunciation. NOTE: Prior to summer 2015, the course title was "Advanced Grammar and Linguistic Concepts."
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
SPAN 2096|Minimum Grade of C-|May not be taken concurrently
OR SPAN 2098|Minimum Grade of C-|May not be taken concurrently.

SPAN 3096. Advanced Analysis and Writing Skills. 3 Credit Hours.
Students read short stories and other brief narrative texts, plays, poems and essays in order to facilitate their acquisition of critical skills and to identify basic ideological and formalistic issues within the texts being studied. This course teaches how to become a careful reader and writer. Reading comprehension and writing are its essential aspects. Compositions are written and revised. The course is a prerequisite for most advanced Spanish offerings. This is a critical thinking course and a capstone writing course. NOTE: Cornerstone to the Spanish major and capstone writing course.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(SPAN 2096|Minimum Grade of C-|May not be taken concurrently
OR SPAN 2098|Minimum Grade of C-|May not be taken concurrently
AND (SPAN 3000 to 4999| Required Courses:1|Minimum Grade of C-|May not be taken concurrently).

SPAN 3121. Introduction to the Literature of Spain. 3 Credit Hours.
Examination of major works of Spanish literature. NOTE: Prior to fall 2009, the course title was "Introduction to Spanish Literature." Prior to summer 2015, the course title was "Masterpieces of Spanish Literature."
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
SPAN 2096|Minimum Grade of C-|May not be taken concurrently
OR SPAN 2098|Minimum Grade of C-|May not be taken concurrently.

SPAN 3141. Introduction to the Literature of Latin America. 3 Credit Hours.
Examination of major works of Spanish American literature. NOTE: Prior to fall 2009, the course title was "Introduction to Spanish American Literature." Prior to summer 2015, the course title was "Masterpieces of Spanish American Literature."
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
SPAN 2096|Minimum Grade of C-|May not be taken concurrently
OR SPAN 2098|Minimum Grade of C-|May not be taken concurrently.

SPAN 3142. Puerto Rican Readings. 3 Credit Hours.
This course entails the study of selected works by major Puerto Rican writers.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
SPAN 2096|Minimum Grade of C-|May not be taken concurrently
OR SPAN 2098|Minimum Grade of C-|May not be taken concurrently.
SPAN 3160. Special Topics I. 3 Credit Hours.
A study of language, literature, culture or other areas of special interest in the Hispanic world. NOTE: Prior to summer 2015, the course title was “Special Topics in Spanish and/or Spanish American Literature.”
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
SPAN 2096|Minimum Grade of C-|May not be taken concurrently
OR SPAN 2098|Minimum Grade of C-|May not be taken concurrently.

SPAN 3201. Catalan Culture and Civilization. 3 Credit Hours.
This course is devoted to the study of Catalan culture. The term “Catalan culture” in the strictest sense refers to the various artistic, intellectual and popular manifestations of the social interactions encountered in those geographical lands populated by Catalan-speaking peoples (located on the eastern part of the Iberian Peninsula and parts of France and Italy). Through the analysis of original texts, films and visual artifacts, the course will incorporate discussions on the history, politics, society, cinema, anthropology and the arts of the Catalan-speaking regions. The course is intended to strengthen the students’ reading skills, to broaden their vocabulary, and to increase cultural and literary awareness by reading, discussing and writing about the various cultural topics introduced in class. The course will be taught in Catalan.
Repeatability: This course may not be repeated for additional credits.

SPAN 3204. Latin America through Film. 3 Credit Hours.
This course is designed to present a multicultural view of Latin American life through Latin American film. It includes the artistic appreciation and the critical analysis of the films viewed.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
SPAN 2096|Minimum Grade of C-|May not be taken concurrently
OR SPAN 2098|Minimum Grade of C-|May not be taken concurrently.

SPAN 3221. The Cultures of Spain. 3 Credit Hours.
The Spanish character as revealed in its language, literature, architecture, history, art, music, and ethnic traditions. Geography and sociology of Spain. Lectures, readings, and discussions. NOTE: Prior to summer 2015, the course title was “Spanish Culture and Civilization.”
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
SPAN 2096|Minimum Grade of C-|May not be taken concurrently
OR SPAN 2098|Minimum Grade of C-|May not be taken concurrently.

SPAN 3222. Spain through Film. 3 Credit Hours.
This course develops Spanish-language skills in their application to the study of the culture of Spain through film. It includes the artistic appreciation and analysis of the films viewed. NOTE: Prior to fall 2009, the course title was “Contemporary Spain through Film.”
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
SPAN 2096|Minimum Grade of C-|May not be taken concurrently
OR SPAN 2098|Minimum Grade of C-|May not be taken concurrently.

SPAN 3241. The Cultures of Latin America. 3 Credit Hours.
Study of the Spanish-American people through their literature, history, architecture, art, music, and European/indigenous traditions and institutions. NOTE: Prior to summer 2015, the course title was “Spanish-American Culture and Civilization.”
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
SPAN 2096|Minimum Grade of C-|May not be taken concurrently
OR SPAN 2098|Minimum Grade of C-|May not be taken concurrently.

SPAN 3243. The Culture of Puerto Rico. 3 Credit Hours.
An examination of topics and themes of Puerto Rican culture and civilization in the context of literary and non-literary texts. NOTE: Prior to summer 2015, the course title was “Puerto Rican Culture and Civilization.”
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
SPAN 2096|Minimum Grade of C-|May not be taken concurrently
OR SPAN 2098|Minimum Grade of C-|May not be taken concurrently.

SPAN 3261. The Hispanic World. 3 Credit Hours.
This course examines what is different about Hispanic society and its multifaceted mentality. To address these questions, it focuses on topics including ethnic struggle, linguistic diversity, and intellectual and artistic creativity, as well as on the relationship between Spain, Latin America, and Latino society in the U.S. Spanish language skills are developed through conversation and writing. NOTE: Prior to summer 2015, the course title was “The Hispanic Mind.”
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
SPAN 3001|Minimum Grade of C-|May not be taken concurrently.
SPAN 3401. Translation Skills. 3 Credit Hours.
Translation skills through familiarity with different types of language taken mainly from Spanish newspapers: reporting, sports, columns, advertisements, correspondence, etc. Models of each and their inherent problems in translation. Essays on translation to examine theories of translation.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
SPAN 3001|Minimum Grade of C-|May not be taken concurrently.

SPAN 3402. Interpretation Skills in Translation. 3 Credit Hours.
Style, techniques, and mechanics of translation focusing on texts relating to the subject areas of law, business, social issues, public health, and education. NOTE: Prior to fall 2009, the course title was "Translation Skills II."
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
SPAN 3001|Minimum Grade of C-|May not be taken concurrently.

SPAN 3501. Spanish for Business Professions. 3 Credit Hours.
An introduction to aspects of the Spanish language and Hispanic culture for business students and business professionals. Emphasis on the development of vocabulary and conversation skills.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
SPAN 1003|Minimum Grade of C-|May not be taken concurrently.
OR SPAN 1903|Minimum Grade of C-|May not be taken concurrently.
OR LCSP EXMPT|May not be taken concurrently.

SPAN 3502. Business Spanish I. 3 Credit Hours.
An introduction in Spanish to basic business concepts (relating to company structure, accounting, banking, etc.) with a focus on Spanish vocabulary and writing skills for business. Attention to applications in Spanish-speaking countries.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
SPAN 2096|Minimum Grade of C-|May not be taken concurrently.
OR SPAN 2098|Minimum Grade of C-|May not be taken concurrently.

SPAN 3503. Business Spanish II. 3 Credit Hours.
An examination in Spanish of business concepts focusing on finance, marketing, and international business, including import and export. Emphasis on vocabulary and writing skills for business. Attention to awareness of Hispanic culture and applications in Spanish-speaking countries.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
SPAN 2096|Minimum Grade of C-|May not be taken concurrently.
OR SPAN 2098|Minimum Grade of C-|May not be taken concurrently.

SPAN 3504. Advanced Business Translation and Interpretation. 3 Credit Hours.
This course will have two components: (1) emphasis on written translation (English-Spanish and Spanish-English), and (2) interpreting skills. Students will have an opportunity to translate a variety of texts including: business correspondence, banking and financial documents, as well as promotional and informational materials. Interpreting will involve various kinds of oral work. The course concentrates primarily on consecutive interpreting (English-Spanish and Spanish-English), but sight translation and oral summary of texts used in a typical business context will also be practiced (for example, renting a property, opening a bank account, or filling out a survey). It builds on the work done in Spanish 3401 and 3402.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
SPAN 3402|Minimum Grade of C-|May not be taken concurrently.

SPAN 3601. Spanish for Health Professions. 3 Credit Hours.
This course assists medical and related human-services personnel and students in interacting and communicating effectively with Spanish-speaking people. Conversation skills, cultural information, and medical and social-services terminology are integrated as they apply to real situations. Students practice verbal and non-verbal skills in simulated role-playing situations. Moreover, the course is designed to assist medical personnel in the acquisition of Spanish medical vocabulary. The delivery of services to the Hispanic community is of foremost importance. NOTE: Prior to summer 2015, the course title was "Spanish for Health and Human Services."
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
SPAN 1003|Minimum Grade of C-|May not be taken concurrently.

SPAN 3602. Medical Spanish. 3 Credit Hours.
This course is designed to assist medical personnel in the acquisition of Spanish medical vocabulary, strategies of communication and cultural knowledge to assist in the delivery of services to the Hispanic community.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
SPAN 2096|Minimum Grade of C-|May not be taken concurrently.
OR SPAN 2098|Minimum Grade of C-|May not be taken concurrently.
SPAN 3701. Spanish for the Legal Professions. 3 Credit Hours.
This course provides students and legal professionals with technical vocabulary and communicative skills in a legal context. Special emphasis is paid to oral and written communication, and aural comprehension in a variety of legal contexts.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
SPAN 1003|Minimum Grade of C-|May not be taken concurrently.

SPAN 3960. Honors Special Topics. 3 Credit Hours.
A study of language, literature, culture or other areas of special interest in the Hispanic world. NOTE: Prior to summer 2015, the course title was "Honors Special Topics in Spanish Literature."

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.

SPAN 3996. Honors Advanced Analysis and Writing Skills. 3 Credit Hours.
Students read short stories and other brief narrative texts, plays, poems and essays in order to facilitate their acquisition of critical skills and to identify basic ideological and formalistic issues within the texts being studied. This course teaches how to become a careful reader and writer. Reading comprehension and writing are its essential aspects. Compositions are written and revised. This is a critical thinking course and an honors writing course. (This course is the honors version of Spanish 3096.)

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO, WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(SPA2096|Minimum Grade of C-|May not be taken concurrently
OR SPA2098|Minimum Grade of C-|May not be taken concurrently)
AND (SPA3001|Minimum Grade of C-|May not be taken concurrently).

SPAN 4020. Special Topics II. 2 Credit Hours.
A comprehensive study of language, literature, culture or other areas of special interest in the Hispanic world. NOTE: Prior to summer 2015, the course title was "Topics in Spanish and/or Spanish American Literature."

Repeatability: This course may be repeated for additional credit.

SPAN 4060. Special Topics. 3 Credit Hours.
A comprehensive study of language, literature, culture or other areas of special interest in the Hispanic world.

Repeatability: This course may be repeated for additional credit.

SPAN 4083. Directed Readings. 2 Credit Hours.
Guided readings at the 4000 level in Spanish, focusing on themes and topics in Hispanic culture, literature and/or linguistics. NOTE: By arrangement with appropriate professor and special permission of department chair.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
SPAN 3096|Minimum Grade of C-|May not be taken concurrently
OR SPAN 3996|Minimum Grade of C-|May not be taken concurrently.

SPAN 4121. Survey of Spanish Literature. 3 Credit Hours.
Survey of selected periods and themes in Spanish literature.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
SPAN 3096|Minimum Grade of C-|May not be taken concurrently
OR SPAN 3996|Minimum Grade of C-|May not be taken concurrently.

SPAN 4123. 16th & 17th Century Spanish Literature. 3 Credit Hours.
This course is devoted to the study of the literature produced during what has been called the Golden Age of Spanish Literature. Although there is special emphasis on the genre of prose, emblematic texts from various genres will be included: chivalric and pastoral novels, Renaissance dialogues, picaresque treatises, and women's texts.

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
SPAN 3096|Minimum Grade of C-|May not be taken concurrently
OR SPAN 3996|Minimum Grade of C-|May not be taken concurrently.

SPAN 4126. Cervantes. 3 Credit Hours.
An in-depth study of Miguel de Cervantes' life and selected works. NOTE: Prior to fall 2009, the course title was "Cervantes' Don Quijote."

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
SPAN 3096|Minimum Grade of C-|May not be taken concurrently
OR SPAN 3996|Minimum Grade of C-|May not be taken concurrently.
SPAN 4127. 18th and/or 19th Century Spanish Literature. 3 Credit Hours.
This course is devoted to the study of Spanish literature during the 18th and/or 19th century. NOTE: Prior to fall 2009, the course title was "Poetry and Drama of the 19th Century."
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
SPAN 3096 Minimum Grade of C- May not be taken concurrently
OR SPAN 3996 Minimum Grade of C- May not be taken concurrently.

SPAN 4128. Hispanic Modernism. 3 Credit Hours.
Using significant works by leading authors (i.e., Martí, Unamuno, Valle-Inclán, Casal, Gutiérrez Nájera, Machado and/or Jiménez), this course explores aspects of Modernity in Spain and/or Spanish America. NOTE: Prior to fall 2009, the course title was "Generation of 1898."
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
SPAN 3096 Minimum Grade of C- May not be taken concurrently
OR SPAN 3996 Minimum Grade of C- May not be taken concurrently.

SPAN 4132. 20th &/or 21st Century Spanish Literature. 3 Credit Hours.
This course is devoted to the study of Spanish literature during the 20th and/or 21st century. NOTE: Prior to fall 2009, the course title was "Contemporary Spanish Novel."
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
SPAN 3096 Minimum Grade of C- May not be taken concurrently
OR SPAN 3996 Minimum Grade of C- May not be taken concurrently.

SPAN 4133. Hispanic Women in Literature. 3 Credit Hours.
The study of the presence of women as authors and/or characters in Spanish and/or Spanish American literature. NOTE: Prior to fall 2009, the course title was "The Female Presence in Peninsular Literature."
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
SPAN 3096 Minimum Grade of C- May not be taken concurrently
OR SPAN 3996 Minimum Grade of C- May not be taken concurrently.

SPAN 4141. Survey of Spanish American Literature. 3 Credit Hours.
Survey of selected periods and themes in Spanish American literature.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
SPAN 3096 Minimum Grade of C- May not be taken concurrently
OR SPAN 3996 Minimum Grade of C- May not be taken concurrently.

SPAN 4142. Spanish American Short Story. 3 Credit Hours.
The evolution of the Spanish American short story.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
SPAN 3096 Minimum Grade of C- May not be taken concurrently
OR SPAN 3996 Minimum Grade of C- May not be taken concurrently.

SPAN 4143. Spanish American Novel. 3 Credit Hours.
This course explores aspects of the Spanish American novel across time, and highlights trends introduced and developed in different texts. NOTE: Prior to fall 2009, the course title was "Latin American Novel."
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
SPAN 3096 Minimum Grade of C- May not be taken concurrently
OR SPAN 3996 Minimum Grade of C- May not be taken concurrently.

SPAN 4144. Spanish American Poetry. 3 Credit Hours.
Trends in Spanish American poetry through representative poems and poets. NOTE: Prior to fall 2009, the course title was "Latin American Poetry."
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
SPAN 3096 Minimum Grade of C- May not be taken concurrently
OR SPAN 3996 Minimum Grade of C- May not be taken concurrently.
SPAN 4146. National Literatures of Spanish America. 3 Credit Hours.
The study of literature in its cultural context focusing on texts from a selected country or countries of Spanish America. NOTE: The country of choice will vary according to the instructor's preference.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
SPAN 3096|Minimum Grade of C-|May not be taken concurrently
OR SPAN 3996|Minimum Grade of C-|May not be taken concurrently.

SPAN 4147. 20th and/or 21st Century Puerto Rican Authors. 3 Credit Hours.
A study of 20th and/or 21st century Puerto Rican authors. NOTE: Prior to fall 2009, the course title was "20th Century Puerto Rican Authors."
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
SPAN 3096|Minimum Grade of C-|May not be taken concurrently
OR SPAN 3996|Minimum Grade of C-|May not be taken concurrently.

SPAN 4148. Latin American Literature of Social Conflict. 3 Credit Hours.
The study of class, ethnic, gender, and other social conflicts in Latin American literature.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
SPAN 3096|Minimum Grade of C-|May not be taken concurrently
OR SPAN 3996|Minimum Grade of C-|May not be taken concurrently.

SPAN 4149. Literature of Colonial Spanish America. 3 Credit Hours.
The study of the literature of Colonial Spanish America. NOTE: Prior to fall 2009, the course title was "Literature of Colonial America."
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
SPAN 3096|Minimum Grade of C-|May not be taken concurrently
OR SPAN 3996|Minimum Grade of C-|May not be taken concurrently.

SPAN 4151. Hispanic Literature through Art. 3 Credit Hours.
Comparative study of Hispanic literature in the context of trends and styles in the history of Art.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
SPAN 3096|Minimum Grade of C-|May not be taken concurrently
OR SPAN 3996|Minimum Grade of C-|May not be taken concurrently.

SPAN 4152. U.S. Latino/a Studies. 3 Credit Hours.
An exploration of literature, history, race, ethnicity, gender and language among Latinos/as in the United States. NOTE: Prior to summer 2015, the course title was "U.S. Latino Literature."
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
SPAN 3096|Minimum Grade of C-|May not be taken concurrently
OR SPAN 3996|Minimum Grade of C-|May not be taken concurrently.

SPAN 4161. Hispanic Literature through Art. 3 Credit Hours.
Comparative study of Hispanic literature in the context of trends and styles in the history of Art.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
SPAN 3096|Minimum Grade of C-|May not be taken concurrently
OR SPAN 3996|Minimum Grade of C-|May not be taken concurrently.

SPAN 4162. Hispanic Nobel Laureates. 3 Credit Hours.
Readings from selected writers from Spain and Latin America who have received the Nobel Prize in Literature.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
SPAN 3096|Minimum Grade of C-|May not be taken concurrently
OR SPAN 3996|Minimum Grade of C-|May not be taken concurrently.

SPAN 4168. Independent Study. 1 to 4 Credit Hour.
An independent-study course arranged each semester. Please consult with the instructor.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
SPAN 3096|Minimum Grade of C-|May not be taken concurrently
OR SPAN 3996|Minimum Grade of C-|May not be taken concurrently.
SPAN 4183. Directed Readings. 3 to 6 Credit Hours.
Guided readings in Spanish, at the 4000 level, focusing on themes and topics in Hispanic culture, literature and/or linguistics. NOTE: By arrangement with appropriate professor and special permission of department chair.

Repeatability: This course may be repeated for additional credit.
Pre-requisites:
SPAN 3096|Minimum Grade of C-|May not be taken concurrently
OR SPAN 3996|Minimum Grade of C-|May not be taken concurrently.

SPAN 4221. The Art of Spain. 3 Credit Hours.
A panoramic view of the art of Spain from two perspectives: the chronological and the geographic. The chronological perspective includes artistic and architectural work from the paleolythic period (the Caves of Altamira) to the present time. The geographic perspective examines work from Asturias, in the north, to Sevilla and Granada in the south and Barcelona on the Mediterranean coast of Spain.

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
SPAN 2096|Minimum Grade of C-|May not be taken concurrently
OR SPAN 2098|Minimum Grade of C-|May not be taken concurrently.

SPAN 4240. Topics in Hispanic Popular Cultures. 3 Credit Hours.
The study of manifestations of Hispanic popular culture.

Repeatability: This course may be repeated for additional credit.
Pre-requisites:
SPAN 2096|Minimum Grade of C-|May not be taken concurrently
OR SPAN 2098|Minimum Grade of C-|May not be taken concurrently.

SPAN 4242. Hispanic Influences in the U.S.. 3 Credit Hours.
This course examines contemporary U.S. Latino literature and writers. Students will examine the evolution of Latino literature and its themes, and examine the experiences of Latino writers and their impact on U.S. culture. Coursework will include lectures, readings, films, papers and class discussions.

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
SPAN 3096|Minimum Grade of C-|May not be taken concurrently
OR SPAN 3996|Minimum Grade of C-|May not be taken concurrently.

SPAN 4301. The Sounds of Spanish. 3 Credit Hours.
An articulatory study of the sounds of Spanish with attention to regional variation and comparisons with English. NOTE: Prior to summer 2015, the course title was "Spanish Phonetics."

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(SPAN 3003|Minimum Grade of C-|May not be taken concurrently)
AND (SPAN 3096|Minimum Grade of C-|May not be taken concurrently
OR SPAN 3996|Minimum Grade of C-|May not be taken concurrently).

SPAN 4302. Introduction to Spanish Linguistics. 3 Credit Hours.
Concepts and procedures of linguistic description applied to sounds, words, and sentence patterns of the Spanish language.

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(SPAN 3003|Minimum Grade of C-|May not be taken concurrently)
AND (SPAN 3096|Minimum Grade of C-|May not be taken concurrently
OR SPAN 3996|Minimum Grade of C-|May not be taken concurrently).

SPAN 4303. Spanish/English Bilingualism. 3 Credit Hours.
A contrastive linguistic study of Spanish and English sound and grammatical systems. Appropriate for students and teachers of Spanish in the context of the U.S. NOTE: Prior to summer 2015, the course title was "Spanish / English Contrasts."

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(SPAN 3003|Minimum Grade of C-|May not be taken concurrently)
AND (SPAN 3096|Minimum Grade of C-|May not be taken concurrently
OR SPAN 3996|Minimum Grade of C-|May not be taken concurrently).
SPAN 4304. Spanish Applied Linguistics. 3 Credit Hours.
This course will explore a number of theories accounting for language learning from classical times to the present. Students will examine not only the teaching of Spanish in accordance with these theories, but also the acquisition of Spanish by the second language learner.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: 
(SPAN 3003|Minimum Grade of C-|May not be taken concurrently)
AND (SPAN 3096|Minimum Grade of C-|May not be taken concurrently)
OR SPAN 3996|Minimum Grade of C-|May not be taken concurrently).

SPAN 4305. Evolution of the Spanish Language. 3 Credit Hours.
A study of chronological developments in the linguistic and social history of Spanish. NOTE: Prior to summer 2015, the course title was "History of the Spanish Language."
Repeatability: This course may not be repeated for additional credits
Pre-requisites: 
(SPAN 3003|Minimum Grade of C-|May not be taken concurrently)
AND (SPAN 3096|Minimum Grade of C-|May not be taken concurrently)
OR SPAN 3996|Minimum Grade of C-|May not be taken concurrently).

SPAN 4306. Spanish Sociolinguistics. 3 Credit Hours.
This course will provide an introduction to the study of language in society as represented in sociolinguistic research from Spain, Latin America, and the United States. Emphasis is on linguistic variation.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: 
(SPAN 3003|Minimum Grade of C-|May not be taken concurrently)
AND (SPAN 3096|Minimum Grade of C-|May not be taken concurrently)
OR SPAN 3996|Minimum Grade of C-|May not be taken concurrently).

SPAN 4307. Language and Gender. 3 Credit Hours.
An examination of the relationship between language use and social gender, i.e., of women's and men's speech. Language is examined from the perspectives of sounds, grammatical structures, semantic positioning, and conversational strategies with illustrations based on the use of Spanish and other languages.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: 
(SPAN 3003|Minimum Grade of C-|May not be taken concurrently)
AND (SPAN 3096|Minimum Grade of C-|May not be taken concurrently)
OR SPAN 3996|Minimum Grade of C-|May not be taken concurrently).

SPAN 4401. Advanced Translation and Interpretation. 3 Credit Hours.
Advanced specialized textual translation and interpretation. NOTE: Prior to summer 2015, the course title was “The Art of Translation.”
Repeatability: This course may not be repeated for additional credits
Pre-requisites:  
SPAN 3096|Minimum Grade of C-|May not be taken concurrently
OR SPAN 3996|Minimum Grade of C-|May not be taken concurrently.

SPAN 4449. Medieval Spanish Literature. 3 Credit Hours.
Analysis of Spanish texts written during the Middle Ages. NOTE: Prior to fall 2009, the course title was "Medieval Spanish Text."
Repeatability: This course may not be repeated for additional credits
Pre-requisites:  
SPAN 3096|Minimum Grade of C-|May not be taken concurrently
OR SPAN 3996|Minimum Grade of C-|May not be taken concurrently.

SPAN 4885. Service Learning. 3 Credit Hours.
Work on site in the Spanish-speaking community combined with in-class discussion of the work experience and of readings focusing on the Spanish language in the U.S. and Latino culture. NOTE: Prior to summer 2015, the course title was "Internship."
Repeatability: This course may be repeated for additional credit.
Pre-requisites:  
SPAN 2096|Minimum Grade of C-|May not be taken concurrently
OR SPAN 2098|Minimum Grade of C-|May not be taken concurrently.

Special Education (SPED)
Courses

SPED 2128. Assistive Technology and Universal Design for Learning. 3 Credit Hours.
This course will provide students with an extensive background regarding the various types and uses of assistive and accessible technology and how
the principles of Universal Design for Learning apply to the inherent flexibility of technology as a pathway toward attainment of educational goals.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Early Childhood Education, Special Education
Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate
College Restrictions: Must be enrolled in one of the following Colleges: Education
Repeatability: This course may not be repeated for additional credits.

SPED 2231. Introduction to Inclusive Education. 3 Credit Hours.
This course examines Special Education practices in relation to the history of the field, current laws governing the education and employment of
individuals with disabilities. A focus on the categories of disabilities will include an examination of teaching strategies and accommodations that are used
in meeting the needs of diverse learners.
Repeatability: This course may not be repeated for additional credits.

SPED 3187. Integrated Literacy and Special Education Practicum. 3 Credit Hours.
This integrated practicum experience will provide opportunities for students to apply theoretical models and research-based instructional strategies in
the area of literacy to middle grades students in inclusive classrooms. Focus will be placed on developmental, cognitive, physical, social, behavioral,
processing and learning needs of students and how these needs relate to comprehending written text, specifically for students having disabilities.
Particular emphasis will be focused on ways to connect information from the co-requisite literacy methods course and apply this knowledge to students
with disabilities in the middle grades classroom. Differentiated instruction, response to intervention, appropriate curricular modification, and authentic
assessment related to appropriate instructional decision-making are themes that run throughout this learning experience. NOTE: Background clearances
required.
College Restrictions: Must be enrolled in one of the following Colleges: Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY
Co-requisites: MGRE 3196, MGRE 3296
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(MGRE 4108|Minimum Grade of C-|May not be taken concurrently)
AND (MAES 3145|Minimum Grade of C-|May not be taken concurrently)
AND (SPED 4109|Minimum Grade of C-|May not be taken concurrently).

SPED 3201. Effective Instructional Strategies for Young Students with Mild to Significant Disabilities. 3 Credit Hours.
This course is an introduction to effective instruction and strategies for teaching students with mild to significant disabilities from pre-kindergarten
through eighth grade. The purpose of this course is to identify and understand specific evidence-based strategies that will positively impact student
success particularly in the inclusive setting and across additional educational settings.
Field of Study Restrictions: Must be enrolled in one of the following Concentrations: Special Education
Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate
College Restrictions: Must be enrolled in one of the following Colleges: Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY
Co-requisites: SPED 3287
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
SPED 2231|Minimum Grade of C-|May not be taken concurrently.

SPED 3211. Effective Instructional Strategies for Young Children with Disabilities. 3 Credit Hours.
This course is an introduction to effective instruction and strategies for teaching students with disabilities across birth to fourth grade. The purpose of this
course is to identify specific strategies that will aid in student success in the inclusive setting. Emphasis will be placed on strategies and activities specific
to pre-kindergarten and elementary students, collaboration and communication strategies among professionals, technology in the classroom, and ways
in which to address family participation and diversity in today's classroom.
College Restrictions: Must be enrolled in one of the following Colleges: Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
SPED 2231|Minimum Grade of C-|May not be taken concurrently.
SPED 3287. Practicum for Diverse Learners. 3 Credit Hours.
Practicum experience that provides opportunities for students to apply theories of learning and development.
Field of Study Restrictions: Must be enrolled in one of the following Concentrations: Special Education
Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate
College Restrictions: Must be enrolled in one of the following Colleges: Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY
Pre-requisites: SPED 3201
Repeatability: This course may be repeated for additional credit.

SPED 3312. Methods and Curriculum for Students with Moderate to Severe Disabilities. 3 Credit Hours.
This course will examine the assessment and remediation processes required in the education of individuals with moderate to severe disabilities. A special focus is the developmental and ecological assessment of this population and how this information can be used to develop instructional programs. NOTE: Practicum meets half days during the regular semesters and full days in the summer. Must be admitted to the Certification program. NOTE: Students must register concurrently for SPED 3312, 3332, and 3487.
College Restrictions: Must be enrolled in one of the following Colleges: Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY
Pre-requisites: SPED 3332, SPED 3487
Repeatability: This course may not be repeated for additional credits.

SPED 3332. Assessing and Teaching Students with Mild Disabilities. 3 Credit Hours.
This course will examine the assessment and intervention processes required in the education of students with mild learning problems. An emphasis will be on the understanding of learning differences and how to teach learning strategies that can accommodate those with learning differences. NOTE: Students must register concurrently for SPED 3312, 3332, and 3487.
College Restrictions: Must be enrolled in one of the following Colleges: Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY
Pre-requisites: SPED 3312, SPED 3487
Repeatability: This course may not be repeated for additional credits.

SPED 3347. Practicum in Special Education. 3 Credit Hours.
Prerequisite for Special Education students with no background in education. Practicum meets half days during the regular semesters and full days in the summer. Must be admitted to the Certification program. NOTE: Students must register concurrently for SPED 3312, 3332, and 3487.
College Restrictions: Must be enrolled in one of the following Colleges: Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY
Pre-requisites: SPED 3312, SPED 3332
Repeatability: This course may be repeated for additional credit.

SPED 4103. Classroom Management and Positive Behavior Support. 3 Credit Hours.
This course will examine the assessment and remediation processes required in the education of individuals with moderate to severe disabilities. A special focus is the developmental and ecological assessment of this population and how this information can be used to develop instructional programs. NOTE: Practicum meets half days during the regular semesters and full days in the summer. Must be admitted to the Certification program. NOTE: Students must register concurrently for SPED 3312, 3332, and 3487.
College Restrictions: Must be enrolled in one of the following Colleges: Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY
Pre-requisites: SPED 3312, SPED 3487
Repeatability: This course may not be repeated for additional credits.

SPED 4105. Assessment in Early Childhood Special Education. 3 Credit Hours.
This course is field-based and is designed to provide students with an understanding of assessment theory, the purposes of assessment and specific assessment techniques as they relate to the education of children with special needs. Emphasis will be placed on how assessment is used to identify children with disabilities as well as how assessment can be used to plan and monitor the effectiveness of instructional practices as they relate to student learning and development in the classroom. A problem-solving approach will be employed. Students will be provided with the opportunity to apply the knowledge learned in the course in the classroom through 20 hours of field experience. NOTE: Background clearances required.
College Restrictions: Must be enrolled in one of the following Colleges: Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY
Pre-requisites: SPED 4196
Repeatability: This course may not be repeated for additional credits.
SPED 4106. Literacy Instruction for Young Children with Disabilities. 3 Credit Hours.
The focus of this course is to provide an understanding of how to identify and provide interventions for children who are having difficulty learning to read. This course begins with focusing on problems that may arise with the development of foundational literacy skills that include oral language development, phonological sensitivity, recognition and discrimination of print, and knowledge of letters. The course then focuses on problems that arise as children begin to learn to crack the code and begin identifying words. Finally issues regarding fluency and comprehension are addressed. The goal of the class is to provide classroom teachers with strategies to understand a) the types of reading difficulties that children with special needs may experience and b) the various research-based intervention strategies that could be used to facilitate children's learning to read. Emphasis will be placed on understanding theories and interventions that surround literacy development for children in Pre-Kindergarten to grade 4 settings, with an additional exploration of how language and literacy are impacted by diversity, various disabilities and atypical behaviors. An equally important theme will be how to actually implement this knowledge in inclusive classrooms through appropriate assessment practices, research validated literacy interventions, developmental reading programs, evidence-based instructional practices, and content area materials. Other integral parts of literacy and language development, and writing, such as text production, spelling, and composition, co-teaching, collaboration with paraprofessionals and other related support staff, spoken language, communication skill development through assistive technology, and universal design in inclusive classrooms will be examined at the instructor's discretion. NOTE: Background clearances required.

College Restrictions: Must be enrolled in one of the following Colleges: Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY
Co-requisites: SPED 4105
Repeatability: This course may not be repeated for additional credits.

SPED 4109. Educating Students with Disabilities in Inclusive Settings. 3 Credit Hours.
This course is an introduction to effective strategies for teaching students with disabilities across age levels and content areas. Additional skills (e.g., study skills and self-determination) will be thoroughly discussed to demonstrate how these critical skills could be taught across content areas. The purpose of this course is to identify specific strategies that will aid in student success in the inclusive setting. Emphasis will be placed on evidence-based strategies and activities specific to elementary students, technology in the classroom, and ways in which to address diversity in today's classroom. This course has a field-based component which is designed to provide students with an understanding of assessment theory, the purposes of assessment and specific assessment techniques as they relate to the education of children with special needs. Emphasis will be placed both on how assessment is used to identify children with disabilities as well as how assessment can be used to plan and monitor the effectiveness of instructional practices as they relate to student learning and development in the classroom. A problem-solving approach will be employed. Students will be provided with the opportunity to apply the knowledge learned in the course in the classroom. NOTE: Background clearances required.

College Restrictions: Must be enrolled in one of the following Colleges: Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY
Co-requisites: MGRE 4108
Repeatability: This course may not be repeated for additional credits.

SPED 4106. Literacy Instruction for Young Children with Disabilities. 3 Credit Hours.
The focus of this course is to provide knowledge of a developmental language framework for pre-service early childhood and elementary-grade teachers that will be the foundation for effective literacy instruction for struggling readers in inclusive settings including students with a wide range of abilities and disabilities. Emphasis will be placed on understanding theories and interventions that surround language acquisition and literacy development for children in Pre-Kindergarten to grade 4 settings, with an additional exploration of how language and literacy are impacted by diversity, various disabilities and atypical behaviors.

College Restrictions: Must be enrolled in one of the following Colleges: Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY
Co-requisites: SPED 4105
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

SPED 4331. Community Resources and Collaboration in Special Education. 3 Credit Hours.
This course will examine the conceptual foundation for collaborative interactions and activities in special education settings. An emphasis will be on the collaborative process necessary for IEP development and implementation including the transition process. Additional resources at the local, regional and national levels for special education services will be identified.

College Restrictions: Must be enrolled in one of the following Colleges: Education
Student Attribute restrictions: Must be enrolled in one of the following Student Attributes: Clearance for Education
Cohort Restrictions: Must be enrolled in one of the following Cohorts: EDCNDCY
Co-requisites: EDUC 4801
Repeatability: This course may not be repeated for additional credits.

Statistics (STAT)
Courses

STAT 0826. Statistics in the News. 4 Credit Hours.
Through discussion of approximately 50 news articles, learn basic principles of statistics. This course focuses on the relevance, interpretation and usage of statistics in the news media. It has no quantitative prerequisites and involves more reading than math aptitude. Statistics deals with the study of variability, uncertainty, and decision-making, and has applicability to most other disciplines and everyday life. NOTE: This course fulfills the Quantitative Literacy (GQ) requirement for students under GenEd and a Quantitative Reasoning (QA or QB) requirement for students under Core.

Course Attributes: GQ
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 0701 to 0702| Required Courses:1|Minimum Grade of C-|May not be taken concurrently
OR MATH 0800 to 1041 | Required Courses:1|Minimum Grade of C-|May be taken concurrently
OR MC3 Y|May not be taken concurrently
OR MC4 Y|May not be taken concurrently
OR MC5 Y|May not be taken concurrently
OR MC6 Y|May not be taken concurrently
OR STAT 1001|Minimum Grade of C-|May be taken concurrently
OR STT2 Y|May not be taken concurrently
OR STAT 1102|Minimum Grade of C-|May be taken concurrently
OR STAT 1902|Minimum Grade of C-|May be taken concurrently.

STAT 0827. Statistical Reasoning & Games of Chance. 4 Credit Hours.
This is a beginning course in probability and statistics with special emphasis on the critical analysis of games of chance. The objectives of the course are to introduce several quantitative concepts with real-life applications. These applications are related to situations that involve fallacies in reasoning, equity markets and games of chance. NOTE: This course fulfills the Quantitative Literacy (GQ) requirement for students under GenEd and a Quantitative Reasoning (QA or QB) requirement for students under Core.

Course Attributes: GQ
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 0701 to 0702| Required Courses:1|Minimum Grade of C-|May not be taken concurrently
OR MATH 0800 to 1041 | Required Courses:1|Minimum Grade of C-|May be taken concurrently
OR MC3 Y|May not be taken concurrently
OR MC4 Y|May not be taken concurrently
OR MC5 Y|May not be taken concurrently
OR MC6 Y|May not be taken concurrently
OR STAT 1001|Minimum Grade of C-|May be taken concurrently
OR STT2 Y|May not be taken concurrently
OR STAT 1102|Minimum Grade of C-|May be taken concurrently
OR STAT 1902|Minimum Grade of C-|May be taken concurrently.

STAT 1001. Quantitative Methods for Business I. 3 Credit Hours.
Fundamentals of finite mathematics necessary for a business student to pursue statistics and other quantitatively oriented business courses. Topics and illustrations are specifically directed to applications in business and economics. Topics include algebraic concepts; linear, quadratic, polynomial and rational functions; logarithm and exponential functions; elementary matrix manipulations. Fitting of curves, interest rate calculations, present and future values of annuities are some of the specific applications. Use of a graphic calculator. NOTE: (1) This course can be used to satisfy the university Core Quantitative Reasoning A (QA) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. (2) Prior to fall 2014, the course title was “Pre-Calculus for Business.”


Course Attributes: QA
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MATH 0701 to 0702| Required Courses:1|Minimum Grade of C-|May not be taken concurrently
OR STA1 Y|May not be taken concurrently
OR STA2 Y|May not be taken concurrently
OR MATH 1011|Minimum Grade of C-|May not be taken concurrently
OR MATH 1021|Minimum Grade of C-|May not be taken concurrently.
STAT 1102. Quantitative Methods for Business II. 3 Credit Hours.
Continuation of Statistics 1001 (C011). Introduction to Differential and Integral Calculus. Topics include functions and graphs, differentiation of polynomial, logarithmic, exponential, and rational functions. Higher order derivatives with applications, maximum and minimum, break-even analysis and market equilibrium. Integration: antiderivative and the definite integral with applications to marginal analysis and other problems in business and economics. Use of a graphic calculator. NOTE: (1) Math C075 (taken prior to Summer 2007 session) and some other higher level Math courses can substitute for Statistics 1102. Please check with your academic advisor when making your course selection. (2) This course can be used to satisfy the university Core Quantitative Reasoning B (QB) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. (3) Prior to fall 2014, the title of STAT 1102 was "Calculus for Business."


Course Attributes: QB

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
MATH 1022|Minimum Grade of C-|May not be taken concurrently
OR STAT 1001|Minimum Grade of C-|May not be taken concurrently
OR STA2 Y|May not be taken concurrently
OR STT2 Y|May not be taken concurrently.

STAT 1902. Honors Quantitative Methods for Business II. 3 Credit Hours.
Continuation of Statistics 1001 (C011). Introduction to Differential and Integral Calculus. Topics include functions and graphs, differentiation of polynomial, logarithmic, exponential, and rational functions. Higher order derivatives with applications, maximum and minimum, break-even analysis and market equilibrium. Integration: antiderivative and the definite integral with applications to marginal analysis and other problems in business and economics. Use of a graphic calculator. NOTE: (1) Math C075 (taken prior to Summer 2007 session) and some other higher level Math courses can substitute for Statistics 1902. Please check with your academic advisor when making your course selection. (2) This course can be used to satisfy the university Core Quantitative Reasoning B (QB) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. (3) Prior to fall 2014, the title of STAT 1902 was "Honors Calculus for Business."


Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR

Course Attributes: HO, QB

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
MATH 1022|Minimum Grade of C-|May not be taken concurrently
OR STAT 1001|Minimum Grade of C-|May not be taken concurrently
OR STA2 Y|May not be taken concurrently
OR STT2 Y|May not be taken concurrently.
STAT 2103. Statistical Business Analytics. 4 Credit Hours.
This course provides students with the fundamental concepts and tools needed to understand the role of statistics and business analytics in organizations. It covers basic descriptive statistics, probability, and statistical inference. Topics include probability distributions, random sampling and sampling distributions, point and interval estimation, and hypothesis testing. The course also covers hypothesis testing for several populations, correlation, simple linear regression, multiple regression, and an introduction to data mining. Use of Excel for data analysis and inference. NOTE: This course is a four credit hour course which will substitute for Statistics 2101 (C021) and 2102 (0022) for Fox School students. Prior to fall 2014, the title for STAT 2103 was "Business Statistics."


Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(MATH 1022|Minimum Grade of C-|May not be taken concurrently
OR STAT 1001|Minimum Grade of C-|May not be taken concurrently
OR STAT 1002|Minimum Grade of C-|May not be taken concurrently
OR MATH 1021|Minimum Grade of C-|May not be taken concurrently
AND (STAT 1102|Minimum Grade of C-|May not be taken concurrently
OR STAT 1902|Minimum Grade of C-|May not be taken concurrently
OR MATH 1031|Minimum Grade of C-|May not be taken concurrently
OR MATH 1401|Minimum Grade of C-|May not be taken concurrently
OR MATH 1941|Minimum Grade of C-|May not be taken concurrently
OR MATH 1038|Minimum Grade of C-|May not be taken concurrently
OR STT3 Y|May not be taken concurrently).

STAT 2104. Selected Topics in Statistical Business Analytics. 1 Credit Hour.
Statistics 2104 is a one credit hour course that covers probability rules, joint and conditional probability, inference, confidence intervals, hypothesis tests, two sample design, simple linear regression, inference for regression, and multiple regression. NOTE: This course is designed for transfer students who have successfully completed a 3 credit hour introductory statistics course. This one credit hour course will bridge the gap between a 3 credit hour introductory statistics course taken at another institution, and the 4 credit hour Statistics 2103 (Business Statistics) course at Fox. Prior to fall 2014, the title of STAT 2104 was "Selected Topics in Business Statistics."

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(MATH 1022|Minimum Grade of C-|May not be taken concurrently
OR STAT 1001|Minimum Grade of C-|May not be taken concurrently
OR STAT 1002|Minimum Grade of C-|May not be taken concurrently
OR MATH 1021|Minimum Grade of C-|May not be taken concurrently
AND (STAT 1102|Minimum Grade of C-|May not be taken concurrently
OR STAT 1902|Minimum Grade of C-|May not be taken concurrently
OR MATH 1031|Minimum Grade of C-|May not be taken concurrently
OR MATH 1401|Minimum Grade of C-|May not be taken concurrently
OR MATH 1941|Minimum Grade of C-|May not be taken concurrently
OR MATH 1038|Minimum Grade of C-|May not be taken concurrently
OR STT3 Y|May not be taken concurrently)
AND (STAT 2101|Minimum Grade of C-|May not be taken concurrently
OR STAT 2901|Minimum Grade of C-|May not be taken concurrently
OR MATH 1013|Minimum Grade of C-|May not be taken concurrently
OR CEE 3048|Minimum Grade of C-|May not be taken concurrently
OR PSY 1167|Minimum Grade of C-|May not be taken concurrently
OR SOC 1167|Minimum Grade of C-|May not be taken concurrently
OR STAT 2512|Minimum Grade of C-|May not be taken concurrently
OR PSY 2168|Minimum Grade of C-|May not be taken concurrently
OR ECE 3522|Minimum Grade of C-|May not be taken concurrently).
STAT 2512. Intermediate Statistics. 3 Credit Hours.
This course covers the basics of statistical estimation theory, in preparation for further study in regression, time series analysis, and forecasting (as tested on the SOA/CAS Course 4 professional examination). Topics include: classical point estimation methods; construction of confidence intervals; tests of statistical hypotheses; and basic analysis of categorical data. NOTE: This course replaces the Statistics 2102 (0022) Business Core requirement for Actuarial Science majors.


Repeatability: This course may not be repeated for additional credits

Pre-requisites:
AS 2101|Minimum Grade of C-|May not be taken concurrently
OR MATH 3031|Minimum Grade of C-|May not be taken concurrently
OR STAT 2103|Minimum Grade of C-|May not be taken concurrently
OR STAT 2903|Minimum Grade of C-|May not be taken concurrently.

STAT 2521. Data Analysis and Statistical Computing. 3 Credit Hours.
This course presents practical applications of statistical methods using software. The emphasis is on giving students experience in solving real life problems using appropriate statistical methods. Statistical techniques studied include organization and presentation of data, statistical testing, multiple regression, Chi-Square tests and logistic regression. Case studies and projects, with applications, are used to show the application of statistical methods to business problems. Through this course students should be able to select, utilize and apply quantitative statistical methods to real life problems, and get familiar with data analysis using statistical software. The main statistical software we use is SPSS. Students will also be exposed to other packages, such as Excel and R.


Repeatability: This course may not be repeated for additional credits

Pre-requisites:
STAT 2103|Minimum Grade of C|May not be taken concurrently
OR STAT 2903|Minimum Grade of C|May not be taken concurrently
OR STAT 2104|Minimum Grade of C|May not be taken concurrently
OR SOC 1167|Minimum Grade of C|May not be taken concurrently
OR CEE 3048|Minimum Grade of C|May not be taken concurrently
OR PSY 1167|Minimum Grade of C|May not be taken concurrently
OR PSY 2168|Minimum Grade of C|May not be taken concurrently
OR AS 2101|Minimum Grade of C|May not be taken concurrently
OR ECE 3522|Minimum Grade of C|May not be taken concurrently
OR SOC 0825|Minimum Grade of C|May not be taken concurrently
OR ANTH 0825|Minimum Grade of C|May not be taken concurrently
OR POLS 0825|Minimum Grade of C|May not be taken concurrently
OR PSY 0825|Minimum Grade of C|May not be taken concurrently.
STAT 2522. Survey Design and Sampling. 3 Credit Hours.

This course presents the principal applications of sample surveys, survey design, criteria of a good sample design, and characteristics of simple random sampling, stratified random sampling, and cluster sampling. Case studies are used where appropriate to illustrate applications of survey sampling. Emphasis will be placed on both the theory and methodology of surveying and include sampling principles, sample design, questionnaire construction, and response problems.


Repeatability: This course may not be repeated for additional credits

Pre-requisites:
STAT 2103|Minimum Grade of C|May not be taken concurrently
OR STAT 2903|Minimum Grade of C|May not be taken concurrently
OR STAT 2104|Minimum Grade of C|May not be taken concurrently
OR SOC 1167|Minimum Grade of C|May not be taken concurrently
OR CEE 3048|Minimum Grade of C|May not be taken concurrently
OR PSY 1167|Minimum Grade of C|May not be taken concurrently
OR PSY 2168|Minimum Grade of C|May not be taken concurrently
OR AS 2101|Minimum Grade of C|May not be taken concurrently
OR ECE 3522|Minimum Grade of C|May not be taken concurrently
OR SOC 0825|Minimum Grade of C|May not be taken concurrently
OR ANTH 0825|Minimum Grade of C|May not be taken concurrently
OR PSY 0825|Minimum Grade of C|May not be taken concurrently
OR AS 2101|Minimum Grade of C|May not be taken concurrently.

STAT 2523. Design of Experiments and Quality Control. 3 Credit Hours.

The first part of this course provides students with insight into statistically designed experiments and related topics. The course covers the fundamental statistical concepts required for designing efficient experiments to answer real questions. The fundamental concepts of replication, blocking, and randomization are examined. Topics covered include block designs, balanced incomplete block designs, and Latin Square designs. Additional topics include factorial experiments, fractional factorial designs, and orthogonal arrays. The course also introduces students to response surface methodology, mixture designs, and conjoint analysis. Quality improvement can be accomplished using experimental design principles. The second part of the course covers the core principles of the management of quality in the production of goods and services. Statistical quality control techniques are used in the implementation of these principles. Topics covered include control charts, cusum procedures, and Taguchi methods.


Repeatability: This course may not be repeated for additional credits

Pre-requisites:
STAT 2103|Minimum Grade of C|May not be taken concurrently
OR STAT 2903|Minimum Grade of C|May not be taken concurrently
OR STAT 2104|Minimum Grade of C|May not be taken concurrently
OR SOC 1167|Minimum Grade of C|May not be taken concurrently
OR CEE 3048|Minimum Grade of C|May not be taken concurrently
OR PSY 1167|Minimum Grade of C|May not be taken concurrently
OR PSY 2168|Minimum Grade of C|May not be taken concurrently
OR ECE 3522|Minimum Grade of C|May not be taken concurrently
OR SOC 0825|Minimum Grade of C|May not be taken concurrently
OR ANTH 0825|Minimum Grade of C|May not be taken concurrently
OR PSY 0825|Minimum Grade of C|May not be taken concurrently
OR AS 2101|Minimum Grade of C|May not be taken concurrently.
STAT 2903. Honors Statistical Business Analytics. 4 Credit Hours.

This course provides students with the fundamental concepts and tools needed to understand the role of statistics and business analytics in organizations. It covers basic descriptive statistics, probability, and statistical inference. Topics include probability distributions, random sampling and sampling distributions, point and interval estimation, and hypothesis testing. The course also covers hypothesis testing for several populations, correlation, simple linear regression, multiple regression, and an introduction to data mining. Use of Excel for data analysis and inference. NOTE: This course is a four credit hour course which will substitute for Statistics 2101 (C021) and 2102 (0022) for Fox School students. Prior to fall 2014, the title of STAT 2903 was "Honors Business Statistics."


Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits

Pre-requisites:

(MATH 1022|Minimum Grade of C-|May not be taken concurrently
OR STAT 1001|Minimum Grade of C-|May not be taken concurrently
OR STAT 2|Minimum Grade of C-|May not be taken concurrently
OR MATH 1021|Minimum Grade of C-|May not be taken concurrently
AND (STAT 1102|Minimum Grade of C-|May not be taken concurrently
OR STAT 1902|Minimum Grade of C-|May not be taken concurrently
OR MATH 1031|Minimum Grade of C-|May not be taken concurrently
OR MATH 1041|Minimum Grade of C-|May not be taken concurrently
OR MATH 1941|Minimum Grade of C-|May not be taken concurrently
OR MATH 1038|Minimum Grade of C-|May not be taken concurrently
OR STT3 Y|May not be taken concurrently).

STAT 3501. Statistics for Engineers. 3 Credit Hours.

Not to be taken by School of Business and Management students; open only to Engineering students. Descriptive statistics, inference, regression and correlation, and experimental design. Engineering applications.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School

Repeatability: This course may not be repeated for additional credits

Pre-requisites:

MATH 1041|Minimum Grade of C-|May not be taken concurrently
OR MATH 1941|Minimum Grade of C-|May not be taken concurrently
OR MATH 1038|Minimum Grade of C-|May not be taken concurrently.

STAT 3503. Intermediate Business Statistics. 3 Credit Hours.

Topics will be chosen from multiple regression, forecasting, and time series. Standard statistical packages will be introduced and used extensively. The course will emphasize applications in business such as financial forecasting, production management, and actuarial science. This course has been approved by the Society of Actuaries/Casualty Actuarial Society for VEE - Applied Statistical Methods. Completion of this course with a minimum grade of B- is required for VEE - Applied Statistical Methods credit.


Repeatability: This course may not be repeated for additional credits

Pre-requisites:

STAT 2103|Minimum Grade of C|May not be taken concurrently
OR STAT 2903|Minimum Grade of C|May not be taken concurrently
OR STAT 2104|Minimum Grade of C|May not be taken concurrently
OR SOC 1167|Minimum Grade of C|May not be taken concurrently
OR ECE 3522|Minimum Grade of C|May not be taken concurrently
OR SOC 0825|Minimum Grade of C|May not be taken concurrently
OR ANTH 0825|Minimum Grade of C|May not be taken concurrently
OR POLS 0825|Minimum Grade of C|May not be taken concurrently
OR PSY 0825|Minimum Grade of C|May not be taken concurrently.
STAT 3580. Special Topics - Statistics. 3 Credit Hours.
Special topics in current developments in the field of statistics.
College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatability: This course may be repeated for additional credit.

STAT 3582. Independent Study. 1 to 6 Credit Hour.
Readings, papers and/or laboratory work under supervision of a faculty member.
College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School
Repeatability: This course may be repeated for additional credit.

Strategic Communication (STRC)

Courses

STRC 0801. Contemporary American Social Movements. 3 Credit Hours.
Social movements range from identity-based movements (such as the civil rights movement and the gay and lesbian rights movement) to issue-based movements (such as anti-globalization and animal rights) to ideological movements (such as the free software movement and the green movement). The course introduces students to contemporary American social movements and their counter-movements, dominant strategies and tactics movements use to communicate with a larger public, and individual campaigns within the larger framework of social movement from both theoretical and applied perspectives. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and the American Culture (AC) requirement for students under Core. Students cannot receive credit for this course if they have successfully completed STRC 0901.
Course Attributes: GU
Repeatability: This course may not be repeated for additional credits.

STRC 0821. Emotional Intelligence and Leadership. 3 Credit Hours.
Using an interdisciplinary approach that looks at the theory of emotional intelligence and the leadership process in diverse personal, cultural, political, and business contexts, you will enhance your own leadership capacity. Develop conceptual thinking, self-awareness, self-management, personal motivation, social skills, and your capacity for empathy within a globalized and interconnected world. Engage in personal reflections, class discussions, small group experiential activities, and collaborate on a case study project as you observe and interview Philadelphia community leaders. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core.
Course Attributes: GB
Repeatability: This course may not be repeated for additional credits.

STRC 0901. Honors Contemporary American Social Movements. 3 Credit Hours.
Social movements range from identity-based movements (such as the civil rights movement and the gay and lesbian rights movement) to issue-based movements (such as anti-globalization and animal rights) to ideological movements (such as the free software movement and the green movement). The course introduces students to contemporary American social movements and their counter-movements, dominant strategies and tactics movements use to communicate with a larger public, and individual campaigns within the larger framework of social movement from both theoretical and applied perspectives. (This is an Honors Course.) NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and the American Culture (AC) requirement for students under Core. Students cannot receive credit for this course if they have successfully completed STRC 0801.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GU, HO
Repeatability: This course may not be repeated for additional credits.

STRC 1111. Public Speaking. 3 Credit Hours.
Students will prepare, present, and evaluate speeches on significant topics of public concern in professional settings. Students will learn principles of public speaking and of critical thinking: the discovery and evaluation of arguments and evidence, organization, style, audience analysis and adaptation, speech composition, and presentation skills. At least five individual, graded speeches are required in this course. Class size is limited and class meetings focus on helping students develop public speaking skills through in-class activities, collaborative learning, and peer critiques. This course helps students give professional presentations in an increasingly diverse workplace. NOTE: Departmental foundation requirement. Students currently taking English 0701 may not register for this course.
Repeatability: This course may not be repeated for additional credits.

STRC 1112. Communicating Leadership. 3 Credit Hours.
This course introduces students to leadership studies from a communication perspective. Leadership will be considered in a variety of contexts, including group leadership, for-profit and non-profit organizational leadership, and elected and non-elected public leadership. Through all course activities (e.g., readings, discussion, and case studies) students will gain a broad understanding of how leadership emerges and is enacted on a daily basis through communication. NOTE: Departmental foundation requirement.
Repeatability: This course may not be repeated for additional credits.
STRC 1911. Honors Public Speaking. 3 Credit Hours.
Beyond learning about the form and function of public speaking, this course also allows students an opportunity to explore, expand upon, and introduce policy decisions in any particular topic of their choosing. Students learn about methods of making solid presentations, means of analysis and logic, and effective methods of persuasion. Finally, students consider the role of public speaking as an agent for political, social, and academic change.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

STRC 2111. Introduction to Communication Theory. 3 Credit Hours.
This course introduces students to the field of communication through an examination of historical and contemporary communication theories. Students will learn to analyze communication theories from a variety of areas, including interpersonal, small group, organizational, mass, and public communication, and integrate these theories into their daily communication practices. NOTE: Departmental foundation requirement. Not recommended for students with fewer than 30 credit hours.

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(STRC 1111|Minimum Grade of C|May not be taken concurrently)
AND (STRC 2111|Minimum Grade of C|May be taken concurrently).

STRC 2112. Strategies and Tactics of Persuasion. 3 Credit Hours.
Persuasion viewed from the perspectives of the persuader and the persuadee. The course is designed to make students more effective in both roles, and also to raise troubling ethical questions. It covers politics, product advertising, religious cults, education, and much more. This course offers extensive use of media in conjunction with readings, lecture-discussions, and assignments. NOTE: Departmental foundation requirement.

Repeatability: This course may not be repeated for additional credits.

STRC 2221. Public Advocacy. 3 Credit Hours.
This course provides an overview to the field, history, and practice of public advocacy. The course focuses on understanding the nature and role of public discourse in addressing significant social, political, economic, and/or cultural concerns. This is a core course and primary prerequisite for all students in the "Rhetoric and Public Advocacy" concentration.

Repeatability: This course may not be repeated for additional credits.

STRC 2296. Rhetoric of Social Movements. 3 Credit Hours.
This course introduces students to the guiding ideas and communication strategies of social movements, groups that seek support from a larger public in efforts to exert influence and gain power on behalf of a cause they consider just. Recent examples of interest include gay and lesbian rights, environmental protection, and anti-globalization. NOTE: This course can be used to satisfy a university Core Studies in Race, Writing Intensive, and American Culture (XC) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: XC

Repeatability: This course may not be repeated for additional credits.

STRC 2333. Discussion Methods. 3 Credit Hours.
A "hands-on" survey of discussion methods, focusing on group problem-solving techniques and panel discussions. Students will gain experience in group leadership, group participation, and criticism of group interactions.

Repeatability: This course may not be repeated for additional credits.

STRC 2440. Special Topics in Public Relations. 3 Credit Hours.
This course focuses on subject matter not covered by regular departmental courses. Topics announced in advance.

Repeatability: This course may be repeated for additional credit.

STRC 2496. News Writing and Media Relations. 3 Credit Hours.
This writing-intensive course focuses on the fundamentals of writing for various forms of news media, including print and electronic. Use of AP Style is taught and required. NOTE: Required course for all students in the Public Relations concentration. This course is a prerequisite for all Public Relations writing courses. A grade of C or higher is required in order to take upper-level PR courses.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

STRC 2551. Media Information Gathering and Evaluation. 3 Credit Hours.
This is a basic course in applied research for planning and evaluating communication campaigns.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Public Relations
Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate

Repeatability: This course may not be repeated for additional credits.

STRC 2552. Introduction to Public Relations. 3 Credit Hours.
Overview of public relations careers, skills and responsibilities. Intended for both those who are considering a PR career and those planning to enter any field that deals with the public.

Repeatability: This course may not be repeated for additional credits.
STRC 2661. Introduction to Organizational Communication. 3 Credit Hours.
Organizational communication is the study of the relationship between communicating and organizing. This course introduces students to classical and contemporary theories of organizational communication and their implications for everyday communication practices. Focusing on a variety of organizational forms, including both for-profit and non-profit organizations, students will develop a strong ability to integrate their understanding of organizational communication with their current and future participation in organizations through creative and critical verbal and written analyses of communication processes.
Repeatability: This course may not be repeated for additional credits.

STRC 2662. Leading Groups and Team Building. 3 Credit Hours.
Teams, and small groups, are an essential element of work and social life; we are constantly asked to cooperate, coordinate, and collaborate. While teamwork can be a productive, immensely satisfying and rewarding experience, too often it falls short of meeting our expectations. This class introduces students to the small group communication theories and principles that provide the basis for both understanding team building and becoming a productive group member and leader. Through (1) the study of small group communication theory, (2) the evaluation of teams in practice (from mountain climbing to virtual work teams), and (3) analyzing students’ own group experiences, students will develop the communication and analytic skills necessary to make teamwork work for you.
Repeatability: This course may not be repeated for additional credits.

STRC 2672. Global Communication and Leadership. 3 Credit Hours.
This course focuses on communication processes and issues that arise in multinational and global organizations. This course explores the relationship between culture, communication, technology, and ways of organizing across national contexts and in different types of organizations (non-profit, voluntary, civic, governmental, small business and corporate systems). The communicative and ethical dimensions of international organizing are addressed.
Repeatability: This course may not be repeated for additional credits.

STRC 2996. Honors Rhetoric of Social Movements. 3 Credit Hours.
This course focuses on the struggle for black equality in America, viewed from the perspectives of campaign and social movement theory. The course begins with the civil rights movement, moves through black power and subsequent white backlash, and then examines current controversies using books that take diametrically opposed positions. Its aim in part, is to improve critical thinking and communication skills. NOTE: This course can be used to satisfy a university Core Studies in Race, Writing Intensive, and American Culture (XC) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO, XC
Repeatability: This course may not be repeated for additional credits.

STRC 3220. Special Topics in Rhetoric and Public Advocacy. 3 Credit Hours.
Variable topics in Rhetoric and Public Advocacy not covered by regular departmental course offerings. Topics announced in advanced.
Repeatability: This course may be repeated for additional credit.

Pre-requisites:
STRC 2221|Minimum Grade of C|May not be taken concurrently.

STRC 3234. Speech Writing. 3 Credit Hours.
Students prepare speeches for their own presentation and ghost write speeches for others. Emphasis on audience analysis, speech construction, style, persuasion, and manuscript preparation. Includes study of practices of prominent speechwriters and their speeches, as well as great speeches in American history.

Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
Repeatability: This course may not be repeated for additional credits

Pre-requisites:
STRC 1111|Minimum Grade of C|May not be taken concurrently.

STRC 3236. Rhetoric and Identity. 3 Credit Hours.
This course addresses a variety of contemporary issues relating to the construction of personal and collective identity. Issues of race, class, gender, and sexuality may be explored. The course is based on the principle that our identities are created, maintained, and/or challenged through communication and rhetoric.
Repeatability: This course may not be repeated for additional credits.

STRC 3323. Rhetoric and Political Culture. 3 Credit Hours.
Focuses on the nature, strategies, and implications of human discourse within a variety of political settings. Topics might include persuasion in electoral campaigns, the political nature of sign-usage, the implications and consequences of everyday choices, the relationship between media and political ideology, etc.
Repeatability: This course may not be repeated for additional credits.

STRC 3333. Rhetorical Theory. 3 Credit Hours.
Introduction to classical and contemporary theories of speechmaking and other advocacy. Issues to be addressed include rhetoric’s relationship to truth, knowledge, ethics, politics, and judgment.
Repeatability: This course may not be repeated for additional credits.
STRC 3336. Argumentation. 3 Credit Hours.
Students learn the basic principles of making arguments. Includes format for analyzing arguments, organizing ideas, providing evidence for claims, and preparing briefs. Students prepare speeches and debates on current public policy issues.

Repeatability: This course may not be repeated for additional credits.

STRC 3382. Independent Study in Rhetoric and Public Advocacy. 1 to 3 Credit Hour.
Arranged each semester, please consult with the instructor.

Repeatability: This course may be repeated for additional credit.

Pre-requisites:
STRC 2221|Minimum Grade of C|May not be taken concurrently.

STRC 3385. Internship in Rhetoric and Public Advocacy. 3 Credit Hours.
Arranged each semester; please consult with the Program Director. NOTE: Students must be a Strategic Communication (STRC) major; complete 3 of 4 STRC core courses; complete at least 4 courses in their concentration; and have a minimum 3.0 GPA in the major courses. (See http://smc.temple.edu/strc/internships for additional information.)

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits

Repeatability: This course may be repeated for additional credit.

STRC 3396. Rhetorical Criticism. 3 Credit Hours.
Students learn how to apply different methodologies to speeches, songs, poems, essays, and other forms of public discourse. Critical approaches including neo-Aristotelian, cluster criticism, fantasy theme analysis, metaphor analysis, feminist criticism, etc.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

STRC 3440. Special Topics in Public Relations. 3 Credit Hours.
Subject matter not covered by regular departmental course offerings. Topics announced in advance.

Repeatability: This course may be repeated for additional credit.

STRC 3483. Directed Readings in Public Relations. 3 Credit Hours.
Advanced reading in Public Relations topics. NOTE: Hours arranged.

Repeatability: This course may be repeated for additional credit.

Pre-requisites:
STRC 2552|Minimum Grade of C|May not be taken concurrently.

STRC 3485. Internship in Public Relations. 1 to 3 Credit Hour.
Organized professional work under supervision in public relations organization. NOTE: To register for this internship, you must be a major in Strategic Communication (STRC), have Junior or Senior status and permission of the STRC Internship Director. Minimum GPA of 3.0 in the major. A grade of C or higher is required in order to count towards graduation.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Strategic Communication

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits

Repeatability: This course may be repeated for additional credit.

STRC 3487. Communication Field Experience. 1 or 2 Credit Hour.
The Communication Field Experience compliments the Strategic Communication student’s formal education. For many students, the Field Experience is the first opportunity to gain experience in a communication career path. The Field Experience should acquaint students with actual professional practices in their disciplines. The Communication Field Experience offers students the first on-site opportunity to learn about some of the realities of working in the communications field they are planning to pursue as a possible career path. The Field Experience typically occurs before the internship (STRC 3685, 3385, or 3585).

Department restrictions: Must be enrolled in one of the following Departments: SMC:Strategic Communication

Field of Study Restrictions: Must be enrolled in one of the following Majors: Strategic Communication

College Restrictions: Must be enrolled in one of the following Colleges: Media and Communication

Repeatability: This course may not be repeated for additional credits.
STRC 3596. Advanced Public Relations Writing. 3 Credit Hours.
This writing-intensive course is designed to teach preparation of materials such as brochures, speeches, annual reports, proposals, reports to management, radio and TV copy, and client presentations.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(STRC 2496|Minimum Grade of C|May not be taken concurrently)
AND (STRC 2551|Minimum Grade of C|May not be taken concurrently)
AND (STRC 2552|Minimum Grade of C|May not be taken concurrently).

STRC 3663. Research Methods for Organizational Communication. 3 Credit Hours.
This course provides an overview of the methods, concepts, and tools by which research in organizational communication is designed, conducted, interpreted, and critically evaluated.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
STRC 1112|Minimum Grade of C|May not be taken concurrently.

STRC 3670. Special Topics in Organizational Leadership. 3 Credit Hours.
Variable topics in Organizational Leadership.

Class Restrictions: Must be enrolled in one of the following Classes: Sophomore 30 to 59 Credits, Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits

Repeatability: This course may be repeated for additional credit.

Pre-requisites:
STRC 2661|Minimum Grade of C|May not be taken concurrently.

STRC 3685. Internship in Organizational Leadership. 3 Credit Hours.
Students undertake a semester-long internship that directly furthers their practical knowledge of organizational leadership. Students will be supervised and graded by the internship coordinator or other suitable faculty member. The final grade is based on work journals, a final paper, attendance at meetings, the supervisor's report, and a portfolio of all work created during the experience.

Repeatability: This course may be repeated for additional credit.

STRC 3782. Independent Study in Organizational Leadership. 3 Credit Hours.
Students will undertake an independent study of an area of organizational leadership not otherwise offered. The study and results of that study (e.g., a paper) will be completed under the supervision of a faculty member. A syllabus must be filed within the first week of class.

Repeatability: This course may be repeated for additional credit.

STRC 3801. Intercultural Communication. 3 Credit Hours.
This course considers how culture influences communication processes by examining theories of intercultural communication and looking at many of the different processes that make up cultural differences.

Repeatability: This course may not be repeated for additional credits.

STRC 3882. Independent Research for Organizational Leadership. 3 Credit Hours.
Under the supervision of a faculty member, students will undertake an independent research project. This project may be completed at the students' own initiative or be part of a larger faculty research project. Students will plan, execute and write-up a research project. Data may be archival, ethnographic, participant response, or experimental. The final result will be a submission-quality research paper. Students will be strongly encouraged to submit their papers to conferences and/or publications. A syllabus or research agreement must be filed within the first week of class.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits

Repeatability: This course may be repeated for additional credit.

STRC 4212. New York City I: Communities. 3 Credit Hours.
This course focuses on how New York City represents a unique and powerful American and global experience without cultural, social, or political parallels. Students will investigate how the history and narratives of New York City are emblematic of a unique urban experience. To that avail, students will investigate how organizational relationships are developed in one of the world's greatest market conglomerates. Students will also investigate how New York City became a vital player in the improvement of American society through numerous communicative, rhetorical, and political acts.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits

Repeatability: This course may be repeated for additional credit.
STRC 4213. New York City II: Institutions. 3 Credit Hours.
This course is a continuation of STRC 4212, "New York City I: Communities." Understanding that communication within New York City is multi-layered and complex, students will investigate numerous artifacts related to its image and reputation. In particular, students will consider public presentations related to life in New York City. Primarily, these presentations will be related to aspects of communications, media, and theater. In particular, students will cultivate and deepen their understanding of urban communication by analyzing the physical artifacts that are indicative of and advance public life in New York City. To do so, students will investigate exhibits, performances, and cultural or social institutions related to America's largest and only global city. This course is part of a Study Away experience and is offered online, with expectations for self-guided participation in New York City. See the Program Director for more information.
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
STRC 4212|Minimum Grade of C|May not be taken concurrently.

STRC 4220. Special Topics in Rhetoric and Public Advocacy. 3 Credit Hours.
Advanced readings in the methods, theories, and/or strategies of rhetoric and/or advocacy.
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
STRC 2221|Minimum Grade of C|May not be taken concurrently.

STRC 4289. New York City Applied Experience: Field Experience/Corporate Works/Projects. 1 to 4 Credit Hour.
This course is open only to participants in the NYC Study Away Program. Students will be involved with experiential learning in NYC through internships, field experiences, and projects. Credit hours will be affixed depending on the amount of hours worked per week over the entire program session. Only admitted students from the NYC Study Away Program will be authorized to register. Students will be expected to follow program guidelines and procedures and must meet with the Program Director to secure permission to be enrolled in this course. This course can only be taken for work done on location in NYC. Note that students must also register for STRC 4212 (New York City I: Communities) and STRC 4213 (New York City II: Institutions).
Repeatability: This course may be repeated for additional credit.

STRC 4440. Special Topics in Public Relations. 3 Credit Hours.
Advanced readings in Public Relations topics.
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
STRC 2552|Minimum Grade of C|May not be taken concurrently.

STRC 4670. Special Topics in Organizational Leadership. 3 Credit Hours.
Advanced readings course in leadership and organizational communication. Emphasis on research on special topics in the field, e.g., organizational culture, organizational discourse studies, workplace participation and democracy, feminist organizational communication theories, power, control, consent and resistance, socialization, etc. NOTE: Seminar format.
Class Restrictions: Must be enrolled in one of the following Classes: Sophomore 30 to 59 Credits, Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may be repeated for additional credit.

STRC 4696. Diverse Communication and Leadership. 3 Credit Hours.
This course addresses the impact of increasingly diverse workplaces on communication and leadership theories and practices and the ways in which they shape individual and institutional responses. Through an examination of traditional and non-traditional communication and leadership theories, this course focuses on legal aspects of workplace diversity including race, gender, age, ability, orientation, and nationality. This course also examines the communicative and ethical dimensions of working in, leading, and creating diverse workplaces. Students will produce written and oral analyses of case studies and organizational communication practices.
Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(STRC 2661|Minimum Grade of C|May not be taken concurrently
AND STRC 3663|Minimum Grade of C|May be taken concurrently)
OR CMST 2111|Minimum Grade of C|May not be taken concurrently.

STRC 4774. Communicating Organizational Change. 3 Credit Hours.
Students will examine the various reasons for and processes of organizational change. Concepts covered include leading change, collaborative change, facilitating stakeholder involvement and acceptance, communication strategies for change, and maintaining change.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
STRC 2661|Minimum Grade of C|May not be taken concurrently.
STRC 4775. Health Communication. 3 Credit Hours.
Health communication encompasses theories, research, and applications of the symbolic processes by which people, both individually and collectively, understand, share ideas about, and accommodate to illness, trauma, and health in interpersonal and public contexts. This course focuses on the major concepts, theories, and findings that have emerged in health communication scholarship.

Class Restrictions: Must be enrolled in one of the following Classes: Sophomore 30 to 59 Credits, Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits

Repeatability: This course may not be repeated for additional credits.

STRC 4839. Seminar in Rhetoric and Public Advocacy (capstone). 3 Credit Hours.
Content and format may vary. The overall emphasis is on researching and applying special topics within the field of rhetoric and public advocacy - e.g., political campaigns, rhetoric of social issues, interpersonal influence, presidential communication, rhetorical masterpieces, etc. The focus of the course could be on a single topic, individual topics, or group projects.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(STRC 2221|Minimum Grade of C|May not be taken concurrently
AND STRC 2296|Minimum Grade of C|May not be taken concurrently).

STRC 4859. Public Relations Management and Case Problems. 3 Credit Hours.
Public relations management principles are applied to solve organizational problems and maximize opportunities. Study of trends in public relations and issues management. An applied project will enable students to use the skills taught in this course in order to address a variety of audiences, including investors, employees, the community, government, and consumers. Use of AP Style is required. NOTE: Capstone course. Open to Public Relations concentration students only.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(STRC 2496|Minimum Grade of C|May not be taken concurrently
AND STRC 2551|Minimum Grade of C|May not be taken concurrently
AND STRC 2552|Minimum Grade of C|May not be taken concurrently
AND STRC 3543|Minimum Grade of C|May not be taken concurrently
AND STRC 3596|Minimum Grade of C|May be taken concurrently).

STRC 4879. Collaborative Advocacy. 3 Credit Hours.
This course will educate students to understand, observe and facilitate inter-organizational efforts at problem-solving and social change within the public sphere. Employing principles of service learning, students will engage in a semester-long project where they facilitate a change within the public sphere by bringing multiple agents together to address and share concerns.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits

Repeatability: This course may not be repeated for additional credits.

Strategic Management (SGM)

Courses

SGM 0827. Creativity and Organizational Innovation. 3 Credit Hours.
Being creative is about solving problems or approaching opportunities in novel and valuable ways. This course is designed to help ALL students better harness their full creative potential - whether you think: "I am not creative" or "I already have more ideas than I can handle", this class will help you come up with more creative ideas that offer more value and have greater impact on the world. Although creativity has been studied by nearly every professional domain, this course focuses on creativity as a driver of organizational innovation - from non-profits to small businesses and large corporations to students' own entrepreneurial startups. Creativity and innovation are critical to providing value and ensuring long-term survival.

Throughout this course students will develop important life skills while learning to creatively solve problems through a number of real-world innovation challenges. No matter what career or profession you are going into, being more creative and appreciating how and why modern organizations function the way that they do will help you to be more valuable, more employable, more innovative, and more entrepreneurial.

Course Attributes: GB

Repeatability: This course may not be repeated for additional credits.

SGM 3001. Becoming a Manager: Building, Leading, and Managing New and Small Businesses. 3 Credit Hours.
This course is designed to introduce students with limited or no business background to the critical business management skills and tools needed to run a small enterprise or to launch a new venture and become a successful entrepreneur. Whether you want to become a manager, build a consulting or freelance business, start a new for-profit or non-profit venture, or simply want to be more successful working in any organization, understanding the fundamentals of management will help you achieve these goals. Traditional as well as cutting edge management principles will be discussed and students will learn to develop marketing plans, staffing and operational plans, and to analyze the financial viability of various business ideas. NOTE: Business students are not eligible to register for this course and should consider SGM 3503 instead.

College Restrictions: May not be enrolled in one of the following: Business & Mngmnt, Fox School

Repeatability: This course may not be repeated for additional credits.
SGM 3002. Be Your Own Boss: Planning to Start Your Own Business. 3 Credit Hours.
It's a fact: Entrepreneurs report greater satisfaction with their work. Chief among the reasons for this is the freedom to determine their own destiny and the appreciation of having a direct impact with their work. In the current economic climate, more and more students are finding entrepreneurial career paths offer them better or complementary options to traditional employment. This course provides students with an understanding of how to research, write, and present effective business plans. The business plan is a critical strategic document used to plan the launch, pivot, or growth of an enterprise. Students will learn about the interrelationship among the various aspects of the plan including the industry, target market, competition, marketing strategy, human resources, financial resources, and management team among others. Students will also learn about presenting the business plan as they engage in mock presentations to local entrepreneurs and venture capital investors. <p>NOTE: We recommend that non-business students take both an 'Entrepreneurial Thinking' and 'Entrepreneurial Management' course prior to taking SGM 3002 since students should have a feasible business idea prior to class start. Students who do not meet these criteria may be required to complete additional supplementary work and may want to contact the professor to find out if they are sufficiently prepared to take this course. Students cannot receive credit for both SGM 3002 and SGM 4596; Fox Entrepreneurship Majors should take SGM 4596 instead of this course. Field of Study Restrictions: May not be enrolled in one of the following Majors: Entrepreneurship, Finance, Financial Planning, General Business Studies, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Undeclared-Business & Mngt Repeatability: This course may not be repeated for additional credits.

SGM 3501. Entrepreneurial and Innovative Thinking. 3 Credit Hours.
Thinking like an entrepreneur is about seeing opportunities and passionately pursuing them. Anyone can be entrepreneurial -- whether you start the next Facebook, take control of your work-life balance with a lifestyle business, have an impact on the world with a social venture, or drive change and innovation in an existing company. The goal of this course is not to teach students to start a venture nor to manage a business (this is covered in later courses) but to help you understand the hidden value of your ideas. By highlighting the impact of various types of innovation in driving the development of industries and technological fields, we demonstrate the importance of strategy, competitive advantage, core competencies, and value chains to organizations and industries. By training students to identify opportunities and creatively solve problems, we help develop invaluable skills and perspectives that will make anyone more successful in their professional life. Finally, by showing students all the options that entrepreneurship offers as a potential career path, we begin the process of training you to become a successful entrepreneur. Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Career and Technical Education, Economics, Entrpreneurship & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, General Business Studies, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Undeclared-Business & Mngt Repeatability: This course may not be repeated for additional credits.

SGM 3503. Innovation that Works: Building and Assessing Innovative Business Models. 3 Credit Hours.
The modern competitive landscape requires agile, learning organizations that can constantly innovate and reinvent themselves. Many of the management principles and business models that have served executives well for the past 100 years are no longer appropriate or optimal. Unfortunately, innovative ideas and business models can be difficult to assess leaving many companies to stagnate and eventually fail. By integrating topics from students' core business courses with leading-edge management practices and creative problem solving, students will come to understand the implications of organizational innovation through a business model lens. This is accomplished through a number of hands-on exercises and mini-projects in which students talk with actual entrepreneurs in order to understand their challenges and generate innovative solutions. This process helps you evaluate novel business model ideas--What if you gave your product away for free? Can an organization function with no employees (or can you find employees to work for free)? Can you build a multi-million dollar business with no startup capital? These are just some of the alternatives that this course will help you appreciate as you learn to be a more innovative, analytical, high-impact employee or entrepreneur. Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Accounting, Actuarial Science, Business Management, Economics, Entrpreneurship & Innovation Mgt, Entrepreneurship, Finance, Financial Planning, Human Resource Management, International Business, Law & Business, Legal Studies, Management Information Systems, Marketing, Real Estate, Risk Management and Insurance, Supply Chain Management, Undeclared-Business & Mngt Repeatability: This course may not be repeated for additional credits.

SGM 3504. Ready, Fire, Aim: Launching a Profitable Micro-venture in 100 Days. 3 Credit Hours.
It has been said by many successful entrepreneurs and venture capitalists that NO venture is ever successful with its original business model--they all pivot by adapting their product, targeting a different market segment, changing their revenue model, etc. This reality is captured in the mantra--ready, fire, aim--which summarizes a fail-fast, learn, adapt, and succeed model that is taking over virtually all domains of entrepreneurship and innovation (from new venture launch to new product development). This course takes this idea to the streets as students identify an opportunity and work alone or in small teams to launch a business, pivot and adapt to real-time evidence gathered, and become profitable all during a single semester. Although not all students will launch their dream venture in this short time, they may be able to create a business that provides passive income, lets them exit by selling a profitable venture to someone, or allows them to save money to start their next venture. However, more than anything the real learning (and fun) begins once you get out of your head and the classroom to actually launch a business. Repeatability: This course may not be repeated for additional credits.
SGM 3511. Doing Well by Doing Good: Where Innovation and Entrepreneurship Meet Social Impact. 3 Credit Hours.
These days the boundary between for-profit and social entrepreneurial ventures is increasingly becoming blurred. Every company, large and small, is making the multi bottom line of people-planet-profit an all-important goal. If you work in any organization or want to start a new venture of your own it is critical that you prioritize "purpose" or create "meaning." Organizations that ignore their impact on society and the world miss out on opportunities for innovation as well as the immense competitive advantage to having a positive social impact (i.e., doing good) while you do well. If you make meaning you will make people want to write stories about you, want to work for you, and want to buy from you. This course will explore the various ways the emerging U.S. social enterprise sector is evolving. More broadly, this class examines the ways in which entrepreneurship and business in general is embedded in--and affects--larger social, cultural, ecological, and economic relationships.

Repeatability: This course may be repeated for additional credits.

SGM 3521. Finance Your Ideas: Crowdfunding, Grants, Banks, Venture Funds, Corporate and Private Investment. 3 Credit Hours.
In this course you will get out of the classroom and pitch a source (or sources) in order to find funding for your (or your team's) business idea. Ultimately, every pitch requires a feasible business idea but whether you head to Kickstarter to produce a crowdfunding video pitch, present your business plan to a bank, apply for a government grant, present to the powers-that-be inside an existing organization, or pitch to the angels and VC investors that will be invited as guests to the class, will depend on the type of business idea you have. This course discusses a range of equity and non-equity financing options available to organizations today. One of the biggest problems for Temple entrepreneurs is financing their ideas--although securing funding is always difficult, this course helps you appreciate several options you have and the implications for each. A special focus will be paid to the investment decision (i.e., what does it take to persuade an investor to part with their hard earned money) and students will gain insights into factors that influence the viability and financial health of a business as well as the steps that can be taken to increase venture valuation.<p>NOTE: Most students that take this course should enter having already assessed the viability of their idea for a new venture. We recommend that students take both an 'Entrepreneurial Thinking' (e.g. SGM 3501, 0827, 5117) and 'Entrepreneurial Management' (e.g. SGM 3503, 3001, 5187) course prior to taking SGM 3521. Students who do not meet this criteria may be required to complete additional supplementary work and may want to contact the professor to find out if they are sufficiently prepared to take this course. Entrepreneurship majors may want to consider taking SGM 3521 at the same time or even after SGM 4596.

Repeatability: This course may not be repeated for additional credits.

SGM 3580. Special Topics - Strategic Management. 3 Credit Hours.
Special topics in current developments in the field of general and strategic management.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School

Repeatability: This course may be repeated for additional credit.

SGM 3582. Independent Study. 3 Credit Hours.
Readings and/or papers under supervision of a faculty member.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School

Repeatability: This course may be repeated for additional credit.

SGM 3585. Incubator Internship: Contribute, Connect and Learn as a Part of the Entrepreneurial Ecosystem. 3 Credit Hours.
Accelerators and incubators have proven to be quite successful at launching and enabling successful new ventures. These programs help organizations move through multiple milestones and stages, constantly evaluating the success and prospects for the venture, and recommend pivots or changes in the core concept as necessary. This process requires support personnel with a huge range of experience - from business students to work on marketing plans and business models, to engineers and computer programmers to help build prototypes, to law / legal studies students to help assess IP and other legal issues related to incorporation, to media and communication students to generate press or help create videos and webpages for crowdfunding campaigns. In this internship students will be placed in one of these accelerators/incubators so that they can leverage their expertise, gain experience (and a portfolio) working with various new ventures, enhance their networks, and learn what makes these ventures succeed vs. fail. Accelerator/incubator options include those that help Temple students, those that assist with technology commercialization, those that focus on small businesses in North Philly, those focused on app-based companies, and many more both within Temple and elsewhere in the region or around the country / world. Note: Please check http://iei.temple.edu/internships or email: entrepreneurial-internships@temple.edu with questions or for more information (students must have their internship arranged and complete necessary paperwork before the first week of class or they will be dropped from the course).

Repeatability: This course may be repeated for additional credit.

SGM 3682. Independent Study. 3 Credit Hours.
Readings and/or papers under supervision of a faculty member.

College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School

Repeatability: This course may be repeated for additional credit.

SGM 3685. New Venture Internship: Learning to be a High-Value Employee, Manager, or Founder. 3 Credit Hours.
During this semester long course, students will work in an entrepreneurial new venture on a specific high-value project (internships are 100 hours). In parallel to the internship, students will be working with the course faculty in one-on-one, team, and group sessions as they learn how to manage a project. Emphasis is placed on helping students understand how they create value for the organization they are working with while making sure they learn the most from the experience themselves. The Entrepreneurship program typically has a number of internships available or students are welcome to come to the course with an internship opportunity in mind. We strongly recommend that students take the opportunity to reach out to companies and organizations that they really want to work in. The best internships are typically with smaller, high-growth entrepreneurial companies and organizations - not with large, traditional organizations (and not with family or friends).<p>NOTE: Please check http://iei.temple.edu/internships for more information.

Repeatability: This course may be repeated for additional credit.
SGM 4596. Strategic Planning: The Business Plan as a Strategic Tool for Existing Businesses and Entrepreneurs. 3 Credit Hours.
The business plan (BP) is frequently misunderstood and assumed to be most relevant when entrepreneurs seek external funding. In actuality, the BP simply encourages entrepreneurs and managers alike to invest some thought, some time, and some ink before they risk a great deal more time, resources, and money launching an ill-conceived new venture. In addition, the BP is frequently underappreciated as a vital instrument for existing businesses. Senior managers often evaluate a potential departure from existing business models by engaging multiple internal stakeholders, hiring consultants, benchmarking and establishing milestones—as momentum builds the process takes on a life of its own. Ultimately, a great deal could have been saved if a BP had been created from the start. This course teaches students a very practical skill—the know-how to fully develop and flesh-out an innovative new business model via a business plan. In addition, all students will present their ideas to experienced entrepreneurs for feedback and have the opportunity to submit their BP to the Be Your Own Boss Bowl (BYOBB) competition for a chance to win $125k+.


College Restrictions: Must be enrolled in one of the following Colleges: Business & Mngmnt, Fox School

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(SGM 3501|Minimum Grade of C-|May not be taken concurrently)
AND (SGM 3503|Minimum Grade of C-|May not be taken concurrently).

Study Away Non-TU Program (STAW)

Courses

STAW 3011. Non-TU Domestic Program. 1 to 12 Credit Hour.
Repeatability: This course may be repeated for additional credit.

STAW 3021. Non-TU Study Abroad. 1 to 12 Credit Hour.
Repeatability: This course may be repeated for additional credit.

STAW 3031. TU Exchange Program. 1 to 12 Credit Hour.
Repeatability: This course may be repeated for additional credit.

STAW 3041. Study Abroad Insurance. 0 Credit Hours.
Repeatability: This course may be repeated for additional credit.

Supply Chain Management (SCM)

Courses

SCM 3515. Principles of Supply Chain Management. 3 Credit Hours.
Operations and Supply Chain Management is the art and science of integrating the flow of products, information and money through the pipeline from the sources to the end customers. The goal of the course is to provide an understanding of the fundamental principles and activities occurring in the supply chain and to prepare students with a basic knowledge of activities within the supply chain.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(MKTG 2101|Minimum Grade of C|May not be taken concurrently
OR MKTG 2901|Minimum Grade of C|May not be taken concurrently
OR MK01 Y|May not be taken concurrently)
AND (MSOM 3101|Minimum Grade of C|May not be taken concurrently
OR MSOM 3901|Minimum Grade of C|May not be taken concurrently).
SCM 3516. Transportation and Logistics Management. 3 Credit Hours.
Transportation, distribution, logistics, or supply chain management all refer to the process by which companies move material, parts, and products to their customers. Proper planning and scheduling are crucial to efficient operations and customer satisfaction. Transportation management encompasses planning goods movements across its different modes – truck, rail, water, air and pipeline. This course provides students with a basic familiarity to the important issues, concepts and models for analyzing different transportation functions. The focus will be on presenting information about, and providing access to, available tools and techniques that ensure a smooth flow and distribution of goods in the industry today. The course uses both quantitative and spatial techniques for proper decision making – specifying how, when and where to transport goods; selection of appropriate location of warehouses and distribution points; selection of route and carriers; and understanding of logistics and distribution costs.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: (MKTG 2101|Minimum Grade of C|May not be taken concurrently
OR MKTG 2901|Minimum Grade of C|May not be taken concurrently
OR MK01 Y|May not be taken concurrently)
AND (MSOM 3101|Minimum Grade of C|May not be taken concurrently
OR MSOM 3901|Minimum Grade of C|May not be taken concurrently).

SCM 3517. Inventory and Warehouse Management. 3 Credit Hours.
A key decision in manufacturing, retail and some service industry businesses is how much inventory to keep on hand satisfying the customer needs. Inventory is often a business's largest asset and not having enough inventories means losing sales, while holding too much inventory is expensive; therefore an efficient inventory control system is very important in any business. This course develops students' skills for quantitative and analytical thinking in the general areas of Operations, Logistics, Supply Chain Management, and Managing Global and Service Operations by developing analytical skills and an ability to make "data-driven" decisions. This course is a required course for the SCM Major and SCM Minor.
Field of Study Restrictions: Must be enrolled in one of the following Minors: Supply Chain Management, Supply Chain Management
Repeatability: This course may not be repeated for additional credits
Pre-requisites: (MKTG 2101|Minimum Grade of C|May not be taken concurrently
OR MKTG 2901|Minimum Grade of C|May not be taken concurrently
OR MK01 Y|May not be taken concurrently)
AND (MSOM 3101|Minimum Grade of C|May not be taken concurrently
OR MSOM 3901|Minimum Grade of C|May not be taken concurrently).

SCM 3518. Sourcing and Procurement. 3 Credit Hours.
This course introduces students to the fundamental concepts, tools and techniques in purchasing that will make them aware of the demands placed on supply chain managers, understand the strategic nature of purchasing, understand the impact of purchasing on the competitive success and profitability of modern organizations and finally, secure better job prospects and superior on-the-job performance. This course develops students' skills for quantitative and analytical thinking and ability to make "data-driven" decisions. This course is the capstone course for the SCM Major and is required as part of the SCM Minor.
Field of Study Restrictions: Must be enrolled in one of the following Minors: Supply Chain Management, Supply Chain Management
Repeatability: This course may not be repeated for additional credits
Pre-requisites: (SCM 3515|Minimum Grade of C|May not be taken concurrently)
AND (SCM 3516|Minimum Grade of C|May not be taken concurrently).

TUJ International Bus Studies (JIBS)

Courses

JIBS 3101. Introduction to Global Finance. 3 Credit Hours.
This course addresses corporate financing issues in the global financial environment relevant for international corporations or MNCs/MNEs. Topics to be discussed in the course will include: BOP accounts; foreign exchange-rate determination and markets; foreign exchange risk management; corporate strategy for foreign direct investment; valuation of foreign investments; global debt and equity financing, and project finance; international capital budgeting decision process associated with political, sovereign (country) and inflation risks. The perspective of cash versus equity purchases; mergers and acquisitions; comparisons of corporate governance practices around the world; and international taxation will also be touched upon and explored.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: ACCT 2102|Minimum Grade of C-|May not be taken concurrently
OR ACCT 2902|Minimum Grade of C-|May not be taken concurrently.
JIBS 3102. Global Operations and Supply Chain Management. 3 Credit Hours.
This course is designed to present and discuss concepts, issues and problems critical to global operations, with some emphasis on global supply chains. The course seeks to provide an understanding of the importance of individual components (suppliers, manufacturers, distributors, and customers) in the operation of the supply chain. Coverage will include successful approaches in the areas of product and service design, global sourcing and logistics management, sales and operations planning, scheduling, resources planning, inventory management, and project management, among others, which have led to dramatic improvements in global business performance. Important recent developments and approaches for the effective and efficient operation of global supply chains will be identified and discussed. Also, in this course, a software package used for project management, such as MS Project, will be introduced.

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
STAT 2103|Minimum Grade of C-|May not be taken concurrently
OR STAT 2903|Minimum Grade of C-|May not be taken concurrently
OR MATH 2031|Minimum Grade of C-|May not be taken concurrently.

JIBS 3501. Marketing in a Global Environment. 3 Credit Hours.
This course takes a culturally driven approach to International Marketing. It will examine how multinational companies adapt to international opportunity and constraints. Marketing topics covered include global marketing; government regulations; organizational structure; product, price, promotion, and credit policies and methods. The course will combine cases, discussions, and readings to provide a mix of integrating concepts and hands-on problem solving.

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MKTG 2101|Minimum Grade of C-|May not be taken concurrently
OR MKTG 2901|Minimum Grade of C-|May not be taken concurrently.

JIBS 4197. Global Business Overview. 3 Credit Hours.
This course is about making business decisions in international environment. It takes the perspective of a general manager and will focus on the theme of valuation. Students will be challenged to evaluate the capital structure and business models of international enterprises in order to assess strategic options.

Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

JIBS 4596. International Business Capstone. 3 Credit Hours.
This is an integrated course that focuses on strategic management and decision making in international enterprises. Students are challenged to design real-time solutions through the use of comprehensive live case studies. The course is designed to help you develop state-of-the-art business writing skills that are appropriate in both academic and professional contexts. Other important objectives include: (1) Information literacy: To provide students with opportunities to search for outside sources and with instruction related to searching for, evaluating, and/or using sources; (2) Cross-functional (capstone) perspective: To integrate the knowledge accumulated in various functional areas such as accounting, finance, marketing, human resources management and operations management; (3) Hypothesis-driven, fact-based, and action-oriented case work: To provide students with meaningful experience in analyzing strategic problems through the use of the real-time case method. At the end of the course, students should be able to write a basic strategic report that meets the professional standards of an international management consulting firm on junior associate level.

Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(HRM 1101|Minimum Grade of C-|May not be taken concurrently)
AND (JIBS 3501|Minimum Grade of C-|May be taken concurrently
OR JIBS 3102|Minimum Grade of C-|May be taken concurrently).

Theater (THTR)

Courses

THTR 0805. Dramatic Imagination: The Performing Arts in Society. 3 Credit Hours.
Theatre, dance, opera--our imaginations give us the natural ability to accept the make-believe worlds they create on stage. While it is the imagination that ultimately allows us to enjoy the performing arts, imagination also plays a role in creating these worlds. Take advantage of our rich local arts community as you experience live performances in Philadelphia! We will use our imaginative capacities to deepen our own experience, while learning about the value of the arts, the controversies surrounding them, and differences in people's perceptions of the performing arts as compared to other forms of entertainment. NOTE: This course fulfills the Arts (GA) requirement for students under GenEd and the Arts (AR) requirement for students under Core. If you have previously completed Theater C110/1002, The Collaborative Art, you cannot get duplicate credit for this course.

Course Attributes: GA
Repeatability: This course may not be repeated for additional credits.
THTR 0807. The Creative Spirit: A Multidisciplinary View. 4 Credit Hours.
Man is the animal who creates, but why and how? What is happiness? Whether we are making art or making dinner, creativity ultimately makes a difference in our lives and the lives of others. In this course we will view Creativity through the lens of the Arts and investigate the primary relationship of the creative process to the pursuit of happiness. Students will master the fundamental concepts of creativity and engage with artists, performers and working professionals to discover the central role creativity plays in their work and in their daily lives. Apply your personal creativity in weekly hands-on group workshop sessions. Embark upon field assignments to experience Philadelphia’s finest theater, dance and music events and the visual arts. Follow your bliss; discover the importance of intrinsic motivation as a key to developing a passion for life-long learning. NOTE: This course fulfills the Arts (GA) requirement for students under GenEd and the Arts (AR) requirement for students under Core. Students cannot receive credit for this course if they have successfully completed Theater 0907.

Course Attributes: GA
Repeatability: This course may not be repeated for additional credits.

THTR 0825. The Art of Acting. 3 Credit Hours.
Whether you have some or no experience in theater, this course will open new doors and provide a firm understanding of the actor's craft. We will start with improvisatory exercises to explore basic principles of acting, which will help you expand your expressive capabilities, imagination and spontaneity, and give you greater confidence on stage and in front of people. At the same time, you will use your growing knowledge of the craft to analyze the work of actors on stage and film. Finally, you will work on assigned scenes from dramatic literature, giving you the basic tools of text analysis, the principal tool with which an actor figures out a text. NOTE: This course fulfills the Arts (GA) requirement for students under GenEd and Arts (AR) for students under Core. Students cannot receive credit for this course if they have successfully completed Theater 0925, 1201 or C025.

Course Attributes: GA
Repeatability: This course may not be repeated for additional credits.

THTR 0841. Classics of African American Theater. 3 Credit Hours.
In part because of its development, initially, as a consequence of enslavement, African American theater is both entertaining and potentially volatile. We will look at some of the most important African American plays from the late 1700's through to the present, and explore the problems, contestations and the nature of race, class, and gender as exemplified in these dramatic texts. From Ira Aldridge's "The Black Doctor" in 1847, through to August Wilson's "Radio Golf" (2007), we will investigate the historical emergence and institutionalization of race thinking and practice on the American stage. As we consider this span of performance literature, we will analyze debates about race and social justice, investigate the collaborative nature of theater and develop oratory skills in provocative discussions. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core.

Course Attributes: GD
Repeatability: This course may not be repeated for additional credits.

THTR 0842. Race on the Stage. 3 Credit Hours.
A unique taste of artistic diversity, this course combines traditional and interdisciplinary content with the rich experience of "live art." Learn how conventions of the past contribute to arts production and the dramatic presentation of race, gender, sexuality, class and disability today, and how those presentations continue to inform notions of identity. As you read classic and contemporary dramatic texts and critically analyze actual performances, you will be looking at diversity from multiple perspectives and acquiring the kind of understanding of "difference" and "tolerance" that will prepare you to live and work in a global world. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core.

Course Attributes: GD
Repeatability: This course may not be repeated for additional credits.

THTR 0852. World Performances. 3 Credit Hours.
Dance, puppetry, theater, opera - these are performance forms that are part of the cultures of the world. From the earliest religious rituals to modern interpretations of ancient traditions, performances are as varied and diverse as the cultures from which they arise. You are probably familiar with performances arising from western cultures, but the Noh Drama of Japan, the Water Puppetry of Viet Nam, the Koo_thu Patari folk performances of India, the Beijing Opera in China, the Capevera Martial Arts performances of Brazil--these might be new to you. Explore world performances through live class presentations, lectures, video and attendance at international performances in Philadelphia. You might also have the chance to perform yourself! NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed Theater 0952.

Course Attributes: GG
Repeatability: This course may not be repeated for additional credits.

THTR 0907. Honors The Creative Spirit: A Multidisciplinary View. 4 Credit Hours.
Man is the animal who creates, but why and how? Whether we are making art or making dinner, creativity ultimately makes a difference in our lives and the lives of others. In this course we will view creativity through the lens of the arts and explore the broader manifestations of the creative spirit in a variety of related fields and disciplines. Students will learn the fundamental concepts of creativity and engage with artists, performers and working professionals exploring the central role creativity plays in their work. Explore your creativity in weekly hands-on group sessions augmented by periodic field visits to see performances, concerts, galleries, etc. Be creative, follow your bliss and develop a passion for life-long learning! NOTE: This course fulfills the Arts (GA) requirement for students under GenEd and the Arts (AR) requirement for students under Core. Students cannot receive credit for this course if they have successfully completed Theater 0807.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GA, HO
Repeatability: This course may not be repeated for additional credits.
THTR 0925. Honors Art of Acting. 3 Credit Hours.
Whether you have some or no experience in theater, this course will open new doors and provide a firm understanding of the actor's craft. We will start with improvisatory exercises to explore basic principles of acting, which will help you expand your expressive capabilities, imagination and spontaneity, and give you greater confidence on stage and in front of people. At the same time, you will use your growing knowledge of the craft to analyze the work of actors on stage and film. Finally, you will work on assigned scenes from dramatic literature, giving you the basic tools of text analysis, the principal tool with which an actor figures out a text. NOTE: This course fulfills the Arts (GA) requirement for students under GenEd and Arts (AR) for students under Core. Students cannot receive credit for this course if they have successfully completed Theater 0825, 1201 or C025.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GA, HO
Repeatability: This course may not be repeated for additional credits.

THTR 0952. Honors World Performances. 3 Credit Hours.
Dance, puppetry, theater, opera - these are performance forms that are part of the cultures of the world. From the earliest religious rituals to modern interpretations of ancient traditions, performances are as varied and diverse as the cultures from which they arise. You are probably familiar with performances arising from western cultures, but the Noh Drama of Japan, the Water Puppetry of Viet Nam, the Koothu Patari folk performances of India, the Beijing Opera in China, the Capoeira Martial Arts performances of Brazil--these might be new to you. Explore world performances through live class presentations, lectures, video and attendance at international performances in Philadelphia. You might also have the chance to perform yourself! NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed Theater 0852.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: GG, HO
Repeatability: This course may not be repeated for additional credits.

THTR 1002. Theater: The Collaborative Art. 3 Credit Hours.
Live professional theater performances serve as the basis for the study of contemporary theater: its elements, its ideas, and its creators. Lecture/ demonstrations of the elements of theater art presented by the artists/teachers of the theater faculty. If you have previously completed Theater 0805: Dramatic Imagination, you cannot get duplicate credit for this course. NOTE: This course can be used to satisfy the university Core Arts (AR) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. If you have previously completed Theater 0805: The Dramatic Imagination, you cannot get duplicate credit for this course.

Course Attributes: AR
Repeatability: This course may not be repeated for additional credits.

THTR 1003. Creativity: Basic. 3 Credit Hours.
The introductory course to creativity in theater. Techniques to encourage creative self-expression and ways of presenting ideas and materials. NOTE: Restricted to majors, Creativity is the matrix course for all theater students and leads to the various emphasis programs.

Repeatability: This course may not be repeated for additional credits.

THTR 1008. Poetry as Performance. 3 Credit Hours.
This theater course takes the poem off of the printed page, from mere recitation to performance. It teaches theater tips and helpful techniques used in one of the hottest mediums in performance art today, rekindling love of poetry, from Robert Frost, to T.S. Eliot, to Ezra Pound, from Sterling Brown, to Langston Hughes to Sonia Sanchez.

Repeatability: This course may not be repeated for additional credits.

THTR 1087. Production Practicum. 1 Credit Hour.
Participation required in at least one departmental production activity, by fulfilling either an acting or production contract. It is preferred that students do at least one contract in each area of the four production areas. NOTE: For theater majors only. Theater 1087 is required every semester the student is a full-time major. If Theater 1087 is not successfully completed, Theater 1187 must be taken concurrently with Theater 1087 the following semester.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Musical Theater, Theater-Acting, Theater-Directing, Theater-Design, Theater Education, Theater
Repeatability: This course may be repeated for additional credit.

THTR 1096. Introduction to Theater Process. 3 Credit Hours.
Methods of study of dramatic text. Principles of dramatic form; cultural context of modern realistic drama; readings and projects. NOTE: Required of all majors. Recommended to non-majors who intend to work with drama professionally in television or film, or as critics. Theater majors must pass Theater 1096 with a grade of C or better.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Musical Theater, Theater-Acting, Theater-Directing, Theater-Design, Theater Education, Theater
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.
THTR 1141. Voice I for Musical Theater. 1 Credit Hour.
This course introduces the first year Musical Theater student to the principles of bel canto singing. This first semester in a singer's training is devoted to the study and performance of classic Italian songs and arias. Special attention is paid to the development of an effective, thorough and personal vocal warm-up, proper breath support, core strength, legato singing, pure vowel formation, pitch and intonation, rhythmic accuracy and basic principles of IPA (the International Phonetic Alphabet).
Field of Study Restrictions: Must be enrolled in one of the following Concentrations: Musical Theater
Repeatability: This course may not be repeated for additional credits.

THTR 1142. Voice II for Musical Theater. 1 Credit Hour.
This course continues the vocal development of the first year Musical Theater student in the principles of bel canto singing. This second semester in a singer's training is devoted to further study and performance of classic Italian songs and arias. Special attention is paid to proper breath support, core strength, legato singing, pure vowel formation, pitch and intonation, rhythmic accuracy and continued master of IPA (the International Phonetic Alphabet). NOTE: Musical Theater Concentration students only.
Field of Study Restrictions: Must be enrolled in one of the following Concentrations: Musical Theater
Repeatability: This course may not be repeated for additional credits

Pre-requisites:
THTR 1141|Minimum Grade of C|May not be taken concurrently.

THTR 1187. Production Practicum. 1 Credit Hour.
Same as Theater 1087. Theater 1187 and Theater 1087 must be taken concurrently the semester following receipt of the grade F for Theater 1087. NOTE: Required in the event that a student is unsuccessful in the completion of Theater 1087.
Repeatability: This course may be repeated for additional credit.

THTR 1201. Acting for Non-Majors. 3 Credit Hours.
The actor studies Stanislavski through the exploration of Uta Hagen's object exercises. Techniques in relaxation, improvisation and concentration are applied to scene and monologue. NOTE: Taught in Japan only. This course can be used to satisfy the university Core Arts (AR) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: AR
Repeatability: This course may not be repeated for additional credits.

THTR 1202. Fundamentals of Voice and Movement. 3 Credit Hours.
This course is designed to teach the basics of the human form and how that form inhabits space. The course will increase the students' awareness of their own bodies and will teach the fundamentals of their bodies' anatomy. As the students move their bodies through space, and begin to explore various movement patterns and shapes, they will also engage their voices in order to learn how physical postures change the quality, the tone, and/ or the emotional expression of the vocal instrument. In addition, the course will ask each student to analyze his/her movement and vocal patterns and habits through a series of in-class exercises, and the students will explore variations of movement and voice in an effort to expand upon these habitual practices. In order to teach the often-complicated concepts discussed in this course, the instructor will use anatomical vocabulary, in-class exercises focusing on breath, body and movement, performance movement theory, and the student's own self-designed movement project.
Repeatability: This course may not be repeated for additional credits.

THTR 1211. Fundamentals of Acting. 3 Credit Hours.
This course is intended for the student who wants more than a basic introduction to acting but may not be able to major in theater. Exercises, scene study, script analysis. NOTE: Ideally this course would be a continuation of work done in Theater 0825: The Art of Acting. Prior to spring 2009, the course title was "Basic Acting II."
Repeatability: This course may not be repeated for additional credits.

THTR 1231. Acting I. 3 Credit Hours.
The actor explores techniques in relaxation, improvisation, and concentration using Uta Hagen's Basic Object exercises as a foundation. These techniques will be applied to one scene and one monologue taken from contemporary American dramatic literature. NOTE: For theater majors only. Majors must pass Theater 1231 with a grade of B or better. Required for Acting Concentration. Prior to fall 2009, the course title was "Introduction to Acting."
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Musical Theater, Theater-Acting, Theater-Directing, Theater-Design, Theater Education, Theater
Repeatability: This course may not be repeated for additional credits.

THTR 1232. Jacques Lecoq Technique Part 1. 3 Credit Hours.
This course introduces students to the Jacques Lecoq technique, which uses the body as a starting point for performance. Using the body to create space, characters, emotions and relationships among others, the class will use improvisation and ensemble work as key tools to create physical theater rather than psychological. This course is the first part of a longer journey, which goes from the Neutral Mask to Clown and an approach to various European classical styles.
Repeatability: This course may not be repeated for additional credits.
THTR 1411. Welcome Backstage. 3 Credit Hours.
This course is an introduction to all things technical in theater. Students will learn the vocabulary of the theater, where it relates to techniques, materials, equipment and the machinery that make theater a physical reality. The course includes projects in drafting, lighting design, and costume construction, as well as a lab component that will introduce a variety of shop practices. As part of the lab, students will contribute to realizing the Department of Theater's mainstage productions, though work in the scene shop, lighting and sound. NOTE: Theater majors must pass Theater 1411 with a grade of C or better. Prior to spring 2009, the course title was “Technical Theater Production.”
Repeatability: This course may not be repeated for additional credits.

THTR 2001. Introduction to Hip Hop Theater. 3 Credit Hours.
This course is designed to introduce students to the principles and techniques characteristic of Hip Hop theater and dance. Students will examine the impact Hip Hop is having on the professional theater in the United States, study the genesis and history of Hip Hop culture, and become acquainted with and execute Hip Hop movement combinations. Emphasis will be placed on Hip Hop’s growing influence on American Theater. Through lecture and performance opportunities, students will gain an appreciation for the contributions of the art form to theater and become familiar with the demands of Hip Hop in performance. Movement fundamentals of alignment, flexibility, endurance, dynamic range, and strength will be addressed.
Repeatability: This course may not be repeated for additional credits.

THTR 2008. Poetic Ethnography. 3 Credit Hours.
“Poetic Ethnography” is a second level Theater Literature and Performance course meant as a companion to “Poetry as Performance” (Theater 1008). As a performance technique, the choreopoem is a genre of narrative theater that has increased in popularity alongside Hip Hop and Spoken Word. As an advanced compliment to “Poetry as Performance,” this class creates a space for social engagement. “Poetic Ethnography” seeks to further develop our understanding of the use of choreopoem.
Repeatability: This course may not be repeated for additional credits.

THTR 2085. Theater Internship. 3 or 6 Credit Hours.
This course offers hands-on, organized, professional work under supervision in a professional theater or a leader in the entertainment industry. Permission of the instructor is necessary. Course registration must occur prior to actual internship work.
Repeatability: This course may be repeated for additional credit.

THTR 2101. Ballet I for Musical Theater. 1 Credit Hour.
Development of technical skills in ballet, including safe, efficient alignment and clear articulation of movement vocabulary is a necessity for a musical theater actor to excel in the professional world. This course is the Musical Theater Concentration student's first in a series of semesters of dance training.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Musical Theater
Repeatability: This course may not be repeated for additional credits.

THTR 2121. Ballet II for Musical Theater. 1 Credit Hour.
Further development of technical ballet skills increases students' core strength and provides a basic skill set that will be added to in the succeeding six semesters. Ballet is the primary building block of dance training and the Temple Musical Theater Concentration student benefits from a year long study of the discipline.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Musical Theater
Repeatability: This course may not be repeated for additional credits.

THTR 2131. Music Theory/Sightsinging: Basic. 2 Credit Hours.
Basic fundamentals of music theory, including key signatures, rhythm, melody, harmony, and dynamics, are examined in order to strengthen the actor's ability to learn music, and prepare music for auditions and performance. The course includes the study of sight singing, basic keyboard skills, rhythm in simple meters, accidentals, major scales, key signatures, major and perfect intervals, solfege and rhythmic reading drills. These fundamentals are obligatory for success for Musical Theater Concentration students.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Musical Theater
Repeatability: This course may not be repeated for additional credits.

THTR 2141. Voice III for Musical Theater. 1 Credit Hour.
As the second year of training begins for the Musical Theater student, the instructor and student turn their attention to vocal growth and development, range expansion, and musicianship. This third semester in a singer's training is devoted to the study and performance of classic English songs and arias. Attention is paid to the development of the singer's technical skills, proper breath support, core strength, legato singing, pure vowel formation, pitch and intonation, rhythmic accuracy and English diction. NOTE: Musical Theater Concentration students only.
Field of Study Restrictions: Must be enrolled in one of the following Concentrations: Musical Theater
Repeatability: This course may not be repeated for additional credits
Pre-requisites: THTR 1142|Minimum Grade of C|May not be taken concurrently.
THTR 2142. Voice IV for Musical Theater. 1 Credit Hour.
As the second year of training continues for the Musical Theater student, the instructor and student turn their attention to vocal growth and development, range expansion, and musicianship. This fourth semester in a singer's training is devoted to study and performance of songs from Operetta. Attention is paid to the development of the singer's musicianship, proper breath support, core strength, legato singing, pure vowel formation, pitch and intonation, rhythmic accuracy and English diction. NOTE: Musical Theater Concentration students only.
Field of Study Restrictions: Must be enrolled in one of the following Concentrations: Musical Theater
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
THTR 2141|Minimum Grade of C|May not be taken concurrently.

THTR 2201. Acting Styles. 3 Credit Hours.
The objective of this course is to undertake the challenges of heightened language and period style while maintaining commitment to objectives, detailed given circumstances and truthful listening and reacting. This is the third and final acting course available to students who are not enrolled in the Acting Concentration.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
THTR 1211|Minimum Grade of C|May not be taken concurrently
OR THTR 1231|Minimum Grade of C|May not be taken concurrently.

THTR 2210. Special Topics. 2 to 3 Credit Hours.
This course is reserved for intensive study of a particular aspect of theater. NOTE: For Majors only. Permission of the instructor is necessary.
Repeatability: This course may be repeated for additional credit.

THTR 2221. Voice for the Actor. 3 Credit Hours.
Fitzmaurice Technique applied to increase the power, range and expressivity of the voice. Through Yoga and bioenergetics the actor achieves relaxation. Through rib, diaphragmatic and abdominal exercises, the actor finds the freedom of the voice possible in strength and structure. NOTE: Required for Acting Concentration.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Musical Theater, Theater-Acting, Theater-Directing, Theater-Design, Theater Education, Theater
Repeatability: This course may be repeated for additional credit.

THTR 2231. Speech for the Actor. 3 Credit Hours.
Fundamentals of speech for the performer: the goal is clarity, dissipation of regional accents, learning IPA, and General American speech. NOTE: Required for Acting Concentration.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Musical Theater, Theater-Acting, Theater-Directing, Theater-Design, Theater Education, Theater
Repeatability: This course may not be repeated for additional credits.

THTR 2232. Jacques Lecoq Technique Part 2. 3 Credit Hours.
This class is the next step to the Lecoq method. We will be using the tools acquired from Theater 1232 to create performance pieces inspired by different, very specific theatrical styles such as melodrama, bande mimee, Commedia Dell' Arte, and clown.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
THTR 1232|Minimum Grade of C|May not be taken concurrently.

THTR 2233. Advanced Speech for the Actor. 3 Credit Hours.
This Advanced Speech class focuses on pinpointing the aspiring professional actor's current dialect limitations. Students will master the International Phonetic Alphabet and learn the two industry standard neutral dialects for stage and television acting. Concentrated individual coaching in scene work and audition monologues will help make students more competitive professionally.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
THTR 2231|Minimum Grade of C|May not be taken concurrently.

THTR 2241. Basic Movement. 3 Credit Hours.
Introduces the student actor to basic skills, concepts and techniques of movement for the actor. Modern dance, improvisation and physicalization of dramatic text are integral parts of the course. NOTE: Required for Acting Concentration.
Repeatability: This course may be repeated for additional credit.

THTR 2251. Dance for the Actor. 3 Credit Hours.
Experience in various dance idioms including modern, social, jazz, and character choreodram especially designed for the actor.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
THTR 2241|Minimum Grade of C|May not be taken concurrently.
THTR 2252. Alexander Technique. 3 Credit Hours.
The goal of this class is to teach actors to recognize when they interfere with the natural functioning of their physical and vocal instruments and to introduce them to a practical method of working with themselves that they can apply to their performance activities. NOTE: Prior to spring 2009, the course title was "Movement for the Actor II."
Repeatability: This course may not be repeated for additional credits.

THTR 2261. Acting II. 3 Credit Hours.
The actor applies techniques gained in Theater 1231 to scene work. Exploration of scenes from 20th century American dramatic literature with particular focus on defining beats and playing objectives. NOTE: Required for Acting Concentration. May be repeated with permission of the department. Prior to fall 2009, the course title was "Basic Acting Technique."
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Musical Theater, Theater-Acting, Theater-Directing, Theater-Design, Theater Education, Theater
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
THTR 1231 | Minimum Grade of C | May not be taken concurrently.

THTR 2262. Improvisation. 3 Credit Hours.
This course is designed to develop spontaneity and increase listening skills. It will begin with exercises in trust building, listening and ensemble building. You will then progress to short form scenes to increase skill, and by the end of the semester you will learn to do long form work that may include a performance.
Repeatability: This course may not be repeated for additional credits.

THTR 2271. Dialects for the Actor. 3 Credit Hours.
The study of dialects most commonly used in the American theater. Each student has the opportunity to work with an additional dialect of particular interest. Application of the International Phonetic Alphabet, as well as ear-training are fundamental to learning new dialects.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
THTR 2231 | Minimum Grade of C | May not be taken concurrently.

THTR 2411. Introduction to Design. 3 Credit Hours.
A project oriented class covering the language of basic composition and how it translates into the language of theatrical design. Script analysis of a play is realized in a series of projects in costume, lighting and set design. NOTE: Theater Majors must pass 2411 with a grade of C or better.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
THTR 1411 | Minimum Grade of C | May not be taken concurrently.

THTR 2421. Creative Sound Technique. 3 Credit Hours.
Practical techniques for theater sound design.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Musical Theater, Theater-Acting, Theater-Directing, Theater-Design, Theater Education, Theater
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
THTR 1411 | Minimum Grade of C | May not be taken concurrently.

THTR 2441. Stage Management I. 3 Credit Hours.
This course will be a thorough analysis of the technical and organizational aspects as well as the typical responsibilities of stage management. The focus of the course is the stage manager's and/or assistant stage manager's process. Topics include, but are not limited to: preparing for and running rehearsals, communication and paperwork skills, and leadership and team building methods. Production participation is required, serving as a SM or ASM on a TU Mainstage or Second Stage production. Nights and weekends of production work required.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
THTR 1411 | Minimum Grade of C | May not be taken concurrently.

THTR 2442. Propcraft. 3 Credit Hours.
This course explores the theory and practice of properties design and prop-mastery. Students will learn the process involved in properties research, design, and construction and will gain practical experience by serving as Propmaster (or Co-Propmaster) for one of the productions in the theater season. Students will collaborate with the design team, production staff and stage management extensively while working on the production and will attend technical rehearsals and production meetings. The course will require a significant commitment outside of class time, particularly when students are working on a production. Production work in class can be applied as a production contract for the semester.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
THTR 1411 | Minimum Grade of C | May not be taken concurrently.
THTR 2511. Lighting for the Theater. 3 Credit Hours.
This is an introductory course focusing on the basic mechanics of lighting for the theater. Then uses and application of various theatrical lighting instruments will be explored. The course will also introduce students to the basic design process for lighting design. NOTE: Production participation required.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
THTR 1411|Minimum Grade of C|May not be taken concurrently.

THTR 2512. Lighting Design I. 3 Credit Hours.
The basics of Lighting Design for the theater are introduced and explored. Students will work with theatrical lighting equipment in the light lab. Projects range from recreating paintings with light, to lighting staged scenes from three different scripts.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
THTR 2511|Minimum Grade of C|May not be taken concurrently.

THTR 2611. Make-Up. 3 Credit Hours.
This course will meet once a week for three hours in the theater's Make-Up lab. This course will cover basic skincare, light and shadow relating to the face, the basics of theatrical make-up application, "glamour" make-up, period make-up styles, prosthetics, and specialty make-up such as scars, bruises and blood. A hands-on studio class, students will learn to create make-up designs on themselves and others.
Repeatability: This course may not be repeated for additional credits.

THTR 2612. Costume Design I. 3 Credit Hours.
This one semester course is an introduction to Costume Design for the stage. Students begin by learning how to read a play script looking for clues to character. Students discover how to explore character through a series of exercises including character/scene breakdowns, research of period costume, collage and sketching techniques as well as developing costume design through the exploration of line, form, color and texture. NOTE: Graphic projects required.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
THTR 2411|Minimum Grade of C|May not be taken concurrently.

THTR 2711. Drawing and Rendering Techniques I. 3 Credit Hours.
This course introduces students to a wide variety of drawing, painting and mixed media techniques in a hands-on studio environment. The Fall semester will be an exploration of all types of drawing media, including graphite pencil, charcoal, conte crayon, pastel, India ink and fiber tipped pens. The Spring semester will build upon what was learned in the fall and will introduce students to a wide variety of painting techniques and mixed media including watercolor, gouache, collage and acrylics. NOTE: This is a drawing course, and students will be expected to purchase art supplies during the semester.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
THTR 2411|Minimum Grade of C|May not be taken concurrently.

THTR 2712. Drawing and Rendering Techniques II. 3 Credit Hours.
This Painting laboratory empowers set, costume and lighting designers by providing them with a deeper understanding of the manipulation of color for the stage. Students learn color theory and color palettes as well as how to render a variety of surfaces including costumes, properties and architecture. Painting exercises are completed in and out of doors, from life and from research. Media includes watercolor, gouache, pastel, acrylic, markers, pencil, airbrush and collage. NOTE: This is a drawing course, and students will be expected to purchase art supplies during the semester.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
THTR 1411|Minimum Grade of C|May not be taken concurrently.

THTR 2713. Design Drafting. 3 Credit Hours.
By learning the mechanical and conceptual methods of drafting, students develop the skills needed to produce graphic representation of scenic and lighting design for the theater. Students learn to draft precise, attractive, and thorough drawings based upon industry standards. Utilizing skills acquired through written texts, lecture, and class discussion, students complete, inside and outside of class, drafting projects (ground plans, elevations, sections, isometrics, etc.) based on samples given by the instructor. Students present projects in class for critique and discussion, and the course culminates in final project presentations.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
THTR 1411|Minimum Grade of C|May not be taken concurrently.
THTR 2721. Scene Design I. 4 Credit Hours.
This course continues the development begun in Basic Design and Technical Theater classes. It is project oriented with the class time devoted to
discussion and presentation. The focus is on interpretation of script, basic research, development of visual metaphor with an emphasis on the power
and manipulation of space. The course begins with design of sculpture and moves through increasingly complex solutions to the creation of stage
environments. Drafting, rendering and model building skills are developed.
Repeatability: This course may not be repeated for additional credits
Pre-requisites: (THTR 1411|Minimum Grade of C|May not be taken concurrently
AND THTR 2411|Minimum Grade of C|May not be taken concurrently).

THTR 3001. History of the Theater I. 3 Credit Hours.
This course studies the development of theatrical modes of presentation, playwrights, plays, architecture, actors, producing agents, and audiences from
the beginnings of theater to 1800. Relationships are drawn between the developing theater and the political and social history of the times.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Musical Theater, Theater-Acting, Theater-Directing, Theater-
Design, Theater Education, Theater
Repeatability: This course may not be repeated for additional credits
Pre-requisites: (THTR 1096|Minimum Grade of C|May not be taken concurrently)
AND (THTR 1411|Minimum Grade of C|May not be taken concurrently).

THTR 3002. History of the Theater II. 3 Credit Hours.
This course studies the development of theatrical modes of presentation, playwrights, plays, architecture, actors, producing agents, and audiences from
1800 to today. Relationships are drawn between the developing theater and the political and social history of the times.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Musical Theater, Theater-Acting, Theater-Directing, Theater-
Design, Theater Education, Theater
Repeatability: This course may not be repeated for additional credits
Pre-requisites: (THTR 1096|Minimum Grade of C|May not be taken concurrently)
AND (THTR 1411|Minimum Grade of C|May not be taken concurrently).

THTR 3011. Methods of Teaching Artistry. 3 Credit Hours.
An exploration of the theory and practice of teaching artistry, students will examine how to engage young people, in partnership with a classroom
teacher, in and through theater. A hands-on course, students will acquire practical methods, strategies, and a repertoire of exercises, through which
theater can be used as a teaching and learning tool in K-12 classroom settings. Throughout the course, students will apply the methods learned in
their Temple classroom and in school district classrooms. Students will learn from each other through observation and discussion of the Teaching
Artists implemented in class. Students will also learn from classroom Teachers, professional Teaching Artists and Education Directors from
Philadelphia's many professional theaters who will share their work and experience in the field. NOTE: This is a required course for students in the
Theater Education Concentration within the Department of Theater.
Repeatability: This course may not be repeated for additional credits.

THTR 3012. American Musical Theater. 3 Credit Hours.
The course examines the history of the American Musical Theater, including the many entertainment genres influential to its creation. A study of
musicals ranging from the late 19th century to the present as well as significant composers, lyricists, choreographers and other contributors to the art
form. NOTE: Theater majors must pass Theater 3012 with a grade of C or better.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Musical Theater
Repeatability: This course may not be repeated for additional credits.

THTR 3013. Methods of Teaching Theater. 3 Credit Hours.
An exploration of the theory and practice of teaching theater, students will examine current practices, procedures and methodology in various settings
including the elementary and high school classroom, in recreation centers and education departments of equity and non-equity theaters. NOTE: This is a
required course for students in the Theater Education Concentration within the Department of Theater.
Repeatability: This course may not be repeated for additional credits.

THTR 3051. Modern Directions. 3 Credit Hours.
The dramatic literature, criticism, and theater history of the modern period studied in appropriate cultural contexts. NOTE: Theater majors must pass
Theater 3051 with a grade of C or better.
Repeatability: This course may not be repeated for additional credits.

THTR 3052. Theater of Protest. 3 Credit Hours.
Behind nearly every successful social movement, thwarted military coup or insurgent political revolution, there has always been the Theater of Protest.
A unique, cross-culturally distinct genre, the plays, the performers and oftentimes, even the playwrights themselves, that have added their political bent
to the discourse on the Theater of Protest, have put their lives on the line as resistance warriors in cultural movements, sometimes even paying the
ultimate price for their art.
Repeatability: This course may not be repeated for additional credits.
THTR 3053. Women in Theater. 3 Credit Hours.
This course examines the contribution of women in the theater from the renaissance to the present. Playwrights, actors, directors and designers are considered.

Repeatability: This course may not be repeated for additional credits.

THTR 3054. African-American Theater. 3 Credit Hours.
This course examines thematic concerns and dramatic techniques of African American theater from the Harlem Renaissance to the present.

Repeatability: This course may not be repeated for additional credits.

THTR 3055. Performance Art. 3 Credit Hours.
An introduction to performance art. Lecture and discussion of the history and aesthetics of the form. Students will create projects that may combine music, art, dance and theater. The course culminates in an original performance piece presented to the Theater Department at the end of the semester.

Repeatability: This course may not be repeated for additional credits.

THTR 3056. Shakespeare on Film. 3 Credit Hours.
"Shakespeare on Film" provides students the opportunity to develop an historical perspective of how the plays of William Shakespeare have been adapted to film. Students become familiar with the important 20th century figures who have been instrumental in the adaptation of Shakespeare to film, develop a critical understanding and appreciation of the film adaptations of Shakespeare's plays, and gain an appreciation of the breadth and influence of Shakespeare as seen in films of the last two decades.

Repeatability: This course may not be repeated for additional credits.

THTR 3057. Queer Theater. 3 Credit Hours.
Through the examination of seminal queer plays of the 20th and 21st centuries, from Sholom Asch's "God of Vengeance" to Mart Crowley's "The Boys in the Band" to Douglas Carter Beane's "The Little Dog Laughed," the students obtain an appreciation of the contribution of theater on the emergence of a visible and viable queer presence in society.

Repeatability: This course may not be repeated for additional credits.

THTR 3058. Community Engaged Theater. 3 Credit Hours.
This course will look at the use of theater and performance to examine and combat institutional, social, cultural, interpersonal, and personal oppressions. We will look at the various definitions of Theater for Social Change/Community Engaged Theater by reading essays and articles about the history of such work. We will engage in discussions about the ethical and practical challenges to doing this kind of work and develop our own ethical philosophies as practitioners. We will primarily use the work of Augusto Boal, founder of Theatre of the Oppressed, to develop our own performances that respond to local (expanding out to global) issues which most interest the members of the course. The course will combine theory and practice. This is a PRACTICAL course that will involve theater games, class participation and performance.

Repeatability: This course may not be repeated for additional credits.

THTR 3070. Seminar in Drama. 3 Credit Hours.
Intensive research into a specialized topic in dramatic literature, criticism, or theater history. Written and/or oral presentation required.

Repeatability: This course may be repeated for additional credit.

THTR 3080. Special Topics. 2 to 4 Credit Hours.
Advanced study in special topic areas under the direction of an area specialist. NOTE: Theater majors only. Permission of a faculty member.

Repeatability: This course may be repeated for additional credit.

THTR 3082. General Study. 1 to 3 Credit Hour.
Arranged each semester, please consult with the instructor.

Repeatability: This course may be repeated for additional credit.

THTR 3085. Practice Teaching in Theater I. 3 Credit Hours.
Active internships in the Education Department of a regional theater designed to edify the Theater Education Concentration student in the artistry and mechanics of the Education Department of a professional theater's activities. NOTE: This is a required course for students in the Theater Education Concentration within the Department of Theater.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Theater Education

Repeatability: This course may be repeated for additional credit.

THTR 3086. Practice Teaching in Theater II. 3 Credit Hours.
Active internships in the Education Department of a regional theater designed to edify the Theater Education Concentration student in the artistry and mechanics of the Education Department of a professional theater's activities. NOTE: This is a required course for students in the Theater Education Concentration within the Department of Theater.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Theater Education

Repeatability: This course may be repeated for additional credit.

THTR 3096. Classical Tradition. 3 Credit Hours.
The dramatic literature, criticism, and theater history of ancient Greece and Rome and their influence on Western theatrical development, studied in appropriate cultural contexts. NOTE: Theater majors must pass Theater 3096 with a grade of C or better.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.
THTR 3097. Romantic Tradition. 3 Credit Hours.
The dramatic literature, criticism, and theater history of the Renaissance in England and subsequent developments in Europe in the late 18th and early 19th centuries studied in appropriate cultural contexts. NOTE: Theater majors must pass Theater 3097 with a grade of C or better.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

THTR 3101. Jazz I for Musical Theater. 1 Credit Hour.
This course is designed to introduce the student to principles and techniques characteristic of Jazz dance. Students will execute movement combinations in a variety of jazz styles. Emphasis will be placed on movement fundamentals of alignment, flexibility, endurance, dynamic range, and strength. The two-course offerings in Jazz dance are essential to the Temple Musical Theater Concentration student's development.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Musical Theater
Repeatability: This course may not be repeated for additional credits.

THTR 3121. Jazz II for Musical Theater. 1 Credit Hour.
An intermediate level dance technique course designed to continue the student's development in the techniques of Jazz dance and acquaint the student with the origins and evolution of Jazz dance technique in America.
Field of Study Restrictions: Must be enrolled in one of the following Concentrations: Musical Theater
Repeatability: This course may not be repeated for additional credits.

THTR 3131. Advanced Jazz for Musical Theater. 1 to 3 Credit Hour.
An intermediate/advanced dance level technique course designed to continue the musical theater student's development in the technique of jazz dance. Combinations, leaps, and turning sequences become more complex with emphasis on technical proficiency, alignment fundamentals, use of space, strength, agility, endurance, weight placement, musicality, terminology, etiquette, and expression.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Musical Theater
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(THTR 2101|Minimum Grade of C-|May not be taken concurrently
AND THTR 2121|Minimum Grade of C-|May not be taken concurrently
AND THTR 3101|Minimum Grade of C-|May not be taken concurrently
AND THTR 3121|Minimum Grade of C-|May not be taken concurrently).

THTR 3132. Musical Theater Voice & Acting. 3 Credit Hours.
Practical work in the application of performance techniques to specific songs from the American Musical Theater of the first half of the 20th century provides a beginning experience in musical theater performance. Through exercises, analysis, critique and performance of classic musical theater compositions, students strengthen vocal technique and performance skills. Accordingly, the examination of early composers and styles provides a greater appreciation for the rich early stages of American musical theater. The incorporation of truthful acting with attention to given circumstances and objectives is blended with principles of healthy, supported singing. This is the Musical Theater Concentration student's first musical theater performance course.
Field of Study Restrictions: Must be enrolled in one of the following Concentrations: Musical Theater
Repeatability: This course may not be repeated for additional credits.

THTR 3141. Voice V for Musical Theater. 1 Credit Hour.
This fifth semester in the third year of a Musical Theater student's training is devoted to the study and performance of classic Broadway songs. Composers explored in this semester include Jerome Kern, Cole Porter, Irving Berlin, Harold Arlen, Rodgers and Hart, and Rodgers and Hammerstein. Attention is paid to the development of the singer's musicianship, proper breath support, core strength, legato singing, rhythmic accuracy, text analysis, English diction, and knowledge of classic musical theater composers. NOTE: Musical Theater Concentration students only.
Field of Study Restrictions: Must be enrolled in one of the following Concentrations: Musical Theater
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
THTR 2142|Minimum Grade of C|May not be taken concurrently.

THTR 3142. Voice VI for Musical Theater. 1 Credit Hour.
This sixth semester in the third year of the Musical Theater student's training is devoted to further study and performance of Broadway songs. Composers explored in this semester include Lerner and Loewe, Stephen Sondheim, Frank Loesser, Andrew Lloyd Webber, Jason Robert Brown, and Adam Guettel. Attention is paid to the development of the singer's musicianship, proper breath support, core strength, rhythmic accuracy, text analysis, English diction, and knowledge of all significant musical theater composers. NOTE: Musical Theater Concentration students only.
Field of Study Restrictions: Must be enrolled in one of the following Concentrations: Musical Theater
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
THTR 3141|Minimum Grade of C|May not be taken concurrently.
THTR 3151. Ballet III for Musical Theater. 1 Credit Hour.
The development of ballet techniques learned in Ballet I and II is continued. Barre combinations move faster and become more complex. Center exercises are longer and require more memorization and stamina. Different rhythms are introduced. Turnout based on individual ability and strength continues to be emphasized along with posture and core strength. More types of pirotettes and jumps are learned and embellished (multiple turns, beats). Proper placement is reinforced by students applying those concepts to the exercises and movements they learn. Head and arm movements are coordinated and synchronized. Memorization of steps and musicality are further developed. Precision of movement is stressed. The historical and social context of specific ballet movements is explained. Prerequisites are Ballet I and II, or by permission of instructor.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Musical Theater

Repeatability: This course may not be repeated for additional credits
Pre-requisites:

(THTR 2101|Minimum Grade of C|May not be taken concurrently)
AND (THTR 2121|Minimum Grade of C|May not be taken concurrently).

THTR 3191. Research. 1 to 3 Credit Hour.
Arranged each semester, please consult with the instructor.

Repeatability: This course may be repeated for additional credit.

THTR 3210. Theater Workshop. 3 Credit Hours.
Special Topics in Acting: Intensive study of a specific theater discipline as it applies to acting, voice, speech, singing and/or movement.

Repeatability: This course may be repeated for additional credit.

THTR 3220. Theater Workshop. 3 Credit Hours.
Special Topics in Acting: Intensive study of a specific theater discipline as it applies to acting, voice, speech, singing and/or movement. A continuation of Theater 3210.

Repeatability: This course may be repeated for additional credit.

THTR 3221. Advanced Voice for the Actor. 3 Credit Hours.
Focus on structuring the voice while maintaining relaxation and centeredness acquired in destructuring. Use rib-reserve and abdominal support/ transverse measures. Apply to monologues, poetry and scenes. NOTE: For majors only.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Theater

Repeatability: This course may be repeated for additional credit.
Pre-requisites:

(THTR 2221|Minimum Grade of C|May not be taken concurrently
AND THTR 2231|Minimum Grade of C|May not be taken concurrently).

THTR 3230. Theater Workshop. 3 Credit Hours.
Special Topics in Acting: Intensive study of a specific theater discipline as it applies to acting, voice, speech, singing and/or movement.

Repeatability: This course may be repeated for additional credit.

THTR 3231. Acting for Commercials, Industrials and Voice-Overs. 3 Credit Hours.
This is a studio course that introduces students to the skills and techniques needed to perform in on-camera commercials, voice-overs, industrials and trade show work. It will include instruction on how to audition for and successfully book this kind of work as well as training in techniques for teleprompter and earprompter work.

Department restrictions: Must be enrolled in one of the following Departments: SCT:Theater Instruction

Repeatability: This course may not be repeated for additional credits
Pre-requisites:

THTR 2261|Minimum Grade of C|May not be taken concurrently.

THTR 3241. Combat & Stunts for the Actor. 3 Credit Hours.
These classes will focus on the art and skill of stage and stunt violence. The actors will be trained in unarmed fake fighting so that they will be able to perform violence for film, television or stage with safety and precision. From punches and slaps, blocks and kicks or just falling safely, these classes help keep the actor safe long after the class is over. NOTE: Prior to spring 2009, the course title was "Stage Combat."

Repeatability: This course may not be repeated for additional credits

THTR 3242. Improvisation 2. 3 Credit Hours.
This course builds on the foundational skills explored in Improvisation, and continues the exploration of Actor's Improv. Short-form games and exercises are revisited to review and build skills in listening, being present and adaptable, and creating successful scene work. Students continue to develop skills as simultaneous playwright/director/actors in creating realistic, relationship-based scenes with a variety of emotionally-grounded truth-inspired characters. Several long-form formats and devices are explored. Students work with Instructor to create a trusting ensemble of spontaneous actors able to perform a variety of improvised forms in both comic and dramatic tone. End of semester includes a performance.

Repeatability: This course may not be repeated for additional credits
Pre-requisites:

THTR 2262|Minimum Grade of C|May not be taken concurrently.
THTR 3278. Acting for Film and TV. 3 Credit Hours.
This course is designed to develop performance skills before the camera. Actors are given experience in texts for commercials, soap operas, sit-coms, and/or film scenes, so that they are prepared for auditions in these areas. Individual and ensemble exercises may be on location and in the studio.
**Repeatability:** This course may be repeated for additional credit.

THTR 3279. Acting Ill. 3 Credit Hours.
The goal of this course is to assist the actor in negotiating the challenges of heightened language and period style while maintaining commitment to objectives, detailed given circumstances and truthful listening and reacting. The content of this course will focus on such writers as Shakespeare, Moliere, the Greeks, and Restoration. Requires intensive outside preparation of exercises and scenes for presentation in class. NOTE: Required for Acting Concentration.

**Field of Study Restrictions:** Must be enrolled in one of the following Fields of study: Musical Theater, Theater-Acting, Theater-Directing, Theater-Design, Theater Education, Theater

**Repeatability:** This course may not be repeated for additional credits.

**Pre-requisites:**
THTR 1096|Minimum Grade of C|May not be taken concurrently
AND THTR 2261|Minimum Grade of C|May not be taken concurrently.

THTR 3301. Introduction to the Director’s Art. 3 Credit Hours.
This class is geared to serve the needs of Advanced Actors, Design/tech students and Theater Generalists as well as Directors: a comprehensive introduction to the art and craft of directing and of the actor’s relationship to the director’s process. Direct two scenes. Learn the fundamental process and tools of directing: working with actors, focusing on text and character analysis, in-class exercises on staging techniques and composition theory; explore core rehearsal methods, status, and the relationship between language and behavior. NOTE: Theater majors must pass Theater 3301 with a grade of C or better.

**Repeatability:** This course may not be repeated for additional credits.

**Pre-requisites:**
THTR 1231|Minimum Grade of C|May not be taken concurrently
AND THTR 2411|Minimum Grade of C|May not be taken concurrently.

THTR 3321. Rehearsal & Performance. 2 to 4 Credit Hours.
The focus of this class will be on advancing the actor's storytelling techniques of script analysis and concept work by working with directors and culminating in the presentation of a one-act play or one act of a full-length play. Awareness of design elements as well as application of voice and movement techniques allow the actor to fully realize the character in the physical world of the play. This prepares the actor for the audition and rehearsal process in which the actor makes choices, brings something to the table and learns to collaborate with the director.

**Repeatability:** This course may be repeated for additional credit.

THTR 3305. Diamond Peer Teachers – Internship I. 1 Credit Hour.
The Diamond Peer Teachers Program provides students with a mentored university-level teaching experience in their major. Course requirements include participation in the three-day pre-semester Teaching Institute and regular participation in the Peer Teachers support group throughout the semester. Peer Teachers provide supplemental instruction in first- and second-year courses, promote student engagement, and model successful study habits and academic preparedness for students with whom they work. For Diamond Peer Teachers only.

**Department restrictions:** Must be enrolled in one of the following Departments: CA:Theater

**Field of Study Restrictions:** Must be enrolled in one of the following Fields of study: Theater

**Repeatability:** This course may be repeated for additional credit.

THTR 3306. Diamond Peer Teachers – Internship II. 1 Credit Hour.
The Diamond Peer Teachers Program provides students with a mentored university-level teaching experience in their major. Course requirements include participation in the three-day pre-semester Teaching Institute and regular participation in the Peer Teachers support group throughout the semester. Peer Teachers provide supplemental instruction in first- and second-year courses, promote student engagement, and model successful study habits and academic preparedness for students with whom they work. For Diamond Peer Teachers only.

**Department restrictions:** Must be enrolled in one of the following Departments: CA:Theater

**Field of Study Restrictions:** Must be enrolled in one of the following Fields of study: Theater

**Repeatability:** This course may be repeated for additional credit.

THTR 3421. Technical Direction for the Theater. 3 Credit Hours.
This course is designed to give students a solid introduction to the processes involved in successful technical direction. The technical director is part engineer, part manager, part designer and full-time problem solver. We’ll delve into problem solving (making the magic happen), budgeting (of time, money and talent), structural design (how to make things not fall down, unless you want them to), drafting (it’s different for technical directors) and project management (how to plan an effective build, load-in and strike). Student will serve as Assistant Technical Directors for our mainstage shows, and some production work will be involved. This class will serve as a production contract for students enrolled in THTR 1087.

**Repeatability:** This course may not be repeated for additional credits.

**Pre-requisites:**
THTR 1411|Minimum Grade of C|May not be taken concurrently.
THTR 3431. Scene Painting I. 3 Credit Hours.
This course introduces the basics of scene painting for the theater including the varieties of media. Projects will develop an understanding of executing painter’s elevations, layout techniques, color mixing and traditional “old world” methods of application. This hands-on course meets for a three hour session once a week. Some class projects will include scenic painting for realized productions for the Theater Department season.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
THTR 1411|Minimum Grade of C|May not be taken concurrently.

THTR 3432. Scene Painting II. 3 Credit Hours.
While continuing the development of traditional skill sets, this course focuses on various means of application and materials which new technology has made available. Real textures, controlled accident, chemical processes and non-traditional means of application are investigated. This hands-on course meets for a three hour session once a week. Some class projects will include scenic painting for realized productions for the Theater Department season.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
THTR 3431|Minimum Grade of C|May not be taken concurrently.

THTR 3442. Theater Management I. 3 Credit Hours.
This introductory course provides the opportunity to examine the key role of management and manager in theater, and the skills, knowledge, and relationships necessary to successfully manage. Students will explore, discuss, and practice areas of theater management including Company, Stage and House Management; Marketing and Communications; Audience Development and Education; Finance; Resource Development; and Leadership.
Repeatability: This course may not be repeated for additional credits.

THTR 3611. Visual History I. 3 Credit Hours.
A survey course which is subtitled “The History of Art, Architecture, Costume and Décor from Cave-Man to the Renaissance.” The fall semester will be an introduction to the visual arts, architecture, clothing and artifacts from early man to the Renaissance. The course surveys the major periods in Western history and the visual characteristics of each period. Students will explore how the cultural, political, and religious systems influenced art, architecture, costume and decor of the times; as well as the qualities that make each period visually distinct. The class will make use of paintings, film, slides, music, and hands-on projects to connect students with each time period. NOTE: Prior to fall 2009, the course title was “History of Costume and Architectural Decor.”
Repeatability: This course may not be repeated for additional credits.

THTR 3612. Visual History II. 3 Credit Hours.
A survey course which is subtitled “The History of Art, Architecture, Costume and Décor from Baroque to Space-Man.” The spring semester will be an introduction to the visual arts, architecture, clothing and artifacts from the Baroque period to Modern Day. The course surveys the major periods in Western history and the visual characteristics of each period. Students will explore how the cultural, political, and religious systems influenced art, architecture, costume and decor of the times; as well as the qualities that make each period visually distinct. The class will make use of paintings, film, slides, music, and hands-on projects to connect students with each time period.
Repeatability: This course may not be repeated for additional credits.

THTR 3621. Costume Production. 3 Credit Hours.
This course is an introduction to the process of costume construction form the designer’s sketch to the finished garment. This course will cover basic skills necessary to construct a garment and create costume props and accessories. Sewing skills, fabric identification and basic pattern layout are some of the topics included. Development and construction of costume props and accessories, such as hats, headdresses and masks will be covered.
Repeatability: This course may not be repeated for additional credits.

THTR 3622. Draping and Flat Pattern Drafting. 3 Credit Hours.
This course entails the development of a pattern using “slopers,” draping and flat pattern drafting. The course is geared for patterning and construction period costumes for theatrical use. Topics include methods to achieve a period silhouette, where to go for pattern resources, how to fit period garments and construction techniques specific to theater.
Repeatability: This course may not be repeated for additional credits.
Pre-requisites:
THTR 3621|Minimum Grade of C|May not be taken concurrently.

THTR 3623. Costume Crafts. 3 Credit Hours.
This class covers materials, techniques and alternative applications used in creating costume pieces that are crafted rather than sewn. Projects will include mask making, millinery and other costume accessories used in theatrical productions.
Repeatability: This course may not be repeated for additional credits.

THTR 3624. Draping and Flat Pattern Drafting 2. 3 Credit Hours.
This course entails advance flat pattern drafting and draping techniques needed to construct period garments for theatrical productions. The focus of the projects will be on period men’s garments, tailoring techniques and advance pattern drafting.
Repeatability: This course may not be repeated for additional credits.
THTR 3801. Playwriting. 3 Credit Hours.
This course is designed to introduce basic playwriting, in particular elements of the playwright's craft: dramatic action, plot, characterization and theatricality. The course functions as a playwriting workshop with students presenting exercises in class to be discussed by their peers. Utilizing techniques learned, students will complete a draft of a one-act play.
Repeatability: This course may not be repeated for additional credits.

THTR 4003. Production Dramaturgy. 2 to 4 Credit Hours.
This course engages the student in the process of providing comprehensive production dramaturgy to better enhance and support the creative process of mounting and marketing a theatrical production.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
THTR 4097|Minimum Grade of C|May not be taken concurrently
OR CMST 2111|Minimum Grade of C|May not be taken concurrently.

THTR 4097. World of the Play. 3 Credit Hours.
This course is intended to provide an overview of the dramaturgical research process. It is the prerequisite for an advanced elective course in Production Dramaturgy, where the students will be assigned to serve as actual production dramaturges for our six main stage productions, providing research materials for the cast, the creative team, and for publicity/marketing purposes. Included will be approaches to creating study guides for both audiences and for educational purposes.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

THTR 4101. Tap for Musical Theater. 1 Credit Hour.
This course develops knowledge and skill in the fundamental techniques of tap dance. Tap is a dance form consistently utilized by choreographers and training in the form is a requirement for Musical Theater Concentration students.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Musical Theater
Repeatability: This course may not be repeated for additional credits.

THTR 4121. Musical Theater Dance Techniques. 1 Credit Hour.
An intensive study of dance vocabulary utilized in auditions for the professional musical theater. Under the guidance of a working professional musical theater dancer/choreographer, students study and learn combinations in jazz, ballet, tap, hip-hop and modern dance. NOTE: Musical Theater Concentration students only.
Field of Study Restrictions: Must be enrolled in one of the following Concentrations: Musical Theater
Repeatability: This course may not be repeated for additional credits.

THTR 4131. Musical Theater Scene Study. 3 Credit Hours.
Practical work in the application of performance techniques to specific scenes from the American Musical Theater provides further development for the student of Musical Theater. Vocal and acting skills are combined with the development of character in musical play scene-work including both song and dialogue. Students spend the semester in collaboration with fellow students on notable and challenging scenes from the musical theater. This is the Musical Theater Concentration student's second musical theater performance course.
Field of Study Restrictions: Must be enrolled in one of the following Concentrations: Musical Theater
Repeatability: This course may not be repeated for additional credits.

THTR 4132. Senior Cabaret Workshop. 3 Credit Hours.
A semester-long study of, and practice in, the art of cabaret singing enhances the training of Musical Theater students as individual performers. The course culminates in a performance showcase highlighting the students' efforts. Students accomplish extensive song repertoire study and collaborate with the instructor and accompanist to create specific medleys and/or song arrangements that complement their vocal abilities. A semester-long examination of contemporary cabaret artists also occurs as well as weekly in-class performance opportunities. NOTE: Graduating seniors only - May or December.
Field of Study Restrictions: Must be enrolled in one of the following Concentrations: Musical Theater
Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
Repeatability: This course may not be repeated for additional credits.

THTR 4133. Musical Theater: Dress Rehearsal. 3 Credit Hours.
The Musical Theater Concentration culminates in Theater 4133, an intensive audition and performance seminar specially designed to prepare students for the rigorous demands of auditioning for and performing in professional musical theater. Throughout the semester, visiting guest professionals from Philadelphia and New York City provide valuable insight into the realities of acting in the musical theater as a profession.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Musical Theater
Repeatability: This course may not be repeated for additional credits.
THTR 4134. Directing for the Musical Stage. 2 to 4 Credit Hours.
The focus of this class will be on advancing the student director's skill as pertains to the American Musical Theater repertoire. The course will address the myriad challenges of directing a musical work: including heightened stakes and storytelling techniques, intensified scheduling and management requirements of musical productions, and collaboration with musical directors and choreographers. Students will also apply and enhance acquired skills in script analysis, concept work, staging, working with actors and design elements by applying them to a challenging variety of material from the American Musical Theater.

Repeatability: This course may not be repeated for additional credits
Pre-requisites:
THTR 3301|Minimum Grade of C|May not be taken concurrently.

THTR 4141. Voice VII for Musical Theater. 1 Credit Hour.
This seventh semester of the fourth year of the Musical Theater student's vocal growth and development prepares the student for entrance into the professional world and integrates the principles applied in the previous three years of study. This semester in a singer's training is devoted to the compilation of a repertoire book. Students hone 15 audition pieces for use in auditions for the Musical Theater. Attention is paid to the singer's professionalism, vocal stamina, and mastery of his/her vocal instrument. An in-depth study of the repertoire of the student's particular voice type is also undertaken. NOTE: Musical Theater Concentration students only.
Field of Study Restrictions: Must be enrolled in one of the following Concentrations: Musical Theater
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
THTR 3142|Minimum Grade of C|May not be taken concurrently.

THTR 4173. Writing Lyrics. 3 Credit Hours.
Students examine classic and contemporary examples of musical theater pieces, as well as works from other genres, and write their own scenes and lyrics. Students learn how to make jokes "land," how to incorporate a turn, and how to write in the present tense and "in the moment." They also are familiarized with various musical styles and learn to communicate with future collaborators. This course serves the Temple Theater student interested in the creation and writing of musical theater.
Repeatability: This course may not be repeated for additional credits.

THTR 4212. Acting IV. 3 Credit Hours.
Exploration of the physical life of the character using techniques derived from Michael Checkov and others. The actor is introduced to concepts of the Center, Psychological Gesture and the Invisible Envelope. Scene work will consist of material from the works of Chekov, Shaw, Wilde, Coward, O'Neill, Wilson, Miller, Shepard and Kushner. NOTE: Required for Acting Concentration.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Musical Theater, Theater-Acting, Theater-Directing, Theater-Design, Theater Education, Theater
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(THTR 1231|Minimum Grade of C|May not be taken concurrently
AND THTR 2261|Minimum Grade of C|May not be taken concurrently
AND THTR 3279|Minimum Grade of C|May not be taken concurrently).

THTR 4221. Theater as a Profession. 3 to 4 Credit Hours.
This course is designed for Theater majors who have completed most of their theater requirements and expect to work in the profession. The course provides information about the business of show business as well as instruction in auditioning, resume preparation, business expenses, artistic leadership and portfolio presentation. Guest faculty will discuss preparation for work in acting, directing, design, technical production, dramaturgy and playwriting. Projects for students in all areas will be included.
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Musical Theater, Theater-Acting, Theater-Directing, Theater-Design, Theater Education, Theater
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(THTR 1231|Minimum Grade of C|May not be taken concurrently
AND THTR 2261|Minimum Grade of C|May not be taken concurrently).

THTR 4222. Acting V. 3 Credit Hours.
This course is intended for students in the Acting Concentration who have completed the full Acting sequence. The student will apply all of the acting techniques and craft skills learned in their studies to carefully chosen monologues. In addition, the student will gain experience with the skill of cold-readings essential for the audition process. NOTE: Prior to fall 2009, the course title was "URTA Preparation Class."
Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Musical Theater, Theater-Acting, Theater-Directing, Theater-Design, Theater Education, Theater
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(THTR 1231|Minimum Grade of C|May not be taken concurrently
AND THTR 2261|Minimum Grade of C|May not be taken concurrently
AND THTR 3279|Minimum Grade of C|May not be taken concurrently
AND THTR 4212|Minimum Grade of C|May not be taken concurrently).
THTR 4241. Swordplay for the Actor. 3 Credit Hours.
Fighting with the sword is one of most exciting and rewarding skills that the actor can have in his bag of tricks. The ending of “Hamlet,” “King Lear” and “Pirates of the Caribbean” conclude with a fight scene. The student will be exercised in the sword and work towards its perfection. An emphasis on fencing with the foil, epee and sabre may become part of the student's regimen to teach better coordination and focus as well as the practical applications thereof. The second half of the semester will be spent working on sword technique in rehearsal style classes. The students will perform two fight scenes. One will be for the mid-term and the other for the final/adjudication. Certification with the Society of American Fight Directors is possible at the end of the semester. NOTE: Prior to spring 2009, the course title was “Advanced Stage Combat.”
Repeatability: This course may not be repeated for additional credits.

THTR 4282. Acting. 1 to 3 Credit Hour.
Arranged each semester, please consult with the instructor.
Repeatability: This course may be repeated for additional credit.

THTR 4299. Thesis for Acting Emphasis. 4 Credit Hours.
Selection, preparation, and performance of one-act plays. Focus on characterization, scene analysis, and a deeper understanding of acting technique as applied to the dramatic structure of the one-act. Plays are presented at the end of the semester in a Festival of One-Acts. This opportunity enables the actor to grow and develop in a way that only a major performance challenge can provide. Requires intensive outside rehearsal for presentation in class.
Co-requisites: THTR 1087
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
THTR 4222|Minimum Grade of C|May not be taken concurrently.

THTR 4301. Advanced Directing. 4 Credit Hours.
The focus of this class will be on advancing the director's storytelling techniques of script analysis, concept work, staging and working with actors and design elements by applying them to a challenging variety of material and longer forms beyond the single scene, culminating in the presentation of a one act play or one act of a full-length play.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(THTR 2261|Minimum Grade of C|May not be taken concurrently AND THTR 3241|Minimum Grade of C|May not be taken concurrently AND THTR 3301|Minimum Grade of C|May not be taken concurrently).

THTR 4482. Technical Production. 1 to 3 Credit Hour.
This course will explore techniques and practices in technical theater production and technical direction for theater. Topics will include advanced carpentry, metalwork, theater rigging, structural design, drafting, budgeting and theater safety with a focus on proper technique, craftsmanship and efficiency. The class will consist of both lecture and hands-on work. Students will complete a series of projects relevant to the topics covered.
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
THTR 1411|Minimum Grade of C|May not be taken concurrently.

THTR 4511. Creativity in Lighting. 3 Credit Hours.
Lighting design projects in the Lighting Laboratory. The purpose of the course is to expand the designer's vision beyond naturalistic effect and explore how painting, architecture, music, and other arts can provide inspiration and the basis for design in all media.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
THTR 2511|Minimum Grade of C|May not be taken concurrently.

THTR 4582. Lighting Design. 1 to 3 Credit Hour.
Arranged each semester, please consult with the instructor.
Repeatability: This course may be repeated for additional credit.

THTR 4611. Costume Design II. 4 Credit Hours.
A continuation of Costume Design I, this course will explore the process of taking a costume from the page to the stage. We will learn to read scripts, do script analysis from a costume designer's point of view, create character and budget breakdowns, and research costume, hair, make-up and accessories for a variety of time periods. Hand-on projects will include the creation of character collages, "thumbnail" sketches, fabric swatching and painted costume renderings for a variety of plays, musicals, operas, films and commercials. NOTE: Graphic projects required.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
THTR 2612|Minimum Grade of C|May not be taken concurrently.

THTR 4711. History of Modern Scenic Design. 3 Credit Hours.
Survey of major historical periods of theatrical design. Intensive reading in the period 1880 to present. Oral and written projects.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
THTR 1096|Minimum Grade of C|May not be taken concurrently.
THTR 4721. Scene Design II. 4 Credit Hours.
A project oriented course which deals with a wide variety of theatrical genre and with increasing degrees of complexity. The content is determined both by the needs of the students and by their particular interests. Students continue to develop drafting, rendering and model building skills.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
THTR 2721 [Minimum Grade of C] May not be taken concurrently.

THTR 4782. Scene Design. 1 to 3 Credit Hour.
Arranged each semester, please consult with the instructor.
Repeatability: This course may be repeated for additional credit.

THTR 4997. Honors World of the Play. 3 Credit Hours.
This course is intended to provide an overview of the dramaturgical research process. It is the prerequisite for an advanced elective course in Production Dramaturgy, where the students will be assigned to serve as actual production dramaturges for our six main stage productions, providing research materials for the cast, the creative team, and for publicity/marketing purposes. Included will be approaches to creating study guides for both audiences and for educational purposes. NOTE: This is an Honors course.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO, WI
Repeatability: This course may not be repeated for additional credits.

Therapeutic Recreation (THRC)

Courses

THRC 0813. Disability Identity. 3 Credit Hours.
Odds are that each of us will encounter disability at some point in our lives, either directly or indirectly through family, friends, neighbors, and colleagues. What is it like to live with a disability, and how does disability intersect with other aspects of personal identity, like gender, race and culture? Is disability socially and culturally defined? Join us as we examine historical perspectives of disability marked by fear and discrimination and fueled by media portrayals. We will then explore most recent indicators of personal, social, and environmental change that support disability identity and result in a more accommodating environment for us all. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot earn credit for THRC 0813 if they have successfully completed GUS 0813.
Course Attributes: GB
Repeatability: This course may not be repeated for additional credits.

THRC 1102. Adapted Sport, Recreation and Inclusive Leisure Services. 3 Credit Hours.
This course focuses on the organization and delivery of sport, fitness, recreation and leisure services to individuals with disabilities. Content includes principles and procedures for promoting inclusive community leisure services. Hands-on learning through volunteer experience is required. NOTE: Required of all students majoring in Therapeutic Recreation (recommended for other majors involved in services to persons with disabilities).
Repeatability: This course may not be repeated for additional credits.

THRC 2103. Foundations of Therapeutic Recreation Practice. 3 Credit Hours.
An introduction to the historical and conceptual roots of therapeutic recreation and its contemporary status as a profession is gained in this course. Content includes social-psychological aspects of recreation and leisure, therapeutic recreation service delivery models, legislation, professional organizations, and credentialing procedures.
Repeatability: This course may not be repeated for additional credits.
THRC 2104. Therapeutic Recreation Modalities. 3 Credit Hours.

In this experiential course, students are exposed to an assortment of activity-based interventions used in therapeutic recreation practice. Modalities to which students are introduced include but are not limited to animal-assisted therapy, horticulture, reminiscence, aromatherapy, massage, juggling, humor, sports, crafts, social skills and relaxation training. NOTE: Special authorization is required for non-majors. For Therapeutic Recreation majors, all Health Related Professions courses (HRPR 1001, HRPR 2103) and Cognate Core courses (KINS 1223, PSY 1001, PSY/SOC 1167, PSY 2301, and PSY 2201) must be successfully passed with a C or better to move on to this upper-division Therapeutic Recreation course.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(HRPR 1001|Minimum Grade of C|May not be taken concurrently
OR HRPR 1101|Minimum Grade of C|May not be taken concurrently
OR THRC 0813|Minimum Grade of C|May not be taken concurrently
OR HRPR 1201|Minimum Grade of C|May not be taken concurrently
AND (HRPR 2103|Minimum Grade of C|May not be taken concurrently
AND (KINS 1223|Minimum Grade of C|May not be taken concurrently
OR KIN1 Y|May not be taken concurrently
AND (PSY 1061|Minimum Grade of C|May not be taken concurrently
OR PSY 1001|Minimum Grade of C|May not be taken concurrently
OR PSY1 Y|May not be taken concurrently
AND (THRC 1102|Minimum Grade of C|May not be taken concurrently
AND (THRC 2103|Minimum Grade of C|May not be taken concurrently).

THRC 2201. Therapeutic Recreation and Developmental Disabilities. 3 Credit Hours.

This course allows students to explore the role of recreation in the habilitation, rehabilitation and inclusive community life of individuals with developmental disabilities. Students are introduced to the principles and methods of service delivery based on person-centered planning, transitional life skills, community reintegration and inclusion. NOTE: For Therapeutic Recreation majors, all Health Related Professions courses (HRPR 1001, HRPR 2103) and Cognate Core courses (KINS 1223, PSY 1001, PSY/SOC 1167, PSY 2301, and PSY 2201) must be successfully passed with a C or better to move on to this upper-division Therapeutic Recreation course.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(HRPR 1001|Minimum Grade of C|May not be taken concurrently
OR HRPR 1101|Minimum Grade of C|May not be taken concurrently
OR THRC 0813|Minimum Grade of C|May not be taken concurrently
OR HRPR 1201|Minimum Grade of C|May not be taken concurrently
AND (HRPR 2103|Minimum Grade of C|May not be taken concurrently
AND (KINS 1223|Minimum Grade of C|May not be taken concurrently
OR KIN1 Y|May not be taken concurrently
AND (PSY 1061|Minimum Grade of C|May not be taken concurrently
OR PSY 1001|Minimum Grade of C|May not be taken concurrently
OR PSY1 Y|May not be taken concurrently
AND (THRC 1102|Minimum Grade of C|May not be taken concurrently
AND (THRC 2103|Minimum Grade of C|May not be taken concurrently).

THRC 2203. Assistive Technology in Recreation. 3 Credit Hours.

This course introduces students to the range of assistive devices used with persons with disabilities to support physically and socially active involvement in recreation and leisure pursuits. Students learn to adapt activity materials to accommodate varying functional abilities and how to use assistive devices, ranging from simple adaptive sports equipment to augmentative communication devices, with individuals with disabilities. NOTE: Course is open to all majors and is appropriate for those students interested in working with individuals with disabilities. For Therapeutic Recreation majors, all Health Related Professions courses (HRPR 1001, HRPR 2103) and Cognate Core courses (KINS 1223, PSY 1001, PSY/SOC 1167, PSY 2301, and PSY 2201) must be successfully passed with a C or better to move on to this upper-division Therapeutic Recreation course.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(HRPR 1001|Minimum Grade of C|May not be taken concurrently
OR HRPR 1101|Minimum Grade of C|May not be taken concurrently
OR THRC 0813|Minimum Grade of C|May not be taken concurrently
OR HRPR 1201|Minimum Grade of C|May not be taken concurrently
AND (HRPR 2103|Minimum Grade of C|May not be taken concurrently
AND (KINS 1223|Minimum Grade of C|May not be taken concurrently
OR KIN1 Y|May not be taken concurrently
AND (PSY 1061|Minimum Grade of C|May not be taken concurrently
OR PSY 1001|Minimum Grade of C|May not be taken concurrently
OR PSY1 Y|May not be taken concurrently
AND (THRC 1102|Minimum Grade of C|May not be taken concurrently
AND (THRC 2103|Minimum Grade of C|May not be taken concurrently).
THRC 2205. Adventure Challenge/Programming. 3 Credit Hours.
This course introduces students to theoretical and practical approaches to using experiential learning and adventure therapy. Students experience team-building activities and are taught core leadership skills required when leading adventure challenge activities, as well as approaches and techniques for use of these activities with clients with disabilities. NOTE: The course is open to all majors and is appropriate for those interested in team-building activities. Upon successful completion of low rope and challenge activities, students receive a certificate indicating they have been trained to lead low ropes and team challenge activities.
Repeatability: This course may not be repeated for additional credits.

THRC 3096. Assessment and Documentation in Therapeutic Recreation. 3 Credit Hours.
In this course, students learn the clinical process used by healthcare professionals when working in health and human service agencies with particular emphasis on assessment and documentation as it relates to the discipline of therapeutic recreation. Students learn clinical skills related to client intake and assessment, treatment planning, and documentation. NOTE: Special authorization is required for non-majors.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Therapeutic Recreation
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(HRPR 1001|Minimum Grade of C|May not be taken concurrently
OR HRPR 1101|Minimum Grade of C|May not be taken concurrently
OR THRC 0813|Minimum Grade of C|May not be taken concurrently
OR HRPR 1201|Minimum Grade of C|May not be taken concurrently)
AND (HRPR 2103|Minimum Grade of C|May not be taken concurrently)
AND (KINS 1223|Minimum Grade of C|May not be taken concurrently)
OR KIN1 Y|May not be taken concurrently
AND (PSY 1061|Minimum Grade of C|May not be taken concurrently
OR PSY 1001|Minimum Grade of C|May not be taken concurrently
OR PSY1 Y|May not be taken concurrently
OR (THRC 1102|Minimum Grade of C|May not be taken concurrently
AND (THRC 2103|Minimum Grade of C|May not be taken concurrently).

THRC 3103. Professional Seminar II. 3 Credit Hours.
This is a seminar course designed to allow students to explore personal and professional issues related to completing their academic experience. Students evaluate their readiness to begin practicing as a recreation therapist. Topics include certification, professional ethics, professional involvement and responsibilities, and client advocacy. Students review and refine their professional portfolios, practice interviewing skills, and discuss issues related to continuing education and growth as a healthcare provider. Students are guided in the process of securing and succeeding at their internship placements. NOTE: For Therapeutic Recreation majors, all Health Related Professions courses (HRPR 1001, HRPR 2103) and Cognate Core courses (KINS 1223, PSY 1001, PSY/SOC 1167, PSY 2301, and PSY 2201) must be successfully passed with a C or better to move on to this upper-division Therapeutic Recreation course.
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(HRPR 1001|Minimum Grade of C|May not be taken concurrently
OR HRPR 1101|Minimum Grade of C|May not be taken concurrently
OR THRC 0813|Minimum Grade of C|May not be taken concurrently
OR HRPR 1201|Minimum Grade of C|May not be taken concurrently)
AND (HRPR 2103|Minimum Grade of C|May not be taken concurrently)
AND (KINS 1223|Minimum Grade of C|May not be taken concurrently)
OR KIN1 Y|May not be taken concurrently
AND (PSY 1061|Minimum Grade of C|May not be taken concurrently
OR PSY 1001|Minimum Grade of C|May not be taken concurrently
OR PSY1 Y|May not be taken concurrently
OR (PSY 2201|Minimum Grade of C|May not be taken concurrently
AND (PSY 2201|Minimum Grade of C|May not be taken concurrently
OR PSY2 Y|May not be taken concurrently
AND (PSY 2301|Minimum Grade of C|May not be taken concurrently
AND (EDUC 1322|Minimum Grade of C|May not be taken concurrently
AND (PSY 1167|Minimum Grade of C|May not be taken concurrently
OR SOC 1167|Minimum Grade of C|May not be taken concurrently
OR PSY 1003|Minimum Grade of C|May not be taken concurrently
OR STT4 Y|May not be taken concurrently).
THRC 3111. Health Promotion through Leisure Education. 3 Credit Hours.
In this course, students examine the relationship between health promotion and leisure behavior for individuals with disabilities. Students learn to design programs for health promotion and leisure education. The use of technology to develop health promotion teaching materials is required. NOTE: For Therapeutic Recreation majors, all Health Related Professions courses (HRPR 1001, HRPR 2103) and Cognate Core courses (KINS 1223, PSY 1001, PSY/SOC 1167, PSY 2301, and PSY 2201) must be successfully passed with a C or better to move on to this upper-division Therapeutic Recreation course.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(HRPR 1001|Minimum Grade of C|May not be taken concurrently)
OR HRPR 1101|Minimum Grade of C|May not be taken concurrently
OR THRC 0813|Minimum Grade of C|May not be taken concurrently
OR HRPR 1201|Minimum Grade of C|May not be taken concurrently
AND (HRPR 2103|Minimum Grade of C|May not be taken concurrently)
AND (KINS 1223|Minimum Grade of C|May not be taken concurrently)
OR KIN1 Y|May not be taken concurrently
AND (PSY 1061|Minimum Grade of C|May not be taken concurrently)
OR PSY 1001|Minimum Grade of C|May not be taken concurrently
OR PSY1 Y|May not be taken concurrently
AND (PSY 2201|Minimum Grade of C|May not be taken concurrently)
OR PSY2 Y|May not be taken concurrently
AND (THRC 1102|Minimum Grade of C|May not be taken concurrently)
AND (THRC 2103|Minimum Grade of C|May not be taken concurrently)
AND (PSY 2301|Minimum Grade of C|May not be taken concurrently)
OR PSY3 Y|May not be taken concurrently
OR EDUC 1322|Minimum Grade of C|May not be taken concurrently).

THRC 3185. Internship I. 3 Credit Hours.
This course involves a 150-hour field placement experience at a health and human service agency in which students are involved with ongoing therapeutic recreation programs and services. NOTE: Students are required to obtain child abuse and criminal clearance background checks, complete the College of Health Professions Health Screening, and complete a minimum of 65 professional development hours by the deadline date set by the junior internship coordinator PRIOR to beginning field placement experience. For Therapeutic Recreation majors, all Health Related Professions courses (HRPR 1001, HRPR 2103) and Cognate Core courses (KINS 1223, PSY 1001, PSY/SOC 1167, PSY 2301, and PSY 2201) must be successfully passed with a C or better to move on to this upper-division Therapeutic Recreation course.

Repeatability: This course may be repeated for additional credit.

Pre-requisites:
(HRPR 1001|Minimum Grade of C|May not be taken concurrently)
OR HRPR 1101|Minimum Grade of C|May not be taken concurrently
OR THRC 0813|Minimum Grade of C|May not be taken concurrently
OR HRPR 1201|Minimum Grade of C|May not be taken concurrently
AND (HRPR 2103|Minimum Grade of C|May not be taken concurrently)
AND (KINS 1223|Minimum Grade of C|May not be taken concurrently)
OR KIN1 Y|May not be taken concurrently
AND (PSY 1061|Minimum Grade of C|May not be taken concurrently)
OR PSY 1001|Minimum Grade of C|May not be taken concurrently
OR PSY1 Y|May not be taken concurrently
AND (PSY 2201|Minimum Grade of C|May not be taken concurrently)
OR PSY2 Y|May not be taken concurrently
AND (THRC 1102|Minimum Grade of C|May not be taken concurrently)
AND (THRC 2103|Minimum Grade of C|May not be taken concurrently)
AND (THRC 2104|Minimum Grade of C|May not be taken concurrently)
AND (THRC 3101|Minimum Grade of C|May not be taken concurrently)
OR THRC 3096|Minimum Grade of C|May not be taken concurrently
AND (PSY 2301|Minimum Grade of C|May not be taken concurrently)
OR PSY3 Y|May not be taken concurrently
OR EDUC 1322|Minimum Grade of C|May not be taken concurrently)
AND (PSY 1167|Minimum Grade of C|May not be taken concurrently)
OR SOC 1167|Minimum Grade of C|May not be taken concurrently
OR PSY 1003|Minimum Grade of C|May not be taken concurrently
OR STT4 Y|May not be taken concurrently).
THRC 3196. Research and Evaluation in Therapeutic Recreation. 3 Credit Hours.
This is the capstone, Writing-Intensive course for Therapeutic Recreation majors. It is designed to enable students to evaluate and interpret research and to apply the results of these interpretations to therapeutic recreation practice in the form of evidence-based practice. Students learn fundamental research terminology and procedures including the strengths and limitation of both naturalistic and positivistic research methods utilized in field-based settings. Extensive reading and critiquing of empirical research is required for successful completion. NOTE: For Therapeutic Recreation majors, all Health Related Professions courses (HRPR 1001, HRPR 2103) and Cognate Core courses (KINS 1223, PSY 1001, PSY/SOC 1167, PSY 2301, and PSY 2201) must be successfully passed with a C or better to move on to this upper-division Therapeutic Recreation course.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Therapeutic Recreation

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(HRPR 1001|Minimum Grade of C|May not be taken concurrently
OR HRPR 1101|Minimum Grade of C|May not be taken concurrently
OR THRC 0813|Minimum Grade of C|May not be taken concurrently
OR HRPR 1201|Minimum Grade of C|May not be taken concurrently
AND (HRPR 2103|Minimum Grade of C|May not be taken concurrently)
AND (KINS 1223|Minimum Grade of C|May not be taken concurrently
OR KIN1 Y|May not be taken concurrently)
AND (PSY 1061|Minimum Grade of C|May not be taken concurrently
OR PSY 1001|Minimum Grade of C|May not be taken concurrently
OR PSY1 Y|May not be taken concurrently)
AND (PSY 2201|Minimum Grade of C|May not be taken concurrently
OR PSY2 Y|May not be taken concurrently)
AND (THRC 1102|Minimum Grade of C|May not be taken concurrently
AND (THRC 2103|Minimum Grade of C|May not be taken concurrently
AND (THRC 2104|Minimum Grade of C|May not be taken concurrently
AND (THRC 3185|Minimum Grade of C|May not be taken concurrently
AND (THRC 3101|Minimum Grade of C|May not be taken concurrently
AND (THRC 3096|Minimum Grade of C|May not be taken concurrently
AND (PSY 2301|Minimum Grade of C|May not be taken concurrently
OR PSY3 Y|May not be taken concurrently
OR EDUC 1322|Minimum Grade of C|May not be taken concurrently
AND (PSY 1167|Minimum Grade of C|May not be taken concurrently
OR SOC 1167|Minimum Grade of C|May not be taken concurrently
OR PSY 1003|Minimum Grade of C|May not be taken concurrently
OR STT4 Y|May not be taken concurrently).

THRC 3201. Health, Activity, and Aging. 3 Credit Hours.
This course will examine the concept of "well aging" with a focus on the contribution of a socially and physically active leisure lifestyle to the wellness of elders living in retirement and assisted living communities. NOTE: Appropriate for individuals with interests in psychology, public health and sociology.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Therapeutic Recreation

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
PSY 1061|Minimum Grade of C|May not be taken concurrently
OR PSY 1001|Minimum Grade of C|May not be taken concurrently
OR PSY1 Y|May not be taken concurrently.
THRC 3203. Therapeutic Recreation and Mental Health. 3 Credit Hours.
Students examine the role of recreation therapy in behavioral healthcare in this course. Content includes terminology, etiology, and care of individuals with acute and chronic mental illnesses and the importance of recreation as a coping resource and component of life quality. Issues associated with relapse prevention and the role and function of recreation therapists within the healthcare team are discussed. NOTE: For Therapeutic Recreation majors, all Health Related Professions courses (HRPR 1001, HRPR 2103) and Cognate Core courses (KINS 1223, PSY 1001, PSY/SOC 1167, PSY 2301, and PSY 2201) must be successfully passed with a C or better to move on to this upper-division Therapeutic Recreation course.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(HRPR 1001|Minimum Grade of C|May not be taken concurrently)
OR HRPR 1101|Minimum Grade of C|May not be taken concurrently
OR THRC 0813|Minimum Grade of C|May not be taken concurrently
OR HRPR 1201|Minimum Grade of C|May not be taken concurrently
AND (HRPR 2103|Minimum Grade of C|May not be taken concurrently)
AND (PSY 1061|Minimum Grade of C|May not be taken concurrently)
OR PSY 1001|Minimum Grade of C|May not be taken concurrently
OR PSY1 Y|May not be taken concurrently
AND (PSY 2201|Minimum Grade of C|May not be taken concurrently)
OR PSY2 Y|May not be taken concurrently
AND (THRC 1102|Minimum Grade of C|May not be taken concurrently)
AND (THRC 2103|Minimum Grade of C|May not be taken concurrently)
AND (THRC 3101|Minimum Grade of C|May not be taken concurrently)
OR THRC 3096|Minimum Grade of C|May not be taken concurrently).

THRC 3282. Independent Study in Therapeutic Recreation. 1 to 3 Credit Hour.
In this course, students undertake supervised independent projects on issues related to health, leisure, and disabilities.

Repeatability: This course may be repeated for additional credit.
THRC 4111. Administration of Therapeutic Recreation. 3 Credit Hours.
This course explores the management of therapeutic recreation services based on professional standards of practice. Reflecting the range of healthcare and human services agencies where therapeutic recreation is practiced, topics include administrative theory and decision-making, budgeting and reimbursement, risk management, marketing, personnel and volunteer policies and procedures, and quality improvement. The use of technology as part of the management process is also discussed, including the use of spreadsheets and other data management programs. NOTE: This course is for majors only. For Therapeutic Recreation majors, all Health Related Professions courses (HRPR 1001, HRPR 2103) and Cognate Core courses (KINS 1223, PSY 1001, PSY/SOC 1167, PSY 2301, and PSY 2201) must be successfully passed with a C or better to move on to this upper-division Therapeutic Recreation course.

Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits

Co-requisites: THRC 4185

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(HRPR 1001|Minimum Grade of C|May not be taken concurrently)
OR HRPR 1101|Minimum Grade of C|May not be taken concurrently
OR THRC 0813|Minimum Grade of C|May not be taken concurrently
OR HRPR 1201|Minimum Grade of C|May not be taken concurrently
AND (HRPR 2103|Minimum Grade of C|May not be taken concurrently)
AND (KINS 1223|Minimum Grade of C|May not be taken concurrently)
AND (KIN 1 Y|May not be taken concurrently)
AND (PSY 1061|Minimum Grade of C|May not be taken concurrently)
OR PSY 1001|Minimum Grade of C|May not be taken concurrently
OR PSY 1 Y|May not be taken concurrently
AND (PSY 2201|Minimum Grade of C|May not be taken concurrently)
OR PSY 2 Y|May not be taken concurrently
AND (THRC 1102|Minimum Grade of C|May not be taken concurrently)
AND (THRC 2103|Minimum Grade of C|May not be taken concurrently)
AND (THRC 2104|Minimum Grade of C|May not be taken concurrently)
AND (THRC 3103|Minimum Grade of C|May not be taken concurrently)
AND (THRC 3111|Minimum Grade of C|May not be taken concurrently)
AND (THRC 3185|Minimum Grade of C|May not be taken concurrently)
AND (THRC 3196|Minimum Grade of C|May not be taken concurrently)
AND (THRC 4196|Minimum Grade of C|May not be taken concurrently)
AND (THRC 3101|Minimum Grade of C|May not be taken concurrently)
OR THRC 3096|Minimum Grade of C|May not be taken concurrently)
AND (PSY 2301|Minimum Grade of C|May not be taken concurrently)
OR PSY 3 Y|May not be taken concurrently
OR EDUC 1322|Minimum Grade of C|May not be taken concurrently)
AND (PSY 1167|Minimum Grade of C|May not be taken concurrently)
OR SOC 1167|Minimum Grade of C|May not be taken concurrently)
OR PSY 1003|Minimum Grade of C|May not be taken concurrently
OR STT4 Y|May not be taken concurrently).
THRC 4185. Internship II. 12 Credit Hours.
This course is a semester-long, 600-hour field placement where students apply academic learning to demonstrate competencies associated with entry-level practice in therapeutic recreation. NOTE: Requires current certification in first aid and CPR. Pre-placement health screening, child abuse and criminal clearances are also required prior to the start of the internship experience by the deadline date set by the senior internship coordinator. Completion of 120 professional development hours is required. Special authorization is required for internship placements greater than 150 miles from Temple University's main campus. See the senior internship coordinator for details.

Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits

Co-requisites: THRC 4111

Repeatability: This course may be repeated for additional credit.

Pre-requisites:
(HRPR 1001|Minimum Grade of C|May not be taken concurrently)
OR HRPR 1101|Minimum Grade of C|May not be taken concurrently
OR THRC 0813|Minimum Grade of C|May not be taken concurrently
OR HRPR 1201|Minimum Grade of C|May not be taken concurrently
AND (HRPR 2103|Minimum Grade of C|May not be taken concurrently)
AND (KINS 1223|Minimum Grade of C|May not be taken concurrently)
OR KIN1 Y|May not be taken concurrently)
AND (PSY 1061|Minimum Grade of C|May not be taken concurrently
OR PSY 1001|Minimum Grade of C|May not be taken concurrently
OR PSY1 Y|May not be taken concurrently)
AND (PSY 2201|Minimum Grade of C|May not be taken concurrently
OR PSY2 Y|May not be taken concurrently)
AND (THRC 1102|Minimum Grade of C|May not be taken concurrently
AND (THRC 2103|Minimum Grade of C|May not be taken concurrently
AND (THRC 2104|Minimum Grade of C|May not be taken concurrently
AND (THRC 3103|Minimum Grade of C|May not be taken concurrently
AND (THRC 3111|Minimum Grade of C|May not be taken concurrently
AND (THRC 3185|Minimum Grade of C|May not be taken concurrently
AND (THRC 3196|Minimum Grade of C|May not be taken concurrently
AND (THRC 4196|Minimum Grade of C|May not be taken concurrently
AND (THRC 3101|Minimum Grade of C|May not be taken concurrently
AND THRC 3096|Minimum Grade of C|May not be taken concurrently
AND (PSY 2301|Minimum Grade of C|May not be taken concurrently
OR PSY3 Y|May not be taken concurrently
OR EDUC 1322|Minimum Grade of C|May not be taken concurrently
AND (PSY 1167|Minimum Grade of C|May not be taken concurrently
OR SOC 1167|Minimum Grade of C|May not be taken concurrently
OR PSY 1003|Minimum Grade of C|May not be taken concurrently
OR STT4 Y|May not be taken concurrently).

THRC 4196. Therapeutic Recreation Clinical Procedures. 3 Credit Hours.
This course allows students to further their understanding of clinical practice in therapeutic recreation through an examination of how recreation therapists use activity-based interventions, the environment, and therapeutic relationships to facilitate individual and group behavioral change. Students design protocols for intervention groups and simulate leadership techniques used by recreation therapists in clinical practice. Field-based application of group planning and leadership is required. NOTE: This course is for majors only and should be taken the semester before enrolling in THRC 4185. Field-based application of group planning and leadership is required. For Therapeutic Recreation majors, all Health Related Professions courses (HRPR 1001, HRPR 2103) and Cognate Core courses (KINS 1223, PSY 1001, PSY/SOC 1167, PSY 2301, and PSY 2201) must be successfully passed with a C or better to move on to this upper-division Therapeutic Recreation course.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(THRC 3185|Minimum Grade of C|May not be taken concurrently)
AND (PSY 2201|Minimum Grade of C|May not be taken concurrently
OR PSY2 Y|May not be taken concurrently)
AND (PSY 2301|Minimum Grade of C|May not be taken concurrently
OR PSY3 Y|May not be taken concurrently
OR EDUC 1322|Minimum Grade of C|May not be taken concurrently
AND (PSY 1167|Minimum Grade of C|May not be taken concurrently
OR SOC 1167|Minimum Grade of C|May not be taken concurrently
OR PSY 1003|Minimum Grade of C|May not be taken concurrently
OR STT4 Y|May not be taken concurrently).
THRC 4205. Therapeutic Recreation in Geriatric Service Settings. 3 Credit Hours.
This course is designed to provide an overview of settings that provide services for the geriatric population. The course examines current techniques and philosophies toward therapeutic recreation programming for individuals utilizing such services. The students are required to visit, observe, and complete assignments with elders in geriatric service settings throughout the semester. The observation and hands-on experience support student learning and create opportunities to interact with elders. The course examines techniques, issues, and best practices related to conducting innovative and effective programs for elders in a variety of settings, as well as discussing the current trends and obstacles for delivery of services.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(HRPR 1001|Minimum Grade of C|May not be taken concurrently
 OR HRPR 1101|Minimum Grade of C|May not be taken concurrently
 OR THRC 0813|Minimum Grade of C|May not be taken concurrently
 OR HRPR 1201|Minimum Grade of C|May not be taken concurrently)
 AND (HRPR 2103|Minimum Grade of C|May not be taken concurrently)
 AND (KINS 1223|Minimum Grade of C|May not be taken concurrently)
 OR KIN1 Y|May not be taken concurrently)
 AND (PSY 1061|Minimum Grade of C|May not be taken concurrently)
 OR PSY 1001|Minimum Grade of C|May not be taken concurrently
 OR PSY1 Y|May not be taken concurrently)
 AND (THRC 1102|Minimum Grade of C|May not be taken concurrently)
 AND (THRC 2103|Minimum Grade of C|May not be taken concurrently)

THRC 4211. Therapeutic Recreation and Physical Disabilities. 3 Credit Hours.
This course provides the student with an opportunity to become familiar with the etiology, characteristics, and complications of various disabling conditions. Common assessment findings and approaches to treatment for each disability will be reviewed, as well as the role of the recreational therapist within the rehabilitation and health promotion process. Issues associated with independent living and the implications for the role and function of recreation therapists within the rehabilitation team are addressed.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(HRPR 1001|Minimum Grade of C|May not be taken concurrently
 OR HRPR 1101|Minimum Grade of C|May not be taken concurrently
 OR THRC 0813|Minimum Grade of C|May not be taken concurrently
 OR HRPR 1201|Minimum Grade of C|May not be taken concurrently)
 AND (HRPR 2103|Minimum Grade of C|May not be taken concurrently)
 AND (KINS 1223|Minimum Grade of C|May not be taken concurrently
 OR KIN1 Y|May not be taken concurrently)
 AND (PSY 1061|Minimum Grade of C|May not be taken concurrently)
 OR PSY 1001|Minimum Grade of C|May not be taken concurrently
 OR PSY1 Y|May not be taken concurrently)
 AND (THRC 1102|Minimum Grade of C|May not be taken concurrently)
 AND (THRC 2103|Minimum Grade of C|May not be taken concurrently
 AND (THRC 2104|Minimum Grade of C|May not be taken concurrently)
 AND (THRC 3101|Minimum Grade of C|May not be taken concurrently)
 OR THRC 3096|Minimum Grade of C|May not be taken concurrently).
THRC 4213. Therapeutic Recreation and Pediatric Healthcare. 3 Credit Hours.
This course examines the range of organized and structured play and recreation services used by recreation therapists to promote the health, well-being, and social inclusion of children. Using the social model of disability (ICF) as the conceptual framework, students will examine the influence of the physical and social environment (family, peers) on health and well-being, as well as varied therapeutic uses of play and recreation that foster resilience and recovery and promote social development and community inclusion. The course is used to link developmental needs of children with services provided in varied service delivery settings, including hospitals and residential treatment centers, schools, camps, public parks, and recreation departments. The psychosocial needs and experiences of children resulting from trauma, abuse, and varied chronic illnesses and disabling conditions (e.g., cerebral palsy, autism spectrum disorders, conduct disorders, and ADHD) are reviewed.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(HRPR 1001|Minimum Grade of C|May not be taken concurrently
OR HRPR 1101|Minimum Grade of C|May not be taken concurrently
OR THRC 0813|Minimum Grade of C|May not be taken concurrently
OR HRPR 1201|Minimum Grade of C|May not be taken concurrently
AND (HRPR 2103|Minimum Grade of C|May not be taken concurrently
AND (KINS 1223|Minimum Grade of C|May not be taken concurrently
OR KIN1 Y|May not be taken concurrently
AND (PSY 1061|Minimum Grade of C|May not be taken concurrently
OR PSY 1001|Minimum Grade of C|May not be taken concurrently
OR PSY1 Y|May not be taken concurrently
AND (THRC 1102|Minimum Grade of C|May not be taken concurrently
AND (THRC 2103|Minimum Grade of C|May not be taken concurrently
AND (THRC 2104|Minimum Grade of C|May not be taken concurrently
AND (THRC 3101|Minimum Grade of C|May not be taken concurrently
OR THRC 3096|Minimum Grade of C|May not be taken concurrently
AND (PSY 2301|Minimum Grade of C|May not be taken concurrently
OR PSY3 Y|May not be taken concurrently
OR EDUC 1322|Minimum Grade of C|May not be taken concurrently).

Topical Studies (TS)

Courses

TS 1185. Field Study - Extern. 2 to 3 Credit Hours.
Students participate in a field experience that varies according to interests and the number of credits the student wishes to pursue. Students in some colleges (SCT, for example) receive no credits for this experience. In the classroom component, students participate in discussions regarding career selection, search skills, resume writing and critiques, and interviewing skills. The field study may take place during a specific time period (Spring Break, the first two weeks of January, during an entire term) which is noted on the course at the time of registration.

Repeatability: This course may be repeated for additional credit.

TS 1285. Field Study - Extern. 2 to 3 Credit Hours.
Students who take Topical Studies 1185 (0084) may not take Topical Studies 1285 (0085). Course only available to those with an extern placement. Students participate in a field experience that varies according to interests and the number of credits the student wishes to pursue. Students in some colleges (SCT, for example) receive no credits for this experience. In the classroom component, students participate in discussions regarding career selection, search skills, resume writing and critiques, and interviewing skills. The field study may take place during a specific time period (Spring Break, the first two weeks of January, during an entire term) which is noted on the course at the time of registration.

Repeatability: This course may be repeated for additional credit.

TS 3082. Independent Study. 3 Credit Hours.
Students make arrangements with faculty in their departments to take an individual program of study. Course is by arrangement. Contact department chair for information.

Repeatability: This course may be repeated for additional credit.

TS 4082. Independent Study. 16 Credit Hours.
Students make arrangements with faculty in their departments to take an individual program of study. Course is by arrangement. Contact department chair for information.

Repeatability: This course may be repeated for additional credit.

Tourism&Hospitality Management (STHM)
Courses

STHM 0827. Dimensions of Diversity: What’s Brewing in the Melting Pot?. 3 Credit Hours.
Are we really living in a melting pot? How important are the differences and similarities among individuals? The purpose of this course will be to focus on a variety of issues related to the nature of personal and cultural identity within a diverse American society. Specifically, this course will explore critical factors that shape one’s place or standing in society (e.g., race, disability, age, gender, and sexuality). The meaning and significance of these dimensions will be explored as they relate to the societal and technological complexities of the 21st Century. The best practice and research in racism, inequality, and social injustice in industries such as sport, leisure, tourism and healthcare will be explored. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core.
Course Attributes: GD
Repeatability: This course may not be repeated for additional credits.

STHM 0857. Sport & Leisure in American Society. 3 Credit Hours.
Explore the complexity and diversity of American society through the study of sport and leisure. To what extent does the way we play or spectate sports, the way we plan or experience leisure time, reflect American values? As we trace a brief history of the United States through the lens of sport and leisure, we will observe how concepts of freedom, democracy and equality are tested through time. Issues of race, ethnicity, gender, age, disability, and socio-economic class will be prominent as we observe American ideals both upheld and contradicted in the context of the way Americans recreate.
NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Student cannot receive credit for STHM 0857 if they have successfully completed AAS 0857, SOC 0857 or REL 0957.
Course Attributes: GU
Repeatability: This course may not be repeated for additional credits.

STHM 1113. The Business of Leisure. 3 Credit Hours.
This course is an introduction to the nature, scope, and significance of the leisure services-based industries of hospitality, recreation, sport and tourism. The course will address the conceptual foundations, economic significance, current trends, and socio-cultural dimensions of hospitality, recreation, sport, and tourism, in the context of leisure and business in contemporary society. Note: Prior to fall 2015, the course title was "Foundations of Leisure."
Repeatability: This course may not be repeated for additional credits.

STHM 1211. Sport and Society. 3 Credit Hours.
This course is an introduction to the nature, scope, and significance of the total field of sport and recreation management. The course will address the benefits of sport and recreation, the problem areas facing sport and recreation management, the socio-cultural dimensions of sport and recreation as they relate to sport and recreation management, the relationship between sport and recreation behavior and the natural environment, the evolution of the sport and recreation management profession, the institutional basis for the sport and recreation movement in the United States, the governance of sport, career opportunities in sport and recreation management, professional organizations, the roles of professional sport and recreation managers, ethical behavior and ethical codes in sport and recreation management, and current issues and trends in sport and recreation.
Class Restrictions: May not be enrolled in one of the following: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
College Restrictions: Must be enrolled in one of the following Colleges: Tourism & Hospitality Mngmnt
Repeatability: This course may not be repeated for additional credits.

STHM 1311. The Business of Tourism and Hospitality. 3 Credit Hours.
The nature, scope and significance of the total field of tourism and hospitality; history and development, philosophies and theories, analysis of trends, issues and challenges.
Class Restrictions: May not be enrolled in one of the following: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits
College Restrictions: Must be enrolled in one of the following Colleges: Tourism & Hospitality Mngmnt
Repeatability: This course may not be repeated for additional credits.

STHM 2114. Leisure and Tourism for a Diverse Society. 3 Credit Hours.
This course emphasizes leisure, sport, recreation, tourism, and hospitality services for a multi-cultural, multi-racial, multi-ethnic society, as well as for persons with disabilities. As the course explores the significance of play, recreation, and leisure throughout the life span, it will focus on the impact of leisure delivery systems on diverse populations within our society. Implications of personal biases will be a thread throughout the course.
College Restrictions: Must be enrolled in one of the following Colleges: Tourism & Hospitality Mngmnt
Repeatability: This course may not be repeated for additional credits.

STHM 2211. Organizational Strategy in Sport and Recreation. 3 Credit Hours.
This course focuses on the strategic challenges confronting firms that compete in the global economy within the sport and recreation industries. It provides students a forum in which to apply and integrate business theories, practices and skills in a global environment. The course examines opportunities for entrepreneurs in the industry through business plan development.
College Restrictions: Must be enrolled in one of the following Colleges: Tourism & Hospitality Mngmnt
Repeatability: This course may not be repeated for additional credits.
STHM 2311. Global Issues in Tourism and Hospitality Management. 3 Credit Hours.
This course concentrates on international and global issues and development in tourism and hospitality. Problems and characteristics specific to
the international aspect of the tourism and hospitality industries will be examined. By the end of the course students will develop a comprehensive
understanding of the forces influencing international tourism and hospitality. Students will also improve their knowledge of world geography and
international players through the exploration of developed and potential tourist areas. Contemporary issues, as they relate to social and economic
trends, are explored.
College Restrictions: Must be enrolled in one of the following Colleges: Tourism & Hospitality Mngmnt
Repeatability: This course may not be repeated for additional credits.

STHM 3185. Internship I. 3 Credit Hours.
Students will be assigned to an industry agency to complete 180 hours of professional experience. The agency will be selected through cooperation
between the student, the School Internship Coordinator and an agency supervisor.
Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
College Restrictions: Must be enrolled in one of the following Colleges: Tourism & Hospitality Mngmnt
Repeatability: This course may not be repeated for additional credits.

STHM 3211. Management in Sport and Recreation. 3 Credit Hours.
Provides the knowledge required to formulate and manage effectively the resources in a sport or recreation operation. Human resource administration
will be a major focus; managerial history, organizational needs, job designs, recruitment process, hiring/firing process, discipline and grievance
procedures, motivation and performance appraisals are included. The course will expose the students to the additional associated management
functions of budgets and accounting, facility management, risk management, customer service, community relations, and fund raising.
Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
College Restrictions: Must be enrolled in one of the following Colleges: Tourism & Hospitality Mngmnt
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
HRM 1101|Minimum Grade of C-|May not be taken concurrently
OR HRM 1901|Minimum Grade of C-|May not be taken concurrently.

STHM 3213. Budget and Finance Systems in Sport and Recreation. 3 Credit Hours.
Accounting trends as they relate to the sport and recreation industries will be covered. Financial decision-making, including cash management; ratio
analysis; asset management; leverage; short, intermediate, and long-term financing will be the course focus. Economic theory will be applied to sport
and recreation settings/organizations. Current trends in revenue production, including sponsorships, will be noted. Different types of budgets will be
reviewed and students will learn the budget preparation and approval process.
Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
College Restrictions: Must be enrolled in one of the following Colleges: Tourism & Hospitality Mngmnt
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ACCT 2101|Minimum Grade of C-|May not be taken concurrently
OR ACCT 2901|Minimum Grade of C-|May not be taken concurrently.

STHM 3214. Marketing Management in Sport and Recreation. 3 Credit Hours.
An analysis of essential marketing, promotion and sales principles as currently applied in the sport and recreation industries. Guidelines for formulating
marketing goals and strategies, inclusive of target marketing, will be included. The marketing mix will be evaluated in terms of specific applications set in
both industry segments. Trends, issues and problems influencing the industry will also be examined. Principles of salesmanship, sales techniques, sales
strategies, and evaluation of sales performance in light of goal planning and objectives will be covered.
Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
College Restrictions: Must be enrolled in one of the following Colleges: Tourism & Hospitality Mngmnt
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
MKTG 2101|Minimum Grade of C-|May not be taken concurrently
OR MKTG 2901|Minimum Grade of C-|May not be taken concurrently.

STHM 3215. Stadium/Arena Design and Management. 3 Credit Hours.
The Stadium/Arena Design and Management course will require that students closely examine, condense, and digest information on planning,
design, construction, and maintenance of stadiums and arenas which may be employed in athletics, leisure, sport, entertainment, recreation, and
physical education. The students will prepare materials for class presentations, topics, and problems for discussion and analysis. The class will visit
representative facility sites within the area.
Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
College Restrictions: Must be enrolled in one of the following Colleges: Tourism & Hospitality Mngmnt
Repeatability: This course may not be repeated for additional credits.
STHM 3216. Economics of Sport and Recreation. 3 Credit Hours.
This course examines the sport and recreation industries using microeconomic theory for analysis. The topics include league structure, organizational decision making, labor relations, incentive structures and facility financing.
Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
College Restrictions: Must be enrolled in one of the following Colleges: Tourism & Hospitality Mngmnt
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(ACCT 2101|Minimum Grade of C-|May not be taken concurrently
OR ACCT 2901|Minimum Grade of C-|May not be taken concurrently
AND (ECON 1101|Minimum Grade of C-|May not be taken concurrently
OR ECON 1901|Minimum Grade of C-|May not be taken concurrently).

STHM 3217. Research in Sport and Recreation. 3 Credit Hours.
This course will examine ways that research helps solve practical industry problems in recreation and sports. Topics will include problem identification, the logic of research, research designs, information search strategies, questionnaire development, and data analysis. Written and oral communication skills, as well as the use of data analysis software, will be stressed.
Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
College Restrictions: Must be enrolled in one of the following Colleges: Tourism & Hospitality Mngmnt
Repeatability: This course may not be repeated for additional credits.

STHM 3220. Special Topics in Sport & Recreation Management. 3 Credit Hours.
Variable content course. See the course schedule for specific topics offered in a given semester.
Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
College Restrictions: Must be enrolled in one of the following Colleges: Tourism & Hospitality Mngmnt
Repeatability: This course may be repeated for additional credit.

STHM 3221. Athletics Administration. 3 Credit Hours.
The course covers the organization and implementation of college athletics. Theory, principles, and problem areas will be addressed. Goals and policies associated with the administration of college athletics will also be covered, along with the approaches to planning, organizing, directing, controlling, budgeting, and evaluating college athletic programs.
Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
College Restrictions: Must be enrolled in one of the following Colleges: Tourism & Hospitality Mngmnt
Repeatability: This course may not be repeated for additional credits.

STHM 3222. Professional and International Sport. 3 Credit Hours.
The course will cover the current issues related to both professional and collegiate sports. The specific topics will vary from semester to semester in order to address the most pressing issues facing professional and collegiate sports at the time. Issues such as rising costs of stadium and arena construction, increasing corporate involvement, increasing emphasis on younger athletes, increasing concern for security measures, increasing commercialization, increasing pressure for new technology, increasing multiculturalism, and increasing emphasis on benefits-based management will be covered.
Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
College Restrictions: Must be enrolled in one of the following Colleges: Tourism & Hospitality Mngmnt
Repeatability: This course may not be repeated for additional credits.

STHM 3224. Media and Communications in Sport and Recreation. 3 Credit Hours.
The purpose of this class is to give an overview of sports information and media relations as they pertain to collegiate and professional sports. The class will go into detail on how professional teams and institutions deal with the media, including: strategic planning, placement of stories, holding media conferences, writing press releases, oversight of web sites, handling sensitive situations, and game operations.
Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
College Restrictions: Must be enrolled in one of the following Colleges: Tourism & Hospitality Mngmnt
Repeatability: This course may not be repeated for additional credits.

STHM 3225. Recreation and Leisure Service Management. 3 Credit Hours.
This course will provide the knowledge required to formulate and manage effectively the resources in a public or private recreation or leisure service operation. Coordination of resources, inclusive of human, financial, physical, and technological, will be discussed. The course will expose the students to the typical programs and services provided by recreation and leisure service agencies. Emphasis will be placed on career opportunities and professional development.
Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
College Restrictions: Must be enrolled in one of the following Colleges: Tourism & Hospitality Mngmnt
Repeatability: This course may not be repeated for additional credits.
STHM 3226. Consumer Behavior in Sport and Recreation. 3 Credit Hours.
Marketing strategies designed to increase and sustain consumer demand for sport and recreation products and services rely upon an understanding of the individual consumer. This course will examine a variety of personal, psychological and socio-environmental factors that influence attendance and participation in sport and recreation and related consumption behaviors of media usage, purchase of merchandise, and travel. The course will also explore processes that operate within the consumer to understand how individuals make decisions to spend available resources of time and money on sport and recreation consumption activities.

Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
College Restrictions: Must be enrolled in one of the following Colleges: Tourism & Hospitality Mngmnt
Repeatability: This course may not be repeated for additional credits.

STHM 3227. Advanced Marketing for Sport and Recreation. 3 Credit Hours.
Sport marketing has changed dramatically as the result of increasing competition and environmental change. This course takes a system approach and is designed to extend students’ knowledge and experience in marketing of sport and athletic events by first understanding the nature of competition within the industry; second, by understanding the role of information technology; and third, by developing extensive analytic skills.

Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
College Restrictions: Must be enrolled in one of the following Colleges: Tourism & Hospitality Mngmnt
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
STHM 3296|Minimum Grade of C-|May not be taken concurrently.

STHM 3228. Sales Management in Sport and Recreation. 3 Credit Hours.
This course will examine the diverse and complex nature of sales within sport and recreation settings. We will introduce basic sales and customer satisfaction concepts and techniques, and then see how they are applied in sport and recreation organizations. Students will be exposed to the sales process through lectures, readings, and assignments.

Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
College Restrictions: Must be enrolled in one of the following Colleges: Tourism & Hospitality Mngmnt
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
STHM 3276|Minimum Grade of C-|May not be taken concurrently.

STHM 3296. Marketing Management in Sport and Recreation. 3 Credit Hours.
An analysis of essential marketing, promotion and sales principles as currently applied in the sport and recreation industries. Guidelines for formulating marketing goals and strategies, inclusive of target marketing, will be included. The marketing mix will be evaluated in terms of specific applications set in both industry segments. Trends, issues and problems influencing the industry will also be examined. Principles of salesmanship, sales techniques, sales strategies, and evaluation of sales performance in light of goal planning and objectives will be covered.

Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
College Restrictions: Must be enrolled in one of the following Colleges: Tourism & Hospitality Mngmnt
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(ECON 1101|Minimum Grade of C-|May not be taken concurrently
OR ECON 1901|Minimum Grade of C-|May not be taken concurrently
AND (MKTG 2101|Minimum Grade of C-|May not be taken concurrently
OR MKTG 2901|Minimum Grade of C-|May not be taken concurrently.

STHM 3311. Organization Management in Tourism and Hospitality. 3 Credit Hours.
This course provides the knowledge required to formulate and manage effectively the resources in a tourism or hospitality operation. Human resource administration will be the main focus; managerial history, organizational needs, job designs, recruitment process, hiring/firing process, discipline and grievance procedures, motivation and performance appraisals are examples of topics. Team learning approach and environment are highly emphasized.

Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
College Restrictions: Must be enrolled in one of the following Colleges: Tourism & Hospitality Mngmnt
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
HRM 1101|Minimum Grade of C-|May not be taken concurrently
OR HRM 1901|Minimum Grade of C-|May not be taken concurrently.

STHM 3312. Strategic Decision Making in Tourism and Hospitality Management. 3 Credit Hours.
This course will focus on how to make good decisions to solve practical industry problems in tourism and hospitality settings. Topics will include understanding the processes, tools, data, and organizational environments necessary for effective decision making. The overall goal will be to help students understand how to make a system (whether a collection of employees, customers, equipment and technology, or business locations) work more effectively. Written and oral communication skills, as well as the use of data analysis software, will be stressed.

Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
College Restrictions: Must be enrolled in one of the following Colleges: Tourism & Hospitality Mngmnt
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
ECON 1101|Minimum Grade of C-|May not be taken concurrently
OR ECON 1901|Minimum Grade of C-|May not be taken concurrently.
S_TM 3313. Financial Issues in Tourism and Hospitality. 3 Credit Hours.
This course is designed to provide students with knowledge of the fundamental concepts and tools that represent the core of financial management. The course will particularly emphasize the financial function and issues in a hospitality organization and will provide the student with applications of financial concepts in the context of hospitality financial management.
Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
College Restrictions: Must be enrolled in one of the following Colleges: Tourism & Hospitality Mngmnt
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(ACCT 2101|Minimum Grade of C-|May not be taken concurrently
OR ACCT 2901|Minimum Grade of C-|May not be taken concurrently)
AND (ECON 1101|Minimum Grade of C-|May not be taken concurrently
OR ECON 1901|Minimum Grade of C-|May not be taken concurrently).

S_THM 3315. Tourism and Hospitality Sales. 3 Credit Hours.
The main objective of the course is to give a general overview of sales management discipline and its leadership role in the tourism and hospitality industry. The student will be exposed to the overall nature and dimensions of sales and sales management as it is relevant to and practiced by the tourism and hospitality industry. The student will be going through readings, assignments, interaction in group discussions and role-play, and a practical hands-on project that provides them with an opportunity to practice what they learn during the course.
Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
College Restrictions: Must be enrolled in one of the following Colleges: Tourism & Hospitality Mngmnt
Repeatability: This course may not be repeated for additional credits.

S_THM 3320. Special Topics in Hospitality Management. 3 Credit Hours.
This course is designed to provide students with an in-depth analysis of the current issues facing hospitality management. The course will address some of the major issues currently facing tourism and hospitality managers in the areas of advertising, public relations, information technology, and management systems. The course will build on the competencies students have already developed in their earlier courses, which introduced them to the basics of marketing, management, and finance. Given their working knowledge, students will be called upon in class to identify potential solutions to current issues.
Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
College Restrictions: Must be enrolled in one of the following Colleges: Tourism & Hospitality Mngmnt
Repeatability: This course may be repeated for additional credit.

S_THM 3321. Tourism Planning and Development. 3 Credit Hours.
An analysis of the socioeconomic planning process involved in developing tourism destinations in global, community, metropolitan, urban, and rural settings. Emphasis will be on policy and product development, regeneration and enhancement of facilities and services to meet the needs of tourists. Includes the adjustment process involved in integrating tourism into a developing economy, and the project management skills inherent in steering a development from inception to fruition. Extensive use is made of concepts from sociology, economics, political science, and business disciplines. Special readings from the current literature, case studies, guest speakers, and video cases will form an integral part of this course.
Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
College Restrictions: Must be enrolled in one of the following Colleges: Tourism & Hospitality Mngmnt
Repeatability: This course may not be repeated for additional credits.

S_THM 3322. Destination Management Organizations. 3 Credit Hours.
This course is designed to provide a comprehensive understanding of the role, the scope and the business of destination marketing organizations. The course will also provide an overview on the history, development and future of destination marketing organizations in the United States and around the world. Trends, issues and challenges are discussed. Current and past managers of destination marketing organizations will be invited to provide first hand examples and deeper insights into destination marketing organizations, such as politics that govern relationships, funding, and marketing strategies.
Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
College Restrictions: Must be enrolled in one of the following Colleges: Tourism & Hospitality Mngmnt
Repeatability: This course may not be repeated for additional credits.

S_THM 3324. Hospitality Operations. 3 Credit Hours.
Hospitality Operations will focus on an integration and application of planning, implementation, operation, and maintenance of accommodations, including hotels, motels, and resorts. The physical aspects, capital investments, layout, and design will be included with the operational component. The course will also provide students with guided learning and hands-on experience in using a property management system.
Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
College Restrictions: Must be enrolled in one of the following Colleges: Tourism & Hospitality Mngmnt
Repeatability: This course may not be repeated for additional credits.
STHM 3325. Food and Beverage Management. 3 Credit Hours.
A survey course in basic commercial food service. Forecasting, selection, ordering, receiving, storing, preparation, portioning, costs analysis, menu and customer expectations will be discussed. Beverage manufacturing, quality criteria and sensory standards for distilled spirits and domestic and foreign wines are included.
Pre-requisites: STHM 3396|Minimum Grade of C-|May not be taken concurrently.
Repeatability: This course may not be repeated for additional credits.

STHM 3327. Advanced Destination Marketing Systems. 3 Credit Hours.
Destination marketing has changed dramatically as the result of increasing competition and environmental change. This course takes a system approach and is designed to extend students' knowledge and experience in marketing to tourism and hospitality by first understanding the nature of competition within the tourism industry; second, by understanding the role of information technology; and third, by developing extensive analytical skills.
Pre-requisites: STHM 3396|Minimum Grade of C-|May not be taken concurrently.
Repeatability: This course may not be repeated for additional credits.

STHM 3328. Gaming and Casino Management. 3 Credit Hours.
This course is an overview of the role gambling plays in today's society. The course's goal is to provide students with the background necessary to understand the gaming industry and its relationship to tourism, hospitality, recreation, and sports. Topics include the evolution of legal gaming, its management and regulation, the structure of the various gaming industries, and key terminology. Analysis of participation patterns and impacts of gambling, both positive and negative, on society will be addressed. An introduction to game rules and basic concepts from probability and statistics necessary to understand gambling operations will be discussed.
Pre-requisites: STHM 3396|Minimum Grade of C-|May not be taken concurrently.
Repeatability: This course may not be repeated for additional credits.

STHM 3329. Revenue Management in Tourism and Hospitality Management. 3 Credit Hours.
In this course students will learn to identify and exploit opportunities for revenue optimization in different business contexts. Students will review the main methodologies that are used in each of these areas, discuss issues associated with different pricing strategies, and survey current practices in the industry. Within the broader area of pricing theory, the course places particular emphasis on tactical optimization of pricing and capacity allocation decisions, tackled using quantitative models of consumer behavior, demand forecasts and market segmentation.
Pre-requisites: STHM 3396|Minimum Grade of C-|May not be taken concurrently.
Repeatability: This course may not be repeated for additional credits.

STHM 3330. Special Topics in Destination and Event Management. 3 Credit Hours.
This course is designed to provide students with an in-depth analysis of the current issues facing destination and event management. The course will address some of the major issues currently facing tourism and event managers in the areas of advertising, public relations, information technology, and management systems. The course will build on the competencies students have already developed in their earlier courses, which introduced them to the basics of marketing, management, and finance. Given their working knowledge, students will be called upon in class to identify solutions to current issues.
Pre-requisites: STHM 3396|Minimum Grade of C-|May not be taken concurrently.
Repeatability: This course may be repeated for additional credit.

STHM 3336. Marketing in Tourism and Hospitality. 3 Credit Hours.
An analysis of essential marketing principles as currently applied in the tourism and hospitality industries. Concepts and tools in marketing research will be emphasized and practiced. The marketing mix will be evaluated in terms of specific applications set in both industry segments. Trends, issues and problems influencing tourism and hospitality marketing will also be examined. This writing intensive course requires writing a marketing research proposal, an online marketing survey, and a marketing plan for a tourism or hospitality company.
Pre-requisites: (ECON 1101|Minimum Grade of C-|May not be taken concurrently) OR ECON 1901|Minimum Grade of C-|May not be taken concurrently) AND (MKTG 2101|Minimum Grade of C-|May not be taken concurrently) OR MKTG 2901|Minimum Grade of C-|May not be taken concurrently.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.
STHM 3411. Program and Special Event Planning. 3 Credit Hours.
This course presents a sequential model of the program and event planning process with particular focus upon the role of the servant leader. The course includes a strong theoretical foundation, formulation of philosophy and goals; needs assessment; selection and design of special program and/or one-time event elements; implementation; and evaluation. Different program and special event formats, including fairs, family reunions, festivals, recreation events, sporting events, meetings, conferences, social events, and grand openings, with different levels of leadership involvement will be discussed.
Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
College Restrictions: Must be enrolled in one of the following Colleges: Tourism & Hospitality Mngmnt
Repeatability: This course may not be repeated for additional credits.

STHM 3412. Foundations of Event Leadership. 3 Credit Hours.
This course provides an in-depth and comprehensive analysis of the global events industry. Topics will include the feasibility, viability and sustainability of the event process, the strategic planning process, business development, human resource management, finance and budgeting, event creation and event orchestration, communications, and career development aspects of event leaders.
Repeatability: This course may not be repeated for additional credits.

STHM 3415. Meetings, Conference, and Convention Management. 3 Credit Hours.
The meetings, conference and convention industry has long been recognized as a major market sector in the tourism and hospitality industry, and is one of the fastest growing in the industry. This course will provide students insight into its complex and diverse nature as represented in the diversity of operational aspects it covers: accommodation management, food and beverage management, tourism destination marketing, technical services, front office, facility marketing and sales, risk management, and project management.
Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
College Restrictions: Must be enrolled in one of the following Colleges: Tourism & Hospitality Mngmnt
Repeatability: This course may not be repeated for additional credits.

STHM 3420. International/Domestic Travel Immersion Experience. 3 Credit Hours.
This is a specially designed course that includes educational/experiential trips to sport and tourism destinations. It offers students a unique opportunity to study characteristics and issues specific to the international aspects of the local tourism and hospitality, sport and recreation management industries and destination marketing associations. While abroad, students will visit businesses, companies, and universities; meet leading executives and government/tourism officials; visit sport and recreation facilities; and participate in cultural tours (to museums, theaters, dance performances, the performing arts, and historic parks, trade and art/craft exhibitions). In addition to entertainment, it would indulge students to experience the cultural heritage, ambiance, hospitality, leisure lifestyles, and excitement of the world's great countries and cities globally. The course will help students to develop a better understanding of the global marketplace environments, local cultures, and their identities. (The ideal student would draw upon the body of knowledge based on the concepts of sustainability, global issues and cultural awareness, as well as management and marketing.)
Repeatability: This course may be repeated for additional credit.

STHM 3425. Sustainable Event Management. 3 Credit Hours.
The overall goal of the course is to better educate students about environmentally friendly initiatives in the industries of Tourism, Hospitality, Recreation, and Sport and provide them with the resources and tools to become socially responsible future leaders of each industry. Students will leave this course with knowledge of the tools and methods to reduce their carbon footprint and increase their use of eco-friendly products, materials, and services. The purpose of exposing students to environmental issues in Tourism, Hospitality, Recreation, and Sport is in hopes that they will become an agent of Green Change, not only in their respective industry, but through marketing and public relations practices that reach out to fans and guests across the globe. Throughout this course, students will learn through the text, practical scenarios from real-life case studies, handouts, industry professionals as guest speakers, and hands-on experience by researching, organizing, and planning an environmentally friendly event that will highlight the goals and objectives of this course as their final project. The purpose of the course is to lead students to become agents of Green Change in their respective industry, also giving students an advantage when graduating and entering into the workplace.
Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
College Restrictions: Must be enrolled in one of the following Colleges: Tourism & Hospitality Mngmnt
Repeatability: This course may not be repeated for additional credits.

STHM 3426. Entrepreneurship in Sport, Recreation, Tourism, and Hospitality. 3 Credit Hours.
Examines the management of private business ventures, including an in-depth examination of commercial enterprises as a profit-making business and a survey of small business components. A completed business proposal will be required.
Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
College Restrictions: Must be enrolled in one of the following Colleges: Tourism & Hospitality Mngmnt
Repeatability: This course may not be repeated for additional credits.
STHM 3428. Event Marketing and Sponsorship. 3 Credit Hours.
This course will apply basic and advanced principles of marketing and sponsorship to the event and related industries. The course provides students with the skills and competencies to a) understand why consumers attend events to participate and/or watch and b) use this knowledge to develop a marketing plan with an embedded sponsorship proposal to attract a corporate sponsor.

Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
College Restrictions: Must be enrolled in one of the following Colleges: Tourism & Hospitality Mngmnt
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(ECON 1101|Minimum Grade of C-|May not be taken concurrently
OR ECON 1901|Minimum Grade of C-|May not be taken concurrently)
AND (MKTG 2101|Minimum Grade of C-|May not be taken concurrently
OR MKTG 2901|Minimum Grade of C-|May not be taken concurrently).

STHM 3482. Independent Study. 1 to 3 Credit Hour.
This course provides an opportunity for students to engage in systematic investigations, under the direction of a faculty advisor.

Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
College Restrictions: Must be enrolled in one of the following Colleges: Tourism & Hospitality Mngmnt
Repeatability: This course may be repeated for additional credit.

STHM 4112. Senior Professional Development Seminar. 3 Credit Hours.
The purpose of this class is to expose the students to a model of organizational structure in the sport, recreation, tourism, hospitality, and leisure services profession through simulated experiences. The class is designed with a president, departments, and staff roles. These roles are designed to represent the interactions that take place with various constituencies needed to enhance sport, recreation, tourism, and hospitality education and opportunities.

Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits, Sophomore 30 to 59 Credits
College Restrictions: Must be enrolled in one of the following Colleges: Tourism & Hospitality Mngmnt
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
STHM 3185|Minimum Grade of C-|May not be taken concurrently.

STHM 4185. Internship II. 10 or 12 Credit Hours.
After having completed the student’s last semester of classes, and taken in conjunction with STHM 4191 (0381). The student must complete 600 hours with an industry agency. NOTE: The requirements of this experience are addressed in the School's senior internship manual (which is distributed in STHM 4112 [0370]).

Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits, Sophomore 30 to 59 Credits
College Restrictions: Must be enrolled in one of the following Colleges: Tourism & Hospitality Mngmnt
Repeatability: This course may not be repeated for additional credits.
Co-requisites: STHM 4185

STHM 4191. Senior Project. 3 Credit Hours.
The culminating written project agreed upon by the University and agency supervisors.

Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits, Sophomore 30 to 59 Credits
College Restrictions: Must be enrolled in one of the following Colleges: Tourism & Hospitality Mngmnt
Repeatability: This course may not be repeated for additional credits.

STHM 4212. Law & Ethics in Sport and Recreation. 3 Credit Hours.
This course is designed to address the legal and ethical aspects of sport, recreation, park resources, and leisure services. The course will address legal foundations and the legislative process; contracts and tort law; regulatory agents and methods of compliance; the principles and practices of safety, emergency, and risk management related to sport, recreation, park resources, and leisure services; ethical principles and professionalism in sport and recreation management; environmental ethics; legal issues and trends; and professional competence and professional development related to law and ethics in sport and recreation management.

Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits, Sophomore 30 to 59 Credits
College Restrictions: Must be enrolled in one of the following Colleges: Tourism & Hospitality Mngmnt
Repeatability: This course may not be repeated for additional credits.
STHM 4221. Current and Ethical Issues in Recreation and Leisure. 3 Credit Hours.
This course is designed to provide students with an in-depth analysis of the current and ethical issues facing sport and recreation management. The course will address some of the major issues facing sport and recreation programs in the areas of youth sports, interscholastic athletics, intercollegiate athletics, amateur sports, and professional sports. In addition, the course will address the major issues facing hotel and hospitality management programs in public, private, commercial, and voluntary agencies providing sport and recreation programs; and in specialized agencies providing campus recreation, industrial recreation, and residence-connected sport and recreation programs. The course will build on the competencies students have already developed in their earlier courses, which introduced them to current issues; professional ethics, rights, and responsibilities; theories of ethics; ethical behavior; and ethical codes. Given their working knowledge, students will be called upon in class to identify solutions to current issues and to make ethical decisions when confronted with ethical dilemmas.

Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits, Sophomore 30 to 59 Credits

College Restrictions: Must be enrolled in one of the following Colleges: Tourism & Hospitality Mngmnt

Co-requisites: STHM 4112

Repeatability: This course may not be repeated for additional credits.

STHM 4222. Current and Ethical Issues in Sport Management. 3 Credit Hours.
This course is designed to provide students with an in-depth analysis of the current and ethical issues facing sport and recreation management. The course will address some of the major issues facing sport and recreation managers in the areas of youth sports, interscholastic athletics, intercollegiate athletics, amateur sports, and professional sports. In addition, the course will address the major issues facing sport and recreation managers in public, private, commercial, and voluntary agencies providing sport and recreation programs; and in specialized agencies providing campus recreation, industrial recreation, and residence-connected sport and recreation programs. The course will build on the competencies students have already developed in their earlier courses, which introduced them to current issues; professional ethics, rights, and responsibilities; concepts of morality; theories of ethics; ethical behavior; and ethical codes. Given their working knowledge, students will be called upon in class to identify solutions to current issues and to make ethical decisions when confronted with ethical dilemmas.

Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits, Sophomore 30 to 59 Credits

College Restrictions: Must be enrolled in one of the following Colleges: Tourism & Hospitality Mngmnt

Co-requisites: STHM 4112

Repeatability: This course may not be repeated for additional credits.

STHM 4296. Current and Ethical Issues in Sport and Recreation Management. 3 Credit Hours.
The purpose of this course is to examine current issues that are of concern to sport and recreation administrators. The student will gain a basic understanding of these issues and develop appropriate strategies for effectively dealing with these issues/problems. Students will be encouraged to take advocacy positions on certain issues that are addressed. The course will build on the competencies students have already developed in their earlier courses, which introduced them to current issues; professional ethics, rights, and responsibilities; concepts of morality; theories of ethics; ethical behavior; and ethical codes. Given their working knowledge, students will be called upon in class to identify solutions to current issues and to make ethical decisions when confronted with ethical dilemmas.

Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits, Sophomore 30 to 59 Credits

College Restrictions: Must be enrolled in one of the following Colleges: Tourism & Hospitality Mngmnt

Co-requisites: STHM 4112

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

STHM 4312. Legal Issues in Tourism and Hospitality. 3 Credit Hours.
A comprehensive overview of laws and regulatory agencies governing the tourism and hospitality industry. Legal implications of civil laws, areas of tort and contract will be discussed, along with the law and legal relationships that exist in the business context. Hospitality law, especially when dealing with customers and business contracts, will be the main focus. Issues will be discussed from the points of view of innkeepers, restaurateurs, travel agents, and event planners. Attention will be given to labor relations laws, the Americans with Disabilities Act, risk management, zoning, and unions.

Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits, Sophomore 30 to 59 Credits

College Restrictions: Must be enrolled in one of the following Colleges: Tourism & Hospitality Mngmnt

Co-requisites: STHM 4112

Repeatability: This course may not be repeated for additional credits.

STHM 4321. Hospitality Management Systems. 3 Credit Hours.
The hospitality organization's use a variety of information technologies to facilitate various business activities such as reservation, marketing, operations, and management, with a direct impact on revenues and market share. A perfect synergy between information systems and the hospitality industry requires decision-makers to not only understand the functionalities of advanced systems, but also be able to successfully interpret systems' analyses for their current management practices (e.g., yield management). Using an advanced lodging management system as an effective instructional tool, this course focuses on the fundamentals of management systems within the today's hospitality organizations in general and lodging operations in particular. Students will be exposed to industry examples, in-depth discussions, and simulation projects about how to strategically integrate system applications such as property management, reservation management, sales & marketing management, point of sales systems, and meeting space rentals, etc. within a hotel setting, as well as their impacts on organizations and the industry as a whole.

Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits, Sophomore 30 to 59 Credits

College Restrictions: Must be enrolled in one of the following Colleges: Tourism & Hospitality Mngmnt

Co-requisites: STHM 4112

Repeatability: This course may not be repeated for additional credits.
STHM 4322. Designing Tourism Experiences. 3 Credit Hours.
This course presents an overview of the process of designing effective tourism hardware (attractions, etc.) and software (programs, special events, etc.). Students will learn how to define effective tourism experiences that add value to the visitor experience and how to measure and evaluate these experiences using both qualitative and quantitative methods. Furthermore, students will learn customer experience marketing and management principles to promote affinity and loyalty among tourism consumer groups.
Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits, Sophomore 30 to 59 Credits
College Restrictions: Must be enrolled in one of the following Colleges: Tourism & Hospitality Mngmnt
Co-requisites: STHM 4112
Repeatability: This course may not be repeated for additional credits.

STHM 4396. Hospitality Management Systems. 3 Credit Hours.
Hospitality organizations use a variety of information technologies to facilitate various business activities such as reservation, marketing, operations, and management, with a direct impact on the firm's financial outcomes such as revenues and market share. Effective implementation requires decision-makers to not only understand the functionalities of these advanced systems, but also be able to successfully interpret the systems' output (e.g., relying on daily reports to make pricing decisions). Using an advanced lodging management system as an instructional tool, this course explores the fundamentals of hospitality and lodging management systems. Through multiple industry examples and in-depth discussions, this writing intensive course requires students to work on several simulation projects focusing on strategically integrate system applications such as property management, reservation management, sales & marketing management, point of sales systems, and meeting space rentals within a hotel setting. The impact of these advanced systems on hospitality organizations and on the hospitality industry will be discussed as well.
Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits, Sophomore 30 to 59 Credits
College Restrictions: Must be enrolled in one of the following Colleges: Tourism & Hospitality Mngmnt
Co-requisites: STHM 4112
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

STHM 4397. Designing Tourism Experience. 3 Credit Hours.
This course presents an overview of the process of designing effective tourism hardware (attractions, etc.) and software (programs, special events, etc.). Students will learn how to define effective tourism experiences that add value to the visitor experience and how to measure and evaluate these experiences using both qualitative and quantitative methods. Furthermore, students will learn customer experience marketing and management principles to promote affinity and loyalty among tourism consumer groups. This writing intensive course requires the development of an experience design concept.
Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits, Sophomore 30 to 59 Credits
College Restrictions: Must be enrolled in one of the following Colleges: Tourism & Hospitality Mngmnt
Co-requisites: STHM 4112
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

STHM 4398. Strategic Management and Innovation in Tourism and Hospitality. 3 Credit Hours.
This course exposes student to the strategic management of tourism and hospitality service providers (e.g., destination marketing organizations, accommodation businesses) and their integration into the economic, behavioral and political framework of the travel industry. The overall setting of this course is within innovation and new service development; two key aspects for successful organizations. You will learn theoretical, historical and managerial foundations of service management (in particular for tourism and hospitality). Contemporary issues, as they relate to social and economic trends, are explored. Written and oral communication skills, as well as the use of software, will be stressed. This writing intensive course requires the development of strategic plan for new services/products to be developed or implemented by a tourism or hospitality organization.
Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits, Sophomore 30 to 59 Credits
College Restrictions: Must be enrolled in one of the following Colleges: Tourism & Hospitality Mngmnt
Co-requisites: STHM 4112
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

Tyler School of Art (TYLE)
Courses

TYLE 0805. Race, Identity and Experience in American Art. 3 Credit Hours.
This course charts past and present artistic mediations of racial and ethnic experiences in the United States. These include paintings of the New Frontier and 19th century folk art, ranging across the Harlem Renaissance and New Deal photography, from Chicano murals and the art activism of the Civil Rights Movement, to the contemporary American reception of Chinese art and the digital spaces occupied by activist groups on the Internet. In the struggle to understand the relation between self and other, artists have critically engaged with the images that define our common sense of belonging - images that saturate the public sphere via mass media, advertising, textbooks, museums, and shopping malls. This engagement ranges from a rejection of stereotypes to their appropriation, from the discovery of alternative histories to the rewriting of dominant narratives, from concepts of difference to theories of diversity. While taking a close look at individual artists and movements, this class locates them within their respective contexts. We will discuss socio-political discourses, including essentialism, structuralism, postmodernism, and post-colonialism, and we will question the validity of such concepts as nationalism and identity in an era of global politics that celebrates the hybrid self. The ultimate goal of the course is to find ways of adequately imagining and imagining an American identity today. Note: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they have successfully completed TYLE 0905.
Course Attributes: GD
Repeatability: This course may not be repeated for additional credits.

TYLE 0905. Honors Race, Identity and Experience in American Art. 3 Credit Hours.
Please refer to the Honors Course Guide for a description of TYLE 0905 written by the professor who will be teaching it. The generic description is as follows: This course charts past and present artistic mediations of racial and ethnic experiences in the United States. These include paintings of the New Frontier and 19th century folk art, ranging across the Harlem Renaissance and New Deal photography, from Chicano murals and the art activism of the Civil Rights Movement, to the contemporary American reception of Chinese art and the digital spaces occupied by activist groups on the Internet. In the struggle to understand the relation between self and other, artists have critically engaged with the images that define our common sense of belonging - images that saturate the public sphere via mass media, advertising, textbooks, museums, and shopping malls. This engagement ranges from a rejection of stereotypes to their appropriation, from the discovery of alternative histories to the rewriting of dominant narratives, from concepts of difference to theories of diversity. While taking a close look at individual artists and movements, this class locates them within their respective contexts. We will discuss socio-political discourses, including essentialism, structuralism, postmodernism, and post-colonialism, and we will question the validity of such concepts as nationalism and identity in an era of global politics that celebrates the hybrid self. The ultimate goal of the course is to find ways of adequately imagining and imagining an American identity today. Note: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they have successfully completed TYLE 0805.
Course Attributes: GD, HO
Repeatability: This course may not be repeated for additional credits.

TYLE 1071. Visual Studies 1 Introduction to Visual Studies: History, Theory, Practice. 3 Credit Hours.
This course introduces students to the field of Visual Studies. Students will be introduced to histories and theories of analyzing visual communication from a variety of aesthetic, theoretical, sociological, and historical viewpoints. Students learn to think about representations of knowledge through visual imagery, will consider the impact of medium on the image and message of a piece, and will learn to think critically about visual culture's social and cultural context. Topics covered in class include but are not limited to: human vision and embodied experience; forms of art production including considerations of craft, concept, medium, and social practice; the viewers role in producing meaning; images as representations of social power; and the role of images in the social and material production of space. Critical reading, writing, and seeing will be taught through a base lecture format, in-class exercises, and discussion.
Repeatability: This course may not be repeated for additional credits.

TYLE 1111. Visualizing Urgency. 2 Credit Hours.
Tyler School of Art is offering a two-credit course through its art gallery Temple Contemporary that addresses urgent issues of local relevance and international significance. The content of this course will be shaped through the study of exhibitions, workshops, and guest lectures held in the gallery.
Repeatability: This course may be repeated for additional credit.

TYLE 1911. Honors Visualizing Urgency. 2 Credit Hours.
Tyler School of Art is offering a two-credit course through its art gallery Temple Contemporary that addresses urgent issues of local relevance and international significance. The content of this course will be shaped through the study of exhibitions, workshops, and guest lectures held in the gallery.
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.
TYLE 2468. Search and Destroy: Punk's DIY Rebellion. 3 Credit Hours.
This course examines the far-reaching phenomena of punk music, fashion, and DIY culture that originated in the late 1970s, and its influential effects in later decades. Punk embodied an in-your-face class-consciousness mixed with the anti-aesthetics of negation and unbridled creativity. This class examines the formal manifestations of punk in music, fashion, graphics, and publishing, while attending to the ways that punk broke down the raced, classed and gendered barriers associated with traditional notions of beauty and form. Topics covered will include the shift away from 1960s idealism into 1970s nihilism; the performance of gender in Punk and New Wave, DIY publishing; the relationship of 1970s culture to class conflict and politics; the implications of unskilled production; critical theory of subcultures; and the influence of philosophy and theory on punk practice (Marquis de Sade, Marx, Nietzsche, Bataille, Brecht, Debord, and others).

Repeatability: This course may not be repeated for additional credits.

TYLE 3211. Creative Cottage Industrialist. 3 Credit Hours.
Creative Cottage Industrialist is a three-credit course designed to teach artists the skills they will need to effectively match their creative interests with the developing marketplace. Through a series of case studies, guest lectures, and presentations, students will be encouraged to work collaboratively and individually to develop venture cottage industry plans designed to support and expand their artistic capacity.

Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits

Repeatability: This course may not be repeated for additional credits.

TYLE 3349. Tyler School Japan Art, Media and Design Workshop. 6 Credit Hours.
A workshop designed to provide art students with study-abroad experience in Japan. Individual sections offered by departments or areas of the Tyler School introduce different specific topics, so that students may choose the area in which they wish to work. A Tyler faculty member will teach the studio. In addition to the studio component, there will be art history related lectures on topics in Japanese art, guest lectures and workshops by contemporary Japanese artists, field trips, and a multimedia interdisciplinary lab for all students. The goal of the workshop is to give art students a firm grounding in the social, cultural, historical, and practical facets of art in Japan.

Repeatability: This course may not be repeated for additional credits.

TYLE 3385. Field Internship. 3 Credit Hours.
A field internship must provide practical experience in a setting which is relevant to the student's course of study, such as in a gallery, museum or community art center, etc. A comprehensive paper must be written.

Repeatability: This course may be repeated for additional credit.

TYLE 3585. Diamond Peer Teachers - Internship I. 1 Credit Hour.
The Diamond Peer Teachers Program provides students with a mentored university-level teaching experience in their major. Course requirements include participation in the three-day pre-semester Teaching Institute and regular participation in the Peer Teachers support group throughout the semester. Peer Teachers provide supplemental instruction in first- and second-year courses, promote student engagement, and model successful study habits and academic preparedness for students with whom they work. For Diamond Peer Teachers only.

Repeatability: This course may be repeated for additional credit.

TYLE 3586. Diamond Peer Teachers - Internship II. 1 Credit Hour.
The Diamond Peer Teachers Program provides students with a mentored university-level teaching experience in their major. Course requirements include participation in the three-day pre-semester Teaching Institute and regular participation in the Peer Teachers support group throughout the semester. Peer Teachers provide supplemental instruction in first- and second-year courses, promote student engagement, and model successful study habits and academic preparedness for students with whom they work. For Diamond Peer Teachers only.

Repeatability: This course may be repeated for additional credit.

Undergraduate Studies Merit Scholar (USMS)

Courses

USMS 4082. Independent Study: Internship. 0 to 1 Credit Hours.
Independent Study for Temple University Merit Scholars.
Repeatability: This course may be repeated for additional credit.

USMS 4182. Independent Study: Research. 0 to 1 Credit Hours.
Independent Study for Temple University Merit Scholars.
Repeatability: This course may be repeated for additional credit.

USMS 4282. Independent Study: Study Abroad. 0 to 1 Credit Hours.
Independent Study for Temple University Merit Scholars.
Repeatability: This course may be repeated for additional credit.

USMS 4382. Independent Study: Volunteer. 0 to 1 Credit Hours.
Independent Study for Temple University Merit Scholars.
Repeatability: This course may be repeated for additional credit.

University College (UC)
Courses

UC 0701. Computer Literacy Workshop. 0 Credit Hours.
The intent of this workshop is to provide students with the basic computing skills necessary for success in the Fox School of Business. This workshop will provide students with instruction on how to utilize Microsoft Office tools, as well as basic computer and Internet navigation skills. This workshop will allow students to practice these skills in a lab setting.

Repeatability: This course may not be repeated for additional credits.

University Seminar (UNVS)

Courses

UNVS 1001. First Year Seminar I. 1 Credit Hour.
This course introduces first-year students to the opportunities and rigors of higher education, as well as to the skills needed to use academic resources successfully in college. The topics covered in the seminar help first year students articulate and reach their academic goals. There are no prerequisites or co-requisites for this course. NOTE: This course meets for 11 weeks. In addition, several sections of this course are linked to learning communities.

Class Restrictions: Must be enrolled in one of the following Classes: Freshman 0 to 29 Credits

Repeatability: This course may not be repeated for additional credits.

UNVS 1002. First Year Seminar II. 1 Credit Hour.
This is a one-credit course that introduces first-year students to the opportunities to discover major interests through applied learning and other career-oriented experiences. The course exposes students to career paths and encourages major exploration through discussions with faculty, informational interviews, readings, and opportunities to practice skills needed to be a more effective student.

Class Restrictions: Must be enrolled in one of the following Classes: Freshman 0 to 29 Credits

Repeatability: This course may not be repeated for additional credits.

UNVS 1003. Academic Bridge for International Students. 3 Credit Hours.
Academic Bridge for International Students is a three-credit course that includes instruction in all four language skills (reading, writing, speaking, and listening). It also focuses on additional academic skills and strategies necessary for students to succeed in undergraduate courses. Critical thinking and independent research will be emphasized along with the introduction to technologies that support course requirements. There are no prerequisites or co-requisites for this course. To take this course you must be an international student whose native language is not English.

Repeatability: This course may not be repeated for additional credits.

UNVS 1004. President's Seminar I: Organizational Change at Temple University. 1 Credit Hour.
Students will address key questions that focus on factors and issues that impact organizational change at Temple University. Conversations with guest faculty, a series of directed readings, group discussion and individual writing assignments will promote the development of students' understanding of the central questions and their practical implications. Through this course students will learn how to identify the need for change, approaches for implementation, the importance of goal setting, and a greater understanding of how these issues affect an organization like Temple.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate

Repeatability: This course may not be repeated for additional credits.

UNVS 1005. President's Seminar II: Organizational Change at Temple University. 0 or 1 Credit Hours.
Students will address key questions that focus on factors and issues that impact organizational change at Temple University. Conversations with guest faculty, a series of directed readings, group discussion and individual writing assignments will promote the development of students' understanding of the central questions and their practical implications. Students will work on implementing change on selected issues discussed in UNVS 1004, President's Seminar I.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate

UNVS 1006. Academic Success Strategies. 1 Credit Hour.
Academic Success Strategies provides an opportunity for explicit instruction in critical thinking skills. Through the study of historical and contemporary learning theories and research-based cognitive strategies, students will be able to meaningfully reflect upon their learning. In addition to these opportunities in metacognitive practice, students will develop and implement techniques to improve their efficacy as students.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate

Repeatability: This course may not be repeated for additional credits.

Sophomore Seminar is a one-credit course that provides sophomore students an opportunity to work on career planning and development. Topics covered in this course will span the career development process from exploring individual strengths, academic majors, potential career paths, how to get an internship, explore research opportunities, how to get involved on campus, and preparing for graduate school.

Level Registration Restrictions: May not be enrolled in one of the following: Graduate

Repeatability: This course may not be repeated for additional credits.
This is a one-credit optional course that introduces new transfer students to the opportunities and resources at Temple University. This course would count as elective credit. Topics will include exploring individual strengths, academic majors, potential career paths, how to get an internship, research opportunities, getting involved on campus, and graduate school preparation. Additionally, we will familiarize students with the Temple community and offices. The topics covered in this seminar will help transfer students develop and meet short- and long-term career goals.

Level Registration Restrictions: May not be enrolled in one of the following: Graduate
Repeatability: This course may not be repeated for additional credits.

UNVS 2003. Global Citizenship. 1 Credit Hour.
In our increasingly globalized society, the development of global perspectives and competencies are important for successful navigation of the world. This course explores topics and themes related to helping students prepare to move forward as global citizens.

Repeatability: This course may not be repeated for additional credits.

Students will explore the multifaceted cultural, historical and artistic development of Paris and Rome. Students will engage in pre-departure sessions on the historical and political realities that shaped the often turbulent life of these cities. Students will learn to identify the many artistic/architectural movements as represented in Paris, as well as the roughly seven-layered historical/artistic strata that are visible in the “Eternal City.” Students will learn about the diverse people that populate these two cultural capitals, and also the habits that make Parisians and Romans unique in the world. No previous experience with art, architecture, or cultural anthropology is required. No previous knowledge of France or Italy is needed. Students must be able to participate in both the pre-departure as well as in-country session. This course will require additional travel expenses.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate
Repeatability: This course may not be repeated for additional credits.

UNVS 2005. Writing About the Self: Exploring Opportunities and Communicating Strengths. 1 Credit Hour.
You have high aspirations, but how do you get there? What opportunities are most valuable? How can you successfully navigate the application process for graduate and professional school, and major awards? And how can you write about your accomplishments without bragging or rolling out tired clichés? In this course you will explore and clarify your strengths and goals, learn how to identify and assess opportunities relevant to those goals, and practice the art of writing about yourself. Over the course of the semester, you will be exposed to a variety of examples or autobiographical writing and will think about, and practice writing about your experiences.

Repeatability: This course may not be repeated for additional credits.

UNVS 3001. Junior Seminar: Pre-Professional Preparation. 1 Credit Hour.
This is a one-credit optional course that will provide junior level students with an opportunity to work on pre-professional planning and development. It will focus specifically on preparation for post-graduate educational opportunities and entrance exams for graduate and professional programs. This course will count toward graduation as elective credit.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits
Repeatability: This course may not be repeated for additional credits.

UNVS 3002. Peer Mentor Development. 0 to 1 Credit Hours.
Peer Mentor Development is a variable credit course that introduces students to content and communication skills identified as integral to serving as a peer mentor in the college setting. Through this course, students will become proficient guides to Temple and community resources, well-versed in college and academic success strategies, and equipped with interpersonal communication skills to deliver their message and reach fellow students.

Repeatability: This course may not be repeated for additional credits.

UNVS 3003. Resident Assistant Development Seminar. 1 Credit Hour.
The Resident Assistant Development course introduces students to topics and issues pertaining to the Resident Assistant position. Students in this course will be exposed to leadership and student development theories, practical strategies related to community building, crisis management and conflict resolution, and inclusivity. Course material will be grounded in student development theory as well as experiential learning.

Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
Level Registration Restrictions: May not be enrolled in one of the following: Graduate
Repeatability: This course may not be repeated for additional credits.

Upper Division Honors Program (HONS)

Courses

HONS 3991. Honors Scholars Research/Creative Project Design. 3 Credit Hours.
This course focuses on design and development of an independent research/creative arts project developed with the guidance of a faculty mentor. While some topics covered in the seminar will be specific to the seminar participants, common topics will include project specific research or design methodology, discipline appropriate theoretical readings, and the development of project specific theoretical/secondary bibliography. For University Honors Scholars only. Junior standing required. Fulfills University Honors Scholars requirement.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.
Urban Education (URBE)

Courses

URBE 0854. Education in the Global City. 3 Credit Hours.
We are in the midst of vast global change. How does it impact cities like Philadelphia and the people who live here? In this course we focus mainly on education in the city, but this doesn't mean we look only at schools. Globalization is creating new possibilities for learning: we have instant access to vast networks of information, migration is bringing rich cultural diversity to our doorsteps, and we learn in many different types of schools and communities. But globalization is also creating new problems that education must address: new kinds of poverty, increasingly separate lives, mounting intolerance, a digital divide. This course explores what education in all its forms can do to support the American dream for people in the city, nation, and the world. Our exploration goes beyond the classroom, linking academic and community-based learning. The course has a common core of knowledge and each small section also features a different theme related to this core. NOTE: This course fulfills the U.S. Society (GU) requirement for students under Core. Students cannot receive credit for this course if they have successfully completed LAWU 0854.
Course Attributes: GU
Repeatability: This course may not be repeated for additional credits.

URBE 0855. Education for Liberation Here and Abroad. 3 Credit Hours.
This course explores educational issues in urban America and indigenous educational traditions in the "Third World." The course focuses on the connections between education and politics, cultural diversity and economics, and the existence and persistence of poverty in developing nations. Students will critically analyze international films, course readings, and presentations from guest speakers. Culturally responsive, post-modern, and comparative approaches are used to investigate the impact of culture, poverty and development, and the goals of education in each societal context. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core.
Course Attributes: GG
Repeatability: This course may not be repeated for additional credits.

URBE 1006. Schooling and Development in Third World Societies. 3 Credit Hours.
Development in Third World Societies has been defined primarily in terms of economic growth. Schools have been designed largely to support this process and serve the primary function of developing human capital. Similar patterns can also be seen in the United States. The course presents these and alternative definitions of development and the functions of schooling, and compares the experience of third world societies to that of poor people in the cities in the United States. While journeying through different countries, school systems, and cultures, the course also focuses on the "Third World" inside the United States. Here we explore how knowledge of Third World economic and cultural issues can help us understand the life and challenges of urban students from minority, working class, and immigrant backgrounds. Students also learn from experiences with urban and Third World groups with whom they are involved in service learning activities. NOTE: (1) Must complete 20 hours of community-based service learning activities. (2) This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. In addition to meeting the university Core International Studies requirement, this course meets the Non-Western/Third World IS requirement for Communication Sciences majors. Please note the recent update to the Core IS requirement at www.temple.edu/vpus/resources/coreupdates.htm#coreisupdate.
Course Attributes: IS
Repeatability: This course may not be repeated for additional credits.

URBE 1909. Honors Schooling and Development in Third World Societies. 3 Credit Hours.
The Honors version of Urban Education 1006 (C060). NOTE: (1) Course requirements include the completion of 20 hours of community-based service learning activities. (2) This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO, IS
Repeatability: This course may not be repeated for additional credits.

URBE 2320. Special Seminar in Urban Education. 3 Credit Hours.
A special topics course. Topic varies each semester.
Repeatability: This course may be repeated for additional credit.
URBE 3990. Honors Special Seminar in Urban Education. 3 Credit Hours.
An honors special topics course. Topic varies each semester.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

URBE 4496. Understanding Urban Communities. 3 Credit Hours.
This course will introduce students to key issues in urban education, focusing on both formal schooling and informal educational settings. It will use readings from history, sociology, and political science—as well as the popular media—to provide students with a deeper understanding of the larger social and political processes that shape cities and their schools. The course will also cover such key issues as the achievement gap, funding inequalities, high school dropout, school violence, and various approaches to school reform. A key focus of the course will be identifying strengths and assets within urban communities and countering the "deficit" narrative that dominates popular perceptions of urban education. Another key focus will be on identifying promising practices within schools and other organizations that serve urban youth. For this reason, students will conduct research on possible policy interventions, study a particular intervention in depth, and write about that intervention. As a Writing Intensive course, this class will provide students with significant instruction and support in the following areas: conducting research on social policy interventions, evaluating sources, using research to craft an argument, and writing one argument-focused social science research paper and one policy brief. Students will be encouraged to make connections between theory and research on urban education and the challenges and opportunities they may face as practitioners.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Vietnamese (VTNM)

Courses

VTNM 1001. Vietnamese Elements I. 4 Credit Hours.
First semester level Vietnamese.

Repeatability: This course may not be repeated for additional credits.

VTNM 1002. Vietnamese Elements II. 4 Credit Hours.
Second semester level Vietnamese.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
VTNM 1001|Minimum Grade of C-|May not be taken concurrently.

VTNM 2000. Special Topics. 3 Credit Hours.
See the Class Schedule for the specific topic as it changes periodically.

Repeatability: This course may be repeated for additional credit.

VTNM 2001. Second-Year Vietnamese I. 3 Credit Hours.
This course is a second-year, first-semester language course designed to further develop and strengthen the skills in listening, speaking, reading and writing Vietnamese that were introduced in First-Year Vietnamese.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
VTNM 1002|Minimum Grade of C-|May not be taken concurrently.

VTNM 2002. Second-Year Vietnamese II. 3 Credit Hours.
This course is a second-year, second-semester language course designed to further develop and strengthen the skills in listening, speaking, reading, and writing Vietnamese that were introduced in the first semester of Second-Year Vietnamese.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
VTNM 2001|Minimum Grade of C-|May not be taken concurrently.

Visual Studies (VS)
Courses

VS 1058. Visual Studies 1: Interdisciplinary Studio Seminar 1. 3 Credit Hours.
This introductory studio seminar introduces students to the concept of art production from the basis of self-examination. This introductory seminar course instills an understanding of creating art as a response to their cultural upbringing, which questions experiences of gender, ethnicity, politics, culture, religion, aesthetic preferences, and socioeconomic status. First year seminar students are expected to develop the appropriate skills to connect to current tendencies and phenomena in the contemporary art world. Students attend visiting artist series lectures and do research on contemporary artists whose practice is centered on identity. Seminar readings include topics addressing theories of post-identity, class, culture, sexuality and hyphenated identities. The primary focus of the class is on the production of an independent body of interdisciplinary studio artwork.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Art Education, Visual Studies
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits.

VS 1151. Visual Studies 1 Foundation: Drawing. 3 Credit Hours.
An introductory black and white drawing course that emphasizes the development of perceptual, analytical, and structural drawing skills in responses to various problems. Issues of identity and its cultural, historic and aesthetic influence on art making and critical analysis will be explored through various drawing assignments, readings, and discussions. Students will work from life as well as imagination. Value, line, composition, space, and the manipulation of the different media will be among the topics covered. Field trips may be taken.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Art Education, Visual Studies
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits.

VS 1351. Visual Studies 1 Foundation: 3D. 3 Credit Hours.
3D Design introduces the fundamentals of constructing and conceptualizing three-dimensional art forms by examining the theme of identity. The course emphasizes the utilization of a variety of basic materials and includes an intensive introduction to the woodshop.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Art Education, Visual Studies
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits.

VS 1451. Visual Studies 1 Foundation: Composition and Color. 2 Credit Hours.
Students study the visual language of art, particularly the concepts and vocabulary in the elements and principles of visual language, stressing composition, color, and pattern. Through personal art-making and art-viewing, students will strengthen skills of perception, arrangement, spatial choices, knowledge of technical and scientific aspects of color, along with color’s role in a cultural and linguistic context. This course offers opportunities to make and interpret art in a socially meaningful way, while investigating the visual decision-making process in constructing compositions.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Art Education
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits.

VS 1651. Visual Studies 1 Foundation: Digital Imaging. 3 Credit Hours.
This course introduces students to basic tools and ideas essential to digital art making. Students will learn technological skills as they bring them to bear to address questions of identity. The class will address the ways that virtual space and digital techniques change traditional notions of art and inform postmodern ideas of identity through discussions, readings, field trips, and, primarily, art making.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Art Education, Visual Studies
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits.

VS 2058. Visual Studies 2: Interdisciplinary Studio Seminar 2. 3 Credit Hours.
Students continue their development of individual studio practice by investigating ideas of story/history. The class explores ways of organizing narratives, including linearity, non-linearity and layering of disparate content in visual art or other modes of artistic expression and communication. Students may draw upon personal, sociological, cultural and/or imaginary history to construct artist books, time-based artwork, internet imaging or some other form of collected or multiple imagery. Students research the work of contemporary artists who deal with creative non-fiction, fiction, myth, etc. from the autobiographical to the communal. The primary focus of the class is on the production of an independent body of interdisciplinary studio artwork.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Art Education, Visual Studies
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(VS 1058 Minimum Grade of C-) (May be taken concurrently)
AND (VS 1151 Minimum Grade of C-) (May be taken concurrently)
AND (VS 1351 Minimum Grade of C-) (May be taken concurrently)
AND (VS 1651 Minimum Grade of C-) (May be taken concurrently).
VS 2152. Visual Studies 2 Concept Studio: Drawing. 3 Credit Hours.
An intermediate level drawing course continuing the development begun in the introductory level drawing course. Models and still life are among the subjects considered although not exclusively. A variety of dry and wet media are used with an emphasis on the student finding her own voice through various drawing problems. Topics covered include color, composition, and space as well as the manipulation of the media. Emphasis is on exploring and developing narrative themes through readings, discussions, and various studio assignments. Field trips may be taken.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Art Education, Visual Studies
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(VS 1058|Minimum Grade of C-|May be taken concurrently)
AND (VS 1151|Minimum Grade of C-|May not be taken concurrently)
AND (VS 1351|Minimum Grade of C-|May be taken concurrently)
AND (VS 1651|Minimum Grade of C-|May be taken concurrently).

VS 2252. Visual Studies 2 Concept Studio: Painting. 3 Credit Hours.
An introductory level painting course that emphasizes the development of objective and subjective responses to a variety of studio problems. Students work from life and imagination. Among the concepts covered in the course are color theory, color and light, composition, the creation of space, and the manipulation of the medium. The theme of narrative is be explored through various studio problems, readings, and discussions. Field trips may be taken.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Art Education, Visual Studies
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(VS 1058|Minimum Grade of C-|May be taken concurrently)
AND (VS 1151|Minimum Grade of C-|May not be taken concurrently)
AND (VS 1351|Minimum Grade of C-|May be taken concurrently)
AND (VS 1651|Minimum Grade of C-|May be taken concurrently).

VS 2352. Visual Studies 2 Concept Studio: 3D Structures. 3 Credit Hours.
This 3D Structures class builds on the principles taught in the 3D Foundations course to provide more in depth exploration of three-dimensional art in contemporary practice by investigating the element of space. An expanded palette of materials, construction techniques, design principles and aesthetic concepts is utilized. Studio projects are supplemented by readings, lectures and field trips. Installation is introduced as a presentation medium. The development of a personal body of work is evaluated through peer critique.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Art Education, Visual Studies
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(VS 1058|Minimum Grade of C-|May be taken concurrently)
AND (VS 1151|Minimum Grade of C-|May be taken concurrently)
AND (VS 1351|Minimum Grade of C-|May not be taken concurrently)
AND (VS 1651|Minimum Grade of C-|May be taken concurrently).

VS 2452. Visual Studies 2 Studio: Making Democracy: Visual Tactics. 3 Credit Hours.
This studio-based course explores art-making practices in relation to the histories of political and socially engaged movements of the 19th, 20th and 21st centuries, with the aim of fostering political engagement through creative practice. Students will be exposed to and taught historic and contemporary techniques of socially engaged art making such as printmaking, banner and sign making, pamphleteering, puppetry, performance, and historical reenactment. These techniques, in conjunction with reading primary historical texts and contemporary theory, writing, and conducting archival research, will serve as the foundation for the development of a research-based practice that generates new socially engaged artworks. The latter will culminate in a focused research project that students will present to each other at the end of the semester.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Art Education, Visual Studies
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(VS 1058|Minimum Grade of C-|May not be taken concurrently)
AND (VS 1151|Minimum Grade of C-|May not be taken concurrently)
AND (VS 1351|Minimum Grade of C-|May not be taken concurrently)
AND (VS 1651|Minimum Grade of C-|May not be taken concurrently).
VS 2552. Visual Studies 2 Concept Studio: Print Imaging. 3 Credit Hours.
Print Imaging (Focus: Screen Printing) introduces a broad range of historic and contemporary concepts and technologies and encourages a multi-disciplinary approach to fine art printmaking. Studio projects, supplemented by readings, lectures and field trips, focus upon the printed image and the impact it has upon the development of story/history: personal, political, social and cultural thought and communication. Initial projects are very structured and involve the more traditional concepts, skills and processes. As students become more comfortable with the fundamentals of the medium, they are encouraged to develop a more personal approach to concept, subject, scale, material and process.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Art Education, Visual Studies

College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School

Repeatability: This course may not be repeated for additional credits.

VS 2652. Visual Studies 2 Concept Studio: Digital Imaging. 3 Credit Hours.
This course focuses on the use of the computer as a tool with which to create and explore the uses of narrative in art. Students develop technological competency as they create artworks that examine the structures of narrative. Readings, lectures and field trips augment the development of a sense of personal, social and art historical narrative. Students work in time based and non-time based media to create artwork that investigates their own artistic relationship to narrative.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Art Education, Visual Studies

College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(VS 1058|Minimum Grade of C-|May be taken concurrently)
AND (VS 1151|Minimum Grade of C-|May be taken concurrently)
AND (VS 1351|Minimum Grade of C-|May be taken concurrently)
AND (VS 1651|Minimum Grade of C-|May not be taken concurrently).

VS 2852. Visual Studies 2 Concept Studio: Photo Imaging / Digital. 3 Credit Hours.
An introduction to the basic principles of digital photography, including shooting with a digital camera, manipulating images within the computer, toning and printing with inkjet printers. Various types of alternative cameras and unorthodox digital processing methods are explored to expand the range of expression. The course focuses on monochromatic photography, including duotones, as a fine art medium. Emphasis is placed on technical expertise, creative development, an understanding of the potential of imaging software and the development of the subjective use of story/history based on a clear understanding of personal identity. The effect of image on audience is evaluated through peer critique.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Art Education, Visual Studies

College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(VS 1058|Minimum Grade of C-|May be taken concurrently)
AND (VS 1151|Minimum Grade of C-|May be taken concurrently)
AND (VS 1351|Minimum Grade of C-|May be taken concurrently)
AND (VS 1651|Minimum Grade of C-|May not be taken concurrently).

VS 2862. Visual Studies 2 Concept Studio: Photo Imaging / Darkroom. 3 Credit Hours.
An introduction to the basic principles of darkroom photography, including shooting with a film camera, developing film in the darkroom, and printing on silver gelatin paper. This course then goes beyond the usual photography course to introduce the use of various types of alternative cameras, unorthodox chemical processing methods and the use of different types of materials to expand the range of expression. The course focuses on black & white photography as a fine art medium. Emphasis is placed on technical expertise, creative development, and the subjective use of story/history based on a clear understanding of personal identity. The effect of image on audience is evaluated through peer critique.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Art Education, Visual Studies

College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
(VS 1058|Minimum Grade of C-|May be taken concurrently)
AND (VS 1151|Minimum Grade of C-|May be taken concurrently)
AND (VS 1351|Minimum Grade of C-|May be taken concurrently)
AND (VS 1651|Minimum Grade of C-|May not be taken concurrently).
VS 3058. Visual Studies 3 Interdisciplinary Studio Seminar 3. 3 Credit Hours.
Students expand their individual studio practice through the exploration of site and place as a context for making and understanding art. This course includes ideas of interior/exterior space, natural, constructed and virtual environments. Students will also work to create interdisciplinary site based installations. Research includes the work of historical and contemporary artists who address diverse concepts of site and place. Writing, readings, exercises, critique and discussion inform and support their studio investigations. The seminar may include visits to site-specific artworks, public art organizations and/or talks by guest artists. The primary focus of the class is on the production of an independent body of interdisciplinary work that addresses site and place.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Visual Studies
Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(VS 1058|Minimum Grade of C-|May not be taken concurrently)
AND (VS 1151|Minimum Grade of C-|May not be taken concurrently)
AND (VS 1351|Minimum Grade of C-|May not be taken concurrently)
AND (VS 1651|Minimum Grade of C-|May not be taken concurrently)
AND (VS 2058|Minimum Grade of C-|May be taken concurrently).

VS 3100. Visual Studies 3 Studio: Special Topics. 3 Credit Hours.
This studio-based course explores a special topic or theme deemed especially relevant to contemporary visual culture. Material techniques and Tyler studio facilities that relate to the topic will be taught and utilized.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Art Education, Visual Studies
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(VS 1058|Minimum Grade of C-|May not be taken concurrently)
AND (VS 1151|Minimum Grade of C-|May not be taken concurrently)
AND (VS 1351|Minimum Grade of C-|May not be taken concurrently)
AND (VS 1651|Minimum Grade of C-|May not be taken concurrently)
AND (VS 2058|Minimum Grade of C-|May be taken concurrently).

VS 3253. Visual Studies 3 Concept Studio: Hybrid Painting. 3 Credit Hours.
An intermediate level painting course that builds on the conceptual and technical skills learned in Art 2252. An expanded palette of materials and techniques are utilized. This course considers the painting studio and the painting canvas as a laboratory space and metaphorical territory. It investigates notions of border, home, landscape, ecology, etc. Studio projects explore these themes in figurative and abstract modes, and are supplemented by lectures and research into artists who share these concerns in content and form. Students are encouraged to develop their own voice through a variety of painting problems. The theme of narrative is be explored through readings, discussions, and a variety of studio assignments. Field trips may be taken.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Art Education, Visual Studies
Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(VS 1058|Minimum Grade of C-|May not be taken concurrently)
AND (VS 1151|Minimum Grade of C-|May not be taken concurrently)
AND (VS 1351|Minimum Grade of C-|May not be taken concurrently)
AND (VS 1651|Minimum Grade of C-|May not be taken concurrently)
AND (VS 2058|Minimum Grade of C-|May be taken concurrently)
AND (VS 2252|Minimum Grade of C-|May be taken concurrently).
VS 3553. Visual Studies 3 Concept Studio: Hybrid Print Imaging. 3 Credit Hours.  
Students continue to develop personal approaches to the concepts, materials, and processes of traditional and digital fine art printmaking. Studio projects, supplemented by readings, lectures and field trips, focus upon the print medium as a multidisciplinary means of creative expression and communication. Special emphasis will be placed upon printed images as unique, large-scale multiples in site-specific installations.  
Field of Study Restrictions: Must be enrolled in one of the following Majors: Art Education, Visual Studies  
Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits  
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School  
Repeatability: This course may not be repeated for additional credits  
Pre-requisites:  
(VS 1058|Minimum Grade of C|May not be taken concurrently)  
AND (VS 1151|Minimum Grade of C|May not be taken concurrently)  
OR FDPR 1511|Minimum Grade of C|May not be taken concurrently)  
AND (VS 1351|Minimum Grade of C|May not be taken concurrently)  
OR FDPR 1531|Minimum Grade of C|May not be taken concurrently)  
AND (VS 1651|Minimum Grade of C|May not be taken concurrently)  
OR ARTU 2601|Minimum Grade of C|May be taken concurrently)  
AND (VS 2058|Minimum Grade of C|May be taken concurrently).  

VS 3653. Visual Studies 3 Concept Studio: Hybrid Digital Imaging. 3 Credit Hours.  
The theme of site/place is explored in relation to technology. This class explores ideas of virtual sites, the relationship between digital images and real sites, and how technology and media produce and interact with non-virtual sites. Students gain technological competencies in relation to readings, lectures and field trips that explore site/place as a theme.  
Field of Study Restrictions: Must be enrolled in one of the following Majors: Art Education, Visual Studies  
Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits  
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School  
Repeatability: This course may not be repeated for additional credits  
Pre-requisites:  
(VS 1058|Minimum Grade of C|May not be taken concurrently)  
AND (VS 1151|Minimum Grade of C|May not be taken concurrently)  
OR FDPR 1511|Minimum Grade of C|May not be taken concurrently)  
AND (VS 1351|Minimum Grade of C|May not be taken concurrently)  
OR FDPR 1531|Minimum Grade of C|May not be taken concurrently)  
AND (VS 1651|Minimum Grade of C|May not be taken concurrently)  
OR ARTU 2601|Minimum Grade of C|May be taken concurrently)  
AND (VS 2058|Minimum Grade of C|May be taken concurrently).  

VS 3863. Visual Studies 3 Concept Studio: Hybrid Photo Imaging/Darkroom. 3 Credit Hours.  
This course introduces students to numerous aesthetics and techniques that are both traditional and non-traditional to create images that break the boundaries of traditional Darkroom Photography. The course begins with demonstrations in basic darkroom techniques and expands into extended developing, processing and printing techniques. The course then introduces processes that utilize techniques from the worlds of Painting, Printmaking, Fibers and 3D to make hybridized photo art pieces. The results can be original prints or photo objects on surfaces other than paper, but still all made with film and chemicals. The development of a personal aesthetic is pursued through the use of sophisticated shooting, processing and printing techniques, supported by professional level presentation. Research into conceptual means of working is employed to consider the context of the image as related to site/place. The effect of image on audience is evaluated through peer critique.  
Repeatability: This course may not be repeated for additional credits  
Pre-requisites:  
(VS 1058|Minimum Grade of C|May not be taken concurrently)  
AND (VS 1151|Minimum Grade of C|May not be taken concurrently)  
OR FDPR 1511|Minimum Grade of C|May not be taken concurrently)  
AND (VS 1351|Minimum Grade of C|May not be taken concurrently)  
OR FDPR 1531|Minimum Grade of C|May not be taken concurrently)  
AND (VS 1651|Minimum Grade of C|May not be taken concurrently)  
OR ARTU 2601|Minimum Grade of C|May be taken concurrently)  
AND (VS 2058|Minimum Grade of C|May be taken concurrently).
VS 4098. Visual Studies 4 Interdisciplinary Studio Seminar. 4 Credit Hours.
The purpose of this writing intensive studio course is to help students begin the process of translating the themes of the Visual Studies curriculum (Identity, Stories, Site/Place) into work that reflects a personal voice and vision, and to familiarize students with the ways that writing is used in fine arts and visual culture. This class brings together students working across all media. You will be responsible for your own research, and for finding a place to create the work. While pursuing studio projects you will also be completing writing assignments. The writing projects are designed to make you aware of different approaches to writing in the visual arts. You will create a proposal for your studio projects and a research paper. The challenge to writing about art is to clearly define the artist’s choices, techniques, medium and personal vision. You are translating the visual into language. Details are a critical part of the descriptive process, using the vocabulary of the discipline of art making. Clarity, organization and a command of grammar and style will be key to creating a successful research paper.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Visual Studies
Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits, Sophomore 30 to 59 Credits
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(VS 1058|Minimum Grade of C-|May not be taken concurrently)
AND (VS 1151|Minimum Grade of C-|May not be taken concurrently)
AND (VS 1351|Minimum Grade of C-|May not be taken concurrently)
AND (VS 1651|Minimum Grade of C-|May not be taken concurrently)
AND (VS 2058|Minimum Grade of C-|May not be taken concurrently)
AND (VS 3058|Minimum Grade of C-|May be taken concurrently).

VS 4485. Field Internship. 1 to 3 Credit Hour.
This course offers experiential learning and hands-on training relevant to the student’s course of study.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Art Education, Visual Studies
Repeatability: This course may be repeated for additional credit.
Pre-requisites:
(VS 1058|Minimum Grade of C-|May not be taken concurrently)
AND (VS 1151|Minimum Grade of C-|May not be taken concurrently)
AND (VS 1351|Minimum Grade of C-|May not be taken concurrently)
AND (VS 1651|Minimum Grade of C-|May not be taken concurrently)
AND (VS 2058|Minimum Grade of C-|May not be taken concurrently).

VS 4511. Curatorial Lab. 3 Credit Hours.
This class provides students with hands-on experience curating an exhibition as a team, from initial idea to final installation. We will explore traditional museums and other kinds of exhibition spaces from small galleries to artist-run coops. Visits and conversations with local curators and museum professionals in Philadelphia will offer some practical insights into the challenges of creating exhibitions within a complex institution. Philadelphia’s robust contemporary art community and its rich historical landscape provide opportunities to explore and reflect on a variety of curatorial practices in different contexts. Although this course focuses on contemporary work, we will learn about the goals and techniques of museum and gallery displays in centuries past in order to place current strategies in context.
College Restrictions: Must be enrolled in one of the following Colleges: Music & Dance, Boyer College, Theater, Film & Media Arts, Art, Tyler School
Repeatability: This course may not be repeated for additional credits.

VS 4554. Visual Studies 4 Concept Studio: Interdisciplinary Print Imaging. 3 Credit Hours.
Advanced Printmaking students approach contemporary printmaking as a vital, interdisciplinary art form that maintains its important traditions and incorporates new technological methods, such as photographic and digital imaging, for producing, translating and disseminating visual information to a broadly diverse, global audience. Emphasis is on creative growth, individual instruction and the preparation of analog and digital print portfolios. Intermediate-level printmaking experience is required and basic computer imaging experience is recommended.
Field of Study Restrictions: Must be enrolled in one of the following Majors: Art Education, Visual Studies
Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits, Sophomore 30 to 59 Credits
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School
Repeatability: This course may not be repeated for additional credits
Pre-requisites:
(VS 1058|Minimum Grade of C-|May not be taken concurrently)
AND (VS 1151|Minimum Grade of C-|May not be taken concurrently)
AND (VS 1351|Minimum Grade of C-|May not be taken concurrently)
AND (VS 1651|Minimum Grade of C-|May not be taken concurrently)
AND (VS 2058|Minimum Grade of C-|May not be taken concurrently)
AND (VS 3553|Minimum Grade of C-|May not be taken concurrently).
VS 4654. Visual Studies 4 Concept Studio: Interdisciplinary Digital Imaging. 3 Credit Hours.  
An upper-level class that deals with the relationships between digital and non-digital art materials. Students make work that approaches ideas of translation in terms of materials, as well as discussing ideas of translating ideas to an audience, notions of originality in the digital realm, and art as a medium for communication. Digital images will be integrated with other media to create interdisciplinary work.  
Field of Study Restrictions: Must be enrolled in one of the following Majors: Art Education, Visual Studies  
Class Restrictions: May not be enrolled in one of the following: Freshman 0 to 29 Credits, Sophomore 30 to 59 Credits  
College Restrictions: Must be enrolled in one of the following Colleges: Art, Tyler School  
Repeatability: This course may not be repeated for additional credits  
Pre-requisites:  
(VS 1058|Minimum Grade of C-|May not be taken concurrently)  
AND (VS 1151|Minimum Grade of C-|May not be taken concurrently)  
AND (VS 1351|Minimum Grade of C-|May not be taken concurrently)  
AND (VS 1651|Minimum Grade of C-|May not be taken concurrently)  
AND (VS 2058|Minimum Grade of C-|May not be taken concurrently)  
AND (VS 3653|Minimum Grade of C-|May not be taken concurrently).  

VS 4754. Visual Studies 4 Interdisciplinary Moving Image. 3 Credit Hours.  
This course provides an introduction to basic principles of digital animation and onscreen interactivity for artists. Students will experiment with traditional and nontraditional digital animation techniques and learn to use interactivity to broaden and articulate their relationships with viewers. The course will build upon digital techniques taught in “Visual Studies 1 Foundation: Digital Imaging” as well as on each student's interests in terms of content and studio techniques. We will explore ideas of translation in terms of virtual and fictional space.  
Repeatability: This course may not be repeated for additional credits  
Pre-requisites:  
(VS 1058|Minimum Grade of C-|May not be taken concurrently)  
AND (VS 1151|Minimum Grade of C-|May not be taken concurrently)  
AND (VS 1351|Minimum Grade of C-|May not be taken concurrently)  
AND (VS 1651|Minimum Grade of C-|May not be taken concurrently).  

Women's Studies (WMST)  

Courses  

WMST 0801. Border Crossings: Gendered Dimensions of Globalization. 3 Credit Hours.  
Explore the ways in which gender "works" in different cultural and national contexts, and the impact globalization has on gender relations. "Gender" indicates the ways in which our social lives are organized around categories of male and female - in relation to work, family, sexuality, culture, and nation. "Globalization" describes the transfer of economic and cultural goods between nations and peoples. Questions we will ask include: What is globalization and how do women and men experience it differently? Do women and men work the same jobs in the global labor market, and do they get paid the same wages? How does immigration affect families? Does a growing connectedness between cultures and nations change traditional gender roles? How different are experiences of women in the "Third World" from those of women in the "First World," and why? Investigate these issues together by reading critical writings as well as Internet blogs, watching films/documentaries, and analyzing popular media. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Students cannot receive credit for this course if they have successfully completed LAWU 0801.  
Course Attributes: GG  
Repeatability: This course may not be repeated for additional credits.  

WMST 0824. Gender and World Societies. 3 Credit Hours.  
Learn about the history of feminine and masculine gender roles from comparative and international perspectives. Using case studies from Ancient Greece, Medieval Europe, West Africa, Victorian Britain, Modern Europe, the Middle East, South Asia, East Asia, and/or Latin America, we will explore certain themes - The State, The Sacred, Work, The Family, The Body and Sexuality, Modern Revolutionary Movements - to investigate how gender and gender roles have changed over time, and their significance today. Readings include primary sources written both by men and by women, secondary sources, novels, and films. NOTE: This course fulfills the World Society (GG) requirement for students under GenEd and International Studies (IS) for students under Core. Duplicate Credit Warning: Students may take only one of the following courses for credit; all other instances will be deducted from their credit totals: History 0824, 1708, C065, Women's Studies 0824, 1708, or C065.  
Course Attributes: GG  
Repeatability: This course may not be repeated for additional credits.
WMST 0863. Living for Change: Autobiographies of Women in Radical Social Movements. 3 Credit Hours.

This class aims at broadening our understandings of women's involvement in and influences on American political culture by reading life narratives of women in social movements. The focus will be in particular on movements that usually are not associated with women's political and cultural work, such as Native American Rights, Black Power, anarchist and workers' movements, and the Religious Right. Autobiographical writings will also help us understand the role women's narrative tradition has played in the social, literary, and historical perspectives. Questions we will explore include: Why did these women get politically involved? How were their experiences in social movements shaped by their gender? What is their cultural and political legacy? Why did they write about their life, and why do we read their narratives? NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. STUDENTS CANNOT receive credit for this course if they have successfully completed History 0832, POLS 0832, SOC 0832 or Women's Studies 0932.

Course Attributes: GU

Repeatability: This course may not be repeated for additional credits.

WMST 0832. Politics of Identity in America. 3 Credit Hours.

Gay or straight. Black or white. Male or female. What do these different group identities mean to Americans? How do they influence our politics? Should we celebrate or downplay our diversity? This course explores how we think about others and ourselves as members of different groups and what consequences it has for how we treat one another. Our fundamental social identities can be a source of power or of powerlessness, a justification for inequality or for bold social reform. Students learn about the importance of race, class, gender and sexual orientation across a variety of important contexts, such as the family, workplace, schools, and popular culture and the implications these identities have on our daily lives. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they have successfully completed History 0832, POLS 0832, SOC 0832 or Women's Studies 0932.

Course Attributes: GD

Repeatability: This course may not be repeated for additional credits.

WMST 0851. Gender in America. 3 Credit Hours.

Being a man or a woman means feeling like a man or a woman. People display gender by learning the routines and expectations associated with being male or female. How do people learn gender? How does living in a gendered society lead to differences in power and opportunities between men and women? How do race, ethnicity and sexuality affect the way gender is experienced for these different groups? How does gender acquire such important meaning in terms of identity and behavior? Using a variety of written materials including novels that explore gender identity construction, this course looks at how gender has become such a prominent feature of life in America. NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Duplicate Credit Warning: Students may take only one of the following courses for credit; all other instances will be deducted from their credit totals: Sociology 0851, 1676, 1696, C081, X081, Women's Studies 0851, 1676, 1696, C081, X081.

Course Attributes: GU

Repeatability: This course may not be repeated for additional credits.

WMST 0832. Honors Politics of Identity in America. 3 Credit Hours.

Gay or straight. Black or white. Male or female. What do these different group identities mean to Americans? How do they influence our politics? Should we celebrate or downplay our diversity? This course explores how we think about others and ourselves as members of different groups and what consequences it has for how we treat one another. Our fundamental social identities can be a source of power or of powerlessness, a justification for inequality or for bold social reform. Students learn about the importance of race, class, gender and sexual orientation across a variety of important contexts, such as the family, workplace, schools, and popular culture and the implications these identities have on our daily lives. NOTE: This course fulfills the Race & Diversity (GD) requirement for students under GenEd and Studies in Race (RS) for students under Core. Students cannot receive credit for this course if they have successfully completed History 0832, POLS 0832, SOC 0832 or Women's Studies 0832.

Course Attributes: GD, HO

Repeatability: This course may not be repeated for additional credits.

WMST 0932. Honors Living for Change: Autobiographies of Women in Radical Social Movements. 3 Credit Hours.

This class aims at broadening our understandings of women's involvement in and influences on American political culture by reading life narratives of women in social movements. The focus will be in particular on movements that usually are not associated with women's political and cultural work, such as Native American Rights, Black Power, anarchist and workers' movements, and the Religious Right. Autobiographical writings will also help us understand the role women's narrative tradition has played in the social, literary, and historical perspectives. Questions we will explore include: Why did these women get politically involved? How were their experiences in social movements shaped by their gender? What is their cultural and political legacy? Why did they write about their life, and why do we read their narratives? NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed Women's Studies 0863.

Course Attributes: GU, HO

Repeatability: This course may not be repeated for additional credits.

WMST 0963. Honors Living for Change: Autobiographies of Women in Radical Social Movements. 3 Credit Hours.

This class aims at broadening our understandings of women's involvement in and influences on American political culture by reading life narratives of women in social movements. The focus will be in particular on movements that usually are not associated with women's political and cultural work, such as Native American Rights, Black Power, anarchist and workers' movements, and the Religious Right. Autobiographical writings will also help us understand the role women's narrative tradition has played in the social, literary, and historical perspectives. Questions we will explore include: Why did these women get politically involved? How were their experiences in social movements shaped by their gender? What is their cultural and political legacy? Why did they write about their life, and why do we read their narratives? NOTE: This course fulfills the U.S. Society (GU) requirement for students under GenEd and American Culture (AC) for students under Core. Students cannot receive credit for this course if they have successfully completed Women's Studies 0863.

Course Attributes: GU, HO

Repeatability: This course may not be repeated for additional credits.
WMST 1076. Introduction to Women’s Studies. 3 Credit Hours.
An interdisciplinary course covering a variety of perspectives on women and gender. Emphasis on women in American society with consideration of special conditions of women in third world societies. Studies the central institutions of gender-including family, sexuality and love, the sexual division of labor, the ideology of femininity, and the structural basis of this ideology - women's social roles, and symbolic representations of women in culture. Special emphasis on class and racial differences and similarities. NOTE: This course can be used to satisfy the university Core Individual and Society (IN) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: IN
Repeatability: This course may not be repeated for additional credits.

WMST 1096. Introduction to Women’s Studies. 3 Credit Hours.
An interdisciplinary course covering a variety of perspectives on women and gender. Emphasis on women in American society with consideration of special conditions of women in third world societies. Studies the central institutions of gender-including family, sexuality and love, the sexual division of labor, the ideology of femininity, and the structural basis of this ideology - women's social roles, and symbolic representations of women in culture. Special emphasis on class and racial differences and similarities. NOTE: This course can be used to satisfy a university Core Individual and Society (IN) and Writing Intensive (WI) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: IN
Repeatability: This course may not be repeated for additional credits.

WMST 1101. American Women’s Lives. 3 Credit Hours.
This course will look at American women’s autobiographical writings, diaries, journals, and book length accounts, to understand the role women's narrative tradition has played in the development of American culture. The writings will be approached from social, literary, and historical perspectives. Subjects may include slave narratives, social reformers, social movements, pioneers, and literary figures. Issues of gender, race, and class will be highlighted. NOTE: This course can be used to satisfy a university Core American Culture (AC) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: AC
Repeatability: This course may not be repeated for additional credits.

WMST 1197. American Women's Lives. 3 Credit Hours.
This course will look at American women’s autobiographical writings, diaries, journals, and book length accounts, to understand the role women's narrative tradition has played in the development of American culture. The writings will be approached from social, literary, and historical perspectives. Subjects may include slave narratives, social reformers, social movements, pioneers, and literary figures. Issues of gender, race, and class will be highlighted. NOTE: This course can be used to satisfy a university Core American Culture (AC) and Writing Intensive (WI) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.
Course Attributes: AC
Repeatability: This course may not be repeated for additional credits.

WMST 1201. International Women's Writing. 3 Credit Hours.
Reading and discussion of fiction, diaries, memoirs, and personal essays written by women in Africa, Asia, Latin America, and the Caribbean. Will examine the ways in which such "universal" themes as love, family, work, and personal identity are shaped by cultural contexts. NOTE: This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information. In addition to meeting the university Core International Studies requirement, this course meets the Non-Western/Third World IS requirement for Communication Sciences majors. Please note the recent update to the Core IS requirement at www.temple.edu/vpus/resources/coreupdates.htm#coreisupdate.
Course Attributes: IS
Repeatability: This course may not be repeated for additional credits.

WMST 1301. Foundations in Women's Studies. 3 Credit Hours.
The purpose of this overarching course is to have the student explore the essential texts that define the history of Women's Studies. The course will address how gender difference is constituted, the diversity of women's experiences in relation to class, race, and sexuality, providing the student with a common body of knowledge agreed upon by experts in the field of Women's Studies. The course functions as the foundation for future courses in Women's Studies. The students will study the works of historical contributors to feminist thought such as Sojourner Truth, Elizabeth Cady Stanton, Betty Friedan, Simone de Beauvoir, Kate Millet, bell hooks, Angela Davis, and others. Though this course is designed particularly with the needs of Women's Studies majors in mind, it will introduce to both majors and non-majors the intellectual issues, topics, and figures that embody the history of feminist struggle from its first wave in the 19th and early 20th centuries to the present day.
Repeatability: This course may not be repeated for additional credits.
WMST 1676. Men and Women in American Society. 3 Credit Hours.
The course examines gender roles in the United States. It includes how children learn to be boys and girls within their families, through play, from the media, and in schools. It includes the way men and women learn to interact together in personal relationships and work. It examines the benefits of being a man in our society and attempts to understand how and why this advantage works. The focus is on how society shapes the lives of children and adults in gendered ways, how we all participate in creating gendered differences, and how we can bring about change. NOTE: This course can be used to satisfy the university Core American Culture (AC) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: AC

Repeatability: This course may not be repeated for additional credits.

WMST 1696. Men and Women in American Society. 3 Credit Hours.
The course examines gender roles in the United States. It includes how children learn to be boys and girls within their families, through play, from the media, and in schools. It includes the way men and women learn to interact together in personal relationships and work. It examines the benefits of being a man in our society and attempts to understand how and why this advantage works. The focus is on how society shapes the lives of children and adults in gendered ways, how we all participate in creating gendered differences, and how we can bring about change. NOTE: This course can be used to satisfy the university Core American Culture (AC) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: AC

Repeatability: This course may not be repeated for additional credits.

WMST 1700. Special Topics in Women's Studies. 3 Credit Hours.
Specific cultural or social studies in gender issues with an emphasis on interdisciplinary analyses. NOTE: A variable topics course.

Repeatability: This course may be repeated for additional credit.

WMST 1708. Gender and History. 3 Credit Hours.
A thematic introduction to the history of feminine and masculine roles from a comparative international perspective. The course will focus on topics such as The State, The Sacred, The Family, The Body, Work, and Modern Social Movements, using case studies from Ancient Greece or Rome, Medieval Europe, Africa, China, Japan, Modern Europe, and the Americas. NOTE: This course can be used to satisfy the university Core International Studies (IS) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: IS

Repeatability: This course may not be repeated for additional credits.

WMST 2000. Topics in Women's Studies. 3 Credit Hours.
Specific cultural or social studies in gender issues with an emphasis on interdisciplinary analyses. NOTE: A variable topics course.

Repeatability: This course may be repeated for additional credit.

WMST 2001. Women in Religion and Society. 3 Credit Hours.
Study of both the roles and the understanding of women in primitive and major modern religious traditions, particularly of the West, including an investigation of the authoritative writings and practices of the various traditions.

Repeatability: This course may not be repeated for additional credits.

WMST 2002. Sexual Differences in the Cinema. 3 Credit Hours.
Women and film introductory course foregrounding various feminist film theories (Mulvey, Kaplan, Thornham), their construction of the term "woman" and feminism's relationship to "difference" based in categories such as race, class, and sexuality. Possible readings of both Hollywood films, independent films, international films, and more marginal cinemas such as documentary and the experimental are discussed.

Repeatability: This course may not be repeated for additional credits.

WMST 2051. Critical Race Theory and Feminist Implications. 3 Credit Hours.
Building from the ground breaking critical race theory texts that emerged within legal academia during the early 1990's this course will consider the historical underpinnings of this literature and its implications for future feminist theory and practice. The course will investigate the limits of liberal legal remedies in addressing the severe social realities faced by many women of color. We will pay particular attention to the persistence of structural, institutional and everyday racism despite the rejection of race as a viable biological concept with regards to the human species. The experiences of women and men, and sexual identity will be discussed alongside feminist theories of intersectionality. The course will consider how core concepts from critical race theory are deployed within transnational feminist thought and activism.

Repeatability: This course may not be repeated for additional credits

Pre-requisites:
WMST 1301|Minimum Grade of C-|May not be taken concurrently.

WMST 2082. Independent Study. 1 to 6 Credit Hour.
For students who would like to pursue topics on women and sex roles not offered within regular college courses. Original research and projects encouraged. Close faculty supervision both in designing and carrying out the independent study. NOTE: Students must have selected a faculty advisor and submitted a formal proposal before registering for the course.

Repeatability: This course may be repeated for additional credit.
WMST 2096. The Politics of Diversity. 3 Credit Hours.
What does cultural diversity mean to you? To some of us, it is an attempt to forge a new definition of pluralism and community in American culture. To others, it is an opportunity to re-examine American life based on new concepts about race, gender, and class. To others it implies the abandonment of the Western intellectual tradition. Some see it as a way to avoid dealing with racism in the United States by focusing attention on women, gays, the disabled, and white ethnic and religious minorities. This course will examine the current debate about diversity. We will focus our attention on cases that have been part of the controversy. NOTE: This course can be used to satisfy a university Core Studies in Race and Writing Intensive (WR) requirement. Although it may be usable towards graduation as a major requirement or university elective, it cannot be used to satisfy any of the university GenEd requirements. See your advisor for further information.

Course Attributes: WR
Repeatability: This course may not be repeated for additional credits.

WMST 2108. Women's Voices in Russian Culture. 3 Credit Hours.
In this course we will study the depiction of women's voices in Russian culture (memoirs, fiction, feature and documentary films, research in both anthropology and sociology), by female and male authors, researchers, and filmmakers in the context of a larger study of women in Russian culture. Our course will start with an historical survey, but focus most closely on Russian women in the 20th century.

Repeatability: This course may not be repeated for additional credits.

WMST 2109. Sexuality and Gender in American History. 3 Credit Hours.
This course takes us from the beginning of the 20th century (actually, from the tail end of the 19th) to the present, exploring the social, cultural, and political dimensions of the public and private roles of women and men in the United States. It examines changing cultural values and social norms of masculinity and femininity as well as actual behavior of women and men in the family, at work and at play, in love, and in the life of the nation. It also probes the ways in which race, social class, and sexual orientation have affected the experience of gender.

Repeatability: This course may not be repeated for additional credits.

WMST 2159. Sex/Gender/Film/History. 3 Credit Hours.
Students will analyze mainstream, popular films produced in the post-WWII 20th century U.S., treating them as cultural texts that shed light on the ongoing historical struggles over gender identity and appropriate sexual behaviors.

Repeatability: This course may not be repeated for additional credits.

WMST 2160. Topics in Women's Literature. 3 Credit Hours.
Variable content course which examines the representation of women and the literature written by English, American, or other countries' women writers. This course has been offered with many specific topics combining biography and literary texts; neglected masterpieces of American literature by black and white women; woman as hero/heroine; the questions of love, marriage, and vocation for women from 1850 to 1940 and other thematic motifs of 20th and 21st century women's literature. Note: Formerly known as Women in Literature WMST 2197 and ENG 2197. Students may earn up to 6 credits of coursework taken from the following courses: ENG 2160, ENG 2197, WMST 2160, WMST 2197.

Repeatability: This course may be repeated for a total of 6 credit.

WMST 2202. Religion and Human Sexuality East & West. 3 Credit Hours.
The goal of this course is to examine the attitudes and practices of the major world religions regarding human sexuality. Topics to be covered will include marriage and procreation, and such controversial issues as abortion, homosexuality and sexual activity outside of marriage. Note: Religion and Human Sexuality is taught as a cross-listed course in Religion, Women's Studies, and LGBT Studies. Students may receive credit for only one of the following courses: REL 2002, LGBT 2002, WMST 2202.

Repeatability: This course may not be repeated for additional credits.

WMST 2405. Gay and Lesbian Lives. 3 Credit Hours.
In this course we will read autobiographical accounts (memoirs, essays, diaries, and poems) in which a significant portion of the narrative focuses on same-sex erotic attraction and/or gender difference, identified in contemporary society by the label Lesbian/Gay/Bisexual/Transgender/Intersex or the generic (and contested) Queer. The works were selected both to examine how gay and lesbian lives have been defined and altered over the course of the last sixty years and to provide a perspective of national, ethnic, religious, and racial diversity. Our main focus in the classroom will be discussion of these texts and their contexts. The classroom will be augmented by a research assignment focused on a gay or lesbian life we have not examined together in class.

Repeatability: This course may not be repeated for additional credits.

WMST 2815. Love, Marriage, and Family. 3 Credit Hours.
It is easy to assume that love, marriage, and family go together, but this has not always been the case. These concepts have a history. This course is a comparative examination of love, marriage, and family and the related themes of gender and sexuality in different historical periods and geographical areas. It includes ancient, medieval, and modern texts and materials and covers both western (European and American) and non-western (Asian, African, and perhaps Middle Eastern and Latin American) case studies. NOTE: Each instructor may place a different emphasis among those topics and regions.

Repeatability: This course may not be repeated for additional credits.
WMST 2816. Gender, Class, and Nation. 3 Credit Hours.
This course explores the social and economic roles of women and men in modern Europe. Comparison of the impact of gender, class and nationality on middle-class, working class and peasant women and men in England, France, Germany, Italy and Russia. The effects of industrialization, nationalism, war, fascism, communism and the welfare state on women and men's lives. Covers the evolution of the role of girls and women in the family and the changing status of single and married women in the home and the workplace.
Repeatability: This course may not be repeated for additional credits.

WMST 2817. Gender, War, and Society. 3 Credit Hours.
In wartime, the traditional organization of society is often radically altered to meet the pragmatic and ideological needs of triumphing in the ongoing conflict. Ideas about gender - i.e., how masculinity and femininity are defined - are frequently subject to radical revision in the context of a society at war. This course examines the European and, to a lesser extent, the American experiences of war during the two World Wars and the intervening twenty-year period, to understand how war and ideas of gender are related. Using both primary and secondary source materials, as well as films about World Wars I and II, the course looks at the experiences of men and women on the front lines and on the home front, those who participated in the wars and those who resisted them, those who benefited from war and those who participated in the wars and those who resisted them, those who benefited from war and those who were its victims. The course examines not only how wartime experiences construct and revise ideas about gender, but also how the rhetoric of gender is often used to further wartime aims.
Repeatability: This course may not be repeated for additional credits.

WMST 2900. Honors Topics in Women's Studies. 3 Credit Hours.
Specific cultural or social studies in gender issues with an emphasis on interdisciplinary analyses. NOTE: A variable topics course.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.

WMST 2996. Honors The Politics of Diversity. 3 Credit Hours.
What does cultural diversity mean to you? To some of us, it is an attempt to forge a new definition of pluralism and community in American culture. To others, it is an opportunity to re-examine American life based on new concepts about race, gender, and class. To others it implies the abandonment of the Western intellectual tradition. Some see it as a way to avoid dealing with racism in the United States by focusing attention on women, gays, the disabled, and white ethnic and religious minorities. This course will examine the current debate about diversity. We will focus our attention on cases that have been part of the controversy.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO, WI
Repeatability: This course may not be repeated for additional credits.

WMST 3000. Topics in Women's Studies. 3 Credit Hours.
Specific cultural or social studies in gender issues with an emphasis on interdisciplinary analyses. NOTE: A variable topics course.
Repeatability: This course may be repeated for additional credit.

WMST 3003. Women Writers In Black Literature. 3 Credit Hours.
Examines the concerns of black women writers: philosophical overtones, universal statements, literary structures, dominant themes. Will be taught from a comparative perspective by examining representative black women writers in the United States, the Caribbean and Africa. Will include the poetry, drama, short stories and the novels of major writers including Zora Neale Hurston, Buchi Emecheta, Lorraine Hansberry, Elua Sutherland, Sonia Sanchez, and many others. The readings will attempt to demonstrate that, notwithstanding the diversity in cultural, historical, and political backgrounds of the writers, a common thread runs through the works of black women writers.
Repeatability: This course may not be repeated for additional credits.

WMST 3031. Women in Chinese Literature. 3 Credit Hours.
This course focuses on women writers and women as characters in premodern, modern, and contemporary Chinese literature. Texts will include poetry, novels, short stories, and drama. Gender, representation, and women's roles in the history of Chinese literature are among the topics that will be covered. Knowledge of Chinese is not required. The class will be conducted in English, and all readings will be in English translation.
Repeatability: This course may not be repeated for additional credits.

WMST 3082. Independent Study. 1 to 6 Credit Hour.
For students who would like to pursue topics on women and sex roles not offered within regular college courses. Original research and projects encouraged. Close faculty supervision both in designing and carrying out the independent study. NOTE: Students must have selected a faculty advisor and submitted a formal proposal before registering for the course.
Repeatability: This course may be repeated for additional credit.

WMST 3096. The American Woman: Visions and Revisions. 3 Credit Hours.
This course examines the images and roles of women in American culture. Using fiction, poetry, and autobiography, we develop an understanding of stereotypes and myths and we relate these images to the real-life experiences of American women. The readings include all classes and many ethnic groups, and focus primarily on the 20th century.
Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.
WMST 3097. Feminist Theory. 3 Credit Hours.
An examination of contemporary feminist theory as it applies to various fields of academic and social discourse. The course encourages critical analysis of the foundation of knowledge.

Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

WMST 3197. Themes.Genres in Women’s Literature. 3 Credit Hours.
A variable content course in which students examine in depth the ideas, languages, and cultural stances in literature written by women. A specific theme or genre will be taken up each semester. (Courses previously taught under our general [nondisciplinary] Special Topics number have included Women and Poetry, Women's Worlds in Science Fiction and Utopian Literature, and Women's Autobiographical Narratives.) NOTE: A variable topics course.

Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

WMST 3225. Women in U.S. History. 3 Credit Hours.
Explores the ways in which women have both been affected by, and helped to shape, this nation's history. Emphasis will be on how women of different socio-economic backgrounds, races, and ethnic groups have experienced colonization, American expansion, sectionalism, the industrial revolution, urbanization, immigration, war, economic depression, cultural transformations and political change. Commonalities and differences among women, as well as conflicts between them, in a society based on male supremacy will be explored. Issues on how race, ethnicity, and class affect the experience of gender will be highlighted.

Repeatability: This course may not be repeated for additional credits.

WMST 3236. Gender and Technology in Popular Culture. 3 Credit Hours.
The wider context of this seminar is how science and technology influence and shape the world we live in. The focus is on gender related approaches - in what way does technology and its representations shape gender identity - and how this is reflected in popular culture, such as in the science fiction novel and film. Some points of discussion will be feminist critiques of technology, reproductive technologies, virtual reality, and alternative technologies as they are developed as theoretical concepts on the one hand, and are mirrored in science fiction, on the other.

Repeatability: This course may not be repeated for additional credits.

WMST 3241. Getting Medieval: Gender, Sex, Power. 3 Credit Hours.
Does Europe have a sex? Can everyday gender normativity be politically constitutive and also the occasion of excessive violence? To answer these questions we will study what bodies mattered in pre-modern Christian Europe and think about the fate of bodies that did not matter. This course explores different strategies of constructing masculinities and femininities in pre-modern Christian Europe and asks who/what had the power to universalize and discipline such fabrications. We will study how the papacy and medieval monarchies regulated gender and sexuality among Christians and also between Christians, Jews, Muslims and so-called "pagans" from c 500 CE to 1500 CE and in so doing creating a powerful political notion of a territorial "inside" called Europe.

Repeatability: This course may not be repeated for additional credits.

WMST 3258. Women and Work. 3 Credit Hours.
Women's work will be defined in the fullest sense. We shall examine the division of labor between the sexes and changes in women's production in the labor force and in the home from both a historical and a cross-cultural perspective. We shall discuss trends in the employment of women by race, age, and marital status as well as trends in the distribution and nature of household work.

Repeatability: This course may not be repeated for additional credits.

WMST 3259. Women and Poverty. 3 Credit Hours.
This course focuses on women's poverty in the U.S. and the social welfare policies designed to address it. We begin with an overview of poverty in the U.S., ways to measure poverty, and how to read census tables on poverty and income. We then dive into the history of the welfare state in America, starting with the Poorhouse Era and moving through 1996's welfare reform legislation. The second part of the course addresses major issues and themes in poverty scholarship: the culture of poverty thesis, low-wage work, teenage motherhood effects, marriage and single motherhood, social capital, and neighborhood effects. We conclude with a comparative analysis of U.S. and international welfare states.

Repeatability: This course may not be repeated for additional credits.

WMST 3277. Women in the Economy. 3 Credit Hours.
Explores five major themes: unpaid work performed by women in the home; why so many women work for pay; why so many women are clerical workers; why so many women earn substantially less than men (wage differentials). Consideration of these topics and women workers in the Third World - requires understanding alternative economic theories of the labor market and economic approaches to discrimination as well as historical changes in the nature of unpaid and paid work. We shall discuss these theories and apply them to the economic situation of women here and in other societies.

Repeatability: This course may not be repeated for additional credits.
WMST 3431. Women's Lives in Modern Europe. 3 Credit Hours.
This course treats issues related to women's status and power in modern European history from the 18th century to the present. The emphasis of the course will be on the experiences of women in England, France, Germany, and Russia where many economic and political changes have occurred in the last few centuries. The purpose of this course is to discuss important issues that women have confronted in the past, and that continue to influence problems that women face today such as: personal, economic, and political power, education, sexuality, psychology, and social esteem, women's position in the home and the workplace plus the continuing question of conventional versus unconventional gender roles in Western societies. To supplement a general text and several published sources in European history, students will be reading memoirs and essays written by women on economic, political, and social issues pertaining to women, work, and the family during the past two centuries.
Repeatability: This course may not be repeated for additional credits.

WMST 3542. Women & Society in Japan. 3 Credit Hours.
This course analyzes the changing position of women in Japanese society from ancient times to the present. Through discussions, lectures, and audiovisual materials, students learn about goddesses, female diviners, empresses, the classical female writers, women in warrior culture, women in industrializing Japan, and Japanese women's movements.
Repeatability: This course may not be repeated for additional credits.

WMST 3546. Sexuality and Gender. 3 Credit Hours.
This is a historically oriented course focused on competing views of sexuality, in particular, essentialist theories and those which take a social constructionist approach. The first part of the course will lay the groundwork for the analysis of particular areas of sexuality by focusing on the transition from 19th century views of sexuality to the 20th century and on the learning of sexual scripts. The second part of the course will apply these perspectives to a variety of issues including rape, pornography, abortion, and prostitution.
Repeatability: This course may not be repeated for additional credits.

WMST 3559. Health and Reproduction. 3 Credit Hours.
This course will focus on health and human reproduction in the United States. We will view reproduction as both a biological and social event and will be particularly concerned with the medical and health aspects of reproduction. Decisions about child bearing, the medicalization of child bearing, fecundity, birth control, fetal and neonatal health, maternal health and new reproductive technologies are among the topics that will be considered in the research-intensive course. The course will also cover technical, methodological and statistical issues arising in the study of reproduction. NOTE: This is a research-intensive course.
Repeatability: This course may not be repeated for additional credits.

WMST 3721. Women in Pre-Industrial Societies. 3 Credit Hours.
This course analyzes the changing position of women in Japanese society from ancient times to the present. Through discussions, lectures, and audiovisual materials, students learn about goddesses, female diviners, empresses, the classical female writers, women in warrior culture, women in industrializing Japan, and Japanese women's movements.
Repeatability: This course may not be repeated for additional credits.

WMST 3900. Honors Topics in Women's Studies. 3 Credit Hours.
A variable topics course. Additional work arranged by the instructor.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO
Repeatability: This course may be repeated for additional credit.

WMST 3997. Honors: Feminist Theory. 3 Credit Hours.
An examination of contemporary feminist theory as it applies to various fields of academic and social discourse. The course encourages critical analysis of the foundation of knowledge.
Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR
Course Attributes: HO, WI
Repeatability: This course may not be repeated for additional credits.

WMST 4000. Seminar in Women's Studies. 3 Credit Hours.
A variable content course which selects one of the topics necessary for a comprehensive understanding of women in society and studies it in depth. The course may focus on a particular group of women, the study of women from a specific perspective, or the position of women in a particular institution.
Repeatability: This course may be repeated for additional credit.

WMST 4004. Women and Criminal Justice. 3 Credit Hours.
The aims are to develop an understanding of the status of women in the Criminal Justice System as offenders, victims, and workers. We will examine the extent to which status is a reflection of stereotypes of women currently in vogue or a reflection of social structural arrangements in society. Patterns of female crime, treatment within the criminal justice system, victimization, and career opportunities will be studied and compared with those of males, as well as within other societies, where data is available.
Repeatability: This course may not be repeated for additional credits.
WMST 4097. Gender, Race, Class and The City. 3 Credit Hours.
This course will focus on the relationships among gender, race, class, and urban spaces of the 20th century U.S. cities. The course will explore how urban spaces reflect and perpetuate different relations of power, inequality, and identity. How does urban space reflect and reinforce unequal power relations? How do multiple and contradictory identities shape one's experience of the city? How are contemporary debates about the city imbued with racialized, gendered and classed meanings? Focus will be on housing (suburbanization, gentrification, and homelessness), economic restructuring and poverty, welfare policy, and urban social movements.

Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

WMST 4121. Women and Politics. 3 Credit Hours.
The women's movement and its implications for public policy. The role of politics and political philosophy in restraining women's opportunities; an examination of the ideological roots of feminism; present discrimination in the workplace; and women as political activists.

Repeatability: This course may not be repeated for additional credits.

WMST 4389. Field Work in Women's Studies. 3 Credit Hours.
The opportunity to work in a public or private agency whose mission includes women's advocacy. Available to students majoring in Women's Studies and students throughout the College of Liberal Arts. A paper or project related to the area of the field study is also required. NOTE: Placement and faculty advisors arranged prior to registration. (Call 215-204-6953.) Requires a designated supervisor at the field placement (minimum of 7 1/2 hours per week) and a faculty advisor within the College.

Repeatability: This course may be repeated for additional credit.

WMST 4396. Research Seminar in Women's Studies. 3 Credit Hours.
This course serves as the capstone for the Women's Studies major. Students write a substantial research paper (20-25 pages) either drawn from and expanding upon their Women's Studies internship, or on another selected topic. They work closely with the instructor and each other in increasing and applying their understanding of the writing process, scholarly research, and feminist theory and methodology. NOTE: Capstone writing course. For majors only.

Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

WMST 4411. Secularism: Jewish and Muslim Women. 3 Credit Hours.
In its three-hundred-year history as a Western concept, secularism is often defined as the opposite of religion. Religious women have alternately found western secularism to be a source of liberation (as it grants them greater civil rights) and a source of oppression (as it putatively shrinks the religious sphere). In creating feminisms through Jewish and Muslim experience, feminisms that are both secular and religious, these religious women have complicated the meanings of secularism. They have also challenged the notion that feminism is necessarily secular. This course looks at examples of Jewish and Muslim women's lives and feminist thought in the US, Europe, and the Middle East. The course will compare and contrast the feminism of these two groups of religious women, in order to more fully understand the role of concepts like secularism, feminism, and religion.

Repeatability: This course may not be repeated for additional credits.

WMST 4696. Asian Women in Transition. 3 Credit Hours.
This course introduces and compares the experiences of women in Asia and Asian women in migration to the United States in the modern period, including rural and urban women, and ordinary and elite women in the late 19th and 20th centuries. Topics include women in households, women and work, and women's activism.

Course Attributes: WI
Repeatability: This course may not be repeated for additional credits.

WMST 4999. Honors Thesis Independent Study. 3 Credit Hours.
Individually supervised research and writing, in partial fulfillment of the requirements for graduating with Honors in Women's Studies. NOTE: Permission of program director required.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR

Course Attributes: HO
Repeatability: This course may be repeated for additional credit.
Academic Programs

The Academic Programs Chart lists Temple University's degrees, majors, minors and certificates alphabetically, along with the school or college that grants each degree, major, minor and certificate.

Students should be aware that, while all programs cannot be completed on all campuses, courses in many programs are offered on multiple campuses. To learn what specific courses are offered on which campuses in a given semester, refer to the Class Schedule.

Major

A cohesive combination of courses including introductory, intermediate, and advanced coursework that designates a student's primary area of undergraduate study. Majors can be established or restructured to include required or optional tracks/concentrations. A major is typically 36-76 credit hours. Majors are designated on University transcripts at the time the degree is awarded.

Minor

A designated sequence of courses in a discipline or area of undergraduate study. Like the major, it is expected to have coherence and increasing sophistication. A minor is typically 18-24 credit hours (or approximately half of the major) and is independent of the student's major. Minors are designated on University transcripts when the degree is awarded.

Track/Concentration

A coordinated grouping of courses, typically one-third of a major, representing a sub-specialization or emphasis within a major field available for students majoring in that discipline. Track/Concentrations may be offered at the undergraduate, graduate, or professional level. Majors with track/concentration are designated on University transcripts when the degree is awarded.

Certificate

An academic program in which the student completes a prescribed course of study, typically 12 or more credit hours. This may be at the undergraduate, graduate or professional level. Certificates may be pursued independently of and without enrollment in any degree program.

Academic Programs Chart: Degrees, Majors, Minors, Certificates

Asterisks (*) and carets (^) denote multiple option areas (emphasis/concentration) within a program.

<table>
<thead>
<tr>
<th>Degree Programs (emphasis)</th>
<th>Undergraduate</th>
<th>Graduate</th>
<th>Professional</th>
<th>School/College</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accomplished Teaching</td>
<td></td>
<td>M.S.Ed. (<a href="http://bulletin.temple.edu/graduate/scd/education/accomplished-teaching-msed">http://bulletin.temple.edu/graduate/scd/education/accomplished-teaching-msed</a>)</td>
<td></td>
<td>ED</td>
</tr>
<tr>
<td>Accountancy</td>
<td></td>
<td>M.Acc. (<a href="http://bulletin.temple.edu/graduate/scd/fox/accountancy-macc">http://bulletin.temple.edu/graduate/scd/fox/accountancy-macc</a>)</td>
<td></td>
<td>BU</td>
</tr>
<tr>
<td>Accounting (Corporate Accounting*)</td>
<td>B.B.A. (p. 588), Minor (p. 570)</td>
<td>M.S.* (<a href="http://bulletin.temple.edu/graduate/scd/fox/accounting-ms">http://bulletin.temple.edu/graduate/scd/fox/accounting-ms</a>)</td>
<td></td>
<td>BU</td>
</tr>
<tr>
<td>Accounting and Financial Management</td>
<td></td>
<td>Post-M.B.A. Cert.</td>
<td></td>
<td>BU</td>
</tr>
<tr>
<td>Acting</td>
<td>Cert. (p. 388)</td>
<td></td>
<td></td>
<td>CA</td>
</tr>
<tr>
<td>Actuarial Science</td>
<td>B.B.A. (p. 591)</td>
<td>M.S. (<a href="http://bulletin.temple.edu/graduate/scd/fox/actuarial-science-ms">http://bulletin.temple.edu/graduate/scd/fox/actuarial-science-ms</a>), Post-M.B.A. Cert.</td>
<td></td>
<td>BU</td>
</tr>
<tr>
<td>Adult and Organizational Development</td>
<td>B.A. (p. 407), Minor (p. 409)</td>
<td>M.Ed. (<a href="http://bulletin.temple.edu/graduate/scd/education/adult-organizational-development-med">http://bulletin.temple.edu/graduate/scd/education/adult-organizational-development-med</a>)</td>
<td></td>
<td>ED</td>
</tr>
<tr>
<td>Advanced Education in General Dentistry</td>
<td></td>
<td>Cert.</td>
<td></td>
<td>DN</td>
</tr>
<tr>
<td>Advanced Quality Assurance and Regulatory Affairs</td>
<td>Post-Master’s Cert.</td>
<td></td>
<td></td>
<td>PH</td>
</tr>
<tr>
<td>Advertising (Account Management)</td>
<td>B.A. (p. 941)</td>
<td></td>
<td></td>
<td>CO</td>
</tr>
<tr>
<td>Advertising (Art Direction)</td>
<td>B.A. (p. 944)</td>
<td></td>
<td></td>
<td>CO</td>
</tr>
<tr>
<td>Advertising (Copywriting)</td>
<td>B.A. (p. 947)</td>
<td></td>
<td></td>
<td>CO</td>
</tr>
<tr>
<td>Program</td>
<td>Degree(s)</td>
<td>School/College</td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>---------------------------------------------------------------------------</td>
<td>----------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advertising (International Communication*)</td>
<td>Conc.* (p. 973)</td>
<td>CO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advertising (Media Planning)</td>
<td>B.A. (p. 950)</td>
<td>CO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advertising (Research and Strategy)</td>
<td>B.A. (p. 953)</td>
<td>CO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American Studies</td>
<td>B.A. (p. 775), Minor (p. 778), M.A. (<a href="http://bulletin.temple.edu/graduate/scd/cla/african-american-studies-ma">http://bulletin.temple.edu/graduate/scd/cla/african-american-studies-ma</a>), Ph.D. (<a href="http://bulletin.temple.edu/graduate/scd/cla/african-american-studies-phd">http://bulletin.temple.edu/graduate/scd/cla/african-american-studies-phd</a>)</td>
<td>LA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>American Legal Studies (active in Japan)</td>
<td>Cert.</td>
<td>LW</td>
<td></td>
<td></td>
</tr>
<tr>
<td>American Sign Language</td>
<td>Cert. (p. 697)</td>
<td>HP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>American Studies</td>
<td>B.A. (p. 779), Minor (p. 783)</td>
<td>LA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>American/International Law</td>
<td></td>
<td>LL,M.</td>
<td>LW</td>
<td></td>
</tr>
<tr>
<td>American/International Law - China</td>
<td></td>
<td>LL,M.</td>
<td>LW</td>
<td></td>
</tr>
<tr>
<td>Ancient Mediterranean Studies</td>
<td>Minor (p. 809)</td>
<td>LA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anthropology</td>
<td>B.A. (p. 784), Minor (p. 794), M.A. (not open for direct admission), Ph.D. (<a href="http://bulletin.temple.edu/graduate/scd/cla/anthropology-phd">http://bulletin.temple.edu/graduate/scd/cla/anthropology-phd</a>)</td>
<td>LA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anthropology (Human Biology)</td>
<td>B.A. (p. 788)</td>
<td>LA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Applied Behavior Analysis</td>
<td>M.S.Ed. (<a href="http://bulletin.temple.edu/graduate/scd/education/applied-behavior-analysis-msed">http://bulletin.temple.edu/graduate/scd/education/applied-behavior-analysis-msed</a>), Cert. (<a href="http://bulletin.temple.edu/graduate/scd/education/applied-behavior-analysis-certificate">http://bulletin.temple.edu/graduate/scd/education/applied-behavior-analysis-certificate</a>)</td>
<td>ED</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Applied Mathematics</td>
<td>B.S. (p. 1135)</td>
<td>ST</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arabic</td>
<td>Cert. (p. 795), Minor (p. 795)</td>
<td>LA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Architectural Preservation</td>
<td>B.S. (p. 203)</td>
<td>TA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Architecture</td>
<td>B.S.Arch. (p. 206)</td>
<td>TA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Art</td>
<td>B.A. (active in Japan) (p. 213), Minor (p. 212)</td>
<td>TA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Art Education</td>
<td>B.S.Ed. (p. 216)</td>
<td>TA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Art History</td>
<td>B.A. (p. 220), Minor (p. 220), M.A. (<a href="http://bulletin.temple.edu/graduate/scd/tyler/art-history-ma">http://bulletin.temple.edu/graduate/scd/tyler/art-history-ma</a>), Ph.D. (<a href="http://bulletin.temple.edu/graduate/scd/tyler/art-history-phd">http://bulletin.temple.edu/graduate/scd/tyler/art-history-phd</a>)</td>
<td>TA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arts in Community</td>
<td>Cert. (p. 219)</td>
<td>TA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian American Studies</td>
<td>Minor (p. 782)</td>
<td>LA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian Business and Society</td>
<td>Cert. (p. 800)</td>
<td>BU, LA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic Programs</td>
<td>LL.M.</td>
<td>LW</td>
<td>LA</td>
<td>HP</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>-------</td>
<td>----</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>Asian Law</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian Studies</td>
<td>B.A. (p. 797), Minor (p. 802)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Autism Endorsement</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic Pharmaceutical Development</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biochemistry</td>
<td>B.S. (p. 1082)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bioengineering</td>
<td>B.S.Bioe. (p. 470)</td>
<td>M.S.Bioe. (<a href="http://bulletin.temple.edu/graduate/scd/engineering/bioengineering-msbioe">http://bulletin.temple.edu/graduate/scd/engineering/bioengineering-msbioe</a>), Ph.D. (<a href="http://bulletin.temple.edu/graduate/scd/engineering/bioengineering-phd">http://bulletin.temple.edu/graduate/scd/engineering/bioengineering-phd</a>)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bioinformatics</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bioinnovation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biology with Teaching</td>
<td>B.S. (p. 1162)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biomedical Sciences (Cancer Biology and Genetics*, General Biomedical Sciences*, Infectious Disease and Immunity*, Molecular and Cellular Biosciences*, Neuroscience*, Organ Systems and Translational Medicine*)</td>
<td>M.S. (thesis)* (<a href="http://bulletin.temple.edu/graduate/scd/medicine/biomedical-sciences-ms">http://bulletin.temple.edu/graduate/scd/medicine/biomedical-sciences-ms</a>), M.S. (non-thesis)* (<a href="http://bulletin.temple.edu/graduate/scd/medicine/biomedical-sciences-ms">http://bulletin.temple.edu/graduate/scd/medicine/biomedical-sciences-ms</a>), Ph.D.* (<a href="http://bulletin.temple.edu/graduate/scd/medicine/biomedical-sciences-phd">http://bulletin.temple.edu/graduate/scd/medicine/biomedical-sciences-phd</a>)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biopharmaceuticals and Generic Drugs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biophysics</td>
<td>B.S. (p. 1147)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biotechnology</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business</td>
<td>Minor (p. 572)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Administration</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Administration/Accounting</td>
<td>Ph.D. (<a href="http://bulletin.temple.edu/graduate/scd/fox/business-admin-accounting-phd">http://bulletin.temple.edu/graduate/scd/fox/business-admin-accounting-phd</a>)</td>
<td>BU</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Administration/Entrepreneurship</td>
<td>M.B.A. (<a href="http://bulletin.temple.edu/graduate/scd/fox/business-admin-entrepreneurship-mba">http://bulletin.temple.edu/graduate/scd/fox/business-admin-entrepreneurship-mba</a>), Ph.D. (not currently accepting applications) (<a href="http://bulletin.temple.edu/graduate/scd/fox/business-admin-entrepreneurship-phd">http://bulletin.temple.edu/graduate/scd/fox/business-admin-entrepreneurship-phd</a>)</td>
<td>BU</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Administration/Finance</td>
<td>Ph.D. (<a href="http://bulletin.temple.edu/graduate/scd/fox/business-admin-finance-phd">http://bulletin.temple.edu/graduate/scd/fox/business-admin-finance-phd</a>)</td>
<td>BU</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic Programs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------------------------------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Administration/Interdisciplinary Study</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Administration/International Business</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administration</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Administration/Management Information Systems</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Administration/Marketing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Administration/Marketing Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Administration/Risk Management and Insurance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Administration/Strategic Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Administration/Tourism and Sport</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Analytics</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Basics</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Law</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Plus</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Research</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Career and Technical Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Career and Technical Education/Business, Computer and</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information Technology</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Ph.D.** (http://bulletin.temple.edu/graduate/scd/fox/business-admin-interdisciplinary-study-phd)  
**BU**  
**Ph.D.** (http://bulletin.temple.edu/graduate/scd/fox/business-admin-international-business-administration-phd)  
**BU**  
**Ph.D.** (http://bulletin.temple.edu/graduate/scd/fox/business-admin-management-information-systems-phd)  
**BU**  
**Ph.D.** (http://bulletin.temple.edu/graduate/scd/fox/business-admin-marketing-phd)  
**BU**  
**M.B.A.** (http://bulletin.temple.edu/graduate/scd/fox/business-admin-marketing-management-mba)  
**BU**  
**Ph.D.** (http://bulletin.temple.edu/graduate/scd/fox/business-admin-risk-management-insurance-phd)  
**BU**  
**BU**  
**Ph.D.** (http://bulletin.temple.edu/graduate/scd/fox/business-admin-tourism-sport-phd)  
**BU**  
**Minor (p. 571)**  
**BU**  
**Cert. (p. 571)**  
**BU**  
**Cert.**  
**LW**  
**B.B.A. (p. 594)**  
**BU**  
**Cert. (p. 572)**  
**BU**  
**M.S. (not open for direct admission)**  
**BU**  
**M.S.Ed.** (http://bulletin.temple.edu/graduate/scd/education/career-technical-education-msed)  
**ED**  
**M.Ed.** (http://bulletin.temple.edu/graduate/scd/education/career-technical-education-business-computer-information-technology-med)  
**ED**
<table>
<thead>
<tr>
<th>Program</th>
<th>Degree</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career and Technical Education/Business, Computer, and Information Technology Education</td>
<td>B.S.Ed. (p. 410)</td>
<td></td>
</tr>
<tr>
<td>Career and Technical Education/Cooperative Education</td>
<td>B.S.Ed. (p. 418)</td>
<td>ED</td>
</tr>
<tr>
<td>Career and Technical Education/Industrial Education</td>
<td>B.S.Ed. (p. 413)</td>
<td>ED</td>
</tr>
<tr>
<td>Career and Technical Education/K-12</td>
<td>Cert.</td>
<td>ED</td>
</tr>
<tr>
<td>Career and Technical Education/Marketing Education</td>
<td>B.S.Ed. (p. 416)</td>
<td>ED</td>
</tr>
<tr>
<td>Ceramics/Glass (Art Education*)</td>
<td>B.F.A. (p. 231), Conc.*</td>
<td>TA</td>
</tr>
<tr>
<td>Chamber Music</td>
<td>Cert.</td>
<td>BC</td>
</tr>
<tr>
<td>Chemistry with Teaching</td>
<td>B.S. (p. 1167)</td>
<td>ST</td>
</tr>
<tr>
<td>Child and Family Services</td>
<td>Cert.</td>
<td>SW</td>
</tr>
<tr>
<td>Chinese</td>
<td>Cert.  (p. 802), Minor (p. 803)</td>
<td>LA</td>
</tr>
<tr>
<td>Choral Conducting</td>
<td>M.M. (<a href="http://bulletin.temple.edu/graduate/scd/boyer/choral-conducting-mm">http://bulletin.temple.edu/graduate/scd/boyer/choral-conducting-mm</a>)</td>
<td>BC</td>
</tr>
<tr>
<td>Civil Engineering</td>
<td>B.S.C.E. (p. 475)</td>
<td>EN</td>
</tr>
<tr>
<td>Civil Engineering (Cooperative Education Program)</td>
<td>B.S.C.E. (p. 486)</td>
<td>EN</td>
</tr>
<tr>
<td>Civil Engineering (Environmental Engineering with Cooperative Education Program)</td>
<td>B.S.C.E. (p. 482)</td>
<td>EN</td>
</tr>
<tr>
<td>Civil Engineering (Environmental Engineering)</td>
<td>B.S.C.E. (p. 479)</td>
<td>EN</td>
</tr>
<tr>
<td>Classical Languages and Literature</td>
<td>Minor (p. 810)</td>
<td>LA</td>
</tr>
<tr>
<td>Classical Piano</td>
<td>Cert.  (p. 286)</td>
<td>BC</td>
</tr>
<tr>
<td>Classical Voice</td>
<td>Cert.  (p. 287)</td>
<td>BC</td>
</tr>
<tr>
<td>Classics (Classical Civilizations)</td>
<td>B.A. (p. 804)</td>
<td>LA</td>
</tr>
<tr>
<td>Academic Programs</td>
<td>Level</td>
<td>Minor/Minor Program(s)</td>
</tr>
<tr>
<td>-------------------</td>
<td>------</td>
<td>------------------------</td>
</tr>
<tr>
<td>Classics (Classical Languages and Literature)</td>
<td>B.A.</td>
<td>(p. 807)</td>
</tr>
<tr>
<td>Clinical Health Leader</td>
<td>Cert.</td>
<td></td>
</tr>
<tr>
<td>Clinical Research and Translational Medicine</td>
<td>M.S. (<a href="http://bulletin.temple.edu/graduate/scd/cph/clinical-research-translational-medicine-ms">Link</a>)</td>
<td></td>
</tr>
<tr>
<td>Clinical Trial Management</td>
<td>Cert., Post-Master's Cert.</td>
<td></td>
</tr>
<tr>
<td>Clinical and Health Psychology</td>
<td>Minor (p. 904)</td>
<td></td>
</tr>
<tr>
<td>Cognitive Neuroscience</td>
<td>Minor (p. 905)</td>
<td></td>
</tr>
<tr>
<td>Collaborative Piano and Chamber Music</td>
<td>M.M. (<a href="http://bulletin.temple.edu/graduate/scd/boyer/collaborative-piano-chamber-music-mm">Link</a>)</td>
<td></td>
</tr>
<tr>
<td>Collaborative Piano and Opera Coaching</td>
<td>M.M. (<a href="http://bulletin.temple.edu/graduate/scd/boyer/collaborative-piano-opera-coaching-mm">Link</a>)</td>
<td></td>
</tr>
<tr>
<td>Commercialization of Technological Innovation</td>
<td>Cert. (<a href="http://bulletin.temple.edu/graduate/scd/fox/commercialization-technological-innovation-certificate">Link</a>)</td>
<td></td>
</tr>
<tr>
<td>Communication Management</td>
<td>M.S. (<a href="http://bulletin.temple.edu/graduate/scd/smc/communication-management-ms">Link</a>)</td>
<td></td>
</tr>
<tr>
<td>Communication Sciences</td>
<td>Ph.D. (<a href="http://bulletin.temple.edu/graduate/scd/cph/communication-sciences-phd">Link</a>)</td>
<td></td>
</tr>
<tr>
<td>Communication Sciences and Minor (p. 703) Disorders</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication Studies</td>
<td>Minor (p. 973)</td>
<td></td>
</tr>
<tr>
<td>Communication Studies (Communication Studies Thesis)</td>
<td>B.A. (p. 957)</td>
<td></td>
</tr>
<tr>
<td>Communication Studies (Communication and Entrepreneurship)</td>
<td>B.A. (p. 960)</td>
<td></td>
</tr>
<tr>
<td>Communication Studies (Contemporary Media Environments)</td>
<td>B.A. (p. 963)</td>
<td></td>
</tr>
<tr>
<td>Communication Studies (Global Civil Society)</td>
<td>B.A. (p. 966)</td>
<td></td>
</tr>
<tr>
<td>Communication Studies (International Communication*)</td>
<td>B.A. (p. 956), Conc.* (p. 973)</td>
<td></td>
</tr>
<tr>
<td>Communication Studies (Policy, Regulation and Advocacy)</td>
<td>B.A. (p. 969)</td>
<td></td>
</tr>
<tr>
<td>Community Development</td>
<td>B.S. (p. 667), Minor (p. 672)</td>
<td></td>
</tr>
<tr>
<td>Community and Regional Planning (Sustainable Community Planning*, Transportation Planning*)</td>
<td>Minor (p. 672)</td>
<td>M.S.* (<a href="http://bulletin.temple.edu/graduate/scd/sed/community-regional-planning-ms">Link</a>)</td>
</tr>
</tbody>
</table>

*Note: B.S., B.A., M.S., Ph.D., Cert., Conc.*
<table>
<thead>
<tr>
<th>Program</th>
<th>Degree(s)</th>
<th>Certification(s)</th>
<th>College(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Science</td>
<td>B.A. (p. 1097), B.S. (p. 1101), M.S. (<a href="http://bulletin.temple.edu/graduate/scd/cst/computer-science-ms">http://bulletin.temple.edu/graduate/scd/cst/computer-science-ms</a>), Cert.</td>
<td>ST</td>
<td></td>
</tr>
<tr>
<td>Computer Security and Digital Forensics</td>
<td>Cert. (p. 1106)</td>
<td>ST</td>
<td></td>
</tr>
<tr>
<td>Conflict Process</td>
<td>Cert. (<a href="http://bulletin.temple.edu/graduate/scd/education/conflict-process-certificate">http://bulletin.temple.edu/graduate/scd/education/conflict-process-certificate</a>)</td>
<td>ED</td>
<td></td>
</tr>
<tr>
<td>Construction Management Technology</td>
<td>B.S.E.T. (p. 494)</td>
<td>EN</td>
<td></td>
</tr>
<tr>
<td>Construction Management Technology (Cooperative Education Program)</td>
<td>B.S.E.T. (p. 497)</td>
<td>EN</td>
<td></td>
</tr>
<tr>
<td>Corporate Compliance and Ethics (Financial Services Industry, Healthcare)</td>
<td>M.S. (<a href="http://bulletin.temple.edu/graduate/scd/fox/corporate-compliance-ethics-ms">http://bulletin.temple.edu/graduate/scd/fox/corporate-compliance-ethics-ms</a>)</td>
<td>BU</td>
<td></td>
</tr>
<tr>
<td>Corporate Social Responsibility</td>
<td>Minor (p. 574)</td>
<td>BU</td>
<td></td>
</tr>
<tr>
<td>Counseling Psychology</td>
<td>M.Ed. (<a href="http://bulletin.temple.edu/graduate/scd/education/counseling-psychology-med">http://bulletin.temple.edu/graduate/scd/education/counseling-psychology-med</a>), Ph.D. (not currently accepting applications) (<a href="http://bulletin.temple.edu/graduate/scd/education/counseling-psychology-phd">http://bulletin.temple.edu/graduate/scd/education/counseling-psychology-phd</a>)</td>
<td>ED</td>
<td></td>
</tr>
<tr>
<td>Creative Writing</td>
<td>M.F.A. (<a href="http://bulletin.temple.edu/graduate/scd/cla/creative-writing-mfa">http://bulletin.temple.edu/graduate/scd/cla/creative-writing-mfa</a>)</td>
<td>LA</td>
<td></td>
</tr>
<tr>
<td>Data-Driven Decision Making</td>
<td>Cert. (<a href="http://bulletin.temple.edu/graduate/scd/education/data-driven-decision-making-certificate">http://bulletin.temple.edu/graduate/scd/education/data-driven-decision-making-certificate</a>)</td>
<td>ED</td>
<td></td>
</tr>
<tr>
<td>Program</td>
<td>Degree</td>
<td>Location</td>
<td></td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>--------</td>
<td>----------</td>
<td></td>
</tr>
<tr>
<td>Decision Neuroscience</td>
<td>M.S. (not open for direct admission), Ph.D.</td>
<td>BU</td>
<td></td>
</tr>
<tr>
<td>Decision Neuroscience</td>
<td>M.S. (not open for direct admission), Ph.D.</td>
<td>LA</td>
<td></td>
</tr>
<tr>
<td>Dental Public Health</td>
<td>Cert.</td>
<td>DN</td>
<td></td>
</tr>
<tr>
<td>Dentistry (Advanced D.M.D. Program for Faculty, Post-Dental Program for Foreign-Trained Dentists)</td>
<td>D.M.D.</td>
<td>DN</td>
<td></td>
</tr>
<tr>
<td>Digital Innovation in Marketing</td>
<td>M.S.</td>
<td>BU</td>
<td></td>
</tr>
<tr>
<td>Digital Marketing</td>
<td>Minor (p. 574)</td>
<td>BU</td>
<td></td>
</tr>
<tr>
<td>Digital Media Technologies</td>
<td>Minor (p. 160)</td>
<td>ST, CO</td>
<td></td>
</tr>
<tr>
<td>Disability Studies</td>
<td>Cert. (<a href="http://bulletin.temple.edu/graduate/scd/education/disability-studies-certificate">http://bulletin.temple.edu/graduate/scd/education/disability-studies-certificate</a>)</td>
<td>ED</td>
<td></td>
</tr>
<tr>
<td>Diversity Leadership</td>
<td>Cert.</td>
<td>ED</td>
<td></td>
</tr>
<tr>
<td>Documentary Arts and Ethnographic Research</td>
<td>Cert. (<a href="http://bulletin.temple.edu/graduate/scd/tfma/documentary-arts-ethnographic-research-certificate">http://bulletin.temple.edu/graduate/scd/tfma/documentary-arts-ethnographic-research-certificate</a>)</td>
<td>CA</td>
<td></td>
</tr>
<tr>
<td>Drug Development</td>
<td>Cert.</td>
<td>PH</td>
<td></td>
</tr>
<tr>
<td>Early Childhood Education</td>
<td>M.Ed. (<a href="http://bulletin.temple.edu/graduate/scd/education/early-childhood-education-med">http://bulletin.temple.edu/graduate/scd/education/early-childhood-education-med</a>)</td>
<td>ED</td>
<td></td>
</tr>
<tr>
<td>Early Childhood Education and Special Education</td>
<td>M.Ed. (<a href="http://bulletin.temple.edu/graduate/scd/education/early-childhood-education-special-education-med">http://bulletin.temple.edu/graduate/scd/education/early-childhood-education-special-education-med</a>)</td>
<td>ED</td>
<td></td>
</tr>
<tr>
<td>Early Childhood-Elementary Ed (PreK-4)</td>
<td>B.S.Ed. (p. 420)</td>
<td>ED</td>
<td></td>
</tr>
<tr>
<td>Early Childhood-Elementary Ed (PreK-4) (Special Education)</td>
<td>B.S.Ed. (p. 422),</td>
<td>ED</td>
<td></td>
</tr>
<tr>
<td>Earth and Space Science with Teaching</td>
<td>B.S. (p. 1172)</td>
<td>ST</td>
<td></td>
</tr>
<tr>
<td>Ecological Planning and Design</td>
<td>Minor (p. 686)</td>
<td>EV</td>
<td></td>
</tr>
<tr>
<td>Economics</td>
<td>B.B.A. (p. 597), Minor (p. 576)</td>
<td>BU</td>
<td></td>
</tr>
<tr>
<td>Years of Experience: 2023-2024; Years of Variance: 2023-2024</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Indicates that the program is offered in consultation with the Department of Mathematics.
<table>
<thead>
<tr>
<th>Program</th>
<th>Degree(s)</th>
<th>Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economics / Management Career</td>
<td>Cert. (p. 820)</td>
<td>LA</td>
</tr>
<tr>
<td>Education</td>
<td>Minor (p. 445)</td>
<td>ED</td>
</tr>
<tr>
<td>Education/Adult and Organizational Development</td>
<td>Ph.D. (not currently accepting applications) (<a href="http://bulletin.temple.edu/graduate/scd/education/education-adult-organizational-development-phd">http://bulletin.temple.edu/graduate/scd/education/education-adult-organizational-development-phd</a>)</td>
<td>ED</td>
</tr>
<tr>
<td>Education/Applied Linguistics</td>
<td>Ph.D. (<a href="http://bulletin.temple.edu/graduate/scd/education/education-applied-linguistics-phd">http://bulletin.temple.edu/graduate/scd/education/education-applied-linguistics-phd</a>)</td>
<td>ED</td>
</tr>
<tr>
<td>Education/Educational Psychology</td>
<td>Ph.D. (<a href="http://bulletin.temple.edu/graduate/scd/education/education-educational-psychology-phd">http://bulletin.temple.edu/graduate/scd/education/education-educational-psychology-phd</a>)</td>
<td>ED</td>
</tr>
<tr>
<td>Education/Literacy and Learners</td>
<td>Ph.D. (<a href="http://bulletin.temple.edu/graduate/scd/education/education-literacy-learners-phd">http://bulletin.temple.edu/graduate/scd/education/education-literacy-learners-phd</a>)</td>
<td>ED</td>
</tr>
<tr>
<td>Education/Math and Science Education</td>
<td>Ph.D. (<a href="http://bulletin.temple.edu/graduate/scd/education/education-math-science-education-phd">http://bulletin.temple.edu/graduate/scd/education/education-math-science-education-phd</a>)</td>
<td>ED</td>
</tr>
<tr>
<td>Education/Special Education</td>
<td>Ph.D. (<a href="http://bulletin.temple.edu/graduate/scd/education/education-special-education-phd">http://bulletin.temple.edu/graduate/scd/education/education-special-education-phd</a>)</td>
<td>ED</td>
</tr>
<tr>
<td>Education/Urban Education</td>
<td>Ph.D. (<a href="http://bulletin.temple.edu/graduate/scd/education/education-urban-education-phd">http://bulletin.temple.edu/graduate/scd/education/education-urban-education-phd</a>)</td>
<td>ED</td>
</tr>
<tr>
<td>Educational Leadership (K-12, Higher Education)</td>
<td>M.Ed. (<a href="http://bulletin.temple.edu/graduate/scd/education/educational-leadership-med">http://bulletin.temple.edu/graduate/scd/education/educational-leadership-med</a>), Ed.D. (<a href="http://bulletin.temple.edu/graduate/scd/education/educational-leadership-edd">http://bulletin.temple.edu/graduate/scd/education/educational-leadership-edd</a>)</td>
<td>ED</td>
</tr>
<tr>
<td>Educational Psychology</td>
<td>M.Ed. (<a href="http://bulletin.temple.edu/graduate/scd/education/educational-psychology-med">http://bulletin.temple.edu/graduate/scd/education/educational-psychology-med</a>)</td>
<td>ED</td>
</tr>
<tr>
<td>Educational Psychology/ Learning Technology</td>
<td>M.Ed. (not currently accepting applications) (<a href="http://bulletin.temple.edu/graduate/scd/education/educational-psychology-learning-technology-med">http://bulletin.temple.edu/graduate/scd/education/educational-psychology-learning-technology-med</a>)</td>
<td>ED</td>
</tr>
<tr>
<td>Electrical Engineering</td>
<td>B.S.E.E. (p. 502)</td>
<td>EN</td>
</tr>
<tr>
<td>Program</td>
<td>Degree</td>
<td>URL</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>--------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>Electrical Engineering (Bioelectrical Engineering with Cooperative Education Program)</td>
<td>B.S.E.E. (p. 510)</td>
<td>EN</td>
</tr>
<tr>
<td>Electrical Engineering (Bioelectrical Engineering)</td>
<td>B.S.E.E. (p. 506)</td>
<td>EN</td>
</tr>
<tr>
<td>Electrical Engineering (Computer Engineering with Cooperative Education Program)</td>
<td>B.S.E.E. (p. 514)</td>
<td>EN</td>
</tr>
<tr>
<td>Electrical Engineering (Computer Engineering)</td>
<td>B.S.E.E. (p. 518)</td>
<td>EN</td>
</tr>
<tr>
<td>Electrical Engineering (Cooperative Education Program)</td>
<td>B.S.E.E. (p. 522)</td>
<td>EN</td>
</tr>
<tr>
<td>Emergency Management with Cert. (p. 737) Special Populations</td>
<td></td>
<td>HP</td>
</tr>
<tr>
<td>Employee Benefits Law</td>
<td>Cert.</td>
<td>LW</td>
</tr>
<tr>
<td>Endodontics</td>
<td>Cert.</td>
<td>DN</td>
</tr>
<tr>
<td>Engineering</td>
<td>B.S.E. (p. 526)</td>
<td>EN</td>
</tr>
<tr>
<td>Engineering Management</td>
<td>M.S.</td>
<td>(<a href="http://bulletin.temple.edu/graduate/scd/engineering/engineering-management-ms">http://bulletin.temple.edu/graduate/scd/engineering/engineering-management-ms</a>), Cert.</td>
</tr>
<tr>
<td>Engineering Technology (Computer Technology, Construction Technology, Energy Technology, Environmental Technology, General Technology, Mechanical/Manufacturing Technology, Mechatronics Technology)</td>
<td>B.S.E.T. (p. 533)</td>
<td>EN</td>
</tr>
<tr>
<td>Engineering Technology (Cooperative Education Program)</td>
<td>B.S.E.T. (p. 536)</td>
<td>EN</td>
</tr>
<tr>
<td>English</td>
<td>B.A. (p. 822), Minor (p. 828)</td>
<td>M.A. (<a href="http://bulletin.temple.edu/graduate/scd/cla/english-ma">http://bulletin.temple.edu/graduate/scd/cla/english-ma</a>), Ph.D. (<a href="http://bulletin.temple.edu/graduate/scd/cla/english-phd">http://bulletin.temple.edu/graduate/scd/cla/english-phd</a>)</td>
</tr>
<tr>
<td>English (Creative Writing)</td>
<td>B.A. (p. 825)</td>
<td>LA</td>
</tr>
<tr>
<td>English Education/7-12</td>
<td></td>
<td>ED</td>
</tr>
<tr>
<td>English Language Teaching</td>
<td>Cert.</td>
<td>(<a href="http://bulletin.temple.edu/graduate/scd/education/english-language-teaching-certificate">http://bulletin.temple.edu/graduate/scd/education/english-language-teaching-certificate</a>)</td>
</tr>
<tr>
<td>English as a Second Language</td>
<td>Cert.</td>
<td>ED</td>
</tr>
<tr>
<td>Entertainment Law and Business</td>
<td>Minor (p. 577)</td>
<td>BU</td>
</tr>
<tr>
<td>Entrepreneurship</td>
<td>Cert.</td>
<td>BU</td>
</tr>
<tr>
<td>Entrepreneurship and Innovation Management</td>
<td>B.B.A. (p. 600), Minor (p. 577), Cert. (p. 572)</td>
<td>BU</td>
</tr>
<tr>
<td>Program</td>
<td>Level (Year)</td>
<td>Why Code</td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>--------------</td>
<td>----------</td>
</tr>
<tr>
<td>Environmental Engineering</td>
<td>B.S. (p. 489), Minor (p. 492)</td>
<td>EN</td>
</tr>
<tr>
<td>Environmental Health</td>
<td>M.S. (not currently accepting applications) (<a href="http://bulletin.temple.edu/graduate/scd/cph/environmental-health-ms">http://bulletin.temple.edu/graduate/scd/cph/environmental-health-ms</a>)</td>
<td>HP</td>
</tr>
<tr>
<td>Environmental Horticulture</td>
<td>Minor (p. 681)</td>
<td>EV</td>
</tr>
<tr>
<td>Environmental Science</td>
<td>B.S. (p. 1067)</td>
<td>ST</td>
</tr>
<tr>
<td>Environmental Studies</td>
<td>B.A. (p. 830), Minor (p. 835)</td>
<td>LA</td>
</tr>
<tr>
<td>Environmental Sustainability</td>
<td>Cert. (p. 684)</td>
<td>EV</td>
</tr>
<tr>
<td>Epidemiology</td>
<td>M.S. (<a href="http://bulletin.temple.edu/graduate/scd/cph/epidemiology-ms">http://bulletin.temple.edu/graduate/scd/cph/epidemiology-ms</a>), Ph.D. (<a href="http://bulletin.temple.edu/graduate/scd/cph/epidemiology-phd">http://bulletin.temple.edu/graduate/scd/cph/epidemiology-phd</a>)</td>
<td>HP</td>
</tr>
<tr>
<td>Estate Planning</td>
<td>Cert. (p. 1216)</td>
<td>LW</td>
</tr>
<tr>
<td>Event Leadership</td>
<td>Cert. (p. 209)</td>
<td>TH</td>
</tr>
<tr>
<td>Facilities Management</td>
<td>B.S. (p. 209)</td>
<td>TA</td>
</tr>
<tr>
<td>Film</td>
<td>Cert. (p. 373)</td>
<td>CA</td>
</tr>
<tr>
<td>Film and Media Arts</td>
<td>B.A. (p. 349)</td>
<td>CA</td>
</tr>
<tr>
<td>Film and Media Arts (Cinematography)</td>
<td>B.A. (p. 352)</td>
<td>CA</td>
</tr>
<tr>
<td>Film and Media Arts (Directing)</td>
<td>B.F.A. (p. 363)</td>
<td>CA</td>
</tr>
<tr>
<td>Film and Media Arts (Media Arts)</td>
<td>B.F.A. (p. 367)</td>
<td>CA</td>
</tr>
<tr>
<td>Film and Media Arts (Post Production)</td>
<td>B.A. (p. 355)</td>
<td>CA</td>
</tr>
<tr>
<td>Film and Media Arts (Producing)</td>
<td>B.A. (p. 357)</td>
<td>CA</td>
</tr>
<tr>
<td>Film and Media Arts (Screen Studies)</td>
<td>B.A. (p. 360)</td>
<td>CA</td>
</tr>
<tr>
<td>Film and Media Arts (Screenwriting)</td>
<td>B.F.A. (p. 370)</td>
<td>CA</td>
</tr>
<tr>
<td>Finance</td>
<td>B.B.A. (p. 605), Minor (p. 579)</td>
<td>BU</td>
</tr>
<tr>
<td>Academic Programs</td>
<td>Degree/Program</td>
<td>Location</td>
</tr>
<tr>
<td>--------------------------------------------------------</td>
<td>----------------</td>
<td>----------</td>
</tr>
<tr>
<td>Financial Engineering</td>
<td>M.S. (<a href="http://bulletin.temple.edu/graduate/scd/fox/financial-engineering-ms">http://bulletin.temple.edu/graduate/scd/fox/financial-engineering-ms</a>)</td>
<td>BU</td>
</tr>
<tr>
<td>Financial Planning</td>
<td>B.B.A. (p. 608)</td>
<td>BU</td>
</tr>
<tr>
<td>Forensic Chemistry</td>
<td>P.S.M. (<a href="http://bulletin.temple.edu/graduate/scd/cst/forensic-chemistry-psm">http://bulletin.temple.edu/graduate/scd/cst/forensic-chemistry-psm</a>)</td>
<td>ST</td>
</tr>
<tr>
<td>French</td>
<td>B.A. (p. 836), Minor (p. 838), Cert. (p. 838)</td>
<td>LA</td>
</tr>
<tr>
<td>Fundamentals of Programming</td>
<td>Cert. (p. 1106)</td>
<td>ST</td>
</tr>
<tr>
<td>General Business Studies</td>
<td>Minor (p. 579)</td>
<td>BU</td>
</tr>
<tr>
<td>General Program (active in Japan)</td>
<td>A.A. (p. 165), B.A. (p. 166)</td>
<td>LA</td>
</tr>
<tr>
<td>General Science with Teaching</td>
<td>B.S. (p. 1176)</td>
<td>ST</td>
</tr>
<tr>
<td>General and Strategic Management</td>
<td>Post-M.B.A. Cert.</td>
<td>BU</td>
</tr>
<tr>
<td>Geographic Information Systems</td>
<td>Cert. (p. 844)</td>
<td>LA</td>
</tr>
<tr>
<td>Geography and Urban Studies</td>
<td>B.A. (p. 841), Minor (p. 844)</td>
<td>LA</td>
</tr>
<tr>
<td>Geography of Sports, Recreation and Tourism Planning</td>
<td>Cert. (p. 844)</td>
<td>LA</td>
</tr>
<tr>
<td>Geography of Tourism</td>
<td>Cert. (p. 844)</td>
<td>LA</td>
</tr>
<tr>
<td>Geology</td>
<td>B.A. (p. 1125), B.S. (p. 1129), M.S. (<a href="http://bulletin.temple.edu/graduate/scd/cst/geology-ms">http://bulletin.temple.edu/graduate/scd/cst/geology-ms</a>)</td>
<td>ST</td>
</tr>
<tr>
<td>Geoscience</td>
<td>Ph.D. (<a href="http://bulletin.temple.edu/graduate/scd/cst/geoscience-phd">http://bulletin.temple.edu/graduate/scd/cst/geoscience-phd</a>)</td>
<td>ST</td>
</tr>
<tr>
<td>German</td>
<td>B.A. (p. 846), Minor (p. 848), Cert. (p. 848)</td>
<td>LA</td>
</tr>
<tr>
<td>Global Clinical and Pharmacovigilance Regulations</td>
<td>M.S. (<a href="http://bulletin.temple.edu/graduate/scd/pharmacy/global-clinical-pharmacovigilance-regulations-ms">http://bulletin.temple.edu/graduate/scd/pharmacy/global-clinical-pharmacovigilance-regulations-ms</a>)</td>
<td>PH</td>
</tr>
<tr>
<td>Global Health</td>
<td>Cert. (p. 844)</td>
<td>HP</td>
</tr>
<tr>
<td>Global Pharmacovigilance/Benefit-Risk Management</td>
<td>Cert., Post-Master's Cert.</td>
<td>PH</td>
</tr>
<tr>
<td>Global Studies (Global Cultures*, Global Economy*, Global Security*)</td>
<td>B.A.* (p. 849), Minor (p. 857)</td>
<td>LA</td>
</tr>
<tr>
<td>Program</td>
<td>Level</td>
<td>Website</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>-------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Globalization and Development Communication</td>
<td>M.S.</td>
<td>[<a href="http://bulletin.temple.edu/graduate/scd/smc/globalization-development-communication-ms">http://bulletin.temple.edu/graduate/scd/smc/globalization-development-communication-ms</a>]</td>
</tr>
<tr>
<td>Good Manufacturing Practices for the 21st Century</td>
<td>Cert., Post-Master's Cert.</td>
<td>PH</td>
</tr>
<tr>
<td>Graduate Tax</td>
<td>LL.M.</td>
<td>LW</td>
</tr>
<tr>
<td>Health Administration</td>
<td>M.H.A. (<a href="http://bulletin.temple.edu/graduate/scd/fox/health-administration-mha">http://bulletin.temple.edu/graduate/scd/fox/health-administration-mha</a>)</td>
<td>BU</td>
</tr>
<tr>
<td>Health Informatics</td>
<td>M.S. (<a href="http://bulletin.temple.edu/graduate/scd/cph/health-informatics-ms">http://bulletin.temple.edu/graduate/scd/cph/health-informatics-ms</a>), Cert.</td>
<td>HP</td>
</tr>
<tr>
<td>Health Information Management</td>
<td>B.S. (p. 703)</td>
<td>HP</td>
</tr>
<tr>
<td>Health Information Privacy and Security</td>
<td>Cert.</td>
<td>HP</td>
</tr>
<tr>
<td>Health Research</td>
<td>Cert. (p. 916)</td>
<td>LA</td>
</tr>
<tr>
<td>Healthcare Business Analytics</td>
<td>Cert.</td>
<td>BU</td>
</tr>
<tr>
<td>Healthcare Data Analytics</td>
<td>Cert.</td>
<td>HP</td>
</tr>
<tr>
<td>Healthcare Financial Management</td>
<td>M.S. (not currently accepting applications) (<a href="http://bulletin.temple.edu/graduate/scd/fox/healthcare-financial-management-ms">http://bulletin.temple.edu/graduate/scd/fox/healthcare-financial-management-ms</a>)</td>
<td>BU</td>
</tr>
<tr>
<td>Healthcare Innovation Management</td>
<td>Cert. (<a href="http://bulletin.temple.edu/graduate/scd/fox/healthcare-innovation-management-certificate">http://bulletin.temple.edu/graduate/scd/fox/healthcare-innovation-management-certificate</a>)</td>
<td>BU</td>
</tr>
<tr>
<td>History (Public History*)</td>
<td>B.A. (p. 860), Minor (p. 863)</td>
<td>M.A.* (<a href="http://bulletin.temple.edu/graduate/scd/clas/history-ma">http://bulletin.temple.edu/graduate/scd/clas/history-ma</a>), Ph.D. (<a href="http://bulletin.temple.edu/graduate/scd/clas/history-phd">http://bulletin.temple.edu/graduate/scd/clas/history-phd</a>)</td>
</tr>
<tr>
<td>Horticultural Therapy</td>
<td>Cert. (p. 683)</td>
<td>EV</td>
</tr>
<tr>
<td>Horticulture</td>
<td>A.S. (p. 677), B.S. (p. 674)</td>
<td>EV</td>
</tr>
<tr>
<td>Human Development and Community Engagement (Childhood Mental Health, Community-Based Education, Non-Profit Organization and Advocacy)</td>
<td>B.S. (p. 424)</td>
<td>ED</td>
</tr>
<tr>
<td>Academic Programs</td>
<td>Degree/Program</td>
<td>Institution</td>
</tr>
<tr>
<td>--------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Human Resource for Legal Studies Minor (p. 582)</td>
<td></td>
<td>BU</td>
</tr>
<tr>
<td>Illustration</td>
<td>M.F.A. (<a href="http://bulletin.temple.edu/graduate/scd/tyler/illustration-mfa">http://bulletin.temple.edu/graduate/scd/tyler/illustration-mfa</a>)</td>
<td>TA</td>
</tr>
<tr>
<td>Information Science and Technology Minor (p. 1115)</td>
<td>B.A. (p. 1107), B.S. (p. 1110), M.S. (<a href="http://bulletin.temple.edu/graduate/scd/cst/information-science-technology-ms">http://bulletin.temple.edu/graduate/scd/cst/information-science-technology-ms</a>), Cert.</td>
<td>ST</td>
</tr>
<tr>
<td>Information Technology Auditing and Cybersecurity Minor (Information Technology Auditing*, Cybersecurity*)</td>
<td>M.S.* (<a href="http://bulletin.temple.edu/graduate/scd/fox/information-technology-auditing-cybersecurity-ms">http://bulletin.temple.edu/graduate/scd/fox/information-technology-auditing-cybersecurity-ms</a>), Cert.</td>
<td>BU</td>
</tr>
<tr>
<td>Information Technology Innovation and Entrepreneurship Minor (p. 582)</td>
<td></td>
<td>BU</td>
</tr>
<tr>
<td>Innovation Management and Entrepreneurship Innovation Management)</td>
<td>M.S. (<a href="http://bulletin.temple.edu/graduate/scd/fox/innovation-management-entrepreneurship-ms">http://bulletin.temple.edu/graduate/scd/fox/innovation-management-entrepreneurship-ms</a>)</td>
<td>BU</td>
</tr>
<tr>
<td>Innovation Strategy</td>
<td>Cert. (<a href="http://bulletin.temple.edu/graduate/scd/fox/innovation-strategy-certificate">http://bulletin.temple.edu/graduate/scd/fox/innovation-strategy-certificate</a>)</td>
<td>BU</td>
</tr>
<tr>
<td>Instructional Coaching Endorsement</td>
<td>Cert. (<a href="http://bulletin.temple.edu/graduate/scd/education/instructional-coaching-endorsement-certificate">http://bulletin.temple.edu/graduate/scd/education/instructional-coaching-endorsement-certificate</a>)</td>
<td>ED</td>
</tr>
<tr>
<td>Instructional Learning Technology</td>
<td>Cert. (<a href="http://bulletin.temple.edu/graduate/scd/education/instructional-learning-technology-certificate">http://bulletin.temple.edu/graduate/scd/education/instructional-learning-technology-certificate</a>)</td>
<td>ED</td>
</tr>
<tr>
<td>Instrumental Conducting: Wind-Band Emphasis</td>
<td>M.M. (<a href="http://bulletin.temple.edu/graduate/scd/boyer/instrumental-conducting-wind-band-emphasis-mm">http://bulletin.temple.edu/graduate/scd/boyer/instrumental-conducting-wind-band-emphasis-mm</a>)</td>
<td>BC</td>
</tr>
<tr>
<td>Interdisciplinary Studies/ Liberal Arts</td>
<td>B.A.</td>
<td>LA</td>
</tr>
<tr>
<td>International Affairs (active in Japan)</td>
<td>B.A. (p. 168)</td>
<td>LA</td>
</tr>
<tr>
<td>International Business Management B.B.A. (p. 615)</td>
<td></td>
<td>BU</td>
</tr>
<tr>
<td>International Business Management Post-M.B.A. Cert.</td>
<td></td>
<td>BU</td>
</tr>
<tr>
<td>Program</td>
<td>Level</td>
<td>Notes</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>---------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>International Business Studies (active in Japan)</td>
<td>B.S.</td>
<td>p. 175</td>
</tr>
<tr>
<td>International Law (active in Japan)</td>
<td>Cert.</td>
<td>LW</td>
</tr>
<tr>
<td>Investment Management</td>
<td>M.S.</td>
<td>(<a href="http://bulletin.temple.edu/graduate/scd/fox/investment-management-ms">http://bulletin.temple.edu/graduate/scd/fox/investment-management-ms</a>)</td>
</tr>
<tr>
<td>Italian</td>
<td>B.A.</td>
<td>p. 864, Minor (p. 867), Cert. (p. 867)</td>
</tr>
<tr>
<td>Japanese</td>
<td>B.A.</td>
<td>(active in Japan) (p. 171), Minor (p. 868), Cert. (p. 868)</td>
</tr>
<tr>
<td>Jazz Arranging</td>
<td>Cert.</td>
<td>p. 287</td>
</tr>
<tr>
<td>Jazz Improvisation</td>
<td>Cert.</td>
<td>p. 288</td>
</tr>
<tr>
<td>Jazz Piano</td>
<td>Cert.</td>
<td>p. 288</td>
</tr>
<tr>
<td>Jazz Studies</td>
<td>M.M.</td>
<td>(<a href="http://bulletin.temple.edu/graduate/scd/boyer/jazz-studies-mm">http://bulletin.temple.edu/graduate/scd/boyer/jazz-studies-mm</a>)</td>
</tr>
<tr>
<td>Jazz Studies Composition</td>
<td>Cert.</td>
<td>p. 288</td>
</tr>
<tr>
<td>Jazz Studies/Performance</td>
<td>B.M.</td>
<td>p. 298</td>
</tr>
<tr>
<td>Jazz Voice</td>
<td>Cert.</td>
<td>p. 289</td>
</tr>
<tr>
<td>Jewish Secular Studies</td>
<td>Cert.</td>
<td>p. 872</td>
</tr>
<tr>
<td>Jewish Studies</td>
<td>B.A.</td>
<td>p. 869, Minor (p. 872)</td>
</tr>
<tr>
<td>Journalism (International Communication*)</td>
<td>B.A.</td>
<td>p. 978, Conc.* (p. 973)</td>
</tr>
<tr>
<td>Kinesiology (Exercise and Sport Science)</td>
<td>B.S.</td>
<td>p. 712</td>
</tr>
<tr>
<td>Kinesiology (Physical and Health Education Teacher Education)</td>
<td>B.S.</td>
<td>p. 714</td>
</tr>
<tr>
<td>Kinesiology (Pre-Health Professions)</td>
<td>B.S.</td>
<td>p. 717</td>
</tr>
<tr>
<td>Kinesiology/Athletic Training</td>
<td>M.S.</td>
<td>(<a href="http://bulletin.temple.edu/graduate/scd/cph/kinesiology-athletic-training-ms">http://bulletin.temple.edu/graduate/scd/cph/kinesiology-athletic-training-ms</a>), Ph.D. (<a href="http://bulletin.temple.edu/graduate/scd/cph/kinesiology-athletic-training-phd">http://bulletin.temple.edu/graduate/scd/cph/kinesiology-athletic-training-phd</a>)</td>
</tr>
<tr>
<td>Kinesiology/Curriculum and Instruction</td>
<td>M.S.</td>
<td>(<a href="http://bulletin.temple.edu/graduate/scd/cph/kinesiology-curriculum-instruction-ms">http://bulletin.temple.edu/graduate/scd/cph/kinesiology-curriculum-instruction-ms</a>), Ph.D. (not currently accepting applications) (<a href="http://bulletin.temple.edu/graduate/scd/cph/kinesiology-curriculum-instruction-phd">http://bulletin.temple.edu/graduate/scd/cph/kinesiology-curriculum-instruction-phd</a>)</td>
</tr>
<tr>
<td>Academic Programs</td>
<td>Program Details</td>
<td>Location</td>
</tr>
<tr>
<td>------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>Kinesiology/Integrative Exercise Physiology</td>
<td>M.S. (<a href="http://bulletin.temple.edu/graduate/scd/cph/kinesiology-integrative-exercise-physiology-ms">http://bulletin.temple.edu/graduate/scd/cph/kinesiology-integrative-exercise-physiology-ms</a>), Ph.D. (<a href="http://bulletin.temple.edu/graduate/scd/cph/kinesiology-integrative-exercise-physiology-phd">http://bulletin.temple.edu/graduate/scd/cph/kinesiology-integrative-exercise-physiology-phd</a>)</td>
<td>HP</td>
</tr>
<tr>
<td>Kinesiology/Psychology of Movement</td>
<td>M.S. (<a href="http://bulletin.temple.edu/graduate/scd/cph/kinesiology-psychology-movement-ms">http://bulletin.temple.edu/graduate/scd/cph/kinesiology-psychology-movement-ms</a>), Ph.D. (<a href="http://bulletin.temple.edu/graduate/scd/cph/kinesiology-psychology-movement-phd">http://bulletin.temple.edu/graduate/scd/cph/kinesiology-psychology-movement-phd</a>)</td>
<td>HP</td>
</tr>
<tr>
<td>Landscape Architecture</td>
<td>B.S. (p. 679)</td>
<td>EV</td>
</tr>
<tr>
<td>Landscape Plants</td>
<td>Cert. (p. 683)</td>
<td>EV</td>
</tr>
<tr>
<td>Landscape Studies</td>
<td>Minor (p. 682)</td>
<td>EV</td>
</tr>
<tr>
<td>Latin American Studies</td>
<td>B.A. (p. 874), Minor (p. 877), Cert. (p. 930)</td>
<td>LA</td>
</tr>
<tr>
<td>Law</td>
<td>J.D., LL.M., S.J.D.</td>
<td>LW</td>
</tr>
<tr>
<td>Leadership</td>
<td>Cert. (p. 573)</td>
<td>BU</td>
</tr>
<tr>
<td>Leadership</td>
<td>Minor (p. 1005)</td>
<td>CO</td>
</tr>
<tr>
<td>Legal Education</td>
<td>LL.M.</td>
<td>LW</td>
</tr>
<tr>
<td>Legal Studies</td>
<td>B.B.A. (p. 631), Minor (p. 583)</td>
<td>BU</td>
</tr>
<tr>
<td>Legal Studies for Human Resource Managers</td>
<td>Minor (p. 584)</td>
<td>BU</td>
</tr>
<tr>
<td>Lesbian, Gay, Bisexual and Transgender Studies</td>
<td>Minor (p. 878)</td>
<td>LA</td>
</tr>
<tr>
<td>Liberal Arts</td>
<td>M.L.A. (<a href="http://bulletin.temple.edu/graduate/scd/cla/liberal-arts-mia">http://bulletin.temple.edu/graduate/scd/cla/liberal-arts-mia</a>)</td>
<td>LA</td>
</tr>
<tr>
<td>Liberal Studies</td>
<td>B.A. (p. 878)</td>
<td>LA</td>
</tr>
<tr>
<td>Linguistics</td>
<td>B.A. (p. 698)</td>
<td>HP</td>
</tr>
<tr>
<td>Management Information Systems</td>
<td>B.B.A. (p. 635), Minor (p. 585), Cert. (p. 584)</td>
<td>BU</td>
</tr>
<tr>
<td>Marketing (Consumer Insights*, Marketing Communications*)</td>
<td>B.B.A. (p. 640)</td>
<td>BU</td>
</tr>
<tr>
<td>Mathematical Economics</td>
<td>B.A. (p. 1138)</td>
<td>LA, ST</td>
</tr>
<tr>
<td>Program</td>
<td>Degree(s)</td>
<td>Department</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------</td>
<td>------------</td>
</tr>
<tr>
<td>Mathematics (Applied and Computational Mathematics*)</td>
<td>B.A. (p. 1138), B.S. (p. 1142), M.S.* (<a href="http://bulletin.temple.edu/graduate/scd/cst/mathematics-ms">http://bulletin.temple.edu/graduate/scd/cst/mathematics-ms</a>), Ph.D. (<a href="http://bulletin.temple.edu/graduate/scd/cst/mathematics-phd">http://bulletin.temple.edu/graduate/scd/cst/mathematics-phd</a>)</td>
<td>ST</td>
</tr>
<tr>
<td>Mathematics Education/7-12</td>
<td>Cert.</td>
<td>ED</td>
</tr>
<tr>
<td>Mathematics and Computer Science</td>
<td>B.S. (p. 1115)</td>
<td>ST</td>
</tr>
<tr>
<td>Mathematics and Computer Science with Teaching</td>
<td>B.S. (p. 1191)</td>
<td>ST</td>
</tr>
<tr>
<td>Mathematics and Physics</td>
<td>B.S. (p. 1151)</td>
<td>ST</td>
</tr>
<tr>
<td>Mathematics and Technology with Teaching</td>
<td>B.S. (p. 1181)</td>
<td>ST</td>
</tr>
<tr>
<td>Mathematics with Teaching</td>
<td>B.S. (p. 1186)</td>
<td>ST</td>
</tr>
<tr>
<td>Mechanical Engineering</td>
<td>B.S.M.E. (p. 540)</td>
<td>EN</td>
</tr>
<tr>
<td>Mechanical Engineering (Biomechanics with Cooperative Education Program)</td>
<td>B.S.M.E. (p. 546)</td>
<td>EN</td>
</tr>
<tr>
<td>Mechanical Engineering (Biomechanics)</td>
<td>B.S.M.E. (p. 543)</td>
<td>EN</td>
</tr>
<tr>
<td>Mechanical Engineering (Cooperative Education Program)</td>
<td>B.S.M.E. (p. 549)</td>
<td>EN</td>
</tr>
<tr>
<td>Media Arts</td>
<td>Cert. (p. 373)</td>
<td>CA</td>
</tr>
<tr>
<td>Media Studies and Production (Communication Scholarship, Media Production and Business)</td>
<td>M.A. (<a href="http://bulletin.temple.edu/graduate/scd/smc/media-studies-production-ma">http://bulletin.temple.edu/graduate/scd/smc/media-studies-production-ma</a>)</td>
<td>CO</td>
</tr>
<tr>
<td>Media Studies and Production (Emergent Media)</td>
<td>B.A. (p. 981)</td>
<td>CO</td>
</tr>
<tr>
<td>Media Studies and Production (International Communication*)</td>
<td>B.A. (p. 981), Conc.* (p. 973)</td>
<td>CO</td>
</tr>
<tr>
<td>Media Studies and Production (Media Analysis)</td>
<td>B.A. (p. 985)</td>
<td>CO</td>
</tr>
<tr>
<td>Media Studies and Production (Media Business and Entrepreneurship)</td>
<td>B.A. (p. 988)</td>
<td>CO</td>
</tr>
<tr>
<td>Media Studies and Production (Media Production)</td>
<td>B.A. (p. 992)</td>
<td>CO</td>
</tr>
<tr>
<td>Media and Communication</td>
<td>Ph.D. (<a href="http://bulletin.temple.edu/graduate/scd/smc/media-communication-phd">http://bulletin.temple.edu/graduate/scd/smc/media-communication-phd</a>)</td>
<td>CO</td>
</tr>
<tr>
<td>MediaXarts: Cinema for New Technologies and Environments</td>
<td>M.A. (<a href="http://bulletin.temple.edu/graduate/scd/tfma/mediaxarts-cinema-new-technologies-environments-ma">http://bulletin.temple.edu/graduate/scd/tfma/mediaxarts-cinema-new-technologies-environments-ma</a>)</td>
<td>CA</td>
</tr>
<tr>
<td>Program</td>
<td>Degree(s)</td>
<td>Certification/Post-Master's Cert.</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>------------------------------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>Medical Device</td>
<td>Cert., Post-Master's Cert.</td>
<td>PH</td>
</tr>
<tr>
<td>Medicine</td>
<td>M.D.</td>
<td>ME</td>
</tr>
<tr>
<td>Medicine Combination</td>
<td>Ph.D./M.D.</td>
<td>ME</td>
</tr>
<tr>
<td>Middle Grades Education/4-8</td>
<td>Cert.</td>
<td>ED</td>
</tr>
<tr>
<td>Middle Grades Education/4-8 Language Arts</td>
<td>B.S.Ed. (p. 427)</td>
<td>M.Ed. (<a href="http://bulletin.temple.edu/graduate/scd/education/middle-grades-education-language-arts-med">http://bulletin.temple.edu/graduate/scd/education/middle-grades-education-language-arts-med</a>)</td>
</tr>
<tr>
<td>Middle Grades Education/4-8 Mathematics</td>
<td>B.S.Ed. (p. 430)</td>
<td>M.Ed. (<a href="http://bulletin.temple.edu/graduate/scd/education/middle-grades-education-mathematics-med">http://bulletin.temple.edu/graduate/scd/education/middle-grades-education-mathematics-med</a>)</td>
</tr>
<tr>
<td>Middle Grades Education/4-8 Mathematics and Language Arts</td>
<td>B.S.Ed. (p. 432)</td>
<td>M.Ed. (<a href="http://bulletin.temple.edu/graduate/scd/education/middle-grades-education-mathematics-language-arts-med">http://bulletin.temple.edu/graduate/scd/education/middle-grades-education-mathematics-language-arts-med</a>)</td>
</tr>
<tr>
<td>Middle Grades Education/4-8 Mathematics and Science</td>
<td>B.S.Ed. (p. 435)</td>
<td>M.Ed. (<a href="http://bulletin.temple.edu/graduate/scd/education/middle-grades-education-mathematics-science-med">http://bulletin.temple.edu/graduate/scd/education/middle-grades-education-mathematics-science-med</a>)</td>
</tr>
<tr>
<td>Middle Grades Education/4-8 Science</td>
<td>B.S.Ed. (p. 437)</td>
<td>M.Ed. (<a href="http://bulletin.temple.edu/graduate/scd/education/middle-grades-education-science-med">http://bulletin.temple.edu/graduate/scd/education/middle-grades-education-science-med</a>)</td>
</tr>
<tr>
<td>Middle Grades Education/4-8 Science and Language Arts</td>
<td>B.S.Ed. (p. 440)</td>
<td>M.Ed. (<a href="http://bulletin.temple.edu/graduate/scd/education/middle-grades-education-science-language-arts-med">http://bulletin.temple.edu/graduate/scd/education/middle-grades-education-science-language-arts-med</a>)</td>
</tr>
<tr>
<td>Middle Grades Education/4-8 Social Studies</td>
<td>B.S.Ed. (p. 442)</td>
<td>M.Ed. (<a href="http://bulletin.temple.edu/graduate/scd/education/middle-grades-education-social-studies-med">http://bulletin.temple.edu/graduate/scd/education/middle-grades-education-social-studies-med</a>)</td>
</tr>
<tr>
<td>Military Counseling</td>
<td>Post-Master's Cert.</td>
<td>SW</td>
</tr>
<tr>
<td>Program</td>
<td>Degree(s)</td>
<td>Website</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>-----------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Music Performance/Classical Guitar</td>
<td>M.M. (<a href="http://bulletin.temple.edu/graduate/scd/boyer/music-performance-classical-guitar-mm">http://bulletin.temple.edu/graduate/scd/boyer/music-performance-classical-guitar-mm</a>)</td>
<td></td>
</tr>
</tbody>
</table>

* denotes optional specialization.
Music Performance/Double Bass
BC

Music Performance/Flute
BC

Music Performance/French Horn
BC

Music Performance/Harp
BC

Music Performance/Harpsichord
M.M. (http://bulletin.temple.edu/graduate/scd/boyer/music-performance-harpsichord-mm)  
BC

Music Performance/Historical Keyboard
D.M.A. (http://bulletin.temple.edu/graduate/scd/boyer/music-performance-historical-keyboard-dma)  
BC

Music Performance/Oboe
BC
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Percussion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Music Performance/</td>
<td>M.M. (<a href="http://bulletin.temple.edu/graduate/scd/boyer/music-performance-saxophone-mm">http://bulletin.temple.edu/graduate/scd/boyer/music-performance-saxophone-mm</a>)</td>
<td></td>
</tr>
<tr>
<td>Saxophone</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trumpet</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Program</td>
<td>Level</td>
<td>Website</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>-------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Music Performance/Violin</strong></td>
<td>M.M.</td>
<td><a href="http://bulletin.temple.edu/graduate/scd/boyer/music-performance-violin-mm">http://bulletin.temple.edu/graduate/scd/boyer/music-performance-violin-mm</a></td>
</tr>
<tr>
<td><strong>Music Performance/Voice</strong></td>
<td>M.M.</td>
<td><a href="http://bulletin.temple.edu/graduate/scd/boyer/music-performance-voice-mm">http://bulletin.temple.edu/graduate/scd/boyer/music-performance-voice-mm</a></td>
</tr>
<tr>
<td><strong>Music Technology</strong></td>
<td>Cert. (p. 290)</td>
<td></td>
</tr>
<tr>
<td><strong>Music Theory (Jazz)</strong></td>
<td>Cert. (p. 290)</td>
<td></td>
</tr>
<tr>
<td><strong>Music Theory (Traditional)</strong></td>
<td>Cert. (p. 291)</td>
<td></td>
</tr>
<tr>
<td><strong>Music Therapy Jazz</strong></td>
<td>B.M. (p. 327)</td>
<td></td>
</tr>
<tr>
<td><strong>Musical Theater Collaboration</strong></td>
<td>M.F.A. (starting Fall 2016)</td>
<td></td>
</tr>
<tr>
<td><strong>Musical Theater Studies</strong></td>
<td>M.A. (starting Fall 2016) (<a href="http://bulletin.temple.edu/graduate/scd/tfma/musical-theater-studies-ma">http://bulletin.temple.edu/graduate/scd/tfma/musical-theater-studies-ma</a>)</td>
<td></td>
</tr>
<tr>
<td><strong>National Park Service Management</strong></td>
<td>Cert. (p. 1220), Post-Bacc. Cert. (p. 1221)</td>
<td></td>
</tr>
<tr>
<td><strong>Native Perennial Garden Design</strong></td>
<td>Cert. (p. 684)</td>
<td></td>
</tr>
<tr>
<td><strong>Natural Sciences</strong></td>
<td>B.A. (p. 1073)</td>
<td></td>
</tr>
<tr>
<td><strong>Neuromotor Science</strong></td>
<td>M.S. (<a href="http://bulletin.temple.edu/graduate/scd/cph/neuromotor-science-ms">http://bulletin.temple.edu/graduate/scd/cph/neuromotor-science-ms</a>), Ph.D. (<a href="http://bulletin.temple.edu/graduate/scd/cph/neuromotor-science-phd">http://bulletin.temple.edu/graduate/scd/cph/neuromotor-science-phd</a>)</td>
<td></td>
</tr>
<tr>
<td><strong>Neuroscience</strong></td>
<td>Cert.</td>
<td></td>
</tr>
<tr>
<td>Program</td>
<td>Level</td>
<td>Notes</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>-------</td>
<td>-------</td>
</tr>
<tr>
<td>Neuroscience Research Minor</td>
<td>Minor</td>
<td>LA</td>
</tr>
<tr>
<td>Neuroscience: Cellular and Molecular B.S.</td>
<td>B.S.</td>
<td>ST</td>
</tr>
<tr>
<td>Neuroscience: Systems, Behavior and Plasticity B.S.</td>
<td>B.S.</td>
<td>LA</td>
</tr>
<tr>
<td>Nursing (Adult-Gerontology Primary Care*, Family-Individual Across the Lifespan*, R.N. to B.S.N.<em>) B.S.N.</em></td>
<td>B.S.N.*</td>
<td>HP</td>
</tr>
<tr>
<td>M.S.N. (not currently accepting applications)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(<a href="http://bulletin.temple.edu/graduate/scd/cph/nursing-man">http://bulletin.temple.edu/graduate/scd/cph/nursing-man</a>), D.N.P.* (<a href="http://bulletin.temple.edu/graduate/scd/cph/nursing-dnp">http://bulletin.temple.edu/graduate/scd/cph/nursing-dnp</a>)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occupational Therapy M.O.T.</td>
<td></td>
<td>HP</td>
</tr>
<tr>
<td>(<a href="http://bulletin.temple.edu/graduate/scd/cph/occupational-therapy-mot">http://bulletin.temple.edu/graduate/scd/cph/occupational-therapy-mot</a>), D.O.T. (<a href="http://bulletin.temple.edu/graduate/scd/cph/occupational-therapy-dot">http://bulletin.temple.edu/graduate/scd/cph/occupational-therapy-dot</a>)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opera</td>
<td></td>
<td>BC</td>
</tr>
<tr>
<td>M.M. (<a href="http://bulletin.temple.edu/graduate/scd/boyer/opera-mm">http://bulletin.temple.edu/graduate/scd/boyer/opera-mm</a>)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral Biology M.S.</td>
<td></td>
<td>DN</td>
</tr>
<tr>
<td>(<a href="http://bulletin.temple.edu/graduate/scd/dentistry/oral-biology-ms">http://bulletin.temple.edu/graduate/scd/dentistry/oral-biology-ms</a>)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orchestral Music Cert.</td>
<td>Cert.</td>
<td>BC</td>
</tr>
<tr>
<td>Orthodontics Cert.</td>
<td>Cert.</td>
<td>DN</td>
</tr>
<tr>
<td>Painting (Art Education*) B.F.A.</td>
<td>B.F.A.</td>
<td>TA</td>
</tr>
<tr>
<td>(p. 254), Conc.*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performing Arts Cert.</td>
<td>Cert.</td>
<td>BC</td>
</tr>
<tr>
<td>Periodontics Cert.</td>
<td>Cert.</td>
<td>DN</td>
</tr>
<tr>
<td>Pharmaceutical Labeling and Advertising Cert., Post-Master's Cert.</td>
<td></td>
<td>PH</td>
</tr>
<tr>
<td>Pharmaceutical Sciences B.S.</td>
<td>B.S.</td>
<td>ST</td>
</tr>
<tr>
<td>Pharmaceutical Sciences/Pharmaceutical Sciences/Pharmaceutical Sciences/Medicinal Chemistry M.S. (<a href="http://bulletin.temple.edu/graduate/scd/pharmacy/pharmaceutical-sciences-medicinal-chemistry-ms">http://bulletin.temple.edu/graduate/scd/pharmacy/pharmaceutical-sciences-medicinal-chemistry-ms</a>), Ph.D. (<a href="http://bulletin.temple.edu/graduate/scd/pharmacy/pharmaceutical-sciences-medicinal-chemistry-phd">http://bulletin.temple.edu/graduate/scd/pharmacy/pharmaceutical-sciences-medicinal-chemistry-phd</a>)</td>
<td></td>
<td>PH</td>
</tr>
<tr>
<td>Pharmaceutical Sciences/Pharmaceutical Sciences/Pharmaceutical Sciences/Medicinal Chemistry M.S. (<a href="http://bulletin.temple.edu/graduate/scd/pharmacy/pharmaceutical-sciences-pharmaceutics-ms">http://bulletin.temple.edu/graduate/scd/pharmacy/pharmaceutical-sciences-pharmaceutics-ms</a>), Ph.D. (<a href="http://bulletin.temple.edu/graduate/scd/pharmacy/pharmaceutical-sciences-pharmaceutics-phd">http://bulletin.temple.edu/graduate/scd/pharmacy/pharmaceutical-sciences-pharmaceutics-phd</a>)</td>
<td></td>
<td>PH</td>
</tr>
<tr>
<td>Academic Programs</td>
<td>Degrees Offered</td>
<td>Links</td>
</tr>
<tr>
<td>---------------------------------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>Pharmaceutical Sciences/</td>
<td>M.S. (<a href="http://bulletin.temple.edu/graduate/scd/pharmacy/pharmaceutical-sciences-pharmacodynamics-ms">http://bulletin.temple.edu/graduate/scd/pharmacy/pharmaceutical-sciences-pharmacodynamics-ms</a>), Ph.D. (<a href="http://bulletin.temple.edu/graduate/scd/pharmacy/pharmaceutical-sciences-pharmacodynamics-phd">http://bulletin.temple.edu/graduate/scd/pharmacy/pharmaceutical-sciences-pharmacodynamics-phd</a>)</td>
<td>PH</td>
</tr>
<tr>
<td>Pharmacodynamics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pharmaceutical and Regulatory Sciences</td>
<td>M.S. (<a href="http://bulletin.temple.edu/graduate/scd/pharmacy/pharmaceutical-regulatory-sciences-ms">http://bulletin.temple.edu/graduate/scd/pharmacy/pharmaceutical-regulatory-sciences-ms</a>)</td>
<td>PH</td>
</tr>
<tr>
<td>Pharmacy</td>
<td>B.A. (p. 888), Minor (p. 892)</td>
<td>M.A. (<a href="http://bulletin.temple.edu/graduate/scd/cla/philosophy-ma">http://bulletin.temple.edu/graduate/scd/cla/philosophy-ma</a>), Ph.D. (<a href="http://bulletin.temple.edu/graduate/scd/cla/philosophy-phd">http://bulletin.temple.edu/graduate/scd/cla/philosophy-phd</a>)</td>
</tr>
<tr>
<td>Philosophy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical Therapy</td>
<td>D.P.T. (<a href="http://bulletin.temple.edu/graduate/scd/cph/physical-therapy-dpt">http://bulletin.temple.edu/graduate/scd/cph/physical-therapy-dpt</a>), Ph.D. (<a href="http://bulletin.temple.edu/graduate/scd/cph/physical-therapy-phd">http://bulletin.temple.edu/graduate/scd/cph/physical-therapy-phd</a>)</td>
<td>HP</td>
</tr>
<tr>
<td>Physician Assistant</td>
<td>M.M.S. (starting Summer 2016)</td>
<td></td>
</tr>
<tr>
<td>Physics</td>
<td>B.A. (p. 1154), B.S. (p. 1158), B.A./M.S. (p. 1054), B.S./M.S. (p. 1055), Minor (p. 1161)</td>
<td>M.S. (<a href="http://bulletin.temple.edu/graduate/scd/cst/physics-ms">http://bulletin.temple.edu/graduate/scd/cst/physics-ms</a>), Ph.D. (<a href="http://bulletin.temple.edu/graduate/scd/cst/physics-phd">http://bulletin.temple.edu/graduate/scd/cst/physics-phd</a>)</td>
</tr>
<tr>
<td>Physics with Teaching</td>
<td>B.S. (p. 1196)</td>
<td></td>
</tr>
<tr>
<td>Piano Pedagogy</td>
<td>B.M. (p. 307)</td>
<td>M.M. (<a href="http://bulletin.temple.edu/graduate/scd/boyer/piano-pedagogy-mm">http://bulletin.temple.edu/graduate/scd/boyer/piano-pedagogy-mm</a>)</td>
</tr>
<tr>
<td>Play Therapy</td>
<td>Cert.</td>
<td></td>
</tr>
<tr>
<td>Podiatric Medicine</td>
<td>D.P.M.</td>
<td></td>
</tr>
<tr>
<td>Podiatric Medicine and Surgery, Fellowship in</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Political Economy</td>
<td>Cert. (p. 819)</td>
<td></td>
</tr>
<tr>
<td>Political Science</td>
<td>B.A. (p. 895), Minor (p. 897)</td>
<td>M.A. (<a href="http://bulletin.temple.edu/graduate/scd/cla/political-science-ma">http://bulletin.temple.edu/graduate/scd/cla/political-science-ma</a>), Ph.D. (<a href="http://bulletin.temple.edu/graduate/scd/cla/political-science-phd">http://bulletin.temple.edu/graduate/scd/cla/political-science-phd</a>)</td>
</tr>
<tr>
<td>Portuguese</td>
<td>Minor (p. 928)</td>
<td></td>
</tr>
<tr>
<td>Program</td>
<td>Degree/Program</td>
<td>Notes</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>----------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>Professional Studies</td>
<td></td>
<td>Cert.</td>
</tr>
<tr>
<td>Psychological Studies (active in Japan)</td>
<td>B.A. (p. 173), Minor</td>
<td>M.A. (not open for direct admission), Ph.D. (<a href="http://bulletin.temple.edu/graduate/scd/cla/psychology-phd">http://bulletin.temple.edu/graduate/scd/cla/psychology-phd</a>)</td>
</tr>
<tr>
<td>Psychology</td>
<td>B.A. (p. 899), Minor (p. 905)</td>
<td>M.A. (not open for direct admission), Ph.D. (<a href="http://bulletin.temple.edu/graduate/scd/cla/psychology-phd">http://bulletin.temple.edu/graduate/scd/cla/psychology-phd</a>)</td>
</tr>
<tr>
<td>Psychology/Neuroscience</td>
<td></td>
<td>Ph.D.</td>
</tr>
<tr>
<td>Public Health</td>
<td>B.S. (p. 734), Minor (p. 738)</td>
<td>M.A. (<a href="http://bulletin.temple.edu/graduate/scd/cph/public-health-applied-biostatistics-mph">http://bulletin.temple.edu/graduate/scd/cph/public-health-applied-biostatistics-mph</a>)</td>
</tr>
<tr>
<td>Public Health/Applied Biostatistics</td>
<td></td>
<td>M.P.H. (<a href="http://bulletin.temple.edu/graduate/scd/cph/public-health-environmental-health-mph">http://bulletin.temple.edu/graduate/scd/cph/public-health-environmental-health-mph</a>)</td>
</tr>
<tr>
<td>Public Health/Environmental Health</td>
<td></td>
<td>M.P.H. (<a href="http://bulletin.temple.edu/graduate/scd/cph/public-health-epidemiology-mph">http://bulletin.temple.edu/graduate/scd/cph/public-health-epidemiology-mph</a>)</td>
</tr>
<tr>
<td>Public Health/Epidemiology</td>
<td></td>
<td>M.P.H. (<a href="http://bulletin.temple.edu/graduate/scd/cph/public-health-health-policy-phd">http://bulletin.temple.edu/graduate/scd/cph/public-health-health-policy-phd</a>)</td>
</tr>
<tr>
<td>Public Health/Health Policy</td>
<td></td>
<td>Ph.D. (<a href="http://bulletin.temple.edu/graduate/scd/cph/public-health-health-policy-management-mph">http://bulletin.temple.edu/graduate/scd/cph/public-health-health-policy-management-mph</a>)</td>
</tr>
<tr>
<td>Public Health/Health Policy and Management</td>
<td></td>
<td>M.P.H. (<a href="http://bulletin.temple.edu/graduate/scd/cph/public-health-social-behavioral-health-sciences-phd">http://bulletin.temple.edu/graduate/scd/cph/public-health-social-behavioral-health-sciences-phd</a>)</td>
</tr>
<tr>
<td>Public Health/Social and Behavioral Health Sciences</td>
<td></td>
<td>Ph.D. (<a href="http://bulletin.temple.edu/graduate/scd/cph/public-health-social-behavioral-science-mph">http://bulletin.temple.edu/graduate/scd/cph/public-health-social-behavioral-science-mph</a>)</td>
</tr>
<tr>
<td>Public Policy</td>
<td></td>
<td>M.P.P. (starting Fall 2016) (<a href="http://bulletin.temple.edu/graduate/scd/cph/public-policy-mpp">http://bulletin.temple.edu/graduate/scd/cph/public-policy-mpp</a>)</td>
</tr>
<tr>
<td>Public Relations</td>
<td>Minor (p. 1006)</td>
<td></td>
</tr>
<tr>
<td>Real Estate</td>
<td>B.B.A. (p. 645)</td>
<td></td>
</tr>
<tr>
<td>Recreation Therapy</td>
<td></td>
<td>M.S. (<a href="http://bulletin.temple.edu/graduate/scd/cph/recreation-therapy-ms">http://bulletin.temple.edu/graduate/scd/cph/recreation-therapy-ms</a>)</td>
</tr>
<tr>
<td>Regulatory Affairs and Quality Assurance</td>
<td></td>
<td>M.S. (<a href="http://bulletin.temple.edu/graduate/scd/pharmacy/regulatory-affairs-quality-assurance-ms">http://bulletin.temple.edu/graduate/scd/pharmacy/regulatory-affairs-quality-assurance-ms</a>)</td>
</tr>
<tr>
<td>Academic Programs</td>
<td>Location</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------</td>
<td>----------</td>
<td>-------------</td>
</tr>
<tr>
<td>Risk Management</td>
<td>BU</td>
<td>Post-M.B.A. Cert.</td>
</tr>
<tr>
<td>School Nurse</td>
<td>HP</td>
<td>Cert.</td>
</tr>
<tr>
<td>School Psychology</td>
<td>ED</td>
<td>M.Ed. (not open for direct admission), Ed.S. (<a href="http://bulletin.temple.edu/graduate/scd/education/school-psychology-eds">http://bulletin.temple.edu/graduate/scd/education/school-psychology-eds</a>), Ph.D. (<a href="http://bulletin.temple.edu/graduate/scd/education/school-psychology-phd">http://bulletin.temple.edu/graduate/scd/education/school-psychology-phd</a>)</td>
</tr>
<tr>
<td>Science Education/7-12</td>
<td>ED</td>
<td>Cert.</td>
</tr>
<tr>
<td>Screen Studies</td>
<td>CA</td>
<td>Cert. (p. 374), Minor (p. 375)</td>
</tr>
<tr>
<td>Secondary Education / World/Foreign Languages Education</td>
<td>ED</td>
<td>B.S.Ed. (p. 446)</td>
</tr>
<tr>
<td>Secondary Education/English Education</td>
<td>ED</td>
<td>B.S.Ed. (p. 446)</td>
</tr>
<tr>
<td>Secondary Education/Mathematics Education</td>
<td>ED</td>
<td>B.S.Ed. (p. 448)</td>
</tr>
<tr>
<td>Secondary Education/Science Education</td>
<td>ED</td>
<td>B.S.Ed. (p. 451)</td>
</tr>
<tr>
<td>Secondary Education/Social Studies Education</td>
<td>ED</td>
<td>B.S.Ed. (p. 457)</td>
</tr>
<tr>
<td>Secondary Education/World Languages Education</td>
<td>ED</td>
<td>B.S.Ed. (p. 459)</td>
</tr>
<tr>
<td>Social Studies Education/7-12</td>
<td>ED</td>
<td>Cert.</td>
</tr>
<tr>
<td>Social Work</td>
<td>SW</td>
<td>B.S.W. (p. 743), Minor (p. 748)</td>
</tr>
<tr>
<td>Department</td>
<td>Degree(s)</td>
<td>Programs/links</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>---------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Sociology</td>
<td>B.A. (p. 911), Minor (p. 917)</td>
<td>M.A. (<a href="http://bulletin.temple.edu/graduate/scd/cla/sociology-ma">http://bulletin.temple.edu/graduate/scd/cla/sociology-ma</a>), Ph.D. (<a href="http://bulletin.temple.edu/graduate/scd/cla/sociology-phd">http://bulletin.temple.edu/graduate/scd/cla/sociology-phd</a>)</td>
</tr>
<tr>
<td>Sociology of Health</td>
<td>Minor (p. 917)</td>
<td></td>
</tr>
<tr>
<td>Spanish</td>
<td>B.A.* (p. 919), Minor (p. 927), Cert. (p. 928)</td>
<td>M.A. (<a href="http://bulletin.temple.edu/graduate/scd/cla/spanish-ma">http://bulletin.temple.edu/graduate/scd/cla/spanish-ma</a>), Ph.D. (<a href="http://bulletin.temple.edu/graduate/scd/cla/spanish-phd">http://bulletin.temple.edu/graduate/scd/cla/spanish-phd</a>)</td>
</tr>
<tr>
<td>Spanish and Latin American Studies for Business</td>
<td>Cert. (p. 928)</td>
<td></td>
</tr>
<tr>
<td>Spanish and Latino Studies for Health and Human</td>
<td>Cert. (p. 929)</td>
<td></td>
</tr>
<tr>
<td>Spanish and Latino Studies for Health and Human Services Professions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special Education (Autism Spectrum Disorders, Mild Disabilities, Severe Disabilities)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sport Business (Athletics Administration, Recreation and Event Management, Sport Analytics, Sport Marketing and Promotions)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sport Management</td>
<td>Cert. (p. 1216), Minor (p. 1218)</td>
<td></td>
</tr>
<tr>
<td>Sport Marketing</td>
<td>Cert. (p. 1217)</td>
<td></td>
</tr>
<tr>
<td>Sport and Recreation Management (Event Leadership, Governance and Policy, Sport and Recreation Promotion)</td>
<td>B.S. (p. 1208)</td>
<td></td>
</tr>
<tr>
<td>Stage Management</td>
<td>Cert. (p. 389)</td>
<td></td>
</tr>
<tr>
<td>Stormwater Management</td>
<td>Cert.</td>
<td></td>
</tr>
<tr>
<td>Strategic Communication</td>
<td>B.A. (p. 996)</td>
<td></td>
</tr>
<tr>
<td>Strategic Communication (International Communication*)</td>
<td>B.A. (p. 996), Conc.* (p. 973)</td>
<td></td>
</tr>
<tr>
<td>Strategic Communication (Organizational Leadership)</td>
<td>B.A. (p. 998)</td>
<td></td>
</tr>
<tr>
<td>Strategic Communication (Public Relations)</td>
<td>B.A. (p. 1000)</td>
<td></td>
</tr>
<tr>
<td>Strategic Communication (Rhetoric and Public Advocacy)</td>
<td>B.A. (p. 1003)</td>
<td></td>
</tr>
<tr>
<td>Program</td>
<td>Degree/Program Type</td>
<td>Location</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>----------------------------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>Strategic Communication and Cross-Cultural Leadership</td>
<td>Cert.</td>
<td>CO</td>
</tr>
<tr>
<td>String Pedagogy</td>
<td>M.M. (<a href="http://bulletin.temple.edu/graduate/scd/boyer/string-pedagogy-mm">link</a>)</td>
<td>BC</td>
</tr>
<tr>
<td>Supply Chain Management</td>
<td>B.B.A. (p. 654), Minor (p. 587)</td>
<td>BU</td>
</tr>
<tr>
<td>Sustainability</td>
<td>Cert. (p. 1222)</td>
<td>UC</td>
</tr>
<tr>
<td>Sustainable Community Planning</td>
<td>Cert. (<a href="http://bulletin.temple.edu/graduate/scd/sed/sustainable-community-planning-certificate">link</a>)</td>
<td>EV</td>
</tr>
<tr>
<td>Sustainable Food Systems</td>
<td>Cert. (p. 685), Minor (p. 687)</td>
<td>EV</td>
</tr>
<tr>
<td>Taxation</td>
<td>M.S. (<a href="http://bulletin.temple.edu/graduate/scd/law/taxation-ms">link</a>)</td>
<td>LW</td>
</tr>
<tr>
<td>Teaching English to Speakers of Other Languages</td>
<td>M.S.Ed. (<a href="http://bulletin.temple.edu/graduate/scd/education/teaching-english-speakers-other-languages-msed">link</a>)</td>
<td>ED</td>
</tr>
<tr>
<td>Teaching in Higher Education</td>
<td>Cert. (<a href="http://bulletin.temple.edu/graduate/scd/education/teaching-in-higher-education-certificate">link</a>)</td>
<td>ED</td>
</tr>
<tr>
<td>Theater (Acting*, Design*, Directing*, Musical Theater*)</td>
<td>B.A.* (p. 376), Minor (p. 391)</td>
<td>CA</td>
</tr>
<tr>
<td>Theater Education</td>
<td>Cert. (p. 389)</td>
<td>CA</td>
</tr>
<tr>
<td>Theater and Community Engagement</td>
<td>Cert. (p. 390)</td>
<td>CA</td>
</tr>
<tr>
<td>Theater/Acting</td>
<td>M.F.A. (<a href="http://bulletin.temple.edu/graduate/scd/tfma/theater-acting-mfa">link</a>)</td>
<td>CA</td>
</tr>
<tr>
<td>Theater/Design</td>
<td>M.F.A. (<a href="http://bulletin.temple.edu/graduate/scd/tfma/theater-design-mfa">link</a>)</td>
<td>CA</td>
</tr>
<tr>
<td>Theater/Directing</td>
<td>M.F.A. (<a href="http://bulletin.temple.edu/graduate/scd/tfma/theater-directing-mfa">link</a>)</td>
<td>CA</td>
</tr>
<tr>
<td>Theater/Playwriting</td>
<td>M.F.A. (<a href="http://bulletin.temple.edu/graduate/scd/tfma/theater-playwriting-mfa">link</a>)</td>
<td>CA</td>
</tr>
<tr>
<td>Therapeutic Recreation</td>
<td>B.S. (p. 729)</td>
<td>HP</td>
</tr>
<tr>
<td>Tourism and Hospitality Management (2+2 program, active in Japan)</td>
<td>B.S.</td>
<td>TH</td>
</tr>
<tr>
<td>Program</td>
<td>Degree/Cert.</td>
<td>Key</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>--------------</td>
<td>-----</td>
</tr>
<tr>
<td>Tourism and Hospitality Management (Destination Leadership, Hospitality Operations, Hospitality Operations Management, Tourism and Hospitality Marketing)</td>
<td>B.S.* (p. 1211), Cert. (p. 1218), Minor (p. 1219)</td>
<td>TH</td>
</tr>
<tr>
<td>Tourism and Hospitality Management Executive Program</td>
<td>M.T.H.M. (not currently accepting applications)</td>
<td>TH</td>
</tr>
<tr>
<td>Training and Organizational Development</td>
<td>Cert.</td>
<td>ED</td>
</tr>
<tr>
<td>Transportation Planning</td>
<td>Cert.</td>
<td>EV</td>
</tr>
<tr>
<td>Travel and Tourism</td>
<td>Cert.</td>
<td>LA</td>
</tr>
<tr>
<td>Trial Advocacy</td>
<td>LL.M.</td>
<td>LW</td>
</tr>
<tr>
<td>Trial Advocacy and Litigation</td>
<td>Cert.</td>
<td>LW</td>
</tr>
<tr>
<td>Urban Bioethics</td>
<td>M.A. (<a href="http://bulletin.temple.edu/graduate/scd/medicine/urban-bioethics-ma">http://bulletin.temple.edu/graduate/scd/medicine/urban-bioethics-ma</a>), Cert.</td>
<td>ME</td>
</tr>
<tr>
<td>Urban Education</td>
<td>M.Ed. (<a href="http://bulletin.temple.edu/graduate/scd/education/urban-education-med">http://bulletin.temple.edu/graduate/scd/education/urban-education-med</a>), Cert.</td>
<td>ED</td>
</tr>
<tr>
<td>Visual Anthropology</td>
<td>Minor (p. 794)</td>
<td>LA</td>
</tr>
<tr>
<td>Visual Studies</td>
<td>B.A. (p. 261)</td>
<td>TA</td>
</tr>
<tr>
<td>Voice and Speech for the Actor</td>
<td>Cert. (p. 390)</td>
<td>CA</td>
</tr>
<tr>
<td>Women's Studies</td>
<td>B.A. (p. 930), Minor (p. 933), Cert. (p. 933)</td>
<td>LA</td>
</tr>
<tr>
<td>World/Foreign Languages Education/K-12</td>
<td>Cert.</td>
<td>ED</td>
</tr>
<tr>
<td>Writing</td>
<td>Cert. (p. 827)</td>
<td>LA</td>
</tr>
</tbody>
</table>

**Key for Schools and Colleges**

- **BC**: Esther Boyer College of Music & Dance in the Center for the Performing & Cinematic Arts
- **BU**: Fox School of Business & Management
- **CA**: School of Theater, Film & Media Arts in the Center for the Performing & Cinematic Arts
- **CO**: School of Media & Communication
- **DN**: Maurice H. Kornberg School of Dentistry
- **ED**: College of Education
- **EN**: College of Engineering
- **EV**: School of Environmental Design
- **HP**: College of Public Health
<table>
<thead>
<tr>
<th>Code</th>
<th>Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>LA</td>
<td>College of Liberal Arts</td>
</tr>
<tr>
<td>LW</td>
<td>Beasley School of Law</td>
</tr>
<tr>
<td>ME</td>
<td>Lewis Katz School of Medicine</td>
</tr>
<tr>
<td>PH</td>
<td>School of Pharmacy</td>
</tr>
<tr>
<td>PM</td>
<td>School of Podiatric Medicine</td>
</tr>
<tr>
<td>ST</td>
<td>College of Science &amp; Technology</td>
</tr>
<tr>
<td>SW</td>
<td>School of Social Work</td>
</tr>
<tr>
<td>TA</td>
<td>Tyler School of Art</td>
</tr>
<tr>
<td>TH</td>
<td>School of Tourism &amp; Hospitality Management</td>
</tr>
<tr>
<td>UC</td>
<td>University College</td>
</tr>
<tr>
<td>US</td>
<td>University Studies</td>
</tr>
</tbody>
</table>

### Degree Symbols and Classifications

<table>
<thead>
<tr>
<th>Degree</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.A.</td>
<td>Associate in Arts</td>
</tr>
<tr>
<td>A.S.</td>
<td>Associate in Science</td>
</tr>
<tr>
<td>B.A.</td>
<td>Bachelor of Arts</td>
</tr>
<tr>
<td>B.A./M.A.</td>
<td>Five-year Bachelor's and Master's Program</td>
</tr>
<tr>
<td>B.A./M.S.</td>
<td>Five-year Bachelor's and Master's Program</td>
</tr>
<tr>
<td>B.B.A.</td>
<td>Bachelor of Business Administration</td>
</tr>
<tr>
<td>B.F.A.</td>
<td>Bachelor of Fine Arts</td>
</tr>
<tr>
<td>B.F.A. w/TC</td>
<td>Bachelor of Fine Arts with Teaching Certification</td>
</tr>
<tr>
<td>B.M.</td>
<td>Bachelor of Music</td>
</tr>
<tr>
<td>B.S.</td>
<td>Bachelor of Science</td>
</tr>
<tr>
<td>B.S./M.A.</td>
<td>Five-year Bachelor's and Master's Program</td>
</tr>
<tr>
<td>B.S./M.S.</td>
<td>Five-year Bachelor's and Master's Program</td>
</tr>
<tr>
<td>B.S.Arch.</td>
<td>Bachelor of Science in Architecture</td>
</tr>
<tr>
<td>B.S.A.T.</td>
<td>Bachelor of Science in Athletic Training</td>
</tr>
<tr>
<td>B.S.Bio.</td>
<td>Bachelor of Science in Bioengineering</td>
</tr>
<tr>
<td>B.S.C.E.</td>
<td>Bachelor of Science in Civil Engineering</td>
</tr>
<tr>
<td>B.S.E.</td>
<td>Bachelor of Science in Engineering</td>
</tr>
<tr>
<td>B.S.Ed.</td>
<td>Bachelor of Science in Education</td>
</tr>
<tr>
<td>B.S.Env.E.</td>
<td>Bachelor of Science in Environmental Engineering</td>
</tr>
<tr>
<td>B.S.E.E.</td>
<td>Bachelor of Science in Electrical Engineering</td>
</tr>
<tr>
<td>B.S.E.T.</td>
<td>Bachelor of Science in Engineering Technology</td>
</tr>
<tr>
<td>B.S.M.E.</td>
<td>Bachelor of Science in Mechanical Engineering</td>
</tr>
<tr>
<td>B.S.N.</td>
<td>Bachelor of Science in Nursing</td>
</tr>
<tr>
<td>B.S.W.</td>
<td>Bachelor of Science in Social Work</td>
</tr>
<tr>
<td>D.A.T.</td>
<td>Doctor of Athletic Training</td>
</tr>
<tr>
<td>D.B.A.</td>
<td>Doctor of Business Administration</td>
</tr>
<tr>
<td>D.M.A.</td>
<td>Doctor of Musical Arts</td>
</tr>
<tr>
<td>D.M.D.</td>
<td>Doctor of Dental Medicine</td>
</tr>
<tr>
<td>D.N.P.</td>
<td>Doctor of Nursing Practice</td>
</tr>
<tr>
<td>D.O.T.</td>
<td>Doctor of Occupational Therapy</td>
</tr>
<tr>
<td>D.P.M.</td>
<td>Doctor of Podiatric Medicine</td>
</tr>
<tr>
<td>D.P.T.</td>
<td>Doctor of Physical Therapy</td>
</tr>
<tr>
<td>Ed.D.</td>
<td>Doctor of Education</td>
</tr>
<tr>
<td>Ed.S.</td>
<td>Education Specialist</td>
</tr>
<tr>
<td>J.D.</td>
<td>Juris Doctor (first professional degree for law)</td>
</tr>
<tr>
<td>L.L.M.</td>
<td>Master of Laws (further specialization after J.D. degree)</td>
</tr>
<tr>
<td>M.A.</td>
<td>Master of Arts</td>
</tr>
<tr>
<td>M.Acc.</td>
<td>Master of Accountancy</td>
</tr>
<tr>
<td>M.Arch.</td>
<td>Master of Architecture</td>
</tr>
<tr>
<td>Degree</td>
<td>Title</td>
</tr>
<tr>
<td>--------</td>
<td>--------------------------------------------</td>
</tr>
<tr>
<td>M.B.A.</td>
<td>Master of Business Administration</td>
</tr>
<tr>
<td>M.D.</td>
<td>Doctor of Medicine</td>
</tr>
<tr>
<td>M.Ed.</td>
<td>Master of Education</td>
</tr>
<tr>
<td>M.F.A.</td>
<td>Master of Fine Arts</td>
</tr>
<tr>
<td>M.H.A.</td>
<td>Master of Health Administration</td>
</tr>
<tr>
<td>M.J.</td>
<td>Master of Journalism</td>
</tr>
<tr>
<td>M.L.A.</td>
<td>Master of Liberal Arts</td>
</tr>
<tr>
<td>M.L.Arch.</td>
<td>Master of Landscape Architecture</td>
</tr>
<tr>
<td>M.M.</td>
<td>Master of Music</td>
</tr>
<tr>
<td>M.M.S.</td>
<td>Master of Medical Science</td>
</tr>
<tr>
<td>M.M.T.</td>
<td>Master of Music Therapy</td>
</tr>
<tr>
<td>M.O.T.</td>
<td>Master of Occupational Therapy</td>
</tr>
<tr>
<td>M.P.H.</td>
<td>Master of Public Health</td>
</tr>
<tr>
<td>M.S.</td>
<td>Master of Science</td>
</tr>
<tr>
<td>M.S.Bio.</td>
<td>Master of Science in Bioengineering</td>
</tr>
<tr>
<td>M.S.C.E.</td>
<td>Master of Science in Civil Engineering</td>
</tr>
<tr>
<td>M.S.Ed.</td>
<td>Master of Science in Education</td>
</tr>
<tr>
<td>M.S.E.E.</td>
<td>Master of Science in Electrical Engineering</td>
</tr>
<tr>
<td>M.S.Env.</td>
<td>Master of Science in Environmental Engineering</td>
</tr>
<tr>
<td>M.S.M.E.</td>
<td>Master of Science in Mechanical Engineering</td>
</tr>
<tr>
<td>M.S.N.</td>
<td>Master of Science in Nursing</td>
</tr>
<tr>
<td>M.S.W.</td>
<td>Master of Science in Social Work</td>
</tr>
<tr>
<td>M.T.H.M.</td>
<td>Master of Tourism and Hospitality Management</td>
</tr>
<tr>
<td>Ph.D.</td>
<td>Doctor of Philosophy</td>
</tr>
<tr>
<td>Pharm.D.</td>
<td>Doctor of Pharmacy</td>
</tr>
<tr>
<td>P.S.M.</td>
<td>Professional Science Master's</td>
</tr>
<tr>
<td>S.J.D.</td>
<td>Doctor of Juridicial Science</td>
</tr>
</tbody>
</table>
Faculty

Beasley School of Law

Scott C. Burris, Professor, Department of Center for Health Law, Policy and Practice; J.D., Yale University.

David A. Hoffman, Professor, Department of Dean's Office; J.D., Harvard Law School.

Laura E. Little, Professor, Department of Dean's Office; J.D., Temple University School of Law.

Gregory N. Mandel, Professor, Department of Dean's Office; J.D., Stanford Law School.

Boyer College of Music and Dance

Charles Abramovic, Professor, Department of Keyboard Studies; D.M.A., Temple University.

Mitos Andaya, Associate Professor, Department of Choral Activities; D.M.A., University of Kansas.

Christine L. Anderson, Associate Professor, Department of Voice and Opera; D.M.A., University of Cincinnati College-Conservatory of Music.

Luis O. Biava, Professor Emeritus, Department of Instrumental Studies; M.M., Manhattan School of Music.

Beth Bolton, Associate Professor, Department of Music Education and Music Therapy; Ph.D., Temple University.

Karen E. Bond, Associate Professor, Department of Dance; Ph.D., La Trobe University.

Darlene M. Brooks, Associate Professor, Department of Music Education and Music Therapy; Ph.D., Temple University.

Matthew Brunner, Assistant Professor (Teaching/Instructional), Department of Instrumental Studies; D.M.A., Indiana University.

Nathan Buonviri, Assistant Professor, Department of Music Education and Music Therapy; Ph.D., Temple University.

David B. Cannata, Associate Professor, Department of Music Studies; Ph.D., New York University.

Deborah A. Confredo, Professor, Department of Music Education and Music Therapy; Ph.D., Florida State University.

Andreas Dells, Professor, Department of Instrumental Studies; M.M., The Juilliard School.

Marcus DeLoach, Assistant Professor, Department of Voice and Opera; D.M.A., Rice University.

Alexander deVaron, Assistant Professor (Teaching/Instructional), Department of Music Studies; D.M.A., Temple University.

Cheryl L. Dileo, Professor, Department of Music Education and Music Therapy; Ph.D., Louisiana State University.

Rollo A. Dilworth, Associate Professor, Department of Music Education and Music Therapy; D.M.A., Northwestern University.

Sherril Dodds, Professor, Department of Dance; Ph.D., University of Surrey.

Vladimir Dyo, Instructor (Teaching/Instructional), Department of Instrumental Studies; D.M.A., Temple University.

Alexander E. Fiorillo, Professor, Department of Keyboard Studies; M.M., Catholic University of America.

Edward Flanagan, Associate Professor, Department of Music Studies; Ph.D., Temple University.

Cynthia J. Folio, Professor, Department of Music Studies; Ph.D., Eastman School of Music.

Mark Franko, Professor, Department of Dance; Ph.D., Columbia University.

Shana Goldin-Perschbacher, Assistant Professor, Department of Music Studies; Ph.D., University of Virginia.

Lorie A. Gratis, Assistant Professor (Teaching/Instructional), Department of Voice and Opera; D.M.A., Temple University.

Matthew J. Greenbaum, Professor, Department of Music Studies; Ph.D., City University of New York.

Jillian Harris, Assistant Professor, Department of Dance; M.F.A., New York University Tisch School of the Arts.

Andrea McGraw Hunt, Assistant Professor (Teaching/Instructional), Department of Music Education and Music Therapy; Ph.D., Temple University.

Lawrence R. Indik, Associate Professor (Practice), Department of Voice and Opera; D.M.A., Manhattan School of Music.
John F. Johnson, Professor, Department of Music Studies; M.M., University of Texas.

Laura E. Katz Rizzo, Assistant Professor (Teaching/Instructional), Department of Dance; Ph.D., Temple University.

Gregory S. Kettinger, Instructor (Teaching/Instructional), Department of Music Studies; B.M., Temple University.

Joann M. Kirchner, Assistant Professor (Teaching/Instructional), Department of Keyboard Studies; Ph.D., University of Oklahoma.

Michael Klein, Professor, Department of Music Studies; Ph.D., State University of New York at Buffalo.

Allen M. Krantz, Instructor (Teaching/Instructional), Department of Instrumental Studies; M.A., Stanford University.

Steven Kreinberg, Associate Professor, Department of Music Studies; Ed.D., Temple University.

Jan L. Krzywicki, Professor, Department of Music Studies; M.M., Philadelphia Musical Academy.

Edward D. Latham, Associate Professor, Department of Music Studies; Ph.D., Yale University.

Kun-Yang Lin, Associate Professor, Department of Dance; M.F.A., New York University Tisch School of the Arts.

Joyce Z. Lindorff, Professor, Department of Keyboard Studies; D.M.A., The Juilliard School.

Wendy Magee, Associate Professor, Department of Music Education and Music Therapy; Ph.D., University of Sheffield.

Yukiko Mitsudome, Assistant Professor (Research), Department of Music Education and Music Therapy; Ph.D., Temple University.

Phillip R. O’Banion, Assistant Professor, Department of Instrumental Studies; M.M., University of Colorado.

Richard D. Oatts, Professor, Department of Music Studies.

Lambert T. Orkis, Professor, Department of Keyboard Studies; M.M., Temple University.

Elizabeth C. Parker, Assistant Professor, Department of Music Education and Music Therapy; Ph.D., University of Nebraska-Lincoln.

David Pasbrig, Assistant Professor (Teaching/Instructional), Department of Music Studies; D.M.A., Temple University.

Paul Rardin, Associate Professor, Department of Choral Activities; D.M.A., University of Michigan.

Alison M. Reynolds, Associate Professor, Department of Music Education and Music Therapy; Ph.D., Temple University.

Valery Ryvkin, Associate Professor, Department of Voice and Opera; M.M., The Juilliard School.

Benjamin A. Schachter, Assistant Professor (Teaching/Instructional), Department of Music Studies; M.M., New England Conservatory.

Eduard Schmieder, Professor, Department of Instrumental Studies.

Helen Shoemark, Associate Professor, Department of Music Education and Music Therapy; Ph.D., University of Melbourne.

Jeffrey C. Solow, Professor, Department of Instrumental Studies; B.A., University of California Los Angeles.

Merián Soto, Professor, Department of Dance; M.A.

Terell L. Stafford, Professor, Department of Music Studies; M.M., Rutgers University.

Robert T. Stroker, Professor, Department of Music Education and Music Therapy; Ph.D., Michigan State University.

Maria del Pico Taylor, Professor, Department of Keyboard Studies; M.M., Northwestern University.

Emily C. Threinen, Associate Professor, Department of Instrumental Studies; D.M.A., University of Michigan.

Adam Vidiksis, Instructor (Teaching/Instructional), Department of Music Studies; Ph.D., Temple University.

Lindsay Weightman, Associate Professor (Teaching/Instructional), Department of Music Studies; D.M.A., Manhattan School of Music.

Kariamu Welsh, Professor, Department of Dance; D.A., New York University.

Stephen A. Willier, Associate Professor, Department of Music Studies; Ph.D., University of Illinois.

Maurice W. Wright, Professor, Department of Music Studies; D.M.A., Columbia University.

Steven D. Zohn, Professor, Department of Music Studies; Ph.D., Cornell University.
College of Education

Gregory Anderson, Professor, Department of Policy, Organizational, and Leadership Studies; Ph.D., City University of New York.

Janelle M. Bailey, Associate Professor (Teaching/Instructional), Department of Teaching and Learning; Ph.D., University of Arizona.

Cynthia S. Belliveau, Assistant Professor (Teaching/Instructional), Department of Policy, Organizational, and Leadership Studies; Ph.D., Temple University.

Julie L. Booth, Assistant Professor, Department of Psychological Studies in Education; Ph.D., Carnegie Mellon University.

Jean A. Boyer, Assistant Professor (Teaching/Instructional), Department of Psychological Studies in Education; Ph.D., University of Cincinnati.

Joseph Boyle, Associate Professor, Department of Teaching and Learning; Ph.D., University of Kansas.

Carol B. Brantl, Assistant Professor, Department of Teaching and Learning; Ph.D., University of New Mexico.

Wanda M. Brooks, Associate Professor, Department of Teaching and Learning; Ed.D., University of Pennsylvania.

James P. Byrnes, Professor, Department of Psychological Studies in Education; Ph.D., Temple University.

Corinne A. Caldwell, Professor Emerita, Department of Policy, Organizational, and Leadership Studies; Ph.D., University of Pennsylvania.

Robert W. Clark, Associate Professor (Teaching/Instructional), Department of Teaching and Learning; Ph.D., Pennsylvania State University.

Sarah A. Cordes, Assistant Professor, Department of Policy, Organizational, and Leadership Studies; Ph.D., New York University.

Maia Bloomfield Cucchiara, Assistant Professor, Department of Policy, Organizational, and Leadership Studies; Ph.D., University of Pennsylvania.

James Earl Davis, Professor, Department of Policy, Organizational, and Leadership Studies; Ph.D., Cornell University.

Meixia Ding, Assistant Professor, Department of Teaching and Learning; Ph.D., Texas A and M University.

Joseph P. DuCette, Professor, Department of Psychological Studies in Education; Ph.D., Cornell University.

Richard M. Englert, Professor, Department of Policy, Organizational, and Leadership Studies; Ed.D., University of California Los Angeles.

Frank H. Farley, Professor, Department of Psychological Studies in Education; Ph.D., University of London.

Catherine A. Fiorello, Professor, Department of Psychological Studies in Education; Ph.D., University of Kentucky.

Amanda G. Fischer, Assistant Professor, Department of Psychological Studies in Education; Ph.D., Ohio State University.

Joseph P. Folger, Professor, Department of Policy, Organizational, and Leadership Studies; Ph.D., University of Wisconsin-Madison.

Timothy P. Fukawa-Connelly, Assistant Professor, Department of Teaching and Learning; Ph.D., University of Maryland.

William Fullard Jr., Professor Emeritus, Department of Psychological Studies in Education; Ph.D., University of Pennsylvania.

Steven Jay Gross, Professor, Department of Policy, Organizational, and Leadership Studies; Ed.D., University of Pennsylvania.

John Hall, Assistant Professor, Department of Policy, Organizational, and Leadership Studies; Ph.D., University of California Berkeley.

Shanta Hattikudur, Assistant Professor (Teaching/Instructional), Department of Psychological Studies in Education; Ph.D., University of Wisconsin-Madison.

Joseph Haviland, Associate Professor (Teaching/Instructional), Department of Teaching and Learning; Ed.D., Temple University.

Annemarie H. Hindman, Associate Professor, Department of Psychological Studies in Education; Ph.D., University of Michigan.

Shana Hornstein, Assistant Professor (Teaching/Instructional), Department of Teaching and Learning; Ph.D., Arizona State University.

Portia L. Hunt, Professor Emerita, Department of Psychological Studies in Education; Ph.D., Indiana State University.

Vivian W. Ikpa, Associate Professor, Department of Policy, Organizational, and Leadership Studies; Ph.D., University of Maryland College Park.

Will J. Jordan, Associate Professor, Department of Policy, Organizational, and Leadership Studies; Ph.D., Columbia University, Teachers College.

Yasuko Kanno, Associate Professor, Department of Teaching and Learning; Ph.D., University of Toronto.
Avshalom Kaplan, Associate Professor, Department of Psychological Studies in Education; Ph.D., University of Michigan.

Novella E. Keith, Associate Professor Emerita, Department of Teaching and Learning; Ph.D., Rutgers University.

Julie Beth Kessler, Assistant Professor (Teaching/Instructional), Department of Teaching and Learning; Ph.D., Temple University.

Larry J. Krafft, Professor, Department of Policy, Organizational, and Leadership Studies; Ph.D., Michigan State University.

Peshe C. Kunioff, Professor (Teaching/Instructional), Department of Teaching and Learning; Ph.D., Bryn Mawr College.

Janice C. Laurence, Associate Professor, Department of Policy, Organizational, and Leadership Studies; Ph.D., George Mason University.

Yoon H. Lee, Assistant Professor (Teaching/Instructional), Department of Teaching and Learning; Ed.D., Columbia University.

Doug Lombardi, Assistant Professor, Department of Teaching and Learning; Ph.D., University of Nevada, Las Vegas.

Christopher W. McGinley, Associate Professor, Department of Policy, Organizational, and Leadership Studies; Ed. D., University of Pennsylvania.

Kristina Najera, Assistant Professor (Teaching/Instructional), Department of Teaching and Learning; Ph.D., University of Delaware.

Kristie Jones Newton, Associate Professor, Department of Teaching and Learning; Ph.D., University of Maryland College Park.

Timothy J. Patterson, Assistant Professor, Department of Teaching and Learning; Ph.D., Columbia University.

Aneta Pavlenko, Professor, Department of Teaching and Learning; Ph.D., Cornell University.

Laura Pendergast, Assistant Professor, Department of Psychological Studies in Education; Ph.D., Pennsylvania State University.

Ivan J. Quandt, Professor, Department of Teaching and Learning; Ed.D., Indiana University.

Elizabeth Richard, Assistant Professor (Teaching/Instructional), Department of Teaching and Learning; Ph.D., Pennsylvania State University.

Jayminn S. Sanford-DeShields, Associate Professor, Department of Teaching and Learning; Ed.D., Harvard University.

Kenneth G. Schaefer, Professor, Department of Teaching and Learning; Ph.D., Columbia University.

Catherine C. Schifter, Associate Professor, Department of Psychological Studies in Education; Ph.D., University of Pennsylvania.

Joan Poliner Shapiro, Professor, Department of Policy, Organizational, and Leadership Studies; Ed.D., University of Pennsylvania.

Lauren Smith, Assistant Professor (Teaching/Instructional), Department of Psychological Studies in Education; Ph.D., University of Miami.

Michael W. Smith, Professor, Department of Teaching and Learning; Ph.D., University of Chicago.

Tamara Sniad, Assistant Professor (Teaching/Instructional), Department of Teaching and Learning; Ph.D., University of Pennsylvania.

Cathleen S. Soundy, Associate Professor, Department of Teaching and Learning; Ed.D., Rutgers University.

Sarah I. Springer, Assistant Professor (Teaching/Instructional), Department of Psychological Studies in Education; Ph.D., Montclair State University.

Judith C. Stull, Assistant Professor (Teaching/Instructional), Department of Policy, Organizational, and Leadership Studies; Ph.D., Boston College.

Francis J. Sullivan, Associate Professor, Department of Teaching and Learning; Ph.D., University of Pennsylvania.

Jill May Swavely, Associate Professor (Teaching/Instructional), Department of Teaching and Learning; Ed.D., Temple University.

Neil Theobald, Professor, Department of Policy, Organizational, and Leadership Studies; Ph.D., University of Washington.

S. Kenneth Thurman, Professor, Department of Teaching and Learning; Ph.D., Vanderbilt University.

Matthew J. Tincani, Associate Professor, Department of Psychological Studies in Education; Ph.D., Ohio State University.

Gregory M. Tucker, Associate Professor (Teaching/Instructional), Department of Psychological Studies in Education; Ph.D., Temple University.

Nathaniel von der Embse, Assistant Professor, Department of Psychological Studies in Education; Ph.D., Michigan State University.

Matthew J. Elvis Wagner, Associate Professor, Department of Teaching and Learning; Ed.D., Columbia University.

Barbara A. Wasik, Professor, Department of Psychological Studies in Education; Ph.D., Temple University.

Meredith Weber, Assistant Professor (Teaching/Instructional), Department of Teaching and Learning; Ph.D., Temple University.
Keith Witham, Assistant Professor, Department of Policy, Organizational, and Leadership Studies; Ph.D., University of Southern California.

Christine A. Woyshner, Professor, Department of Teaching and Learning; Ed.D., Harvard University.

College of Engineering

Bechara E. Abboud, Associate Professor, Department of Civil and Environmental Engineering; Ph.D., Drexel University.

Berk Ayranci, Instructor (Teaching/Instructional), Department of Civil and Environmental Engineering; M.S.M.E., Temple University.

Li Bai, Associate Professor, Department of Electrical and Computer Engineering; Ph.D., Drexel University.

George Baran, Professor, Department of Mechanical Engineering; Ph.D., University of Michigan.

Leonard K. Bernstein, Instructor (Teaching/Instructional), Department of Civil and Environmental Engineering; M.S., University of Pennsylvania.

Saroj K. Biswas, Professor, Department of Electrical and Computer Engineering; Ph.D., University of Ottawa.

Robert M. Brooks, Associate Professor, Department of Civil and Environmental Engineering; Ph.D., Indian Institute of Technology.

David S. Brookstein, Professor, Department of Mechanical Engineering; Sc.D., Massachusetts Institute of Technology.

Shih-Jiun Chen, Professor, Department of Mechanical Engineering; Ph.D., Drexel University.

Harsh Deep Chopra, Professor, Department of Mechanical Engineering; Ph.D., University of Maryland College Park.

Joseph Thomas Coe Jr., Assistant Professor, Department of Civil and Environmental Engineering; Ph.D., University of California Los Angeles.

Richard S. Cohen, Professor, Department of Mechanical Engineering; Ph.D., Princeton University.

Kurosh Darvish, Associate Professor, Department of Mechanical Engineering; Ph.D., University of Virginia.

Zdenka J. Delalic, Associate Professor, Department of Electrical and Computer Engineering; Ph.D., University of Pennsylvania.

Dmitriy A. Dikin, Associate Professor (Research), Department of Mechanical Engineering; Ph.D., National Academy of Sciences of Ukraine, Institute for Low Temperature Physics and Engineering.

Oleksandr Diloyan, Assistant Professor (Teaching/Instructional), Department of Mechanical Engineering; Ph.D., Donets National Technical University.

Ahmed Faheem, Assistant Professor, Department of Civil and Environmental Engineering; Ph.D., University of Wisconsin.

Omar Z. Fisher, Assistant Professor, Department of Bioengineering; Ph.D., University of Texas at Austin.

Bojana Gligorijevic, Assistant Professor, Department of Bioengineering; Ph.D., Georgetown University.

Yah-el Har-el, Assistant Professor (Research), Department of Bioengineering; Ph.D., Johns Hopkins University.

John J. Helferty, Associate Professor, Department of Electrical and Computer Engineering; Ph.D., Drexel University.

Robert Hughes, Assistant Professor, Department of Mechanical Engineering; Ph.D., McMaster University.

Parsaoran Hutapea, Associate Professor, Department of Mechanical Engineering; Ph.D., North Carolina State University.

Mohammad F. Kiani, Professor, Department of Mechanical Engineering; Ph.D., Louisiana Tech University.

Sanghun Kim, Assistant Professor (Teaching/Instructional), Department of Civil and Environmental Engineering; Ph.D., Syracuse University.

Peter Leikes, Professor, Department of Bioengineering; Ph.D., RWTH Aachen University.

Michel Lemay, Professor, Department of Bioengineering; Ph.D., Case Western Reserve University.

Haijun Liu, Assistant Professor, Department of Mechanical Engineering; Ph.D., University of Maryland College Park.

Muruganandham Manickavachagam, Assistant Professor (Research), Department of Civil and Environmental Engineering; Ph.D., Annamalai University.

Erica R. McKenzie, Assistant Professor, Department of Civil and Environmental Engineering; Ph.D., University of California at Davis.

William C. Miller, Associate Professor (Teaching/Instructional), Department of Civil and Environmental Engineering; Ph.D., University of Pennsylvania.

Svetlana Neretina, Assistant Professor, Department of Mechanical Engineering; Ph.D., McMaster University.
Iyad Obeid, Associate Professor, Department of Electrical and Computer Engineering; Ph.D., Duke University.

Ruth Ochia, Associate Professor (Teaching/Instructional), Department of Bioengineering; Ph.D., University of Washington.

Ralph Oyini Mbouna, Assistant Professor (Teaching/Instructional), Department of Electrical and Computer Engineering; Ph.D., Temple University.

Chetan A. Patil, Assistant Professor (Research), Department of Bioengineering; Ph.D., Vanderbilt University.

Vallorie J. Peridier, Associate Professor, Department of Mechanical Engineering; Ph.D., Lehigh University.

Joseph Picone, Professor, Department of Electrical and Computer Engineering; Ph.D., Illinois Institute of Technology.

Shriram Pillapakkam, Associate Professor (Teaching/Instructional), Department of Mechanical Engineering; Ph.D., New Jersey Institute of Technology.

Nancy Pleshko, Professor, Department of Bioengineering; Ph.D., Rutgers University.

Songgang Qiu, Professor, Department of Mechanical Engineering; Ph.D., University of Minnesota.

David Reiser, Assistant Professor (Teaching/Instructional), Department of Mechanical Engineering.

Fei Ren, Assistant Professor, Department of Mechanical Engineering; Ph.D., Michigan State University.

Shenqiang Ren, Associate Professor, Department of Mechanical Engineering; Ph.D., University of Maryland College Park.

Steven M. Ridenour, Professor Emeritus, Department of Mechanical Engineering; Ph.D., University of Miami.

Robert J. Ryan, Associate Professor (Teaching/Instructional), Department of Civil and Environmental Engineering; Ph.D., Drexel University.

Keyanoush Sadeghipour, Professor, Department of Mechanical Engineering; Ph.D., University of Manchester Institute of Science and Technology.

Sergio E. Serrano, Professor, Department of Civil and Environmental Engineering; Ph.D., University of Waterloo.

Dennis A. Silage, Professor, Department of Electrical and Computer Engineering; Ph.D., University of Pennsylvania.

Andrew Spence, Associate Professor, Department of Bioengineering; Ph.D., Cornell University.

Won Hyuk Suh, Assistant Professor, Department of Bioengineering; Ph.D., University of Illinois at Urbana-Champaign.

Thomas E. Sullivan, Professor, Department of Electrical and Computer Engineering; Ph.D., Pennsylvania State University.

Rominder Suri, Professor, Department of Civil and Environmental Engineering; Ph.D., Michigan Technological University.

Rouzbeh Tehrani, Assistant Professor (Teaching/Instructional), Department of Civil and Environmental Engineering; Ph.D., Temple University.

Philip D. Udo-Inyang, Associate Professor, Department of Civil and Environmental Engineering; Ph.D., University of Missouri-Columbia.

Felix F. Udoeyo, Assistant Professor (Teaching/Instructional), Department of Civil and Environmental Engineering; Ph.D., Abubakar Tafawa Balewa University.

Dmitri Vainchtein, Assistant Professor, Department of Mechanical Engineering; Ph.D., University of Illinois at Urbana-Champaign.

Benoit Van Aken, Assistant Professor, Department of Civil and Environmental Engineering; Ph.D., Catholic University of Louvain.

Evelyn Walters, Assistant Professor (Teaching/Instructional), Department of Civil and Environmental Engineering; Ph.D., Technische Universität München.

Wenhai Wang, Assistant Professor (Research), Department of Mechanical Engineering.

Chang-Hee Won, Associate Professor, Department of Electrical and Computer Engineering; Ph.D., University of Notre Dame.

Jie Yin, Assistant Professor, Department of Mechanical Engineering; Ph.D., Columbia University.

Hui Yu, Assistant Professor (Research), Department of Civil and Environmental Engineering.

Huichun Judy Zhang, Assistant Professor, Department of Civil and Environmental Engineering; Ph.D., Georgia Institute of Technology.

Yimin Daniel Zhang, Associate Professor, Department of Electrical and Computer Engineering; Ph.D., University of Tsukuba.

Ying Julie Zhu, Associate Professor, Department of Electrical and Computer Engineering; Ph.D., Princeton University.
College of Liberal Arts

Zain Abdullah, Associate Professor, Department of Religion; Ph.D., The New School for Social Research.

Carolyn T. Adams, Professor Emerita, Department of Geography and Urban Studies; Ph.D., Washington University.

Howard Addison, Assistant Professor (Teaching/Instructional), Department of Intellectual Heritage; Ph.D., Graduate Theological Foundation.

Hiram Aldarondo, Associate Professor, Department of Spanish and Portuguese; Ph.D., University of Chicago.

Joseph D. Alkus, Instructor (Teaching/Instructional), Department of Criminal Justice; M.S., National Louis University.

David Allen, Associate Professor (Teaching/Instructional), Department of Sociology; Ph.D., University of California Berkeley.

Lauren B. Alloy, Professor, Department of Psychology; Ph.D., University of Pennsylvania.

Rebecca T. Alpert, Professor, Department of Religion; Ph.D., Temple University.

Michael Altimore, Associate Professor (Teaching/Instructional), Department of Sociology; Ph.D., University of Iowa.

Elizabeth Alvarez, Assistant Professor (Teaching/Instructional), Department of Intellectual Heritage; Ph.D., University of Chicago Divinity School.

Nilgün Anadolu-Okur, Associate Professor, Department of African American Studies; Ph.D., Hacettepe University.

Max Andrucki, Assistant Professor (Teaching/Instructional), Department of Geography and Urban Studies; Ph.D., University of Leeds.

Kevin T. Arceneaux, Associate Professor, Department of Political Science; Ph.D., Rice University.

Molefi Kete Asante, Professor, Department of African American Studies; Ph.D., University of California Los Angeles.

Alira Ashvo-Munoz, Assistant Professor (Teaching/Instructional), Department of Spanish and Portuguese; Ph.D., University of Texas at Austin.

Philip Atkins, Assistant Professor (Teaching/Instructional), Department of Philosophy; Ph.D., University of California Santa Barbara.

Kathleen Auerhahn, Associate Professor, Department of Criminal Justice; Ph.D., University of California Riverside.

James D. Bachmeier, Assistant Professor, Department of Sociology; Ph.D., University of California Irvine.

Marcia B. Bailey, Assistant Professor (Teaching/Instructional), Department of Intellectual Heritage; Ph.D., Colgate Rochester Crozer Divinity.

Debra Bangasser, Assistant Professor, Department of Psychology; Ph.D., Rutgers University.

Steven R. Belenko, Professor, Department of Criminal Justice; Ph.D., Columbia University.

Jamal Benin, Instructor (Teaching/Instructional), Department of Intellectual Heritage; M.A., Temple University.

Paul Benzon, Assistant Professor (Teaching/Instructional), Department of Writing Program; Ph.D., Rutgers University.

Daniel W. Berman, Associate Professor, Department of Greek and Roman Classics; Ph.D., Yale University.

Lila Corwin Berman, Associate Professor, Department of History; Ph.D., Yale University.

Susan Bertolino, Instructor (Teaching/Instructional), Department of Intellectual Heritage; M.A., University of Chicago.

Kathleen A. Biddick, Professor Emerita, Department of History; Ph.D., University of Toronto.

Marcus Bingenheimer, Assistant Professor, Department of Religion; Dr.Phil., Wurzburg University.

Erwin A. Blackstone, Professor, Department of Economics; Ph.D., University of Michigan.

Khalid A. Y. Blankinship, Associate Professor, Department of Religion; Ph.D., University of Washington.

Michael L. Bognanno, Associate Professor, Department of Economics; Ph.D., Cornell University.

Aryeh I. Botwinick, Professor, Department of Political Science; Ph.D., Princeton University.

Gary W. Bowman, Associate Professor, Department of Economics; Ph.D., Carnegie Mellon University.

Lucy Bregman, Professor, Department of Religion; Ph.D., University of Chicago Divinity School.

Lisa A. Briand, Assistant Professor, Department of Psychology; Ph.D., University of Michigan.
Sheldon R. Brivic, Professor, Department of English; Ph.D., University of California Berkeley.

Seth C. Bruggeman, Associate Professor, Department of History; Ph.D., College of William and Mary.

Andrew Buck, Professor Emeritus, Department of Economics; Ph.D., University of Illinois.

Sarah Sunn Bush, Assistant Professor, Department of Political Science; Ph.D., Princeton University.

Gregory Byala, Assistant Professor (Teaching/Instructional), Department of Writing Program; Ph.D., Yale University.

Michelle D. Byng, Associate Professor, Department of Sociology; Ph.D., University of Virginia.

Niambi Carter, Assistant Professor, Department of African American Studies; Ph.D., Duke University.

Sanjoy Chakravorty, Professor, Department of Geography and Urban Studies; Ph.D., University of Southern California.

Colin Chamberlain, Associate Professor, Department of Philosophy; Ph.D., Harvard University.

Isabelle Chang, Assistant Professor (Teaching/Instructional), Department of Psychology, Temple University.

Linda Chavers, Instructor (Teaching/Instructional), Department of Intellectual Heritage; Ph.D., Harvard University.

Jason M. Chein, Associate Professor, Department of Psychology; Ph.D., University of Pittsburgh.

Eunice Y. Chen, Assistant Professor, Department of Psychology; Ph.D., University of Sydney.

Rujuta P. Chincholkar-Mandelia, Assistant Professor (Teaching/Instructional), Department of Women's Studies, Temple University.

Fletcher Chmara-Huff, Assistant Professor (Teaching/Instructional), Department of Geography and Urban Studies; Ph.D., Ohio State University.

Daniel Chomsky, Assistant Professor (Teaching/Instructional), Department of Political Science; Ph.D., Northwestern University.

Steven E. Cole, Associate Professor, Department of English; Ph.D., University of Washington.

Bettye Collier-Thomas, Professor, Department of History; Ph.D., George Washington University.

Gretchen A. Condran, Associate Professor, Department of Sociology; Ph.D., University of Pennsylvania.

Whitley Cooke, Associate Professor (Teaching/Instructional), Department of Writing Program; Ph.D., University of Oklahoma.

Norma Corrales-Martin, Assistant Professor (Teaching/Instructional), Department of Spanish and Portuguese; Ph.D., Ohio University.

Lindsay Craig, Assistant Professor (Teaching/Instructional), Department of Philosophy; Ph.D., University of Cincinnati.

Nyron Crawford, Assistant Professor, Department of Political Science; Ph.D., Ohio State University.

Paul Crowe, Associate Professor (Teaching/Instructional), Department of Philosophy; Ph.D., Catholic University of Louvain.

Alicia Aileen Cunningham-Bryant, Assistant Professor (Teaching/Instructional), Department of Intellectual Heritage; Ph.D., Yale University.

Beth K. Curran, Associate Professor (Teaching/Instructional), Department of French, German, Italian and Slavic; Ph.D., Rutgers University.

Roman A. Cybriwsky, Professor, Department of Geography and Urban Studies; Ph.D., Pennsylvania State University.

Amanda Czerniawski, Assistant Professor (Teaching/Instructional), Department of Sociology; Ph.D., Columbia University.

Tirthananmoy Das, Associate Professor (Teaching/Instructional), Department of Economics; Ph.D., State University of New York at Binghamton.

Heath Fogg Davis, Associate Professor, Department of Political Science; Ph.D., Princeton University.

Barbara A. Day-Hickman, Associate Professor, Department of History; Ph.D., University of California Irvine.

Richard E. Deeg, Professor, Department of Political Science; Ph.D., Massachusetts Institute of Technology.

Kevin J. Delaney, Professor, Department of Sociology; Ph.D., State University of New York Stony Brook.

Samuel R. Delany, Professor, Department of English; Ph.D., The Bronx High School of Science.

John A. Dern, Associate Professor (Teaching/Instructional), Department of Intellectual Heritage; Ph.D., Lehigh University.

Dimitrios I. Diamantaras, Associate Professor, Department of Economics; Ph.D., University of Rochester.
Nguyen Thi Dieu, Associate Professor, Department of History; Ph.D., Aix-en-Provence.

Kenneth M. Dossar, Assistant Professor (Teaching/Instructional), Department of Intellectual Heritage; Ph.D., Temple University.

Myrna Douziyan, Assistant Professor (Teaching/Instructional), Department of Intellectual Heritage; Ph.D., University of California Los Angeles.

Hope N. Doyle, Associate Professor (Teaching/Instructional), Department of Spanish and Portuguese; Ph.D., University of Texas at Austin.

Deborah A. Drabick, Associate Professor, Department of Psychology; Ph.D., State University of New York Stony Brook.

Jayne Kribbs Drake, Associate Professor, Department of English; Ph.D., Pennsylvania State University.

Douglas Duckworth, Assistant Professor, Department of Religion; Ph.D., University of Virginia.

William C. Dunkelberg, Professor Emeritus, Department of Economics; Ph.D., University of Michigan.

Rachel Blau DuPlessis, Professor Emerita, Department of English; Ph.D., Columbia University.

Jaime Duran, Assistant Professor (Teaching/Instructional), Department of Spanish and Portuguese; Ph.D., Temple University.

Michael M. Eisman, Associate Professor, Department of History; Ph.D., University of Pennsylvania.

David B. Elesh, Associate Professor, Department of Sociology; Ph.D., Columbia University.

Lauren Ellman, Assistant Professor, Department of Psychology; Ph.D., University of California Los Angeles.

Eugene Ericksen, Professor Emeritus, Department of Sociology; Ph.D., University of Michigan.

Julia Ericksen, Professor Emerita, Department of Sociology; Ph.D., University of Pennsylvania.

Rosario R. Espinal, Professor, Department of Sociology; Ph.D., Washington University-St. Louis.

Jamie J. Fader, Assistant Professor, Department of Criminal Justice; Ph.D., University of Pennsylvania.

Mohsen Fardmanesh, Associate Professor, Department of Economics; Ph.D., Yale University.

Paul Farnsworth, Professor, Department of Anthropology; Ph.D., University of California Los Angeles.

Robert L. Fauber Jr., Associate Professor, Department of Psychology; Ph.D.

Daniel Featherston, Assistant Professor (Teaching/Instructional), Department of Writing Program; Ph.D., University of Arizona.

Barbara Ferman, Professor, Department of Political Science; Ph.D., Brandeis University.

Kenneth Finkel, Professor (Teaching/Instructional), Department of American Studies; M.A., Temple University.

K. Orfeo Fioretos, Associate Professor, Department of Political Science; Ph.D., Columbia University.

Alexa Firat, Assistant Professor (Teaching/Instructional), Department of Asian and Middle Eastern Languages and Studies; Ph.D., University of Pennsylvania.

Ariane Fischer, Assistant Professor (Teaching/Instructional), Department of Intellectual Heritage; Ph.D., George Washington University.

Talissa Ford, Assistant Professor, Department of English; Ph.D., University of California Berkeley.

Joseph S. Foster, Assistant Professor (Teaching/Instructional), Department of Intellectual Heritage; Ph.D., Temple University.

Sergio R. Franco, Associate Professor, Department of Spanish and Portuguese; Ph.D., University of Pittsburgh.

Amy L. Friedman, Assistant Professor (Teaching/Instructional), Department of Writing Program; Ph.D., University of London.

Joseph Friedman, Professor, Department of Economics; Ph.D., University of California Berkeley.

Yukari Fujiwara, Instructor (Teaching/Instructional), Department of Asian and Middle Eastern Languages and Studies; M.A., Eastern Michigan University.

Akim Gabriel, Instructor (Teaching/Instructional), Department of French, German, Italian and Slavic; M.A., Temple University.

Carmelo A. Galati, Assistant Professor (Teaching/Instructional), Department of French, German, Italian and Slavic; Ph.D., Rutgers University.
Inmaculada M. García-Sánchez, Assistant Professor, Department of Anthropology; Ph.D., University of California Los Angeles.

Timothy Garelick, Assistant Professor (Teaching/Instructional), Department of Psychology; Ph.D., Lehigh University.

Paul B. Garrett, Associate Professor, Department of Anthropology; Ph.D., New York University.

Suzanne Gauch, Associate Professor, Department of English; Ph.D., State University of New York at Buffalo.

James R. Getz, Assistant Professor (Teaching/Instructional), Department of Intellectual Heritage; Ph.D., Brandeis University.

Maurizio Giammarco, Assistant Professor (Teaching/Instructional), Department of Intellectual Heritage; Ph.D., Temple University.

Melissa R. Gilbert, Professor, Department of Geography and Urban Studies; Ph.D., Clark University.

Tania Giovannetti, Associate Professor, Department of Psychology; Ph.D., Drexel University.

Joseph Giuffre, Assistant Professor (Teaching/Instructional), Department of Intellectual Heritage, Rutgers University.

Kristin Gjesdal, Associate Professor, Department of Philosophy; Ph.D., University of Oslo.

Travis F. Glasson, Associate Professor, Department of History; Ph.D., Columbia University.

Petra Goedde, Associate Professor, Department of History; Ph.D., Northwestern University.

Eli C. Goldblatt, Professor, Department of English; Ph.D., University of Wisconsin-Madison.

Luis T. González del Valle, Professor Emeritus, Department of Spanish and Portuguese; Ph.D., University of Massachusetts Amherst.

Cynthia M. Gooch, Assistant Professor (Teaching/Instructional), Department of Psychology; Ph.D., Princeton University.

Judith Goode, Professor Emerita, Department of Anthropology; Ph.D., Cornell University.

Alex Gottesman, Assistant Professor, Department of Greek and Roman Classics; Ph.D., University of Chicago.

Thomas J. Gould, Professor, Department of Psychology; Ph.D., Indiana University.

Kimberly Ann Goyette, Associate Professor, Department of Sociology; Ph.D., University of Michigan.

Cristina Gragnani, Assistant Professor, Department of French, German, Italian and Slavic; Ph.D., Harvard University.

Peter Gran, Professor, Department of History; Ph.D., University of Chicago.

Sherri L. Grasmuck, Professor, Department of Sociology; Ph.D., University of Texas.

Douglas Greenfield, Associate Professor (Teaching/Instructional), Department of Intellectual Heritage; Ph.D., Columbia University.

Leonard O. Greenfield, Professor, Department of Anthropology; Ph.D., University of Michigan.

Elizabeth Groff, Associate Professor, Department of Criminal Justice; Ph.D., University of Maryland.

Rachael Groner, Associate Professor (Teaching/Instructional), Department of Writing Program; Ph.D., Purdue University.

Lisa Grunberger, Assistant Professor (Teaching/Instructional), Department of Writing Program; Ph.D., University of Chicago Divinity School.

Alexandra Guisinger, Assistant Professor, Department of Political Science; Ph.D., Yale University.

Elizabeth Gunderson, Assistant Professor, Department of Psychology; Ph.D., University of Chicago.

Michael G. Hagen, Associate Professor, Department of Political Science; Ph.D., University of California Berkeley.

Simon Hakim, Professor, Department of Economics; Ph.D., University of Pennsylvania.

Raymond Halnon, Instructor (Teaching/Instructional), Department of Sociology; B.A., Boston College.

Espen Hammer, Professor, Department of Philosophy; Ph.D., The New School for Social Research.

Patricia Hansell, Associate Professor (Teaching/Instructional), Department of Anthropology; Ph.D., Temple University.

Donald A. Hantula, Associate Professor, Department of Psychology; Ph.D., University of Notre Dame.

Carissa M. Harris, Assistant Professor, Department of English; Ph.D., Northwestern University.
M. Kay Harris, Associate Professor Emerita, Department of Criminal Justice; M.A., University of Chicago.

Philip W. Harris, Associate Professor Emeritus, Department of Criminal Justice.

Carol Harris-Shapiro, Assistant Professor (Teaching/Instructional), Department of Intellectual Heritage; Ph.D., Temple University.

Allison Hayes-Conroy, Assistant Professor, Department of Geography and Urban Studies; Ph.D., Clark University.

Richard G. Heimberg, Professor, Department of Psychology; Ph.D., Florida State University.

Katherine Henry, Associate Professor, Department of English; Ph.D., Rutgers University.

Kevin A. Henry, Assistant Professor, Department of Geography and Urban Studies; Ph.D., McGill University.

Karen Klaiber Hersch, Associate Professor, Department of Greek and Roman Classics; Ph.D., Rutgers University.

Michael Hesson, Assistant Professor (Teaching/Instructional), Department of Anthropology; Ph.D., University of Pennsylvania.

Matthew L. Hiller, Associate Professor, Department of Criminal Justice; Ph.D., Texas Christian University.

Kathryn A. Hirsh-Pasek, Professor, Department of Psychology; Ph.D., University of Pennsylvania.

William L. Holmes, Associate Professor, Department of Economics; Ph.D., University of Illinois at Urbana-Champaign.

Jonathan C. Holmquist, Associate Professor, Department of Spanish and Portuguese; Ph.D., Princeton University.

Kathy M. Houff, Assistant Professor (Teaching/Instructional), Department of Writing Program; Ph.D., University of Georgia.

Alistair Q. Howard, Associate Professor (Teaching/Instructional), Department of Political Science; Ph.D., George Washington University.

Roselyn Hsueh, Assistant Professor, Department of Political Science; Ph.D., University of California Berkeley.

Shuchen Susan Huang, Assistant Professor (Teaching/Instructional), Department of Asian and Middle Eastern Languages and Studies; Ph.D., University of Massachusetts.

Richard H. Immerman, Professor, Department of History; Ph.D., Boston College.

Michael Ingram, Assistant Professor (Teaching/Instructional), Department of Writing Program; M.F.A., University of Iowa.

Cheryl L. Irons-Guynn, Assistant Professor (Teaching/Instructional), Department of Criminal Justice; J.D., Temple University.

Andrew C. Isenberg, Professor, Department of History; Ph.D., Northwestern University.

Jessie B. Iwata, Instructor (Teaching/Instructional), Department of Intellectual Heritage, Temple University.

Alesha Jackson, Assistant Professor (Teaching/Instructional), Department of Writing Program; Ph.D., University of Pennsylvania.

Peter James, Associate Professor (Teaching/Instructional), Department of Psychology; Ph.D., Lehigh University.

Stephen Jankiewicz, Assistant Professor (Teaching/Instructional), Department of Intellectual Heritage; Ph.D., Rutgers University.

Wilbert L. Jenkins, Associate Professor, Department of History; Ph.D., Michigan State University.

Jayasinhji Jhala, Associate Professor, Department of Anthropology; Ph.D., Harvard University.

Kareem J. Johnson, Assistant Professor (Teaching/Instructional), Department of Psychology; Ph.D., University of Michigan.

Peter R. Jones, Professor, Department of Criminal Justice; Ph.D., Aberystwyth University.

Priya Joshi, Associate Professor, Department of English; Ph.D., Columbia University.

Joyce A. Joyce, Professor, Department of English; Ph.D., University of Georgia.

Nyasha Junior, Assistant Professor, Department of Religion; Ph.D., Princeton Theological Seminary.

Hana Muzika Kahn, Assistant Professor (Teaching/Instructional), Department of Spanish and Portuguese; Ph.D., Rutgers University.

Andrew Karpinski, Associate Professor, Department of Psychology; Ph.D.

Deborah Karr, Assistant Professor (Teaching/Instructional), Department of Writing Program; Ed.D., Temple University.
Robert L. Kaufman, Professor, Department of Sociology; Ph.D., University of Wisconsin.

Michael W. Kaufmann, Associate Professor, Department of English; Ph.D., Columbia University.

Charles Kaylor, Assistant Professor (Teaching/Instructional), Department of Geography and Urban Studies; M.U.P., University of Michigan.

Gabriella Kecskes, Assistant Professor (Teaching/Instructional), Department of Writing Program; Ph.D., Temple University.

Philip C. Kendall, Professor, Department of Psychology; Ph.D., Virginia Commonwealth University.

Dustin Kidd, Associate Professor, Department of Sociology; Ph.D., University of Virginia.

Han-Kyul Kim, Assistant Professor (Teaching/Instructional), Department of Philosophy; Ph.D., University of York.

Jacob Kim, Assistant Professor (Teaching/Instructional), Department of Religion; Ph.D., Temple University.

Sook Kyung Kim, Associate Professor (Teaching/Instructional), Department of Writing Program; Ed.D., Temple University.

Susan Klepp, Professor Emerita, Department of History; Ph.D., University of Pennsylvania.

Joshua Klugman, Professor, Department of Sociology; Ph.D., Indiana University.

Robin A. Kolodny, Professor, Department of Political Science; Ph.D., Johns Hopkins University.

Kyriakos M. Kontopoulos, Professor, Department of Sociology; Ph.D., Harvard University.

Rita Krueger, Associate Professor, Department of History; Ph.D., Harvard University.

Fyodor I. Kushnirsky, Professor, Department of Economics; Ph.D., Plekhanov Institute of the National Economy.

Kenneth L. Kusmer, Professor, Department of History; Ph.D., University of Chicago.

George M. Lady, Professor, Department of Economics; Ph.D., Johns Hopkins University.

Peter Lavelle, Assistant Professor, Department of History; Ph.D., Cornell University.

Anne Layman-Horn, Assistant Professor (Teaching/Instructional), Department of Writing Program; Ph.D., New York University.

Mindie Lazarus-Black, Professor, Department of Anthropology; Ph.D., University of Chicago.

Don Lee, Professor, Department of English; M.F.A., Emerson College.

Jeffrey Ethan Lee, Assistant Professor (Teaching/Instructional), Department of Intellectual Heritage; Ph.D., New York University.

Sue-im Lee, Associate Professor, Department of English; Ph.D., University of Illinois at Chicago.

Michael A. Leeds, Professor, Department of Economics; Ph.D., Princeton University.

Frank Leib, Assistant Professor (Teaching/Instructional), Department of Intellectual Heritage; M.D., Temple University.

Mark A. Leuchter, Associate Professor, Department of Religion; Ph.D., University of Toronto.

Heather Levi, Assistant Professor (Teaching/Instructional), Department of Anthropology; Ph.D., New York University.

Judith A. Levine, Assistant Professor, Department of Sociology; Ph.D., Northwestern University.

Laura S. Levitt, Professor, Department of Religion; Ph.D., Emory University.

Richard A. Libowitz, Associate Professor (Teaching/Instructional), Department of Intellectual Heritage; Ph.D., Temple University.

Vasiliki M. Limberis, Professor, Department of Religion; Th.D., Harvard University.

Jay B. Lockenour, Associate Professor, Department of History; Ph.D., University of Pennsylvania.

Peter Logan, Professor, Department of English; Ph.D., University of California Berkeley.

Sherree Logue, Assistant Professor (Teaching/Instructional), Department of Psychology; Ph.D., Indiana University.

Gerardo Augusto Lorenzino, Associate Professor, Department of Spanish and Portuguese; Ph.D., Graduate Center, City University of New York.

Hilary Iris Lowe, Assistant Professor (Teaching/Instructional), Department of History; Ph.D., University of Kansas.
Joshua Lukin, Assistant Professor (Teaching/Instructional), Department of Writing Program; Ph.D., State University of New York at Buffalo.

Meghan Foster Lynch, Assistant Professor, Department of Political Science; Ph.D., Yale University.

Johanna Catherine Maclean, Associate Professor, Department of Economics; Ph.D., Cornell University.

Louis S. Mangione, Associate Professor, Department of Asian and Middle Eastern Languages and Studies; Ph.D., Cornell University.

Benny C. Marcus, Associate Professor (Teaching/Instructional), Department of Sociology; Ph.D., University of Texas at Austin.

Joseph Margolis, Professor, Department of Philosophy; Ph.D., Columbia University.

David L. Margules, Professor, Department of Psychology; Ph.D., University of Michigan.

Peter J. Marshall, Associate Professor, Department of Psychology; Ph.D., University of Cambridge.

James Martin, Assistant Professor (Teaching/Instructional), Department of Writing Program; Ph.D., Binghamton University.

John Masker, Assistant Professor (Teaching/Instructional), Department of Political Science; Ph.D., Boston College.

Robert J. Mason, Professor, Department of Geography and Urban Studies; Ph.D., Rutgers University.

Michele Masucci, Professor, Department of Geography and Urban Studies; Ph.D., Clark University.

Melinda Mattingly, Assistant Professor (Teaching/Instructional), Department of Psychology; Ph.D., Saint Louis University.

Ama Mazama, Associate Professor, Department of African American Studies; Ph.D., La Sorbonne Nouvelle, Paris III.

Walter Thomas McAllister, Assistant Professor (Teaching/Instructional), Department of Writing Program; M.F.A., University of Iowa.

Patricia M. McCarthy, Instructor (Teaching/Instructional), Department of English; M.A., Temple University.

Michael S. McCloskey, Associate Professor, Department of Psychology; Ph.D., University of Southern Mississippi.

Stanley McDonald, Assistant Professor (Teaching/Instructional), Department of Writing Program; M.F.A., Brown University.

Joan Mellen, Professor, Department of English; Ph.D., City University of New York.

Patricia Melzer, Assistant Professor, Department of French, German, Italian and Slavic; Ph.D., Clark University.

Ming Meng, Assistant Professor (Teaching/Instructional), Department of Economics; Ph.D., University of Alabama, Tuscaloosa.

Jeremy Mennis, Associate Professor, Department of Geography and Urban Studies; Ph.D., Pennsylvania State University.

Joanne C. Metzger, Assistant Professor (Teaching/Instructional), Department of Criminal Justice; J.D., Widener University School of Law.

Aldona Middlesworth, Instructor (Teaching/Instructional), Department of Intellectual Heritage; M.A., Temple University.

Marina Mikhailova, Assistant Professor (Teaching/Instructional), Department of Anthropology; Ph.D., University of Chicago.

Juris M. Milestone, Assistant Professor (Teaching/Instructional), Department of Anthropology; Ph.D., Temple University.

Nichole E. Miller, Assistant Professor, Department of English; Ph.D., University of California Irvine.

Robin N. Mitchell-Boyask, Professor, Department of Greek and Roman Classics; Ph.D., Brown University.

Pamela Beth Monaco, Assistant Professor (Teaching/Instructional), Department of Intellectual Heritage, Temple University.

Patricia A. Moore-Martinez, Assistant Professor (Teaching/Instructional), Department of Spanish and Portuguese; Ph.D., Temple University.

Hortensia R. Morell, Professor, Department of Spanish and Portuguese; Ph.D., University of Wisconsin-Madison.

Thomas Morton, Assistant Professor (Teaching/Instructional), Department of Spanish and Portuguese; Ph.D., University of Pennsylvania.

Geoffrey Moss, Assistant Professor (Teaching/Instructional), Department of Sociology; Ph.D., Columbia University.

Andrew R. Mucciaroni, Professor, Department of Political Science; Ph.D., University of Wisconsin-Madison.

Srimati Mukherjee, Associate Professor (Teaching/Instructional), Department of Writing Program; Ph.D., University of Louisiana.
Shigenori Nagatomo, Professor, Department of Religion; Ph.D., University of Hawaii.

Michael Neff, Associate Professor (Teaching/Instructional), Department of Intellectual Heritage; M.A., University of Pennsylvania.

Harvey R. Neptune, Associate Professor, Department of History; Ph.D., New York University.

Nora S. Newcombe, Professor, Department of Psychology; Ph.D., Harvard University.

Steven L. Newman, Associate Professor, Department of English; Ph.D., Johns Hopkins University.

David Nickerson, Associate Professor, Department of Political Science; Ph.D., Yale University.

Daniel T. O’Hara, Professor, Department of English; Ph.D., Temple University.

Thomas Olino, Assistant Professor, Department of Psychology; Ph.D., Stony Brook University.

Ingrid Olson, Associate Professor, Department of Psychology; Ph.D., Yale University.

Richard Orodenker, Instructor (Teaching/Instructional), Department of Intellectual Heritage; M.A., Johns Hopkins University.

Miles D. Orvell, Professor, Department of English; Ph.D., Harvard University.

Jena Osman, Professor, Department of English; Ph.D., State University of New York at Buffalo.

Lara Ostaric, Assistant Professor, Department of Philosophy; Ph.D., University of Notre Dame.

Sharon C. Ostrow, Instructor (Teaching/Instructional), Department of Criminal Justice; M.A., Rutgers University.

Willis F. Overton, Professor Emeritus, Department of Psychology; Ph.D., Clark University.

Randall J. Pabich, Assistant Professor (Teaching/Instructional), Department of Intellectual Heritage, Temple University.

Christine Palumbo-De Simone, Professor (Teaching/Instructional), Department of Writing Program; Ph.D., Temple University.

Catherine Panzarella, Associate Professor (Clinical), Department of Psychology; Ph.D., Temple University.

Marcela Pardes, Assistant Professor (Teaching/Instructional), Department of Spanish and Portuguese; Ph.D., Temple University.

Vinay Parikh, Assistant Professor, Department of Psychology; Ph.D., Punjabi University.

Nicolette Parisi, Assistant Professor (Teaching/Instructional), Department of Criminal Justice; J.D., Temple University.

Anna L. Peak, Assistant Professor (Teaching/Instructional), Department of Intellectual Heritage; Ph.D., Temple University.

C. Hamil Pearsall, Assistant Professor, Department of Geography and Urban Studies; Ph.D., Clark University.

Elizabeth W. Pearson, Instructor (Teaching/Instructional), Department of Intellectual Heritage, Sarah Lawrence College.

José Manuel Pereiro Otero, Associate Professor, Department of Spanish and Portuguese; Ph.D., University of Colorado Boulder.

Donna Marie Peters, Assistant Professor (Teaching/Instructional), Department of Sociology; Ph.D., The New School for Social Research.

Sonja Peterson-Lewis, Associate Professor, Department of African American Studies; Ph.D., University of Florida-Gainesville.

Carolyn Phipps, Assistant Professor (Teaching/Instructional), Department of Spanish and Portuguese; Ph.D., Princeton University.

Montserrat Piera, Associate Professor, Department of Spanish and Portuguese; Ph.D., Pennsylvania State University.

Mark A. Pollack, Professor, Department of Political Science; Ph.D., Harvard University.

Lori Pompa, Instructor (Teaching/Instructional), Department of Criminal Justice; M.S.W., Rutgers University.

Gary D. Pratt, Assistant Professor (Teaching/Instructional), Department of Intellectual Heritage; M.A., Brandeis University.

Olia Prokopenko, Instructor (Teaching/Instructional), Department of French, German, Italian and Slavic; M.A., Karazin National University.

Peter Puchek, Assistant Professor (Teaching/Instructional), Department of Writing Program; Ph.D., Lehigh University.

Victor M. Pueyo Zoco, Assistant Professor, Department of Spanish and Portuguese; Ph.D., State University of New York Stony Brook.
David E. Racker, Assistant Professor (Teaching/Instructional), Department of Intellectual Heritage; Ph.D., Tulane University.

John C. Raines, Professor Emeritus, Department of Religion; Ph.D.

Anthony Ranere, Professor Emeritus, Department of Anthropology; Ph.D., University of California Davis.

Jerry H. Raticliffe, Professor, Department of Criminal Justice; Ph.D., University of Nottingham (UK).

Elliot A. Ratzman, Assistant Professor (Teaching/Instructional), Department of Religion; Ph.D., Princeton University.

Aunshul P. Rege, Assistant Professor, Department of Criminal Justice; Ph.D., Rutgers University.

George F. Rengert, Professor Emeritus, Department of Criminal Justice; Ph.D., University of North Carolina.

Terry Rey, Associate Professor, Department of Religion; Ph.D., Temple University.

Eunsook Ha Rhee, Assistant Professor (Teaching/Instructional), Department of Writing Program; Ed.D., Temple University.

Monica Ricketts, Assistant Professor, Department of History; Ph.D., Harvard University.

Moritz Ritter, Assistant Professor, Department of Economics; Ph.D., University of Toronto.

Paula D. Robison, Associate Professor, Department of English; Ph.D., University of Pennsylvania.

L. Christie Rockwell, Associate Professor, Department of Anthropology; Ph.D., University of California Davis.

Norman Roessler, Associate Professor (Teaching/Instructional), Department of Intellectual Heritage; Ph.D., University of Pennsylvania.

Wilbert J. Roget, Associate Professor, Department of French, German, Italian and Slavic; Ph.D., University of Pittsburgh.

Caterina Gouvis Roman, Assistant Professor, Department of Criminal Justice; Ph.D., American University.

Jessica Roney, Assistant Professor, Department of History; Ph.D., Johns Hopkins University.

Christina Rosan, Assistant Professor, Department of Geography and Urban Studies; Ph.D., Massachusetts Institute of Technology.

Cathryn Jo Rosen, Associate Professor, Department of Criminal Justice; LL.M., Temple University.

Christopher Roy, Assistant Professor (Teaching/Instructional), Department of Anthropology; Ph.D., Princeton University.

Eileen Ryan, Assistant Professor, Department of History; Ph.D., Columbia University.

James Salazar, Associate Professor, Department of English; Ph.D., University of California Berkeley.

Rickie Sanders, Professor, Department of Geography and Urban Studies; Ph.D., Ohio State University.

Sheryl Sawin, Assistant Professor (Teaching/Instructional), Department of Intellectual Heritage, University of Rochester.

Jeremy Schipper, Associate Professor, Department of Religion; Ph.D., Harvard University.

Kolson Schlosser, Assistant Professor (Teaching/Instructional), Department of Geography and Urban Studies; Ph.D., Pennsylvania State University.

Joseph M. Schwartz, Professor, Department of Political Science; Ph.D., Harvard University.

Jordan Shapiro, Instructor (Teaching/Instructional), Department of Intellectual Heritage, Pacifica Graduate Institute.

Pamela J. Shapiro, Assistant Professor (Teaching/Instructional), Department of Psychology; Ph.D., Temple University.

Jacob Shell, Assistant Professor, Department of Geography and Urban Studies; Ph.D., Syracuse University.

Adam Joseph Shellhorse, Assistant Professor, Department of Spanish and Portuguese; Ph.D., University of California Berkeley.

Thomas F. Shipley, Associate Professor, Department of Psychology; Ph.D., University of Pennsylvania.

Muffy E. Siegel, Associate Professor, Department of English; Ph.D., University of Massachusetts.

Jill K. Sigman, Assistant Professor (Teaching/Instructional), Department of Intellectual Heritage; Ph.D., Brown University.

Marilyn Silverfein, Professor Emerita, Department of Geography and Urban Studies; Ph.D., Syracuse University.

Pedro Silos, Associate Professor, Department of Economics; Ph.D., University of Iowa.
Daniel A. Silverman, Assistant Professor (Teaching/Instructional), Department of Criminal Justice; J.D., Temple University.

Bryant Simon, Professor, Department of History; Ph.D., University of North Carolina at Chapel Hill.

Alan S. Singer, Professor, Department of English; Ph.D., University of Washington.

Matthew Smetona, Assistant Professor (Teaching/Instructional), Department of Intellectual Heritage; Ph.D., Temple University.

Hillel David Soifer, Assistant Professor, Department of Political Science; Ph.D., Harvard University.

Miriam Solomon, Professor, Department of Philosophy; Ph.D., Harvard University.

John A. Sorrentino, Associate Professor, Department of Economics; Ph.D., Purdue University.

C. Christopher Soufas, Professor, Department of Spanish and Portuguese; Ph.D., Duke University.

Teresa Scott Soufas, Professor, Department of Spanish and Portuguese; Ph.D., Duke University.

Laura Spagnoli, Associate Professor (Teaching/Instructional), Department of French, German, Italian and Slavic; Ph.D., University of Pennsylvania.

Howard Spodek, Associate Professor, Department of History; Ph.D., University of Chicago.

Gerald J. Stahler, Professor, Department of Geography and Urban Studies; Ph.D., Temple University.

Damien Stankiewicz, Assistant Professor, Department of Anthropology; Ph.D., New York University.

Laurence D. Steinberg, Professor, Department of Psychology; Ph.D., Cornell University.

R. Michael Stewart, Professor Emeritus, Department of Anthropology; Ph.D., Catholic University.

Mary Stricker, Associate Professor (Teaching/Instructional), Department of Sociology; Ph.D., Temple University.

Dorothy Stringer, Associate Professor (Teaching/Instructional), Department of Writing Program; Ph.D., University at Albany, State University of New York.

William J. Stull, Professor, Department of Economics; Ph.D., Massachusetts Institute of Technology.

Sandra L. Suárez, Professor, Department of Political Science; Ph.D., Yale University.

Charles E. Swanson, Associate Professor, Department of Economics; Ph.D., University of Minnesota.

Elizabeth Sweet, Assistant Professor (Teaching/Instructional), Department of Geography and Urban Studies; Ph.D., University of Illinois at Chicago.

Leonard J. Swidler, Professor, Department of Religion; Ph.D., University of Wisconsin.

Benjamin Talton, Associate Professor, Department of History; Ph.D., University of Chicago.

Ralph B. Taylor, Professor, Department of Criminal Justice; Ph.D., Johns Hopkins University.

Ronald D. Taylor, Associate Professor, Department of Psychology; Ph.D., University of Michigan.

Brian Teare, Assistant Professor, Department of English; M.F.A., Indiana University.

Rebecca Tesfai, Professor, Department of Sociology; Ph.D., University of Pennsylvania.

Kimberly Thomas, Assistant Professor (Teaching/Instructional), Department of Writing Program; Ph.D., Indiana University of Pennsylvania.

Ruth P. Thomas, Professor, Department of French, German, Italian and Slavic; Ph.D., Yale University.

Barbara E. Thornbury, Associate Professor, Department of Asian and Middle Eastern Languages and Studies; Ph.D., University of British Columbia.

Teshale Tibebu, Professor, Department of History; Ph.D., State University of New York at Binghamton.

Paul D. Toth, Assistant Professor, Department of Spanish and Portuguese; Ph.D., University of Pittsburgh.

LaTosha Traylor, Assistant Professor, Department of Criminal Justice; Ph.D., University of Illinois at Chicago.

Tara N. Tripp, Instructor (Teaching/Instructional), Department of Criminal Justice; M.S., St. Joseph's University.

Kathleen S. Uno, Associate Professor, Department of History; Ph.D., University of California Berkeley.
Gregory J. W. Urwin, Professor, Department of History; Ph.D., University of Notre Dame.

Nicole Martorano Van Cleave, Assistant Professor, Department of Criminal Justice; Ph.D., Northwestern University.

Ryan Vander Wielen, Associate Professor, Department of Political Science; Ph.D., Washington University-St. Louis.

Lawrence Venuti, Professor, Department of English; Ph.D., Columbia University.

Pablo S. Vila, Professor, Department of Sociology; Ph.D., University of Texas Austin.

Gerald A. Vision, Professor, Department of Philosophy; Ph.D., University of Michigan.

E. Rely Vîlcică, Assistant Professor, Department of Criminal Justice; Ph.D., Temple University.

Thomas J. Waidzunas, Assistant Professor, Department of Sociology; Ph.D., University of California San Diego.

David L. Waldstreicher, Professor, Department of History; Ph.D., Yale University.

Shannon Walters, Assistant Professor, Department of English; Ph.D., Pennsylvania State University.

Grant H. Ward, Assistant Professor (Teaching/Instructional), Department of Intellectual Heritage; Ph.D., Temple University.

Jeffrey T. Ward, Assistant Professor, Department of Criminal Justice; Ph.D., University of Florida.

Owen J. Ware, Assistant Professor, Department of Philosophy; Ph.D., University of Toronto.

Donald Wargo, Associate Professor (Teaching/Instructional), Department of Economics; Ph.D., Temple University.

Anthony Waskie, Assistant Professor (Teaching/Instructional), Department of French, German, Italian and Slavic; Ph.D., New York University.

David Harrington Watt, Professor, Department of History; Ph.D., Harvard University.

David Waxler, Instructor (Teaching/Instructional), Department of Psychology, Rutgers University.

Ronald W. Webb, Instructor (Teaching/Instructional), Department of Latin American Studies; Ph.D., Pennsylvania State University.

Douglas Webber, Assistant Professor, Department of Economics; Ph.D., Cornell University.

Marsha A. Weinraub, Professor, Department of Psychology; Ph.D., University of Michigan.

Robert W. Weisberg, Professor, Department of Psychology; Ph.D., Princeton University.

Charles A. Weitz, Associate Professor, Department of Anthropology; Ph.D., Pennsylvania State University.

Susan Wells, Professor, Department of English; Ph.D., University of Texas at Austin.

Wayne N. Welsh, Professor, Department of Criminal Justice; Ph.D., University of California Irvine.

Sharon White, Assistant Professor (Teaching/Instructional), Department of Writing Program; Ph.D., University of Denver.

Sydney D. White, Associate Professor, Department of Religion; Ph.D., University of California Berkeley.

Catherine Wiley, Assistant Professor (Teaching/Instructional), Department of English; Ph.D., Temple University.

Kimberly D. Williams, Assistant Professor, Department of Anthropology; Ph.D., Ohio State University.

Roland L. Williams Jr., Associate Professor, Department of English; Ph.D., University of Pennsylvania.

Gregory Winch, Assistant Professor (Teaching/Instructional), Department of Writing Program; Ph.D., Southern Illinois University.

Brad Windhauser, Assistant Professor (Teaching/Instructional), Department of Writing Program; M.F.A., Queens University of Charlotte.

Gordon Witty, Assistant Professor (Teaching/Instructional), Department of Asian and Middle Eastern Languages and Studies; M.A., University of Pennsylvania.

David Wolfsdorf, Associate Professor, Department of Philosophy; Ph.D., University of Chicago.

Jennifer D. Wood, Associate Professor, Department of Criminal Justice; Ph.D., University of Toronto.

Matt Wray, Associate Professor, Department of Sociology; Ph.D., University of California Berkeley.
Hongling Xie, Associate Professor, Department of Psychology; Ph.D., University of North Carolina at Chapel Hill.

Philip R. Yannella, Professor, Department of English; Ph.D., University of Wisconsin-Milwaukee.

Sean Yom, Assistant Professor, Department of Political Science; Ph.D., Harvard University.

Reiko Yoshida, Instructor (Teaching/Instructional), Department of Asian and Middle Eastern Languages and Studies; M.A., West Chester University.

Ralph F. Young, Professor (Teaching/Instructional), Department of History; Ph.D., Michigan State University.

Yuan Yuan, Assistant Professor (Teaching/Instructional), Department of Economics; Ph.D., University of Wisconsin-Madison.

Lu Zhang, Assistant Professor, Department of Sociology; Ph.D., Johns Hopkins University.

Shanyang Zhao, Professor, Department of Sociology; Ph.D., University of Maryland.

Yun Zhu, Assistant Professor, Department of Asian and Middle Eastern Languages and Studies; Ph.D., University of South Carolina.

Rebekah Zhuraw, Assistant Professor (Teaching/Instructional), Department of Intellectual Heritage, University of Pennsylvania.

Dai Zusai, Assistant Professor, Department of Economics; Ph.D., University of Wisconsin-Madison.

College of Public Health

William Aaronson, Associate Professor, Department of Health Services Administration and Policy; Ph.D., Temple University.

Ann B. Addis, Instructor (Clinical), Department of Communication Sciences and Disorders; M.A., Northwestern University.

Robin Aronow, Instructor (Teaching/Instructional), Department of Communication Sciences and Disorders; M.A., University of Delaware.

Sarah Bauerle Bass, Associate Professor, Department of Social and Behavioral Sciences; Ph.D., Temple University.

Katherine W. Bauer, Assistant Professor, Department of Epidemiology and Biostatistics; Ph.D., University of Minnesota.

Keesha Benson, Instructor (Teaching/Instructional), Department of Social Work; Ph.D., University of North Carolina at Chapel Hill.

Kristin Berg, Assistant Professor, Department of Rehabilitation Sciences; Ph.D., University of Chicago.

Algie Lakesa Bond, Assistant Professor (Teaching/Instructional), Department of Health Services Administration and Policy; M.H.A., St. Joseph's University.

Casey M. Breslin Murphy, Assistant Professor (Teaching/Instructional), Department of Kinesiology; Ph.D., Auburn University.

Kathryn Brzozowski, Assistant Professor (Teaching/Instructional), Department of Social Work; D.S.W., University of Pennsylvania.

Heather J. Burkett, Instructor (Teaching/Instructional), Department of Rehabilitation Sciences; M.Ed., Temple University.

Scott Burns, Associate Professor (Clinical), Department of Physical Therapy; D.P.T., University of Colorado Denver.

Lois A. Butcher, Assistant Professor (Teaching/Instructional), Department of Kinesiology; Ph.D., Temple University.

William Cabin, Assistant Professor (Teaching/Instructional), Department of Social Work; Ph.D., City University of New York-Hunter College.

Stephen J. Carp, Associate Professor (Teaching/Instructional), Department of Physical Therapy; Ph.D., Temple University.

Cheri E. Carter, Assistant Professor (Teaching/Instructional), Department of Social Work; Ph.D., University of Delaware.

Bradley N. Collins, Associate Professor, Department of Social and Behavioral Sciences; Ph.D., State University of New York at Binghamton.

James Corbin, Instructor (Teaching/Instructional), Department of Social Work; M.S.W., Temple University.

Ronald W. Costen, Professor (Teaching/Instructional), Department of Social Work; Ph.D., University of Pittsburgh.

Catherine Coyle, Professor, Department of Rehabilitation Sciences; Ph.D., Temple University.

Adam Davey, Professor, Department of Epidemiology and Biostatistics; Ph.D., Pennsylvania State University.

Claudia J. Dewane, Associate Professor (Teaching/Instructional), Department of Social Work; Ed.D., Pennsylvania State University.

Susan B. Dickey, Associate Professor, Department of Nursing; Ph.D., University of Pennsylvania.
Elizabeth A. Dieckman, Assistant Professor (Teaching/Instructional), Department of Nursing; D.N.P.

Patricia DiGiacomo, Assistant Professor (Teaching/Instructional), Department of Nursing; M.S.N., Temple University.

Ann E. Dolloff, Instructor (Teaching/Instructional), Department of Rehabilitation Sciences; M.Ed., Temple University.

Jeffrey N. Draine, Professor, Department of Social Work; Ph.D., University of Pennsylvania.

Levent Dumenci, Professor, Department of Epidemiology and Biostatistics; Ph.D., Iowa State University.

William E. Egan, Assistant Professor (Teaching/Instructional), Department of Physical Therapy; D.P.T., Regis University.

Karin Eyrich-Garg, Associate Professor, Department of Social Work; Ph.D., Washington University-St. Louis.

Jane Fagan, Assistant Professor (Teaching/Instructional), Department of Physical Therapy; D.P.T., Simmons College.

Jay S. Fagan, Professor, Department of Social Work; Ph.D., Columbia University.

Ruth Farber, Associate Professor Emerita, Department of Rehabilitation Sciences; Ph.D., Temple University.

Jennifer Orlet Fisher, Professor, Department of Social and Behavioral Sciences; Ph.D., Pennsylvania State University.

Cathy A. Flite, Assistant Professor (Teaching/Instructional), Department of Health Services Administration and Policy; M.Ed., Widener University.

Margaret M. Foley, Associate Professor (Teaching/Instructional), Department of Health Services Administration and Policy; Ph.D., Temple University.

Nikki V. Franke, Associate Professor, Department of Social and Behavioral Sciences; Ed.D., Temple University.

Anne Frankel, Assistant Professor (Teaching/Instructional), Department of Social and Behavioral Sciences; Ph.D., Florida International University.

Letitia G. Gembala, Assistant Professor (Teaching/Instructional), Department of Nursing; M.S.N., Villanova University.

Thomas F. Gordon, Professor Emeritus, Department of Public Health; Ph.D., Michigan State University.

Susan Gresko, Assistant Professor (Teaching/Instructional), Department of Nursing; M.S.N., University of Pennsylvania.

Clara S. Haignere, Associate Professor, Department of Social and Behavioral Sciences; Ph.D., University of Denver.

Christopher Harris, Instructor (Teaching/Instructional), Department of Social Work; M.S.W., Widener University.

Kyle Harris, Instructor (Teaching/Instructional), Department of Kinesiology; M.S., Temple University.

Chantelle Hart, Associate Professor, Department of Social and Behavioral Sciences; Ph.D., Case Western Reserve University.

Elaine Hatala, Assistant Professor (Teaching/Instructional), Department of Rehabilitation Sciences; Ph.D., Temple University.

Alice J. Hausman, Professor, Department of Health Services Administration and Policy; Ph.D., State University of New York at Binghamton.

James Hoffmann, Assistant Professor (Teaching/Instructional), Department of Kinesiology; Ph.D., East Tennessee State University.

Pei-Chun Hsieh, Assistant Professor (Teaching/Instructional), Department of Rehabilitation Sciences; Ph.D., Indiana University, Bloomington.

Matthew Bryant Hudson, Assistant Professor, Department of Kinesiology; Ph.D., University of Florida-Gainesville.

Cheryl A. Hyde, Associate Professor, Department of Social Work; Ph.D., University of Michigan.

Jennifer K. Ibrahim, Associate Professor, Department of Health Services Administration and Policy; Ph.D., University of California Berkeley.

Larry D. Icard, Professor, Department of Social Work; Ph.D., Columbia University.

Roger I. Ideishi, Associate Professor (Teaching/Instructional), Department of Rehabilitation Sciences; J.D., Temple University.

John Jeka, Professor, Department of Kinesiology; Ph.D., Florida Atlantic University.
Monika Jelic, Assistant Professor (Teaching/Instructional), Department of Nursing; M.P.H., Boston University.

Zebulon V. Kendrick, Professor, Department of Kinesiology; Ph.D., Temple University.

Emily Keshner, Professor, Department of Physical Therapy; Ed.D., Columbia University.

Moya Kinnealey, Associate Professor Emerita, Department of Rehabilitation Sciences; Ph.D., Temple University.

Francine P. Kohen, Instructor (Teaching/Instructional), Department of Communication Sciences and Disorders; M.S., Pennsylvania State University.

Rena A. Krakow, Associate Professor, Department of Communication Sciences and Disorders; Ph.D., Yale University.

Ann Kriebel-Gasparro, Assistant Professor (Teaching/Instructional), Department of Nursing; M.S.N., Hahnemann University.

Joseph A. Kumi, Instructor (Teaching/Instructional), Department of Social Work; M.S.W., Florida State University.

Richard Lauer, Associate Professor, Department of Physical Therapy; Ph.D., Case Western Reserve University.

Stephen J. Lepore, Professor, Department of Social and Behavioral Sciences; Ph.D., University of California Irvine.

Beth A. Levine, Instructor (Teaching/Instructional), Department of Communication Sciences and Disorders; M.S., Boston University.

Grace Xueqin Ma, Professor, Department of Social and Behavioral Sciences; Ph.D., University of Oklahoma.

Edwin Maas, Assistant Professor, Department of Communication Sciences and Disorders; Ph.D., San Diego State University.

Bridget B. Mancano, Instructor (Teaching/Instructional), Department of Communication Sciences and Disorders; M.A., Temple University.

Jamie Mansell, Assistant Professor (Teaching/Instructional), Department of Kinesiology; Ph.D., Temple University.

Cindy Joy Marselis, Assistant Professor (Teaching/Instructional), Department of Health Services Administration and Policy; M.B.A., Temple University.

Nadine Martin, Professor, Department of Communication Sciences and Disorders; Ph.D., Temple University.

Carlene A. McAleer, Assistant Professor (Teaching/Instructional), Department of Nursing; M.S.N., Hahnemann University.

Karen McBride, Assistant Professor (Teaching/Instructional), Department of Health Services Administration and Policy; M.S., Philadelphia University.

Brian D. McHugh, Associate Professor, Department of Communication Sciences and Disorders; Ph.D., University of California Los Angeles.

Michael McIntosh, Assistant Professor (Teaching/Instructional), Department of Nursing; Ph.D., Temple University.

Rochelle Mendonca, Assistant Professor (Teaching/Instructional), Department of Rehabilitation Sciences; Ph.D., University of Wisconsin-Milwaukee.

Lois Millner, Associate Professor, Department of Social Work; Ph.D., Bryn Mawr College.

Deborah L. Mills, Instructor (Teaching/Instructional), Department of Social Work; M.S.W., Temple University.

C. Daniel Moser, Assistant Professor (Teaching/Instructional), Department of Kinesiology; Ph.D., Temple University.

Sheila L. Moyle, Instructor (Teaching/Instructional), Department of Rehabilitation Sciences; M.S., University of the Sciences.

Heather Murphy, Assistant Professor, Department of Epidemiology and Biostatistics; Ph.D., University of Guelph.

Maria F. Murt, Instructor (Teaching/Instructional), Department of Nursing; M.S.N., Widener University.

Miguel Muñoz-Laboy, Associate Professor, Department of Social Work; Dr.P.H., Columbia University.

Deborah B. Nelson, Associate Professor, Department of Epidemiology and Biostatistics; Ph.D., University of Pittsburgh.

Rhonda Nelson, Associate Professor (Teaching/Instructional), Department of Rehabilitation Sciences; Ph.D., Temple University.

Bernie Sue Newman, Associate Professor, Department of Social Work; Ph.D., University of Pittsburgh.

Duy Nguyen, Associate Professor, Department of Social Work; Ph.D., Columbia University.

Emeka Nwadiora, Associate Professor, Department of Social Work; J.D., Hofstra University School of Law.

Cheryl B. Oakman, Assistant Professor (Teaching/Instructional), Department of Social Work; Ph.D., Bryn Mawr College.

Heidi Ojha, Assistant Professor (Clinical), Department of Physical Therapy; D.P.T., University of Southern California.
Joon Young Park, Associate Professor, Department of Kinesiology; Ph.D., University of Maryland College Park.

Alan Pfeffer, Associate Professor (Teaching/Instructional), Department of Social Work; M.S.W., Temple University.

Elizabeth A. Pfeffer, Associate Professor (Teaching/Instructional), Department of Rehabilitation Sciences; Ph.D., Nova Southeastern University.

Lok R. Pokhrel, Assistant Professor (Teaching/Instructional), Department of Epidemiology and Biostatistics; Ph.D., East Tennessee State University.

Heather Porter, Associate Professor (Teaching/Instructional), Department of Rehabilitation Sciences; Ph.D., Temple University.

John T. Raffin, Assistant Professor (Teaching/Instructional), Department of Kinesiology; Ph.D., Temple University.

Meghan Rainone, Instructor (Teaching/Instructional), Department of Communication Sciences and Disorders; J.D., Temple University.

Jodi Reich, Assistant Professor (Teaching/Instructional), Department of Communication Sciences and Disorders; Ph.D., Yale University.

James J. Reilly, Associate Professor, Department of Communication Sciences and Disorders; Ph.D., University of Pennsylvania.

Christen J. Rexing, Assistant Professor (Teaching/Instructional), Department of Health Services Administration and Policy; Ph.D., Temple University.

Anne Michael, Instructor (Teaching/Instructional), Department of Rehabilitation Sciences; M.S., Pennsylvania State University.

Jin-Sook Roh, Assistant Professor (Teaching/Instructional), Department of Kinesiology; Ph.D., Massachusetts Institute of Technology.

Thomas P. Rooney, Assistant Professor (Teaching/Instructional), Department of Kinesiology; Ph.D., Temple University.

Jo-Ellen Ross, Assistant Professor (Teaching/Instructional), Department of Rehabilitation Sciences; Ph.D., University of Illinois at Urbana-Champaign.

Nancy L. Rothman, Professor, Department of Nursing; Ed.D., Temple University.

Anne C. Ross, Assistant Professor (Teaching/Instructional), Department of Kinesiology; Ph.D., Temple University.

Scott E. Rutledge, Associate Professor, Department of Social Work; Ph.D., University of Washington.

Kim Sabourin, Instructor (Clinical), Department of Communication Sciences and Disorders; M.A., University of Maryland.

Michael L. Sachs, Professor, Department of Kinesiology; Ph.D., Florida State University.

Mark Salzer, Professor, Department of Rehabilitation Sciences; Ph.D., University of Illinois at Urbana-Champaign.

Susan E. Santalucia, Assistant Professor (Teaching/Instructional), Department of Rehabilitation Sciences; M.S., Temple University.

Mayra C. Santiago, Associate Professor, Department of Kinesiology; Ph.D., University of Minnesota.

David B. Sarno, Professor, Department of Social and Behavioral Sciences; Ph.D., Loyola University Chicago.

Michelle C. Scarpulla, Instructor (Teaching/Instructional), Department of Social and Behavioral Sciences; M.P.H., Temple University.

Mark F. Schmitz, Associate Professor (Teaching/Instructional), Department of Social Work; Ph.D., Iowa State University.

Rosalie Schofield, Associate Professor (Teaching/Instructional), Department of Social Work; Ph.D., Brandeis University.

Jay S. Segal, Professor, Department of Social and Behavioral Sciences; Ph.D., Ohio State University.

Anjali B. Shah, Assistant Professor (Teaching/Instructional), Department of Health Services Administration and Policy; Ph.D., Rutgers University.

Laura Siminoff, Professor, Department of Social and Behavioral Sciences; Ph.D., Johns Hopkins University.

Jonathan Singer, Assistant Professor, Department of Social Work; Ph.D., University of Pittsburgh.

Mary C. Sinnott, Associate Professor (Teaching/Instructional), Department of Physical Therapy; D.P.T., MGH Institute of Health Professions.

Michael R. Sitler, Professor, Department of Kinesiology; Ed.D., New York University.

Gretchen A. Sneeden, Assistant Professor, Department of Rehabilitation Sciences; Ph.D., Indiana University.

Doris Fallon Snyder, Assistant Professor (Teaching/Instructional), Department of Communication Sciences and Disorders; M.A., Temple University.

Mary Stec, Assistant Professor (Teaching/Instructional), Department of Nursing; Ph.D., Widener University.

Gerry A. Stefanatos, Associate Professor, Department of Communication Sciences and Disorders; D.Phil., Oxford University.
Barbara A. Stephens, Assistant Professor (Clinical), Department of Nursing; M.S.N., Temple University.

Ricky L. Swalm, Associate Professor, Department of Kinesiology; Ph.D., Temple University.

Elizabeth Diane Thompson, Assistant Professor (Teaching/Instructional), Department of Physical Therapy; D.P.T., Temple University.

Ryan T. Tierney, Associate Professor (Teaching/Instructional), Department of Kinesiology; Ph.D., Temple University.

Heather M. Traino, Associate Professor, Department of Social and Behavioral Sciences; Ph.D., State University of New York-Buffalo.

Carole Tucker, Associate Professor, Department of Physical Therapy; Ph.D., State University of New York at Buffalo.

Sylvia Twersky-Bumgardner, Instructor (Teaching/Instructional), Department of Health Services Administration and Policy; M.P.H., Tulane University.

Gena B. Vargas, Assistant Professor (Teaching/Instructional), Department of Rehabilitation Sciences; Ph.D., Clemson University.

Sheldon O. Watts, Assistant Professor (Teaching/Instructional), Department of Social and Behavioral Sciences; Ph.D., New York University.

Mark H. Weir, Assistant Professor, Department of Epidemiology and Biostatistics; Ph.D., Drexel University.

Donna Weiss, Associate Professor Emerita, Department of Rehabilitation Sciences; Ph.D., Temple University.

Robert C. Whitaker, Professor, Department of Epidemiology and Biostatistics; M.D., Johns Hopkins University School of Medicine.

Andre Williams, Assistant Professor (Teaching/Instructional), Department of Epidemiology and Biostatistics; Ph.D., Virginia Commonwealth University.

Caitlin N. Wolak, Instructor (Teaching/Instructional), Department of Social and Behavioral Sciences; M.P.H., Temple University.

W. Geoffrey Wright, Associate Professor, Department of Physical Therapy; Ph.D., Brandeis University.

Andrew Yannaccone, Assistant Professor (Teaching/Instructional), Department of Physical Therapy; Ph.D., Virginia Commonwealth University School of Medicine.

Cindy Yascavage, Instructor (Teaching/Instructional), Department of Nursing; Ph.D., Capella University.

Marsha Zibalese Crawford, Associate Professor, Department of Social Work; D.S.W., Howard University.

Lisa S. Zoll, Instructor (Teaching/Instructional), Department of Social Work; M.S.W., Temple University.

Dolores M. Zygmont, Associate Professor (Clinical), Department of Nursing; Ph.D., Temple University.

College of Science and Technology

Abraham Abebe, Assistant Professor (Teaching/Instructional), Department of Mathematics; Ph.D., University of North Carolina at Greensboro.

Ergin H. Ahmed, Assistant Professor (Research), Department of Physics; Ph.D., Temple University.

Robert M. Aiken, Professor Emeritus, Department of Computer and Information Sciences; Ph.D., Northwestern University.

Ola Ajaj, Assistant Professor (Teaching/Instructional), Department of Computer and Information Sciences; Ph.D., Florida Atlantic University.

Shohreh Amini, Professor, Department of Biology; Ph.D., University of Pennsylvania.

Edwin J. Anderson, Professor Emeritus, Department of Earth and Environmental Science; Ph.D., Brown University.

Rodrigo B. Andrade, Associate Professor, Department of Chemistry; Ph.D., Massachusetts Institute of Technology.

Eleni Anni, Associate Professor (Research), Department of Biology.

Alla Arzumanyan, Assistant Professor (Teaching/Instructional), Department of Biology; Ph.D., Yerevan State University.

Leonard B. Auerbach, Professor Emeritus, Department of Physics; Ph.D., University of California Berkeley.

Jessica Babcock, Instructor (Teaching/Instructional), Department of Mathematics; M.Ed., Temple University.

Darius Balsaiunas, Associate Professor, Department of Biology; Ph.D., Uppsala University.

Jorune Balcuniene, Assistant Professor (Research), Department of Biology; Ph.D., Uppsala University.

Michael Joseph Balsai, Assistant Professor (Teaching/Instructional), Department of Biology; Ph.D., University of Pennsylvania.
Giora Baram, Associate Professor Emeritus, Department of Computer and Information Sciences; Ph.D., University of Toledo.

Ershaad Basheer, Assistant Professor (Research), Department of Mathematics; M.S., Jawaharlal Nehru Centre for Advanced Scientific Research.

Suman Batish, Assistant Professor (Teaching/Instructional), Department of Biology; Ph.D., University of Cambridge.

Mary A. Beasten, Instructor (Teaching/Instructional), Department of Chemistry; M.A., Temple University.

Richard Beigel, Professor, Department of Computer and Information Sciences; Ph.D., Stanford University.

Gianfranco Bellipanni, Assistant Professor (Teaching/Instructional), Department of Biology; Ph.D., University of Palermo.

Shiferaw S. Berhanu, Professor, Department of Mathematics; Ph.D., Rutgers University.

Dorothy B. Berner, Professor Emeritus, Department of Biology; Ph.D., University of Pennsylvania.

Md Zakirul Alam Bhuiyan, Assistant Professor (Research), Department of Computer and Information Sciences.

Christopher J. Biehl, Instructor (Teaching/Instructional), Department of Computer and Information Sciences; M.B.A., Temple University.

James L. Bloomer, Associate Professor Emeritus, Department of Chemistry; Ph.D., University of London.

James D. Bloxton, Assistant Professor (Teaching/Instructional), Department of Chemistry; Ph.D., Temple University.

Silvia Boffo, Assistant Professor (Research), Department of Biology.

Vassil Boiadjiev, Assistant Professor (Teaching/Instructional), Department of Chemistry; Ph.D., University of Wisconsin-Milwaukee.

Eric U. Borguet, Professor, Department of Chemistry; Ph.D., University of Pennsylvania.

Elena Borovitskaya, Associate Professor (Teaching/Instructional), Department of Physics; Ph.D., Institute of Applied Physics, Nizhnii Novgorod, Russia.

Angela L. Bricker, Assistant Professor (Teaching/Instructional), Department of Biology; Ph.D., University of Cambridge.

William S. Brinigar, Professor Emeritus, Department of Chemistry; Ph.D., University of Kansas.

Theodore W. Burkhardt, Professor, Department of Physics; Ph.D., Stanford University.

Ilya V. Buynevich, Assistant Professor, Department of Earth and Environmental Science; Ph.D., Boston University.

Jeffrey Campbell, Assistant Professor (Teaching/Instructional), Department of Chemistry; Ph.D., University of California Berkeley.

Vincenzo Carnevale, Assistant Professor (Research), Department of Biology; Ph.D., International School for Advanced Studies, Trieste.

Frank N. Chang, Professor, Department of Biology; Ph.D., University of Wisconsin.

Farzana Chaudhry, Assistant Professor (Teaching/Instructional), Department of Mathematics; Ph.D., Oxford University.

Orin N. Chein, Professor Emeritus, Department of Mathematics; Ph.D., New York University.

Steven M. Chemtob, Assistant Professor, Department of Earth and Environmental Science; Ph.D., California Institute of Technology.

Hua Chen, Assistant Professor (Research), Department of Biology; Ph.D., University of California Berkeley.

Je-Wei Chen, Assistant Professor (Teaching/Instructional), Department of Mathematics; Ph.D., State University of New York Stony Brook.

Ke Chen, Assistant Professor, Department of Physics; Ph.D., Chinese Academy of Sciences.

Paul Christner, Associate Professor (Teaching/Instructional), Department of Biology; Ph.D., University of Pennsylvania.

Francis T. Christoph Jr., Associate Professor Emeritus, Department of Mathematics; Ph.D., Rutgers University.

Bruce P. Conrad, Associate Professor Emeritus, Department of Mathematics; Ph.D., University of California Berkeley.

Erik Cordes, Associate Professor, Department of Biology; Ph.D., Pennsylvania State University.

Raymond F. Coughlin, Associate Professor, Department of Mathematics; Ph.D., Illinois Institute of Technology.

Edward T. Crotty, Assistant Professor (Teaching/Instructional), Department of Computer and Information Sciences.

Shumo Cui, Assistant Professor (Research), Department of Mathematics.
Hai-Lung Dai, Professor, Department of Chemistry; Ph.D., University of California Berkeley.

David R. Dalton, Professor, Department of Chemistry; Ph.D., University of California Los Angeles.

Boris A. Datskovsky, Professor, Department of Mathematics; Ph.D., Harvard University.

Alexandra Krull Davatzes, Assistant Professor, Department of Earth and Environmental Science; Ph.D., Stanford University.

Nicholas Davatzes, Associate Professor, Department of Earth and Environmental Science; Ph.D., Stanford University.

Bruce A. Davidson, Professor (Research), Department of Physics.

Franklin A. Davis, Professor, Department of Chemistry; Ph.D., Syracuse University.

Nicholas Davatzes, Associate Professor, Department of Earth and Environmental Science.

Timothy S. Davis, Instructor (Teaching/Instructional), Department of Earth and Environmental Science.

Franklin A. Davis, Professor, Department of Chemistry; Ph.D., Syracuse University.

Nanjie Deng, Associate Professor (Research), Department of Chemistry; Ph.D., Hyderabad University.

Louis F. Devicaris, Instructor (Teaching/Instructional), Department of Chemistry; M.S., Villanova University.

Graham Dobereiner, Assistant Professor, Department of Chemistry; Ph.D., Yale University.

Vasily Dolgushev, Professor, Department of Mathematics; Ph.D., Massachusetts Institute of Technology.

Marihena Downing, Instructor (Teaching/Instructional), Department of Mathematics; M.A., Temple University.

Eduard Dragut, Assistant Professor, Department of Computer and Information Sciences; Ph.D., University of Illinois at Chicago.

Xiaojiang Du, Associate Professor, Department of Computer and Information Sciences; Ph.D., University of Maryland College Park.

Leroy W. Dubick, Professor Emeritus, Department of Physics; Ph.D., Rutgers University.

Zbigniew Dziembowski, Associate Professor, Department of Physics; Ph.D., Warsaw University.

Nina Edelman, Assistant Professor (Teaching/Instructional), Department of Mathematics; M.A., University of Pennsylvania.

Khaled M. Elokely, Assistant Professor (Research), Department of Chemistry.

Jennifer Emtage, Assistant Professor (Teaching/Instructional), Department of Biology; Ph.D., Johns Hopkins University.

Ivan N. Erdelyi, Professor Emeritus, Department of Mathematics; Ph.D., Victor Babes University of Cluj, Roumania.

Ananias A. Escalante, Professor, Department of Biology; Ph.D., University of California Irvine.

Sarah R. Evangelista, Associate Professor Emeritus, Department of Mathematics; M.A., Temple University.

Mark A. Feitelson, Professor, Department of Biology; Ph.D., University of California Los Angeles.

Aleksey Filin, Assistant Professor (Research), Department of Chemistry; Ph.D., Institute for Solid State Physics.

John Fiore, Instructor (Teaching/Instructional), Department of Computer and Information Sciences; M.S., University of Pennsylvania.

Giacomo Fiorin, Assistant Professor (Research), Department of Biology; Ph.D., International School for Advanced Studies, Trieste.

Steven Fleming, Professor (Teaching/Instructional), Department of Chemistry; Ph.D., University of Wisconsin.

Natalie P. Flynn, Instructor (Teaching/Instructional), Department of Earth and Environmental Science; M.A., Temple University.

Dieter Forster, Professor, Department of Physics; Ph.D., Harvard University.

Jerrold Franklin, Professor Emeritus, Department of Physics; Ph.D., University of Illinois.

Seema Freer, Associate Professor (Practice), Department of Biology; Ph.D., Thomas Jefferson University.

Amy Freestone, Assistant Professor, Department of Biology; Ph.D., University of California Davis.

Frank L. Friedman, Professor Emeritus, Department of Computer and Information Sciences; Ph.D., Purdue University.

Ser-Wei Fu, Assistant Professor (Research), Department of Mathematics; Ph.D., University of Illinois at Urbana-Champaign.

David Futer, Associate Professor, Department of Mathematics; Ph.D., Stanford University.
Janos Galambos, Professor Emeritus, Department of Mathematics; Ph.D., Eotvos University, Budapest, Hungary.

Leonard J. Garrett, Professor Emeritus, Department of Computer and Information Sciences; Ph.D., University of Pennsylvania.

Edward T. Gawlinski, Associate Professor, Department of Physics; Ph.D., Boston University.

Mohamed Ghalwash, Assistant Professor (Research), Department of Computer and Information Sciences.

Jayakumar G. Gilbert, Assistant Professor (Teaching/Instructional), Department of Chemistry; Ph.D., Drexel University.

Jose Gimenez, Assistant Professor (Teaching/Instructional), Department of Mathematics; B.S., Temple University.

Antonio Giordano, Professor, Department of Biology; Ph.D., University of Trieste.

Antonio M. Goncalves, Professor Emeritus, Department of Chemistry; Ph.D., University of Chicago.

Harry B. Gottlieb, Instructor (Teaching/Instructional), Department of Chemistry; M.S., Villanova University.

Yury Grabovsky, Professor, Department of Mathematics; Ph.D., New York University.

David E. Grandstaff, Professor, Department of Earth and Environmental Science; Ph.D., Princeton University.

Alexander Gray, Assistant Professor, Department of Physics; Ph.D., Lawrence Berkeley National Laboratory and University of California, Davis.

Edward R. Gruberg, Professor Emeritus, Department of Biology; Ph.D., University of Illinois.

Yuhong Guo, Assistant Professor, Department of Computer and Information Sciences; Ph.D., University of Alberta.

Cristian E. Gutiérrez, Professor, Department of Mathematics; Ph.D., University of Buenos Aires.

Raymond Habas, Professor, Department of Biology; Ph.D., State University of New York Stony Brook.

Seymour Haber, Professor Emeritus, Department of Mathematics; Ph.D., Massachusetts Institute of Technology.

Peter Hagis Jr., Professor Emeritus, Department of Mathematics; Ph.D., University of Pennsylvania.

Nahed Hamid, Instructor (Teaching/Instructional), Department of Mathematics; M.S., Kean University.

Jun Han, Assistant Professor (Research), Department of Chemistry; Ph.D., Texas A and M University.

Thomas E. Hanson, Professor Emeritus, Department of Biology; Ph.D., Michigan State University.

William R. Harvey, Professor Emeritus, Department of Biology; Ph.D., Harvard University.

Zameer U. Hasan, Professor, Department of Physics; Ph.D., Australian National University, Canberra.

Stephen Blair Hedges, Professor, Department of Biology; Ph.D., University of Maryland.

Meredith M. Hegg, Assistant Professor (Teaching/Instructional), Department of Mathematics.

Emanuel B. Hey, Professor, Department of Biology; Ph.D., State University of New York Stony Brook.

Omar Hijab, Professor, Department of Mathematics; Ph.D., University of California Berkeley.

S. Robert Hilfer, Professor Emeritus, Department of Biology; Ph.D., Yale University.

David R. Hill, Professor, Department of Mathematics; Ph.D., University of Pittsburgh.

David T. Hill, Assistant Professor (Teaching/Instructional), Department of Chemistry; Ph.D., Temple University.

Ralph Hillman, Professor Emeritus, Department of Biology; Ph.D., Yale University.

S. Tonia Hsieh, Assistant Professor, Department of Biology; Ph.D., Harvard University.

Anthony Hughes, Associate Professor (Teaching/Instructional), Department of Computer and Information Sciences; Ph.D., University of Illinois.

Maria Iavarone, Associate Professor, Department of Physics; Ph.D., University of Napoli Federico II.

Giorgio P. Ingargiola, Associate Professor Emeritus, Department of Computer and Information Sciences; Ph.D., University of Pennsylvania.

Robert L. Intemann, Professor Emeritus, Department of Physics; Ph.D., Stevens Institute of Technology.
Susan A. Jansen-Varnum, Professor, Department of Chemistry; Ph.D., University of Missouri-St. Louis.

Serge Jasmin, Assistant Professor (Teaching/Instructional), Department of Chemistry; B.S., Temple University.

Bo Ji, Assistant Professor, Department of Computer and Information Sciences; Ph.D., Ohio State University.

Kelli Shepard El Jones, Instructor (Teaching/Instructional), Department of Mathematics.

Sunnie Joshi, Assistant Professor (Research), Department of Mathematics; Ph.D., Texas A and M University.

Joseph Jupin, Instructor (Teaching/Instructional), Department of Computer and Information Sciences.

Qing Kang, Assistant Professor (Research), Department of Chemistry.

Krishna Kant, Professor, Department of Computer and Information Sciences; Ph.D., University of Texas at Dallas.

James S. Karra, Associate Professor Emeritus, Department of Physics; Ph.D., Rutgers University.

Gurpreet Kaur, Assistant Professor (Teaching/Instructional), Department of Biology; Ph.D., Temple University.

Roy A. Keyer, Associate Professor (Teaching/Instructional), Department of Chemistry; Ph.D., University of California Irvine.

Bojeong Kim, Assistant Professor, Department of Earth and Environmental Science; Ph.D., Cornell University.

isaac Klapper, Professor, Department of Mathematics; Ph.D., New York University Courant Institute of Mathematical Sciences.

Michael L. Klein, Professor, Department of Chemistry; Ph.D., University of Bristol.

Elliot B. Koffman, Professor Emeritus, Department of Computer and Information Sciences; Ph.D., Case Western Reserve University.

Axel Kohlmeyer, Professor (Research), Department of Mathematics.

James F. Korsh, Professor, Department of Computer and Information Sciences; Ph.D., University of Pennsylvania.

Svetlana Kotochigova, Professor (Research), Department of Physics; Ph.D., St. Petersburg State University.

V. Sankrithi Krishnan, Professor Emeritus, Department of Mathematics.

Grant R. Krow, Professor Emeritus, Department of Chemistry; Ph.D., Princeton University.

Rob J. Kulaithnal, Assistant Professor, Department of Biology; Ph.D., McMaster University.

Sudhir Kumar, Professor, Department of Biology; Ph.D., Pennsylvania State University.

Eugene Kwatny, Professor, Department of Computer and Information Sciences; Ph.D., Drexel University.

Sally Kyvernitis, Instructor (Teaching/Instructional), Department of Computer and Information Sciences; M.S., Indiana University.

Mortimer M. Labes, Professor Emeritus, Department of Chemistry; Ph.D., Massachusetts Institute of Technology.

Paul S. LaFollette Jr., Associate Professor, Department of Computer and Information Sciences; M.D., Temple University.

Rolf Lakaemper, Associate Professor, Department of Computer and Information Sciences; Ph.D., University of Hamburg.

Savio Laricchia, Assistant Professor (Research), Department of Physics.

Sigurd Y. Larsen, Professor Emeritus, Department of Physics; Ph.D., Columbia University.

Longin Jan Latecki, Professor, Department of Computer and Information Sciences; Ph.D., University of Hamburg.

Michael Lawlor, Assistant Professor (Teaching/Instructional), Department of Chemistry; Ph.D., Massachusetts Institute of Technology.

David Lefkovitz, Professor Emeritus, Department of Computer and Information Sciences; Ph.D., University of Pennsylvania.

Edward S. Letzter, Professor, Department of Mathematics; Ph.D., University of Washington.

Robert J. Levis, Professor, Department of Chemistry; Ph.D., Pennsylvania State University.

Ronald M. Levy, Professor, Department of Chemistry; Ph.D., Harvard University.

Zhihai Li, Assistant Professor (Research), Department of Chemistry; Ph.D., University of Aachen.
David A. Liberles, Associate Professor, Department of Biology; Ph.D., California Institute of Technology.

Chyanlong Lin, Associate Professor, Department of Physics; Ph.D., Temple University.

Haibin Ling, Associate Professor, Department of Computer and Information Sciences; Ph.D., University of Maryland College Park.

Seymour Lipschutz, Professor Emeritus, Department of Mathematics; Ph.D., New York University.

Maria E. Lorenz, Associate Professor (Teaching/Instructional), Department of Mathematics; Ph.D., University of Southern California.

Martin W. Lorenz, Professor, Department of Mathematics; Ph.D., Universität Giessen.

Sheryl L. Love, Assistant Professor (Teaching/Instructional), Department of Biology; Ph.D., Temple University.

A. Marjatta Lyyra, Professor, Department of Physics; Ph.D., University of Stockholm.

Marcella Macaluso, Associate Professor (Research), Department of Biology; Ph.D., University of Palermo.

Christopher M. MacDermaid, Assistant Professor (Research), Department of Chemistry.

C. Jeffrey Martoff, Professor, Department of Physics; Ph.D., University of California Berkeley.

Spiridoula Matsika, Professor, Department of Chemistry; Ph.D., Ohio State University.

Kathleen E. Mc Kinley, Instructor (Practice), Department of Mathematics; M.S., Saint Joseph’s University.

Rose Marie McGinnis, Instructor (Teaching/Instructional), Department of Computer and Information Sciences; M.B.A., Temple University.

Michelle Hedwig McGowan, Assistant Professor (Teaching/Instructional), Department of Biology; Ph.D., Rutgers University.

George Mehler, Assistant Professor (Practice), Department of Mathematics; Ph.D., Temple University.

Jatinder S. Mehta, Professor, Department of Mathematics; Ph.D., University of Wisconsin.

Gerardo A. Mendoza, Professor, Department of Mathematics; Ph.D., Massachusetts Institute of Technology.

Bernard Meth, Professor Emeritus, Department of Mathematics; Ph.D., University of Pittsburgh.

Andreas Metz, Associate Professor, Department of Physics; Ph.D., Institut Für Kernphysik Universität Mainz.

Zein-Eddine Meziani, Professor, Department of Physics; Ph.D., Université de Paris XI.

Ted W. Mihalisin, Professor Emeritus, Department of Mathematics; Ph.D., University of Rochester.

Richard L. Miller, Professor Emeritus, Department of Biology; Ph.D., University of Chicago.

Irina Mitrea, Professor, Department of Mathematics; Ph.D., University of Minnesota.

Sayaka Miura, Assistant Professor (Research), Department of Biology; Ph.D., Pennsylvania State University.

Shahram Mohrekesh, Assistant Professor (Teaching/Instructional), Department of Computer and Information Sciences.

Karl Morris, Assistant Professor (Teaching/Instructional), Department of Computer and Information Sciences; Ph.D., Florida International University.

Michael I. Mote, Professor Emeritus, Department of Biology; Ph.D., University of California Los Angeles.

Sudipto Mukherjee, Assistant Professor (Research), Department of Chemistry.

Atsuhiro Muto, Assistant Professor, Department of Earth and Environmental Science.

George H. Myer, Professor Emeritus, Department of Earth and Environmental Science; Ph.D., Yale University.

James Napolitano, Professor, Department of Physics; Ph.D., Stanford University.

William D. Nathan, Professor Emeritus, Department of Mathematics; Ph.D., Syracuse University.

Stuart E. Neff, Professor Emeritus, Department of Biology; Ph.D., Cornell University.

Donald E. Neville, Professor Emeritus, Department of Physics; Ph.D., University of Chicago.

Matthew Newby, Assistant Professor (Teaching/Instructional), Department of Physics.
Allen W. Nicholson, Professor, Department of Biology; Ph.D., University of Pennsylvania.

Rhonda H. Nicholson, Assistant Professor (Teaching/Instructional), Department of Biology; Ph.D., Wayne State University.

John Noel, Assistant Professor (Research), Department of Physics; Ph.D., Texas A and M University.

John T. Nosek, Professor, Department of Computer and Information Sciences; Ph.D., Temple University.

Jonathan Nyquist, Professor, Department of Earth and Environmental Science; Ph.D., University of Wisconsin.

Zoran Obradovic, Professor, Department of Computer and Information Sciences; Ph.D., Pennsylvania State University.

Johanan Odhner, Assistant Professor (Research), Department of Chemistry.

Elmer L. Offenbacher, Professor Emeritus, Department of Physics; Ph.D., University of Pennsylvania.

Michael Opterman, Assistant Professor (Teaching/Instructional), Department of Physics.

Charles Osborne, Assistant Professor (Teaching/Instructional), Department of Mathematics; Ph.D., Temple University.

Maria A. Pacheco, Assistant Professor (Research), Department of Biology.

Karen B. Palter, Associate Professor, Department of Biology; Ph.D., Princeton University.

Ellen Panofsky, Assistant Professor (Teaching/Instructional), Department of Mathematics; Ph.D., Lehigh University.

Michael Paolone, Assistant Professor (Research), Department of Physics; Ph.D., University of South Carolina Columbia.

Christopher Pascucci, Instructor (Teaching/Instructional), Department of Computer and Information Sciences; M.S., University of Pennsylvania.

Eli A. Passow, Professor Emeritus, Department of Mathematics; Ph.D., Yeshiva University.

Susan Patterson, Associate Professor, Department of Biology; Ph.D., University of Washington.

John A. Paulos, Professor, Department of Mathematics; Ph.D., University of Wisconsin.

Haowei Peng, Assistant Professor (Research), Department of Physics.

John P. Perdew, Professor, Department of Physics; Ph.D., Cornell University.

Isaak Pesenson, Professor (Teaching/Instructional), Department of Mathematics; Ph.D., Academy of Science of the ASSR.

Hala O. Pflugfelder, Professor Emeritus, Department of Mathematics; Ph.D., Albert-Ludwigs-Universität Freiburg im Breisgau.

Claudia Pine-Simon, Instructor (Teaching/Instructional), Department of Computer and Information Sciences; M.S., University of Pennsylvania.

Alexander Platt, Assistant Professor (Research), Department of Biology; Ph.D., Harvard University.

Arthur T. Poe, Professor Emeritus, Department of Computer and Information Sciences; Ph.D., University of Illinois at Urbana-Champaign.

Sergei L. Kosakovsky Pond, Professor, Department of Biology.

Andrew Price, Associate Professor (Teaching/Instructional), Department of Chemistry; Ph.D., Purdue University.

Sean Gillian Queisser, Assistant Professor, Department of Mathematics.

K. Raghunandan, Professor Emeritus, Department of Mathematics; Ph.D., Colorado State University.

Daniele Ramella, Assistant Professor (Teaching/Instructional), Department of Chemistry.

Yi Rao, Assistant Professor (Research), Department of Chemistry; Ph.D., Institute of Chemistry, Chinese Academy of Sciences.

Harry P. Rappaport, Professor Emeritus, Department of Biology; Ph.D., Yale University.

Robert Rarig, Assistant Professor (Teaching/Instructional), Department of Chemistry; Ph.D., University of Michigan.

Sujith Ravi, Assistant Professor, Department of Earth and Environmental Science; Ph.D., University of Virginia.

Louis Raymon, Professor Emeritus, Department of Mathematics; Ph.D., Yeshiva University.

Daniel Reich, Professor Emeritus, Department of Mathematics; Ph.D., Princeton University.
Brian Rider, Professor, Department of Mathematics; Ph.D., New York University Courant Institute of Mathematical Sciences.

Peter S. Riseborough, Professor, Department of Physics; Ph.D., Imperial College London.

Igor Rivin, Professor, Department of Mathematics; Ph.D., Princeton University.

Flavio Rizzolio, Assistant Professor (Research), Department of Biology; Ph.D., University of Pavia.

Shepherd K. Roberts, Professor Emeritus, Department of Biology; Ph.D., Princeton University.

Dmitri Romanov, Professor (Research), Department of Physics; Ph.D., Novosibirsk Institute of Semiconductor Physics, USSR Academy of Sciences.

Charles W. Ross, Associate Professor (Teaching/Instructional), Department of Chemistry.

Adele Ruosi, Associate Professor (Research), Department of Physics.

Prakash C. Rushi, Instructor (Teaching/Instructional), Department of Mathematics; M.Ed., Temple University.

Adrienn Ruzsinszky Perdew, Assistant Professor, Department of Physics; Ph.D., Budapest University of Technology and Economics.

Douglas T. Saladik, Associate Professor (Teaching/Instructional), Department of Biology; Ph.D., Temple University.

Robert E. Salomon, Professor Emeritus, Department of Chemistry; Ph.D., University of Oregon.

Robert W. Sanders, Professor, Department of Biology; Ph.D., University of Georgia.

Christian E. Schafmeister, Professor, Department of Chemistry; Ph.D., University of California San Francisco.

John J. Schiller, Associate Professor, Department of Mathematics; Ph.D., University of Pennsylvania.

William F. Schmitt, Professor Emeritus, Department of Computer and Information Sciences; Ph.D., University of Pennsylvania.

Robert L. Sears, Professor Emeritus, Department of Biology; Ph.D., University of California Berkeley.

Benjamin Seibold, Assistant Professor, Department of Mathematics; Ph.D., University of Kaiserslautern.

Arun Sethuraman, Assistant Professor (Research), Department of Biology; Ph.D., Iowa State University.

Cinzia Sevignani, Assistant Professor (Teaching/Instructional), Department of Biology; Ph.D., University of Modena.

Brent Sewall, Assistant Professor, Department of Biology; Ph.D., University of California Davis.

Yunfeng Shan, Department of Biology.

Joel B. Sheffield, Professor, Department of Biology; Ph.D., University of Chicago.

Yuan Justin Shi, Associate Professor, Department of Computer and Information Sciences; Ph.D., University of Pennsylvania.

Scott M. Sieburth, Professor, Department of Chemistry; Ph.D., Harvard University.

Jeremy Sivek, Assistant Professor (Teaching/Instructional), Department of Mathematics; Ph.D., University of Pittsburgh.

Jonathan Smith, Associate Professor (Teaching/Instructional), Department of Chemistry; Ph.D., Wesleyan University.

Gregory S. Smutzer, Associate Professor (Teaching/Instructional), Department of Biology; Ph.D., State University of New York at Buffalo.

Daniel D. Spaeth, Assistant Professor (Teaching/Instructional), Department of Biology; Ph.D., Temple University.

Francis C. Spano, Professor, Department of Chemistry; Ph.D., Princeton University.

Nikolaos Sparveris, Assistant Professor, Department of Physics; Ph.D., University of Athens.

Rachel Spigler, Assistant Professor, Department of Biology; Ph.D., University of Georgia.

Avinash Srinivasan, Assistant Professor (Teaching/Instructional), Department of Computer and Information Sciences; Ph.D., Florida Atlantic University.

Ranganatha Srinivasan, Professor, Department of Mathematics; Ph.D., Wayne State University.

Robert J. Stanley, Professor, Department of Chemistry; Ph.D., Pennsylvania State University.

Leon Steinberg, Professor Emeritus, Department of Mathematics; Ph.D., University of Pennsylvania.
Matthew Stover, Assistant Professor, Department of Mathematics; Ph.D., University of Texas at Austin.

Daniel R. Strongin, Professor, Department of Chemistry; Ph.D., University of California Berkeley.

Deborah Stull, Assistant Professor (Teaching/Instructional), Department of Biology; Ph.D., Yale University.

Jianwei Sun, Assistant Professor (Research), Department of Physics; Ph.D., Tulane University.

Yugang Sun, Associate Professor, Department of Chemistry; Ph.D., University of Science and Technology of China.

Bernd Surrow, Associate Professor, Department of Physics; Ph.D., University of Hamburg.

Daniel B. Szyld, Professor, Department of Mathematics; Ph.D., New York University.

Raza A. Tahir-Kheli, Professor Emeritus, Department of Physics; Ph.D., Oxford University.

Stephan T. Takatsu, Professor Emeritus, Department of Biology; Ph.D., University of Wisconsin-Madison.

Chiu Chiang Tan, Assistant Professor, Department of Computer and Information Sciences; Ph.D., College of William and Mary.

Jacqueline C. Tanaka, Associate Professor, Department of Biology; Ph.D., University of Illinois.

Hong Tang, Assistant Professor (Research), Department of Physics; Ph.D., Northwestern Polytechnical University.

Rongjia Tao, Professor, Department of Physics; Ph.D., Columbia University.

Dennis O. Terry Jr., Associate Professor, Department of Earth and Environmental Science; Ph.D., University of Nebraska.

Allan E. Thomas, Assistant Professor (Teaching/Instructional), Department of Chemistry; Ph.D., Temple University.

Jesse Thorburg, Instructor (Teaching/Instructional), Department of Earth and Environmental Science; M.S., Temple University.

H. Frank Thornton, Associate Professor Emeritus, Department of Mathematics; M.A., Princeton University.

Laura Toran, Professor, Department of Earth and Environmental Science; Ph.D., University of Wisconsin.

Darius H. Torchinsky, Assistant Professor, Department of Physics; Ph.D., Massachusetts Institute of Technology.

Georgia Triantafillou, Professor, Department of Mathematics; Ph.D., University of Bonn, Germany.

Tsvetelin D. Tsankov, Assistant Professor (Teaching/Instructional), Department of Physics; Ph.D., Drexel University.

Allison Tumarkin-Deratzian, Associate Professor (Teaching/Instructional), Department of Earth and Environmental Science; Ph.D., University of Pennsylvania.

Gene C. Ulmer, Professor Emeritus, Department of Earth and Environmental Science; Ph.D., Pennsylvania State University.

Wendy Urban, Instructor (Teaching/Instructional), Department of Computer and Information Sciences; M.B.A., Temple University.

Shivaiah Vaddypally, Assistant Professor (Research), Department of Chemistry; Ph.D., Hyderabad University.

Ann M. Valentine, Associate Professor, Department of Chemistry; Ph.D., Massachusetts Institute of Technology.

Elena Ya Vishik, Assistant Professor (Teaching/Instructional), Department of Mathematics; Ph.D., Moscow Pedagogical Institute.

Vladimir Visnjic, Assistant Professor (Teaching/Instructional), Department of Mathematics; Ph.D., University of Bonn, Germany.

Evelyn Vleck, Instructor (Teaching/Instructional), Department of Biology; M.A., William Paterson College.

Vincent Voelz, Assistant Professor, Department of Chemistry; Ph.D., University of California San Francisco.

Slobodan Vucetic, Associate Professor, Department of Computer and Information Sciences; Ph.D., Washington State University.

Doreen Wald, Instructor (Teaching/Instructional), Department of Mathematics; M.Ed., Temple University.

Chelsea Wald, Assistant Professor, Department of Mathematics.

Anduo Wang, Assistant Professor, Department of Computer and Information Sciences.

Charles Wang, Associate Professor (Teaching/Instructional), Department of Computer and Information Sciences.
Pei Wang, Associate Professor (Teaching/Instructional), Department of Computer and Information Sciences; Ph.D., Indiana University.

Richard B. Waring, Associate Professor, Department of Biology; Ph.D., Essex University.

Stephen S. Washburne, Associate Professor Emeritus, Department of Chemistry; Ph.D., Massachusetts Institute of Technology.

Patrick Waters, Assistant Professor (Research), Department of Mathematics.

Bradford B. Wayland, Professor, Department of Chemistry; Ph.D., University of Illinois.

Weerasiri Arachchige Kushan Weerasiri, Instructor (Research), Department of Chemistry.

Robert B. Weinberg, Professor Emeritus, Department of Physics; Ph.D., Columbia University.

Richard C. Weisenberg, Professor Emeritus, Department of Biology; Ph.D., University of Chicago.

Sarah Wengryniuk, Assistant Professor, Department of Chemistry; Ph.D., Duke University.

Vladimira V. Wilent, Assistant Professor (Teaching/Instructional), Department of Chemistry; Ph.D., University of Pennsylvania.

Michael Wilhelm, Assistant Professor (Research), Department of Chemistry; Ph.D., University of Pennsylvania.

Katherine A. Willets, Associate Professor, Department of Chemistry.

John R. Williams, Professor Emeritus, Department of Chemistry; Ph.D., University of Western Australia.

Matthaeus Wolak, Assistant Professor (Research), Department of Physics.

Paul Wolfgang, Instructor (Teaching/Instructional), Department of Computer and Information Sciences; B.S.E.E., University of Pennsylvania.

Jie Wu, Professor, Department of Computer and Information Sciences; Ph.D., Florida Atlantic University.

Wei Wu, Assistant Professor (Teaching/Instructional), Department of Mathematics; Ph.D., University of Leuven.

Xifan Wu, Assistant Professor, Department of Physics; Ph.D., Rutgers University.

William Wuest, Assistant Professor, Department of Chemistry; Ph.D., University of Pennsylvania.

Stephanie L. Wunder, Professor, Department of Chemistry; Ph.D., University of Massachusetts.

Xiaoxing Xi, Professor, Department of Physics; Ph.D., Peking University and Institute of Physics.

Junchao Xia, Associate Professor (Research), Department of Physics.

Xiaojun Xu, Assistant Professor (Research), Department of Physics; Ph.D., Chinese Academy of Sciences.

Wei-Shih Yang, Professor, Department of Mathematics; Ph.D., Cornell University.

Weidong Yang, Associate Professor, Department of Biology; Ph.D., Fudan University.

Zenghui Yang, Assistant Professor (Research), Department of Physics.

Alexander P. Yates, Associate Professor, Department of Computer and Information Sciences; Ph.D., University of Washington.

Jingjie Yu, Assistant Professor (Research), Department of Biology.

Liping Yu, Assistant Professor (Research), Department of Physics.

Tan Yuen, Associate Professor, Department of Physics; Ph.D., Temple University.

Michael J. Zdilla, Assistant Professor, Department of Chemistry; Ph.D., Princeton University.

Qiang Zeng, Assistant Professor, Department of Computer and Information Sciences.

Bin Zhang, Assistant Professor (Research), Department of Physics; Ph.D., University of Pittsburgh.

Dong Zhou, Assistant Professor (Research), Department of Mathematics; Ph.D., Temple University.

David E. Zitarelli, Professor Emeritus, Department of Mathematics; Ph.D., Pennsylvania State University.

Matthew Zumbrum, Assistant Professor (Research), Department of Mathematics; Ph.D., University of Delaware.
Fox School of Business and Management

Joan Allatta, Assistant Professor (Teaching/Instructional), Department of Strategic Management; Ph.D., University of Pennsylvania.

Andrew Allmond, Assistant Professor (Practice), Department of Marketing and Supply Chain Management; M.J., Temple University.

Ronald Anderson, Professor, Department of Finance; Ph.D., Texas A and M University.

Lynne M. Andersson, Associate Professor, Department of Human Resource Management; Ph.D., University of North Carolina at Chapel Hill.

Paul K. Asabere, Professor, Department of Finance; Ph.D., University of Illinois at Urbana-Champaign.

Hilal Atasoy, Assistant Professor (Research), Department of Accounting; Ph.D., University of Illinois at Urbana-Champaign.

Craig Atwater, Instructor (Teaching/Instructional), Department of Marketing and Supply Chain Management; Ph.D., Temple University.

Cynthia Axelrod, Assistant Professor (Practice), Department of Finance; M.B.A., Drexel University.

Steven Balsam, Professor, Department of Accounting; Ph.D., City University of New York.

Rajiv D. Banker, Professor, Department of Accounting; D.B.A., Harvard University.

Sudipta Basu, Professor, Department of Accounting; Ph.D., University of Rochester.

Gary J. Blau, Professor, Department of Human Resource Management; Ph.D., University of Cincinnati.

Misty P. Blessley, Assistant Professor (Teaching/Instructional), Department of Marketing and Supply Chain Management; Ph.D., Temple University.

Jeffrey R. Boles, Assistant Professor, Department of Legal Studies in Business; Ph.D., University of California Berkeley.

Edward C. Boyer, Assistant Professor (Teaching/Instructional), Department of Finance; Ph.D., Temple University.

Lawrence Brown, Professor (Research), Department of Accounting; Ph.D., Rutgers University-New Brunswick.

Dmitri Byzalov, Assistant Professor, Department of Accounting; Ph.D., Harvard University.

Dwight Carey, Assistant Professor (Practice), Department of Strategic Management; B.S., Farleigh Dickinson University at Madison.

Alexandra D. Carides, Assistant Professor (Teaching/Instructional), Department of Statistics; Ph.D., Temple University.

Debra Casey, Assistant Professor (Teaching/Instructional), Department of Human Resource Management; Ph.D., Rutgers University-New Brunswick.

Steven J. Casper, Assistant Professor (Teaching/Instructional), Department of Finance; Ph.D., Temple University.

Boyoun Chae, Assistant Professor, Department of Marketing and Supply Chain Management; Ph.D., University of British Columbia.

Rajeswararao S. Chaganti, Professor, Department of Strategic Management; Ph.D., State University of New York.

Rajan Chandran, Professor, Department of Dean's Office; Ph.D., Syracuse University.

Hua Chen, Assistant Professor, Department of Risk, Insurance and Healthcare Management; Ph.D., Georgia State University.

Pallavi Chitturi, Associate Professor (Research), Department of Statistics; Ph.D., University of Texas at Austin.

J. Jay Choi, Professor, Department of Finance; Ph.D., New York University.

George Chressanthis, Professor (Teaching/Instructional), Department of Risk, Insurance and Healthcare Management; Ph.D., Purdue University.

Teresa Gill Cirillo, Assistant Professor (Practice), Department of Marketing and Supply Chain Management; M.A., Rowan University.

Shira Cohen, Assistant Professor, Department of Accounting; Ph.D., Columbia University.

Mary Conran, Assistant Professor (Practice), Department of Marketing and Supply Chain Management; M.B.A., Temple University.

J. David Cummings, Professor, Department of Risk, Insurance and Healthcare Management; Ph.D., University of Pennsylvania.

Kathleen A. Davis, Assistant Professor (Practice), Department of Human Resource Management; J.D., University of California Berkeley.

John R. Deckop, Professor, Department of Human Resource Management; Ph.D., University of Minnesota.

Mercedes Delgado, Assistant Professor, Department of Strategic Management; Ph.D., Universidad Complutense de Madrid.
C. Anthony Di Benedetto, Professor, Department of Marketing and Supply Chain Management; Ph.D., McGill University.

Angelika Dimoka, Associate Professor, Department of Marketing and Supply Chain Management; Ph.D., University of Southern California.

Yuexiao Dong, Assistant Professor, Department of Statistics; Ph.D., Pennsylvania State University.

Martin J. Doyle, Assistant Professor (Practice), Department of Management Information Systems; M.S., University of Phoenix.

Rob B. Drennan, Associate Professor, Department of Risk, Insurance and Healthcare Management; Ph.D., University of Pennsylvania.

Leora F. Eisenstadt, Assistant Professor (Research), Department of Legal Studies in Business; J.D., New York University School of Law.

Eric Eisenstein, Assistant Professor, Department of Marketing and Supply Chain Management; Ph.D., University of Pennsylvania.

Elyas E. Elyasiani, Professor, Department of Finance; Ph.D., Michigan State University.

Philip English, Assistant Professor (Research), Department of Finance; Ph.D., University of South Carolina.

Kevin J. Fandi, Assistant Professor (Research), Department of Legal Studies in Business; Ph.D., George Mason University.

Susan Feinberg, Associate Professor, Department of Strategic Management; Ph.D., University of Minnesota.

Stuart H. Fine, Associate Professor (Practice), Department of Risk, Insurance and Healthcare Management; Ph.D., Medical University of South Carolina.

Jennifer M. Fitzgerald, Instructor (Practice), Department of Marketing and Supply Chain Management; M.B.A., Temple University.

Laurie J. Fitzpatrick, Assistant Professor (Practice), Department of Marketing and Supply Chain Management; M.F.A., Temple University.

Richard Y. Flanagan, Assistant Professor (Teaching/Instructional), Department of Management Information Systems; Ph.D., Temple University.

Nathan Fong, Assistant Professor, Department of Marketing and Supply Chain Management; Ph.D., Massachusetts Institute of Technology.

Jane H. Frankel, Assistant Professor (Teaching/Instructional), Department of Strategic Management; M.S., University of Pennsylvania.

Mary Anne Gaffney, Associate Professor, Department of Accounting; Ph.D., University of Maryland.

Deanna Geddes, Associate Professor, Department of Human Resource Management; Ph.D., Purdue University.

Mark E. Gershon, Professor, Department of Marketing and Supply Chain Management; Ph.D., University of Arizona.

Katherine W. Gerst, Assistant Professor (Practice), Department of Marketing and Supply Chain Management; M.B.A., Temple University.

Melissa Glenn-Fleming, Assistant Professor (Practice), Department of Marketing and Supply Chain Management; M.A., La Salle University.

Elizabeth A. Gordon, Associate Professor, Department of Accounting; Ph.D., Columbia University.

Isaac Gottlieb, Professor (Clinical), Department of Statistics; Ph.D., Columbia University.

Brad Greenwood, Assistant Professor, Department of Management Information Systems; Ph.D., University of Maryland College Park.

Manak C. Gupta, Professor, Department of Finance; Ph.D., University of California Los Angeles.

Terry Ann Halbert, Professor, Department of Legal Studies in Business; J.D., Rutgers University.

Robert D. Hamilton III, Professor, Department of Strategic Management; Ph.D., Northwestern University.

Xu Han, Assistant Professor, Department of Statistics; Ph.D., University of Pennsylvania.

Crystal M. Harold, Assistant Professor, Department of Human Resource Management; Ph.D., George Mason University.

Roie Hauser, Assistant Professor (Research), Department of Finance; Ph.D., University of Chicago.

Richard M. Heiberger, Professor Emeritus, Department of Statistics; Ph.D.

Theodore L. Hill III, Associate Professor (Teaching/Instructional), Department of Strategic Management; Ph.D., Temple University.

Arthur Hochner, Associate Professor, Department of Human Resource Management; Ph.D., Harvard University.

Samuel D. Hodge Jr., Professor, Department of Legal Studies in Business; J.D., Temple University.

Brian C. Holtz, Assistant Professor, Department of Human Resource Management; Ph.D., George Mason University.
H. Donald Hopkins, Associate Professor, Department of Strategic Management; Ph.D., Pennsylvania State University.

Andrea Hornett, Assistant Professor (Teaching/Instructional), Department of Marketing and Supply Chain Management; Ph.D., George Washington University.

Forrest E. Huffman, Professor, Department of Finance; Ph.D., University of South Carolina.

James M. Hunt, Associate Professor, Department of Marketing and Supply Chain Management; Ph.D., University of Cincinnati.

James Hutchin, Associate Professor (Practice), Department of Strategic Management; M.B.A., American Graduate School of International Management.

Daniel Isaacs, Assistant Professor (Teaching/Instructional), Department of Legal Studies in Business; J.D., Brooklyn Law School.

Alan J. Izenman, Professor, Department of Statistics; Ph.D., University of California Berkeley.

Cheng Jiang, Assistant Professor (Teaching/Instructional), Department of Finance; Ph.D., University of California Riverside.

Kose John, Professor, Department of Finance.

Darin Kapanjie, Assistant Professor (Teaching/Instructional), Department of Statistics; Ed.D., Temple University.

Satyajit Karnik, Assistant Professor (Teaching/Instructional), Department of Finance; Ph.D., University of Michigan.

Howard Keen, Assistant Professor (Teaching/Instructional), Department of Finance; Ph.D., Bryn Mawr College.

Ron Kershner, Assistant Professor (Teaching/Instructional), Department of Statistics; Ph.D., Cornell University.

You Jin Kim, Assistant Professor, Department of Human Resource Management; Ph.D., Michigan State University.

Harold E. Klein, Associate Professor, Department of Strategic Management; Ph.D., Columbia University.

Masaaki Kotabe, Professor, Department of Strategic Management; Ph.D., Michigan State University.

Robert T. Krafty, Assistant Professor, Department of Statistics; Ph.D., University of Pennsylvania.

A. J. Kreimer, Assistant Professor (Practice), Department of Accounting; M.B.A., Temple University.

Jagannathan Krishnan, Professor, Department of Accounting; Ph.D., Ohio State University.

A. J. Kreimer, Assistant Professor (Practice), Department of Accounting; M.B.A., Temple University.

Jayanthi Krishnan, Associate Professor, Department of Accounting; Ph.D., Ohio State University.

Seok-Woo Kwon, Assistant Professor, Department of Strategic Management; Ph.D., University of Southern California.

Nandini Lahiri, Assistant Professor, Department of Strategic Management; Ph.D., University of Michigan.

James M. Lammendola, Assistant Professor (Practice), Department of Legal Studies in Business; J.D., University of Tulsa College of Law.

Richard A. Lancioni, Professor Emeritus, Department of Marketing and Supply Chain Management.

Vanessa J. Lawrence, Associate Professor, Department of Legal Studies in Business; J.D., University of Pennsylvania School of Law.

Xi Li, Assistant Professor, Department of Accounting; Ph.D., London Business School.

Yan Li, Assistant Professor, Department of Finance; Ph.D., Cornell University.

Yuanzhi Li, Assistant Professor, Department of Finance; Ph.D., New York University.

Andrea B. Lopez, Assistant Professor (Teaching/Instructional), Department of Human Resource Management; Ph.D., Temple University.

Diane S. Luedtke, Assistant Professor (Practice), Department of Risk, Insurance and Healthcare Management; M.A., University of Pennsylvania.

Xueming Luo, Professor, Department of Marketing and Supply Chain Management; D.B.A., Louisiana Tech University.

Marco Malandra, Assistant Professor (Practice), Department of Accounting; M.S., Golden Gate University.

Barbara B. Manaka, Assistant Professor (Teaching/Instructional), Department of Risk, Insurance and Healthcare Management; Ph.D., Temple University.

Munir Y. Mandviwalla, Associate Professor, Department of Management Information Systems; Ph.D., Claremont Graduate University.
Connie Xiangdong Mao, Associate Professor, Department of Finance; Ph.D., Cornell University.

Elizabeth G. Matthew, Assistant Professor (Practice), Department of Marketing and Supply Chain Management; M.A., Pennsylvania State University.

John A. McClendon, Associate Professor, Department of Human Resource Management; Ph.D., University of South Carolina.

Michael McCloskey, Assistant Professor (Practice), Department of Risk, Insurance and Healthcare Management; M.B.A., Drexel University.

Robert C. McNamee, Assistant Professor (Teaching/Instructional), Department of Strategic Management; Ph.D., Rutgers University.

James P. Miller, Assistant Professor (Practice), Department of Marketing and Supply Chain Management; Ph.D., University College Cork.

Martina Mincheva, Assistant Professor, Department of Statistics; Ph.D., Princeton University.

Neha Mittal, Assistant Professor (Teaching/Instructional), Department of Marketing and Supply Chain Management; Ph.D., Rutgers University.

Christopher Monos, Assistant Professor (Practice), Department of Marketing and Supply Chain Management; Ph.D., Columbia University.

Christopher Moore, Instructor (Practice), Department of Risk, Insurance and Healthcare Management; M.S., University of Akron.

Maureen Morrin, Professor, Department of Marketing and Supply Chain Management; Ph.D., New York University.

Michael Moughan, Assistant Professor (Practice), Department of Accounting; Ph.D., University of Delaware.

James C. Moustafellos, Assistant Professor (Practice), Department of Management Information Systems; M.Arch., Princeton University.

Shreeram R. Mudambi, Professor, Department of Strategic Management; Ph.D., Cornell University.

Susan Mudambi, Associate Professor (Research), Department of Marketing and Supply Chain Management; Ph.D., University of Warwick.

Subhadeep Mukhopadhyay, Assistant Professor, Department of Statistics; Ph.D., Texas A and M University.

David Nash, Assistant Professor (Practice), Department of Strategic Management; M.S., University of Pennsylvania.

Lalitha Naveen, Associate Professor, Department of Finance; Ph.D., Arizona State University.

Katherine Nelson, Instructor (Practice), Department of Human Resource Management; M.S., Temple University.

E. Carey O'Donnell, Assistant Professor (Practice), Department of Management Information Systems; B.A., Colgate University.

In-Sue Oh, Associate Professor, Department of Human Resource Management; Ph.D., University of Iowa.

Bora Ozkan, Assistant Professor (Teaching/Instructional), Department of Finance; Ph.D., University of New Orleans.

Min-Seok Pang, Assistant Professor, Department of Management Information Systems; Ph.D., University of Michigan.

Arvind Parkhe, Professor, Department of Strategic Management; Ph.D., Temple University.

Paul Pavlou, Professor, Department of Management Information Systems; Ph.D., University of Southern California.

Tony Petrucci, Assistant Professor (Practice), Department of Human Resource Management; Ph.D., Regent University.

M. Moshe Porat, Professor, Department of Dean's Office; Ph.D., Temple University.

James D. Portwood, Professor, Department of Human Resource Management; Ph.D., University of Michigan.

Robert S. Pred, Associate Professor (Teaching/Instructional), Department of Statistics; Ph.D., University of Texas at Austin.

Eric G. Press, Professor, Department of Accounting; Ph.D., University of Oregon.

Bruce B. Rader, Associate Professor (Teaching/Instructional), Department of Finance; Ph.D., University of Houston.

Marc Ragin, Assistant Professor (Research), Department of Risk, Insurance and Healthcare Management; Ph.D., University of Wisconsin-Madison.

Crystal Reeck, Assistant Professor, Department of Marketing and Supply Chain Management; Ph.D., Duke University.

Laureen Regan, Associate Professor, Department of Risk, Insurance and Healthcare Management; Ph.D., University of Pennsylvania.

Sheri Risler, Assistant Professor (Practice), Department of Accounting; B.S., Boston University.

Michael J. Rivera, Associate Professor (Teaching/Instructional), Department of Strategic Management; Ph.D., Purdue University.
Edward C. Rosenthal, Professor, Department of Marketing and Supply Chain Management; Ph.D., Northwestern University.

David H. Ryan, Associate Professor, Department of Accounting; Ph.D., University of South Carolina.

Oleg Rytchkov, Assistant Professor, Department of Finance; Ph.D., Massachusetts Institute of Technology.

Mitabaran Sarkar, Professor, Department of Strategic Management; Ph.D., Michigan State University.

Sanat K. Sarkar, Professor, Department of Statistics; Ph.D., Calcutta University.

Pavel G. Savor, Assistant Professor, Department of Finance; Ph.D., Harvard University.

Stuart M. Schmidt, Professor, Department of Human Resource Management; Ph.D., University of Wisconsin-Madison.

David Schuff, Associate Professor (Teaching/Instructional), Department of Management Information Systems; Ph.D., Arizona State University.

Jonathan A. Scott, Professor, Department of Finance; Ph.D., Purdue University.

Anthony Louis Seeton, Assistant Professor (Practice), Department of Strategic Management; M.B.A., Temple University.

Andrew Sfekas, Assistant Professor, Department of Risk, Insurance and Healthcare Management; Ph.D., Cornell University.

Jeremy J. Shafer, Assistant Professor (Practice), Department of Management Information Systems; M.S., Temple University.

Amir Shoham, Assistant Professor (Teaching/Instructional), Department of Finance; Ph.D., Ben-Gurion University of the Negev.

Jagbir Singh, Professor, Department of Statistics; Ph.D., Florida State University.

Indrajit Sinha, Associate Professor, Department of Marketing and Supply Chain Management; Ph.D., University of Michigan.

S. J. Sklar, Assistant Professor, Department of Legal Studies in Business; J.D., Temple University.

Michael F. Smith, Associate Professor, Department of Marketing and Supply Chain Management; D.B.A., Indiana University.

Sheryl Winston Smith, Assistant Professor, Department of Strategic Management; Ph.D., Harvard University.

Marcus J. Sobel, Associate Professor, Department of Statistics; Ph.D., University of California Berkeley.

John A. Soss, Associate Professor (Teaching/Instructional), Department of Finance; Ph.D., Northwestern University.

Alexander Stein, Assistant Professor (Teaching/Instructional), Department of Marketing and Supply Chain Management; Ph.D., Temple University.

Cheng Yong Tang, Associate Professor, Department of Statistics; Ph.D., Iowa State University.

Lucas Threinen, Assistant Professor (Research), Department of Accounting; Ph.D., University of Chicago.

Michael Valenza, Associate Professor, Department of Legal Studies in Business; J.D., Temple University.

Vinod Venkatraman, Assistant Professor, Department of Marketing and Supply Chain Management; Ph.D., Duke University.

Krupa S. Viswanathan, Associate Professor, Department of Risk, Insurance and Healthcare Management; Ph.D., University of Pennsylvania.

Sunil Wattal, Associate Professor, Department of Management Information Systems; Ph.D., Carnegie Mellon University.

Ellen Weber, Assistant Professor (Practice), Department of Strategic Management; B.S., University of Pennsylvania.

William W. S. Wei, Professor, Department of Statistics; Ph.D., University of Wisconsin-Madison.

Howard J. Weiss, Professor, Department of Marketing and Supply Chain Management; Ph.D., Northwestern University.

Mary A. Weiss, Professor, Department of Risk, Insurance and Healthcare Management; Ph.D., University of Pennsylvania.

Guntram Werther, Professor (Teaching/Instructional), Department of Strategic Management; Ph.D., Washington University.

Jean K. Wilcox, Assistant Professor (Practice), Department of Marketing and Supply Chain Management; Ph.D., University of Chicago.

Storm Wilkins, Assistant Professor (Practice), Department of Risk, Insurance and Healthcare Management; J.D., University of Pennsylvania.

Jacqueline Volkman Wise, Assistant Professor, Department of Risk, Insurance and Healthcare Management; Ph.D., University of Pennsylvania.

Christian E. Wurst, Associate Professor (Teaching/Instructional), Department of Accounting; Ph.D., Temple University.
Faculty

Youngjin Yoo, Professor, Department of Management Information Systems; Ph.D., University of Maryland.

Yuchi Zhang, Assistant Professor, Department of Marketing and Supply Chain Management; Ph.D., University of Maryland College Park.

Zhigen Zhao, Assistant Professor, Department of Statistics; Ph.D., Cornell University.

Jacqueline S. Zinn, Associate Professor, Department of Risk, Insurance and Healthcare Management; Ph.D., University of Pennsylvania.

Rebecca Anne Zinn, Assistant Professor (Practice), Department of Marketing and Supply Chain Management; M.B.A., Temple University.

M. Michael Zuckerman, Assistant Professor (Teaching/Instructional), Department of Risk, Insurance and Healthcare Management; J.D., John Marshall Law School.

Kornberg School of Dentistry

Jasim M. Albandar, Professor, Department of Periodontology and Oral Implantology; D.M.D., Temple University.

Vinodh Bhoopathi, Assistant Professor, Department of Pediatric Dentistry and Community Oral Health Sciences; D.Sc.D., Boston University.

Kenneth G. Boberick, Associate Professor, Department of Restorative Dentistry; D.M.D.

Daniel W. Boston, Associate Professor, Department of Restorative Dentistry; D.M.D., University of Pennsylvania.

Jeffrey H. Godel, Associate Professor (Clinician Scholar), Department of Orthodontics; D.D.S.

Michael J. Horton, Assistant Professor (Research), Department of Orthodontics; Ph.D.

Amid Ismail, Professor, Department of Restorative Dentistry; Dr.P.H., University of Michigan.

Steven R. Jefferies, Professor, Department of Restorative Dentistry; D.D.S., University of Maryland Baltimore.

Laurie MacPhail, Professor, Department of Oral Maxillofacial Pathology, Medicine and Surgery; D.M.D.

Shannon Myers Virtue, Assistant Professor, Department of Pediatric Dentistry and Community Oral Health Sciences; Psy.D., La Salle University.

Matthew Palermo, Assistant Professor (Clinician Scholar), Department of Restorative Dentistry; D.D.S.

Thomas E. Rams, Professor, Department of Periodontology and Oral Implantology; D.D.S., University of Maryland.

James J. Sciote, Professor, Department of Orthodontics; Ph.D., University of Michigan.

Roy H. Stevens, Professor, Department of Endodontontology; D.D.S., Columbia University.

Jon B. Suzuki, Professor, Department of Periodontology and Oral Implantology; D.D.S., Loyola University Chicago.

Marisol Tellez-Merchán, Associate Professor, Department of Pediatric Dentistry and Community Oral Health Sciences; Ph.D., University of Michigan.

Orhan C. Tuncay, Professor, Department of Orthodontics; D.M.D.

Eugene J. Whitaker, Associate Professor Emeritus, Department of Restorative Dentistry; D.M.D.

Jie Yang, Professor, Department of Oral Maxillofacial Pathology, Medicine and Surgery; D.M.D., Temple University.

Maobin Yang, Assistant Professor, Department of Endodontontology; Ph.D., University of Connecticut.

Lewis Katz School of Medicine

Mary E. Abood, Professor, Department of Center for Substance Abuse Research; Ph.D., University of California San Francisco.

Tasuku Akiyama, Assistant Professor, Department of Anatomy and Cell Biology; Ph.D., University of Toyama.

Barrie Ashby, Professor, Department of Pharmacology; Ph.D., University of Leeds.

Raghbir S. Athwal, Professor, Department of Fels Institute for Cancer Research; Ph.D., University of Missouri.

Michael V. Autieri, Professor, Department of Cardiovascular Research Center; Ph.D., Hahnemann University.

S. Ausim Azizi, Professor (Clinician Scholar), Department of Neurology; M.D., Southwestern Medical School.

Mary F. Barbe, Professor, Department of Anatomy and Cell Biology; Ph.D., Wake Forest University.
Mark M. Black, Professor, Department of Anatomy and Cell Biology; Ph.D., Case Western Reserve University.

Bettina A. Buttaro, Associate Professor, Department of Microbiology and Immunology; Ph.D., University of Minnesota.

Roberto Caricchio, Associate Professor (Research), Department of Microbiology and Immunology; M.D., Catholic University of Sacred Heart.

Marion M. Chan, Associate Professor, Department of Microbiology and Immunology; Ph.D., Cornell University Medical College.

Sow-Yeh Chen, Professor, Department of Pathology and Laboratory Medicine; Ph.D.

Xiongwen Chen, Assistant Professor, Department of Cardiovascular Research Center; Ph.D., Temple University.

Joseph Y. Cheung, Professor, Department of Medicine; M.D., Duke University.

Mario P. S. Chin, Assistant Professor, Department of Microbiology and Immunology; Ph.D., University of Hong Kong.

Seo-Hee Cho, Assistant Professor, Department of Shriners Hospitals Pediatric Research Center; Ph.D., Rutgers University.

Eric T. Choi, Associate Professor, Department of Surgery; M.D., University of Chicago.

Parkson Lee-Gau Chong, Professor, Department of Medical Genetics and Molecular Biochemistry; Ph.D., University of Illinois at Urbana-Champaign.

Philip L. Cohen, Professor, Department of Microbiology and Immunology; M.D., Yale University.

Alan Cowan, Professor Emeritus, Department of Pharmacology; Ph.D., University of Strathclyde.

Peter B. Crino, Professor, Department of Shriners Hospitals Pediatric Research Center; M.D., Yale University.

Judith Daniels, Associate Professor, Department of Anatomy and Cell Biology; Ph.D., University of North Carolina at Chapel Hill.

Prasun Datta, Assistant Professor, Department of Neuroscience; Ph.D., University of Calcutta.

Konstantinos Drosatos, Assistant Professor, Department of Pharmacology; Ph.D., Boston University.

Nahum J. Duker, Professor, Department of Pathology and Laboratory Medicine; M.D., University of Illinois College of Medicine.

Nae Dun, Professor, Department of Pharmacology; Ph.D., Loyola University Chicago.

Satoru Eguchi, Professor, Department of Cardiovascular Research Center; M.D., Tohoku University School of Medicine.

Toby K. Eisenstein, Professor, Department of Center for Substance Abuse Research; Ph.D., Bryn Mawr College.

John W. Elrod, Assistant Professor, Department of Center for Translational Medicine; Ph.D., Albert Einstein College of Medicine.

Nora Engel, Associate Professor, Department of Fels Institute for Cancer Research; Ph.D., University of Buenos Aires.

Scott H. Faro, Professor (Clinician Scholar), Department of Radiology; M.D., Rutgers University.

Arthur M. Feldman, Professor, Department of Physiology; M.D., Louisiana State University.

Toby Ferguson, Assistant Professor, Department of Neurology; M.D.

Tracy Lee Fischer-Smith, Assistant Professor, Department of Neuroscience; Ph.D., Temple University.

Thomas L. Force, Professor, Department of Center for Translational Medicine; M.D., Harvard Medical School.

Gianluca Gallo, Associate Professor, Department of Shriners Hospitals Pediatric Research Center; Ph.D., University of Illinois.

Stefania Gallucci, Associate Professor, Department of Microbiology and Immunology; M.D., Università Cattolica del Sacro Cuore.

Ana M. Gamero, Assistant Professor, Department of Medical Genetics and Molecular Biochemistry; Ph.D., University of South Florida.

Doina Ganea, Professor, Department of Microbiology and Immunology; Ph.D., University of Illinois at Chicago.

Glenn Stephen Gerhard, Professor, Department of Medical Genetics and Molecular Biochemistry; M.D., Pennsylvania State University.

Kathleen M. Giangiacomo, Associate Professor, Department of Medical Genetics and Molecular Biochemistry; Ph.D., University of Pennsylvania.

Lawrence E. Goldfinger, Assistant Professor, Department of Sol Sherry Thrombosis Research Center; Ph.D., Northwestern University Medical School.

Jennifer C. Gordon, Associate Professor, Department of Neuroscience; Ph.D., MCP Hahnemann University School of Medicine.
Xavier Graña, Associate Professor, Department of Fels Institute for Cancer Research; Ph.D., University of Barcelona.

Charles Grumbeyer, Professor, Department of Medical Genetics and Molecular Biochemistry; Ph.D., University of Alberta.

Dale S. Haines, Associate Professor, Department of Fels Institute for Cancer Research; Ph.D., Hahnemann University.

James L. Heckman, Associate Professor, Department of Physiology; Ph.D., Temple University.

Earl E. Henderson, Professor, Department of Microbiology and Immunology; Ph.D., University of Chicago.

Wen-Zhe Ho, Professor, Department of Pathology and Laboratory Medicine; M.D., Wuhan University School of Medicine.

Barbara Hoffmann, Professor, Department of Fels Institute for Cancer Research; Ph.D., University of Michigan.

Steven R. Houser, Professor, Department of Cardiovascular Research Center; Ph.D., Temple University.

Wenhui Hu, Associate Professor, Department of Neuroscience; Ph.D., Peking Union Medical College and Chinese Academy of Medical Science.

Yang Hu, Assistant Professor, Department of Shriners Hospitals Pediatric Research Center; M.D., Beijing Medical University.

Jian Huang, Assistant Professor, Department of Pathology and Laboratory Medicine; M.D., Peking University Health Sciences Center.

Jean-Pierre Issa, Professor, Department of Fels Institute for Cancer Research; M.D., The American University of Beirut.

Liselotte E. Jensen, Assistant Professor, Department of Microbiology and Immunology; Ph.D., University of Aarhus.

Nora L. Jones, Assistant Professor (Research Center), Department of Center for Bioethics, Urban Health and Policy; Ph.D., Temple University.

Kamel Khalili, Professor, Department of Neuroscience; Ph.D., University of Pennsylvania School of Medicine.

Laurie Kilpatrick, Associate Professor, Department of Center for Inflammation, Translational and Clinical Lung Research; Ph.D., University of Pennsylvania.

Kwang Chul Kim, Professor, Department of Physiology; Ph.D., Ohio State University.

Seonhee Kim, Assistant Professor, Department of Shriners Hospitals Pediatric Research Center; Ph.D., Rutgers University.

Lynn Kirby, Associate Professor, Department of Center for Substance Abuse Research; Ph.D., University of Pennsylvania.

Raj Kishore, Professor, Department of Pharmacology; Ph.D., Lucknow University.

Walter J. Koch, Professor, Department of Center for Translational Medicine; Ph.D., University of Cincinnati College of Medicine.

Beata Kosnider, Associate Professor, Department of Physiology; Ph.D., University of Lodz.

Warren D. Kruger, Professor, Department of Pharmacology; Ph.D.

Barbara Krynska, Assistant Professor (Research), Department of Shriners Hospitals Pediatric Research Center; Ph.D., Medical University of Silesia.

Satya P. Kunapuli, Professor, Department of Physiology; Ph.D., Indian Institute of Science.

T. Dianne Langford, Associate Professor, Department of Neuroscience; Ph.D., University of Alabama.

Dan A. Liebermann, Professor, Department of Fels Institute for Cancer Research; Ph.D., Weizmann Institute.

Lee-Yuan Liu-Chen, Professor, Department of Center for Substance Abuse Research; Ph.D., Massachusetts Institute of Technology.

John S. Martin, Associate Professor, Department of Physiology; Ph.D., Thomas Jefferson University.

Feroze B. Mohamed, Associate Professor (Clinician Scholar), Department of Radiology; Ph.D., Drexel University.

Marc Monestier, Professor, Department of Microbiology and Immunology; M.D., University of Lyon.

M. Alexandra Monroy, Associate Professor (Research), Department of Cardiovascular Research Center; Ph.D., Boston University School of Medicine.

Madesh Muniswamy, Assistant Professor, Department of Center for Translational Medicine; Ph.D., Wellcome Trust Research Laboratory.

John W. Muschamp, Assistant Professor, Department of Pharmacology; Ph.D., Florida State University.

Matthew O’Brien, Assistant Professor (Clinician Scholar), Department of Medicine; M.D., Brown University.
Hemant K. Parekh, Professor (Clinician Scholar), Department of Pathology and Laboratory Medicine; Ph.D., Bombay University, Cancer Research Institute.

Henry P. Parkman, Professor, Department of Medicine; M.D., Case Western Reserve University.

Vickas Patel, Associate Professor, Department of Medicine; M.D., University of Colorado.

Helen E. Pearson, Associate Professor, Department of Anatomy and Cell Biology; Ph.D., Medical College of Pennsylvania.

Yuri Persidsky, Professor, Department of Pathology and Laboratory Medicine; M.D., Kiev State Medical Institute.

Patrick J. Piggot, Professor, Department of Microbiology and Immunology; Ph.D., University of London.

Stephen H. Pilder, Associate Professor, Department of Anatomy and Cell Biology; Ph.D., Princeton University.

Richard Pomerantz, Assistant Professor, Department of Fels Institute for Cancer Research; Ph.D., State University of New York Downstate Medical Center.

Steven N. Popoff, Professor, Department of Anatomy and Cell Biology; Ph.D., Loyola University.

Raghava Potula, Assistant Professor, Department of Pathology and Laboratory Medicine; Ph.D., Jawaharlal Nehru Institute of Postgraduate Medical Education and Research.

Domenico Praticò, Professor, Department of Center for Translational Medicine; M.D., University of Roma, La Sapienza Medical School.

Xuebin Qin, Associate Professor, Department of Neuroscience; M.D., Wannan Medical College.

Joseph Rabinowitz, Assistant Professor, Department of Center for Translational Medicine; Ph.D., Case Western Reserve University.

Servio Ramirez, Associate Professor (Research), Department of Pathology and Laboratory Medicine; Ph.D., University of Rochester School of Medicine and Dentistry.

A. Koneti Rao, Professor, Department of Pathology and Laboratory Medicine; M.D.

Jay Rappaport, Professor, Department of Neuroscience; Ph.D., University of Pennsylvania.

Scott M. Rawls, Associate Professor, Department of Center for Substance Abuse Research; Ph.D., East Carolina University School of Medicine.

Fabio Recchia, Professor, Department of Cardiovascular Research Center; M.D., University of Baria.

Victor Rizzo, Professor, Department of Cardiovascular Research Center; Ph.D., University of Medicine and Dentistry of New Jersey, New Jersey Medical School.

Pamela C. Roehm, Associate Professor (Clinician Scholar), Department of Otolaryngology/Head and Neck Surgery; M.D., Johns Hopkins University School of Medicine.

Thomas J. Rogers, Professor, Department of Pharmacology; Ph.D., University of Wisconsin-Madison.

Brad S. Rothberg, Associate Professor, Department of Medical Genetics and Molecular Biochemistry; Ph.D., University of Florida.

Michael R. Ruggieri, Associate Professor, Department of Anatomy and Cell Biology; Ph.D., University of Pennsylvania.

Abdel Karim Sabri, Associate Professor, Department of Physiology; Ph.D., Rene Descartes University.

Mahmut Safak, Associate Professor, Department of Neuroscience; Ph.D., Thomas Jefferson University.

Carmen Sapienza, Professor, Department of Fels Institute for Cancer Research; Ph.D., Dalhousie University.

Ilker K. Sariyer, Assistant Professor, Department of Neuroscience; Ph.D., Temple University.

Bassel E. Sawaya, Professor, Department of Fels Institute for Cancer Research; Ph.D., Rene Descartes University.

Rosario Scalia, Professor, Department of Physiology; M.D., University of Catania.

Michael Selzer, Professor, Department of Shriners Hospitals Pediatric Research Center; M.D./Ph.D., New York University.

Scott K. Shore, Associate Professor, Department of Fels Institute for Cancer Research; Ph.D., Drexel University.

Michael A. Sirover, Professor, Department of Pharmacology; Ph.D., State University of New York Stony Brook.
Tomasz Skorski, Professor, Department of Microbiology and Immunology; M.D., Medical Academy of Warsaw.

George Smith, Professor, Department of Shriners Hospitals Pediatric Research Center; Ph.D., Case Western Reserve University.

Jonathan Soboloff, Associate Professor, Department of Medical Genetics and Molecular Biochemistry; Ph.D., University of Ottawa.

Young-Jin Son, Associate Professor, Department of Shriners Hospitals Pediatric Research Center; Ph.D., University of Texas Austin.

Dianne R. Soprano, Professor, Department of Medical Genetics and Molecular Biochemistry; Ph.D., Rutgers University.

Ronald J. Tallarida, Professor Emeritus, Department of Pharmacology.

Italo Tempera, Assistant Professor, Department of Fels Institute for Cancer Research; Ph.D., Sapienza University of Rome.

Ying Tian, Assistant Professor, Department of Pharmacology; Ph.D., Temple University.

Douglas G. Tilley, Assistant Professor, Department of Center for Translational Medicine; Ph.D., Queen's University.

Allan L. Truant, Professor, Department of Pathology and Laboratory Medicine; Ph.D., University of Oregon.

Emily Joy Tsai, Assistant Professor (Clinician Scholar), Department of Medicine; M.D., Harvard Medical School.

Alexander Y. Tsygankov, Associate Professor, Department of Microbiology and Immunology; Ph.D., Bach Institute of Biochemistry, Moscow.

Ronald F. Tuma, Professor, Department of Center for Substance Abuse Research; Ph.D., Temple University.

Çagla Tükel, Assistant Professor, Department of Microbiology and Immunology; Ph.D., Ankara University.

Ellen M. Unterwald, Professor, Department of Center for Substance Abuse Research; Ph.D., Boston University School of Medicine.

Hong Wang, Professor, Department of Center for Metabolic Disease Research; Ph.D., University of Montreal.

Sara Jane Ward, Assistant Professor (Research Center), Department of Center for Substance Abuse Research; Ph.D., Wake Forest University.

Martyn K. White, Assistant Professor (Research Center), Department of Neuroscience; Ph.D., University of Oxford.

Marla R. Wolstson, Professor, Department of Center for Inflammation, Translational and Clinical Lung Research; Ph.D., Temple University.

Weidong Xiao, Professor, Department of Microbiology and Immunology; Ph.D., University of North Carolina at Chapel Hill.

Xiao-Feng Yang, Professor, Department of Cardiovascular Research Center; Ph.D., University of Montreal.

Gil Yosipovitch, Professor, Department of Dermatology; M.D., Tel Aviv University.

M. Raza Zaidi, Assistant Professor, Department of Fels Institute for Cancer Research; Ph.D., Rutgers University, Robert Wood Johnson Medical School.

Yi Zhang, Associate Professor, Department of Fels Institute for Cancer Research; M.D.

Marvin Ziskin, Professor Emeritus, Department of Radiology; M.D.

School of Environmental Design

Kate E. Benisek, Assistant Professor (Teaching/Instructional), Department of Landscape Architecture and Horticulture; M.L.A., Cornell University.

William J. Cohen, Associate Professor (Practice), Department of Community and Regional Planning; Ph.D., University of Pennsylvania.

Jeffrey Doshna, Instructor (Teaching/Instructional), Department of Community and Regional Planning; Ph.D., Rutgers University.

Sasha Eisenman, Assistant Professor, Department of Landscape Architecture and Horticulture; Ph.D., Rutgers University.

Jeffrey P. Featherstone, Professor (Research), Department of Community and Regional Planning; Ph.D., Temple University.

Deborah Anne Howe, Professor, Department of Community and Regional Planning; Ph.D., University of Michigan.

Pauline Hurley-Kurtz, Associate Professor, Department of Landscape Architecture and Horticulture; M.L.A., University of Pennsylvania.

Robert T. Kuper, Associate Professor, Department of Landscape Architecture and Horticulture; M.L.A., Auburn University.

Baldev S. Lamba, Associate Professor, Department of Landscape Architecture and Horticulture; M.L.A., University of Pennsylvania.

Lynn A. Mandarano, Associate Professor, Department of Community and Regional Planning; Ph.D., University of Pennsylvania.
Eva Monheim, Instructor (Teaching/Instructional), Department of Landscape Architecture and Horticulture; M.A.E., Arcadia University.

Mary E. Myers, Associate Professor, Department of Landscape Architecture and Horticulture; Ph.D., Heriot-Watt University, Edinburgh College of Art.

Michael Olszewski, Associate Professor, Department of Landscape Architecture and Horticulture; Ph.D., University of Delaware.

Lolly Tai, Professor, Department of Landscape Architecture and Horticulture; Ph.D., Heriot-Watt University, Edinburgh College of Art.

School of Media and Communication

Osei Appiah, Professor, Department of Advertising; Ph.D., Stanford University.

Geoffrey Baym, Professor, Department of Media Studies and Production; Ph.D., University of Utah.

David Boardman, Professor, Department of Journalism; M.A., University of Washington.

Deborah Cai, Professor, Department of Strategic Communication; Ph.D., Michigan State University.

Guillermo G. Caliendo, Assistant Professor (Teaching/Instructional), Department of Strategic Communication; Ph.D., University of Pittsburgh.

John Edward Campbell, Assistant Professor, Department of Media Studies and Production; Ph.D., University of Pennsylvania.

Amy L. Caples, Assistant Professor (Teaching/Instructional), Department of Media Studies and Production; B.A., Temple University.

Jessica Castonguay, Assistant Professor (Teaching/Instructional), Department of Advertising; Ph.D., University of Arizona.

William B. Cook, Assistant Professor (Teaching/Instructional), Department of Advertising; M.A., Pennsylvania State University.

Brian Creech, Assistant Professor, Department of Journalism; Ph.D., University of Georgia.

Sherri Hope Culver, Associate Professor (Teaching/Instructional), Department of Media Studies and Production; M.L.A., University of Pennsylvania.

Fabienne L. Darling-Wolf, Associate Professor, Department of Journalism; Ph.D., University of Iowa.

Jason del Gandio, Assistant Professor (Teaching/Instructional), Department of Strategic Communication; Ph.D., Southern Illinois University, Carbondale.

Abbe S. Depretis, Assistant Professor (Teaching/Instructional), Department of Strategic Communication; Ph.D., University of Maryland, College Park.

Brooke E. Duffy, Assistant Professor, Department of Advertising; Ph.D., University of Pennsylvania.

Alison Ebbecke, Assistant Professor (Teaching/Instructional), Department of Strategic Communication; B.A., Temple University.

Thomas E. Eveslage, Professor, Department of Journalism.

Gregg C. Feistman, Associate Professor (Teaching/Instructional), Department of Strategic Communication; M.A., Marist College.

Jan L. Fernback, Associate Professor, Department of Media Studies and Production; Ph.D., University of Colorado.

Matthew R. Fine, Assistant Professor (Practice), Department of Media Studies and Production; M.S., Columbia University.

Edward L. Fink, Professor, Department of Strategic Communication; Ph.D., University of Wisconsin-Madison.

Jennifer Lovrinic Freeman, Assistant Professor (Teaching/Instructional), Department of Advertising; B.S., Northwestern University.

Joseph Glennon, Assistant Professor (Teaching/Instructional), Department of Advertising; B.A., University of Massachusetts.

Paul Gluck, Associate Professor (Practice), Department of Media Studies and Production; B.A., Temple University.

Scott Gratson, Associate Professor (Teaching/Instructional), Department of Communication Studies; Ph.D., University of Denver.

Bruce W. Hardy, Assistant Professor, Department of Strategic Communication; Ph.D., University of Pennsylvania.

Christopher Harper, Professor, Department of Journalism; M.J., Northwestern University.

Stacey J. Harpster, Assistant Professor (Teaching/Instructional), Department of Advertising; M.B.A., Temple University.

R. Lance Holbert, Professor, Department of Strategic Communication; Ph.D., University of Wisconsin-Madison.

Thomas L. Jacobson, Professor, Department of Media Studies and Production; Ph.D., University of Washington.

Peter Jaroff, Assistant Professor (Practice), Department of Media Studies and Production; B.A., Grinnell College.
Tricia S. Jones, Professor, Department of Strategic Communication; Ph.D., Ohio State University.

Sheryl D. Kantrowitz, Assistant Professor (Teaching/Instructional), Department of Advertising; BFA, Syracuse University.

Carolyn L. Kitch, Professor, Department of Journalism; Ph.D., Temple University.

John S. Klotz, Associate Professor (Practice), Department of Media Studies and Production; M.S., Rosemont College.

Lauren Kogen, Assistant Professor, Department of Media Studies and Production; Ph.D., University of Pennsylvania.

Magdalena Konieczna, Assistant Professor, Department of Journalism; Ph.D., University of Wisconsin-Madison.

Heather LaMarre, Assistant Professor, Department of Strategic Communication; Ph.D., Ohio State University.

John A. Lent, Professor Emeritus, Department of Media Studies and Production; Ph.D., University of Iowa.

Tony C. Liao, Assistant Professor, Department of Media Studies and Production; Ph.D., Cornell University.

Matthew Lombard, Associate Professor, Department of Media Studies and Production; Ph.D., Stanford University.

Michael L. Maynard, Associate Professor, Department of Advertising; Ph.D., Rutgers University.

George W. Miller III, Associate Professor (Practice), Department of Journalism; M.J., Columbia University.

Logan K. Molyneux, Assistant Professor, Department of Journalism; Ph.D., University of Texas-Austin.

Bryan Monroe, Professor, Department of Media Studies and Production.

William J. Mooney, Assistant Professor (Practice), Department of Media Studies and Production; B.A., Goddard College.

Nancy E. Morris, Professor, Department of Media Studies and Production; Ph.D., University of Pennsylvania.

Katherine A. Mueller, Assistant Professor (Teaching/Instructional), Department of Advertising; B.F.A., Moore College of Art and Design.

Patrick D. Murphy, Associate Professor, Department of Media Studies and Production; Ph.D., Ohio University.

Howard A. Myrick, Professor, Department of Media Studies and Production; Ph.D., University of Southern California.

Maida Odom, Assistant Professor (Teaching/Instructional), Department of Journalism; M.L.A., University of Pennsylvania.

Wazhmah Osman, Assistant Professor, Department of Media Studies and Production; Ph.D., New York University.

Donnalyn Pompper, Associate Professor, Department of Strategic Communication; Ph.D., Temple University.

Hector Postigo, Associate Professor, Department of Media Studies and Production; Ph.D., Rensselaer Polytechnic Institute.

Cornelius B. Pratt, Professor, Department of Strategic Communication; Ph.D., University of Minnesota.

Dana K. Saewitz, Associate Professor (Teaching/Instructional), Department of Advertising; M.L.A., University of Pennsylvania.

Adrienne Shaw, Assistant Professor, Department of Media Studies and Production; Ph.D., University of Pennsylvania.

Larry Stains, Associate Professor (Teaching/Instructional), Department of Journalism; M.J., Columbia University.

Lori L. Tharps, Assistant Professor, Department of Journalism; M.S., Columbia University.

Edward J. Trayes, Professor, Department of Journalism; Ph.D., University of Iowa.

Karen M. Turner, Associate Professor, Department of Journalism; J.D., Northwestern University School of Law.

Elizabeth Leebron Tutelman, Professor, Department of Media Studies and Production; Ph.D., Northwestern University.

Barry Vacker, Associate Professor (Teaching/Instructional), Department of Media Studies and Production; Ph.D., University of Texas at Austin.

Francesca A. Viola, Assistant Professor (Teaching/Instructional), Department of Journalism; J.D., Widener University.

Linn Washington, Associate Professor, Department of Journalism; M.A., Yale Law School.

Kristine Trever Weatherston, Assistant Professor (Teaching/Instructional), Department of Media Studies and Production; Ph.D., Virginia Commonwealth University.
Tracey Weiss, Assistant Professor (Teaching/Instructional), Department of Strategic Communication; Ph.D., Temple University.

Thomas Wright, Assistant Professor (Teaching/Instructional), Department of Strategic Communication; Ph.D., Purdue University.

Soo Min Yu, Assistant Professor, Department of Journalism; Ph.D., Simon Fraser University.

Laura Zaylea, Assistant Professor (Teaching/Instructional), Department of Media Studies and Production; M.F.A., San Francisco Art Institute.

School of Pharmacy

Magid Abou-Gharbia, Professor, Department of Pharmaceutical Sciences; Ph.D., University of Pennsylvania.

Benjamin E. Blass, Assistant Professor (Research), Department of Pharmaceutical Sciences; Ph.D., University of Rochester.

Michael R. Borenstein, Associate Professor, Department of Pharmaceutical Sciences; Ph.D., Temple University.

Daniel J. Canney, Associate Professor, Department of Pharmaceutical Sciences; Ph.D., Temple University.

Wayne E. Childers, Associate Professor, Department of Pharmaceutical Sciences; Ph.D., University of Georgia.

Jon H. Condra, Associate Professor, Department of Pharmaceutical Sciences; Ph.D., University of California Riverside.

A. Reza Fassihi, Professor, Department of Pharmaceutical Sciences; Ph.D., Brighton University.

Marc A. Ilies, Assistant Professor, Department of Pharmaceutical Sciences; Ph.D., University of Bucharest.

Marlene A. Jacobson, Associate Professor, Department of Pharmaceutical Sciences; Ph.D., University of Delaware.

Kenneth R. Korzekwa, Associate Professor, Department of Pharmaceutical Sciences; Ph.D., University of Washington.

Evgeny Krynetskiy, Associate Professor, Department of Pharmaceutical Sciences; Ph.D., Moscow State University.

David B. Lebo, Associate Professor (Teaching/Instructional), Department of Pharmaceutical Sciences; Ph.D.

Salim Merali, Associate Professor, Department of Pharmaceutical Sciences; Ph.D., City University of New York.

Swati V. Nagar, Associate Professor, Department of Pharmaceutical Sciences; Ph.D., University of Minnesota.

Robert B. Raffa, Professor, Department of Pharmaceutical Sciences; Ph.D., Temple University.

Ellen A. Walker, Professor, Department of Pharmaceutical Sciences; Ph.D., University of Michigan.

Albert I. Wertheimer, Professor, Department of Pharmacy Practice; Ph.D.

Ho-Lun Wong, Assistant Professor, Department of Pharmaceutical Sciences; Ph.D., University of Toronto.

School of Theater, Film and Media Arts

Nora Alter, Professor, Department of Film and Media Arts; Ph.D., University of Pennsylvania.

Maggie Anderson, Assistant Professor (Teaching/Instructional), Department of Theater; M.F.A., University of Cincinnati College-Conservatory of Music.

Allan S. Barber, Assistant Professor, Department of Film and Media Arts; M.F.A., Temple University.

Warren F. Bass, Professor, Department of Film and Media Arts; M.F.A.

Nancy Boykin, Assistant Professor (Teaching/Instructional), Department of Theater; M.F.A., University of North Carolina at Chapel Hill.

Chris Cagle, Assistant Professor, Department of Film and Media Arts; Ph.D., Brown University.

Marie Anne Chiment, Professor, Department of Theater; M.F.A., New York University Tisch School of the Arts.

Roderick L. Coover, Associate Professor, Department of Film and Media Arts; Ph.D., University of Chicago.

Peter P. d'Agostino, Professor, Department of Film and Media Arts; M.A.

Sarah Drury, Associate Professor, Department of Film and Media Arts; M.A.

Fred Duer, Associate Professor, Department of Theater; M.F.A., Ohio University.

LeAnn Erickson, Associate Professor, Department of Film and Media Arts; M.F.A.
Robert Hedley, Professor, Department of Theater; M.F.A.

David Ingram, Associate Professor (Practice), Department of Theater; M.F.A.

Lynne Innerst, Associate Professor, Department of Theater; M.F.A., University of Southern California.

Melanie Julian, Assistant Professor (Practice), Department of Theater; M.F.A., Point Park University.

Michael J. Kuetemeyer, Assistant Professor, Department of Film and Media Arts; M.F.A., Temple University.

Andrew Laine, Assistant Professor (Practice), Department of Theater; M.F.A., University of Texas at Austin.

Deirdre S. Maire, Assistant Professor, Department of Film and Media Arts; M.F.A., Temple University.

Matthew Miller, Assistant Professor (Practice), Department of Theater; M.F.A., University of North Carolina at Chapel Hill.

Moon Molson, Assistant Professor (Teaching/Instructional), Department of Film and Media Arts; M.F.A., Columbia University.

Katherine J. Nigh, Assistant Professor (Practice), Department of Theater; Ph.D.

Mary Catherine Pancake, Assistant Professor, Department of Film and Media Arts; M.F.A., School of the Art Institute of Chicago.

David A. Parry, Professor, Department of Film and Media Arts; M.S.

Eran Preis, Associate Professor, Department of Film and Media Arts; M.A., Ohio University.

Peter R. Reynolds, Associate Professor (Practice), Department of Theater; M.F.A.

Lee Richardson, Associate Professor (Practice), Department of Theater; M.F.A., Rutgers University.

Jeffrey S. Rush, Associate Professor, Department of Film and Media Arts; M.F.A., American Film Institute.

Michael P. Ryan, Professor, Department of Film and Media Arts; Ph.D., University of Iowa.

Donna Snow, Associate Professor, Department of Theater; M.F.A., American Conservatory Theater.

Edward Sobel, Assistant Professor, Department of Theater; M.F.A., Northwestern University.

Elisabeth Subrin, Assistant Professor, Department of Film and Media Arts; M.F.A., School of the Art Institute of Chicago.

Paul Swann, Professor, Department of Film and Media Arts; Ph.D.

Rea Tajiri, Assistant Professor, Department of Film and Media Arts; M.F.A., California Institute of the Arts.

Douglas C. Wager, Professor, Department of Theater; M.F.A.

Kimmika Williams-Witherspoon, Associate Professor, Department of Theater; Ph.D., Temple University.

Lauren Wolkstein, Assistant Professor, Department of Film and Media Arts; M.F.A., Columbia University.

School of Tourism and Hospitality Management

Benjamin Altschuler, Assistant Professor (Teaching/Instructional), Department of Tourism and Hospitality Management; Ph.D., University of Utah.

Elizabeth H. Barber, Associate Professor, Department of Sport Management and Leisure Studies; Ph.D., University of Iowa.

Debra K. Blair, Associate Professor (Teaching/Instructional), Department of Sport Management and Leisure Studies; Ed.D., Temple University.

Joris Drayer, Associate Professor, Department of Sport Management and Leisure Studies; Ph.D., University of Northern Colorado.

Daniel C. Funk, Professor, Department of Sport Management and Leisure Studies; Ph.D., Ohio State University.

Michael W. Jackson, Professor, Department of Sport Management and Leisure Studies; H.S.D., Indiana University.

Jeremy S. Jordan, Associate Professor, Department of Sport Management and Leisure Studies; Ph.D., Ohio State University.

R. Aubrey Kent, Professor, Department of Sport Management and Leisure Studies; Ph.D., Ohio State University.

Ceridwyn Ann King, Associate Professor, Department of Tourism and Hospitality Management; Ph.D., Griffith University.

Thilo Kunkel, Assistant Professor, Department of Sport Management and Leisure Studies; Ph.D., Griffith University.
Christopher Lee, Assistant Professor, Department of Sport Management and Leisure Studies; Ph.D., University of Oregon.

Xiang Li, Professor, Department of Tourism and Hospitality Management; Ph.D., Texas A and M University.

Joseph E. Mahan III, Associate Professor (Teaching/Instructional), Department of Sport Management and Leisure Studies; Ph.D., University of Maryland College Park.

Chihyung Michael Ok, Associate Professor, Department of Tourism and Hospitality Management; Ph.D., Kansas State University.

Richard Ridall, Assistant Professor (Teaching/Instructional), Department of Sport Management and Leisure Studies; M.Ed., Temple University.

Wesley S. Roehl, Professor, Department of Tourism and Hospitality Management; Ph.D., Texas A and M University.

Ira L. Rosen, Assistant Professor (Practice), Department of Tourism and Hospitality Management; M.A., Montclair State University.

Michael F. Sheridan, Assistant Professor (Practice), Department of Tourism and Hospitality Management; M.T.H.M., Temple University.

Wesley S. Roehl, Professor, Department of Tourism and Hospitality Management; Ph.D., Temple University.

Ira L. Rosen, Assistant Professor (Practice), Department of Tourism and Hospitality Management; M.A., Temple University.

Luorong Wu, Assistant Professor, Department of Tourism and Hospitality Management; Ph.D., Pennsylvania State University.

Yang Yang, Assistant Professor, Department of Tourism and Hospitality Management; Ph.D., University of Florida.

**Tyler School of Art**

Stephen M. Anderson, Assistant Professor (Teaching/Instructional), Department of Architecture; M.Arch., University of Pennsylvania.

Steven Berkowitz, Associate Professor, Department of Graphic Arts and Design; M.F.A., Temple University.

Philip P. Betancourt, Professor, Department of Art History; Ph.D., University of Pennsylvania.

Elizabeth S. Bolman, Professor, Department of Art History; Ph.D., Bryn Mawr College.

Gerard F. Brown, Assistant Professor, Department of Foundations; M.A., School of the Art Institute of Chicago.

Tracy E. Cooper, Professor, Department of Art History; Ph.D., Princeton University.

Chad D. Curtis, Associate Professor, Department of Crafts; M.F.A., Alfred University, New York State College of Ceramics.

Daniel V. Cutrone, Assistant Professor (Teaching/Instructional), Department of Crafts; M.F.A., Temple University.

Therese A. Dolan, Professor, Department of Art History; Ph.D., Bryn Mawr College.

Alice E. Drueding, Professor, Department of Graphic Arts and Design; B.F.A., Temple University.

Amze J. Emmons, Associate Professor, Department of Graphic Arts and Design; M.F.A., University of Washington.

Seher Erdogan Ford, Assistant Professor, Department of Architecture; M.Arch., Yale University.

Jane DeRose Evans, Professor, Department of Art History; Ph.D., University of Pennsylvania.

Clifton R. Fordham, Assistant Professor, Department of Architecture; M.Arch., Yale University.

Samuel C. Fritch, Assistant Professor (Teaching/Instructional), Department of Foundations; M.F.A., Temple University.

Philip Glahn, Associate Professor, Department of Painting, Drawing and Sculpture; Ph.D., City University of New York.

Abby Ryan Guido, Assistant Professor (Teaching/Instructional), Department of Graphic Arts and Design; B.F.A., Temple University.

Marcia B. Hall, Professor, Department of Art History; Ph.D., Harvard University.

Sally W. Harrison, Associate Professor, Department of Architecture; M.Arch., Massachusetts Institute of Technology.

Jesse Harrod, Assistant Professor, Department of Crafts; M.F.A., School of the Art Institute of Chicago.

Kelly A. Holohan, Associate Professor, Department of Graphic Arts and Design; M.F.A., Temple University.

Marilyn M. Holsing, Professor, Department of Painting, Drawing and Sculpture; M.A., University of New Mexico.
Richard D. Hricko, Professor, Department of Graphic Arts and Design; M.F.A., University of Iowa.

Alicia Imperiale, Assistant Professor, Department of Architecture; M.A., Princeton University.

Simona M. Jovan-Barkley, Assistant Professor (Teaching/Instructional), Department of Foundations; M.F.A., Pennsylvania Academy of the Fine Arts.

Lisa Kay, Assistant Professor, Department of Art Education and Community Arts; Ed.D., Northern Illinois University.

Nichola Kinch, Assistant Professor, Department of Foundations; M.F.A., Temple University.

Jonathan Dunlap Kline, Assistant Professor (Teaching/Instructional), Department of Art History; Ph.D., Temple University.

Stephanie A. Knopp, Professor, Department of Graphic Arts and Design; M.F.A., Pennsylvania State University.

Nicholas W. Kripal, Professor, Department of Crafts; M.F.A., Southern Illinois University.

Scott R. Laserow, Professor, Department of Graphic Arts and Design; B.F.A., Temple University.

Stanley Lechtzin, Professor, Department of Crafts; M.F.A., Cranbook Academy of Art.

Dermot MacCormack, Associate Professor, Department of Graphic Arts and Design; B.F.A., National College of Art and Design, Dublin.

Martha Madigan, Professor, Department of Graphic Arts and Design; M.F.A., School of the Art Institute of Chicago.

Margo S. Margolis, Professor, Department of Painting, Drawing and Sculpture; M.F.A., Indiana University.

Timothy E. McDonald, Associate Professor (Teaching/Instructional), Department of Architecture; M.Arch., McGill University.

Rebecca Michaels, Associate Professor (Teaching/Instructional), Department of Graphic Arts and Design; M.F.A., Temple University.

Leah Modigliani, Assistant Professor, Department of Foundations; Ph.D., Stony Brook University.

Jo-Anna J. Moore, Associate Professor Emeritus, Department of Art Education and Community Arts; Ed. D., Harvard University.

Susan M. Moore, Professor, Department of Painting, Drawing and Sculpture; M.F.A., University of California Davis.

Keith Morrison, Professor, Department of Painting, Drawing and Sculpture; M.F.A., School of the Art Institute of Chicago.

Adele Nelson, Assistant Professor, Department of Art History; Ph.D., New York University.

Dona R. Nelson, Professor, Department of Painting, Drawing and Sculpture; B.F.A., Ohio State University.

Rashna Ng, Associate Professor, Department of Architecture; M.Arch., University of Pennsylvania.

Sharyn A. O'Mara, Associate Professor, Department of Crafts; M.F.A., Rhode Island School of Design.

Odili Donald Odita, Associate Professor, Department of Painting, Drawing and Sculpture; M.F.A., Bennington College.

Karyn Olivier, Associate Professor, Department of Painting, Drawing and Sculpture; M.F.A., Cranbook Academy of Art.

Eric Oskey, Assistant Professor (Teaching/Instructional), Department of Architecture; M.Arch., Cornell University.

Pepón Osorio, Professor, Department of Art Education and Community Arts; M.A., Columbia University.

Wendy B. Osterweil, Associate Professor (Teaching/Instructional), Department of Art Education and Community Arts; M.F.A., University of Wisconsin.

Lisi Raskin, Associate Professor, Department of Painting, Drawing and Sculpture; M.F.A., Columbia University.

Vojislav Ristic, Assistant Professor (Teaching/Instructional), Department of Architecture; Dipl.Ing.Arch., Belgrade University.

Bryan Martin Satalino, Assistant Professor (Teaching/Instructional), Department of Graphic Arts and Design; M.F.A., Temple University.

Joseph S. Scorsone, Professor Emeritus, Department of Graphic Arts and Design.

Vickie L. Sedman, Professor, Department of Crafts; M.F.A., University of Wisconsin-Madison.

Mark Shaver, Assistant Professor (Teaching/Instructional), Department of Foundations; M.F.A., University of Georgia.

Paul E. Sheriff, Professor, Department of Graphic Arts and Design; B.F.A., Temple University.

Mark Shetabi, Associate Professor, Department of Painting, Drawing and Sculpture; M.F.A., Pennsylvania Academy of the Fine Arts.
Robert Z. Shuman Jr., Associate Professor, Department of Architecture; B.Arch., Temple University.

Gerald D. Silk, Professor, Department of Art History; Ph.D., University of Virginia.

Samantha Simpson, Associate Professor, Department of Foundations; M.F.A., San Francisco Art Institute.

Hester Stinnett, Professor, Department of Graphic Arts and Design; M.F.A., Temple University.

Kim D. Strommen, Professor, Department of Graphic Arts and Design; M.F.A., Washington University.

Jude E. Tallichet, Professor, Department of Painting, Drawing and Sculpture; M.F.A., University of Montana.

Christian Tomaszewski, Assistant Professor (Teaching/Instructional), Department of Painting, Drawing and Sculpture; M.F.A., Academy of Fine Arts in Poznan, Poland.

Ashley West, Assistant Professor, Department of Art History; Ph.D., University of Pennsylvania.

M. Katherine Wingert-Playdon, Professor, Department of Architecture; M.S., Pennsylvania State University.

Andrew Wit, Assistant Professor, Department of Architecture; M.Arch., Massachusetts Institute of Technology.

Byron Wolfe, Associate Professor, Department of Graphic Arts and Design; M.F.A., Arizona State University.

William Yalowitz, Associate Professor, Department of Art Education and Community Arts; Ed.D., Temple University.
# Index

## A

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>About Temple University</td>
<td>17</td>
</tr>
<tr>
<td>About This Bulletin (Undergraduate)</td>
<td>14</td>
</tr>
<tr>
<td>Academic Calendar (Undergraduate)</td>
<td>15</td>
</tr>
<tr>
<td>Academic Course Load</td>
<td>82</td>
</tr>
<tr>
<td>Academic Forgiveness</td>
<td>82</td>
</tr>
<tr>
<td>Academic Opportunities</td>
<td>42</td>
</tr>
<tr>
<td>Academic Policies (Undergraduate)</td>
<td>81</td>
</tr>
<tr>
<td>Academic Programs</td>
<td>142</td>
</tr>
<tr>
<td>Academic Programs</td>
<td>2047</td>
</tr>
<tr>
<td>Academic Progress for Undergraduate Courses</td>
<td>83</td>
</tr>
<tr>
<td>Academic Residency Requirements</td>
<td>83</td>
</tr>
<tr>
<td>Academic Rights and Responsibilities</td>
<td>83</td>
</tr>
<tr>
<td>Academic Standing</td>
<td>83</td>
</tr>
<tr>
<td>Academic Support</td>
<td>61</td>
</tr>
<tr>
<td>Accelerated Degree Programs</td>
<td>53</td>
</tr>
<tr>
<td>Accelerated Programs</td>
<td>1030</td>
</tr>
<tr>
<td>Accounting</td>
<td>588</td>
</tr>
<tr>
<td>Accounting (ACCT)</td>
<td>1232</td>
</tr>
<tr>
<td>Accounting Minor</td>
<td>570</td>
</tr>
<tr>
<td>Actuarial Science</td>
<td>591</td>
</tr>
<tr>
<td>Actuarial Science (AS)</td>
<td>1237</td>
</tr>
<tr>
<td>Adult &amp; Organizational Development</td>
<td>407</td>
</tr>
<tr>
<td>Adult &amp; Organizational Development (AOD)</td>
<td>1239</td>
</tr>
<tr>
<td>Advertising</td>
<td>941</td>
</tr>
<tr>
<td>Advertising (ADV)</td>
<td>1242</td>
</tr>
<tr>
<td>Aerospace Studies - AF ROTC (AIRF)</td>
<td>1249</td>
</tr>
<tr>
<td>African American Studies</td>
<td>774</td>
</tr>
<tr>
<td>African American Studies (AAS)</td>
<td>1250</td>
</tr>
<tr>
<td>All Business Minors &amp; Certificates</td>
<td>569</td>
</tr>
<tr>
<td>Ambler Campus</td>
<td>105</td>
</tr>
<tr>
<td>American Sign Language Certificate</td>
<td>697</td>
</tr>
<tr>
<td>American Studies</td>
<td>778</td>
</tr>
<tr>
<td>American Studies (AMST)</td>
<td>1256</td>
</tr>
<tr>
<td>Analytical Reading &amp; Writing (GW)</td>
<td>149</td>
</tr>
<tr>
<td>Anthropology</td>
<td>784</td>
</tr>
<tr>
<td>Anthropology (ANTH)</td>
<td>1266</td>
</tr>
<tr>
<td>Applied Behavior Analysis (ABA)</td>
<td>1283</td>
</tr>
<tr>
<td>Applied Mathematics, B.S.</td>
<td>1135</td>
</tr>
<tr>
<td>Arabic</td>
<td>795</td>
</tr>
<tr>
<td>Arabic (ARBC)</td>
<td>1283</td>
</tr>
<tr>
<td>Architecture</td>
<td>201</td>
</tr>
<tr>
<td>Architecture (ARCH)</td>
<td>1285</td>
</tr>
<tr>
<td>Art</td>
<td>212</td>
</tr>
<tr>
<td>Art (ARTU)</td>
<td>1296</td>
</tr>
<tr>
<td>Art Education &amp; Community Arts Practices</td>
<td>215</td>
</tr>
<tr>
<td>Art Education (ARTE)</td>
<td>1302</td>
</tr>
<tr>
<td>Art History</td>
<td>219</td>
</tr>
<tr>
<td>Art History (ARTH)</td>
<td>1304</td>
</tr>
<tr>
<td>Art History Minor</td>
<td>220</td>
</tr>
<tr>
<td>Art Minor</td>
<td>212</td>
</tr>
<tr>
<td>Arts (GA)</td>
<td>149</td>
</tr>
<tr>
<td>Asian &amp; Middle Eastern Languages &amp; Studies</td>
<td>796</td>
</tr>
<tr>
<td>Asian Studies</td>
<td>796</td>
</tr>
<tr>
<td>Asian Studies (ASST)</td>
<td>1314</td>
</tr>
<tr>
<td>Assessment of Student Learning</td>
<td>87</td>
</tr>
<tr>
<td>Associate in Arts in General Program</td>
<td>165</td>
</tr>
<tr>
<td>Associate in Science in Horticulture</td>
<td>677</td>
</tr>
<tr>
<td>Athletic Policies</td>
<td>88</td>
</tr>
<tr>
<td>Attendance</td>
<td>88</td>
</tr>
<tr>
<td>Audit</td>
<td>88</td>
</tr>
</tbody>
</table>

## B

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>B.F.A. Foundation Program</td>
<td>225</td>
</tr>
<tr>
<td>Bachelor of Arts in Adult &amp; Organizational Development</td>
<td>407</td>
</tr>
<tr>
<td>Bachelor of Arts in Advertising: Account Management Concentration</td>
<td>941</td>
</tr>
<tr>
<td>Bachelor of Arts in Advertising: Art Direction Concentration</td>
<td>944</td>
</tr>
<tr>
<td>Bachelor of Arts in Advertising: Copywriting Concentration</td>
<td>947</td>
</tr>
<tr>
<td>Bachelor of Arts in Advertising: Media Planning Concentration</td>
<td>950</td>
</tr>
<tr>
<td>Bachelor of Arts in Advertising: Research &amp; Strategy Concentration</td>
<td>953</td>
</tr>
<tr>
<td>Bachelor of Arts in African American Studies</td>
<td>775</td>
</tr>
<tr>
<td>Bachelor of Arts in American Studies</td>
<td>779</td>
</tr>
<tr>
<td>Bachelor of Arts in Anthropology</td>
<td>784</td>
</tr>
<tr>
<td>Bachelor of Arts in Anthropology: Human Biology Concentration</td>
<td>788</td>
</tr>
<tr>
<td>Bachelor of Arts in Anthropology: Visual Anthropology Track</td>
<td>791</td>
</tr>
<tr>
<td>Bachelor of Arts in Art History</td>
<td>220</td>
</tr>
<tr>
<td>Bachelor of Arts in Art, Digital Media Concentration</td>
<td>213</td>
</tr>
<tr>
<td>Bachelor of Arts in Asian Studies</td>
<td>797</td>
</tr>
<tr>
<td>Bachelor of Arts in Classics with a Concentration in Classical Civilizations</td>
<td>804</td>
</tr>
<tr>
<td>Bachelor of Arts in Classics with a Concentration in Classical Languages and Literature</td>
<td>807</td>
</tr>
<tr>
<td>Bachelor of Arts in Communication Studies: Communication and Entrepreneurship Track</td>
<td>960</td>
</tr>
</tbody>
</table>
Bachelor of Arts in Communication Studies: Contemporary Media Environments Track ........................................... 963
Bachelor of Arts in Communication Studies: Global Civil Society Track ........................................... 966
Bachelor of Arts in Communication Studies: Major of Distinction (Thesis Track) .................................... 957
Bachelor of Arts in Communication Studies: Policy, Regulation and Advocacy Track .............................. 969
Bachelor of Arts in Criminal Justice ........................................ 812
Bachelor of Arts in Economics ........................................ 815
Bachelor of Arts in English ........................................... 822
Bachelor of Arts in English with a Concentration in Creative Writing .................................................... 825
Bachelor of Arts in Environmental Studies ........................................... 830
Bachelor of Arts in Film and Media Arts ...................................... 349
Bachelor of Arts in Film and Media Arts: Concentration in Cinematography ........................................... 352
Bachelor of Arts in Film and Media Arts: Concentration in Post Production ........................................... 355
Bachelor of Arts in Film and Media Arts: Concentration in Producing ........................................... 357
Bachelor of Arts in Film and Media Arts: Concentration in Screen Studies ........................................... 360
Bachelor of Arts in French ........................................... 836
Bachelor of Arts in General Program ...................................... 166
Bachelor of Arts in Geography and Urban Studies ........................................... 841
Bachelor of Arts in German ........................................... 846
Bachelor of Arts in Global Studies ...................................... 849
Bachelor of Arts in History ........................................... 860
Bachelor of Arts in International Affairs ...................................... 168
Bachelor of Arts in Italian ........................................... 864
Bachelor of Arts in Japanese ........................................... 171
Bachelor of Arts in Jewish Studies ........................................... 869
Bachelor of Arts in Journalism ........................................... 978
Bachelor of Arts in Latin American Studies ...................................... 874
Bachelor of Arts in Liberal Studies ...................................... 878
Bachelor of Arts in Linguistics ........................................... 698
Bachelor of Arts in Mathematical Economics ...................................... 818
Bachelor of Arts in Media Studies and Production: Emergent Media Track ........................................... 981
Bachelor of Arts in Media Studies and Production: Media Analysis Track ........................................... 985
Bachelor of Arts in Media Studies and Production: Media Business and Entrepreneurship Track ...................................... 988
Bachelor of Arts in Media Studies and Production: Media Production Track ........................................... 992
Bachelor of Arts in Philosophy ........................................... 888
Bachelor of Arts in Political Science ...................................... 895
Bachelor of Arts in Psychological Studies ...................................... 173
Bachelor of Arts in Psychology ...................................... 899
Bachelor of Arts in Religion ........................................... 907
Bachelor of Arts in Sociology ........................................... 911
Bachelor of Arts in Sociology: Health Track ...................................... 913
Bachelor of Arts in Spanish: Language & Professional Studies Option 922
Bachelor of Arts in Spanish: Language, Literature, Linguistics Option ...................................... 920
Bachelor of Arts in Spanish: Spanish for Education Option ...................................... 924
Bachelor of Arts in Speech, Language & Hearing Science ...................................... 700
Bachelor of Arts in Strategic Communication ...................................... 996
Bachelor of Arts in Strategic Communication: Concentration in Organizational Leadership ...................................... 998
Bachelor of Arts in Strategic Communication: Concentration in Public Relations ...................................... 1000
Bachelor of Arts in Strategic Communication: Concentration in Rhetoric & Public Advocacy ...................................... 1003
Bachelor of Arts in Theater ........................................... 376
Bachelor of Arts in Women's Studies ...................................... 930
Bachelor of Fine Arts .................................................. 224
Bachelor of Fine Arts .................................................. 226
Bachelor of Fine Arts with Art Education Concentration .................................................. 228
Bachelor of Fine Arts in Ceramics .................................................. 231
Bachelor of Fine Arts in Dance .................................................. 293
Bachelor of Fine Arts in Fibers & Material Studies .................................................. 234
Bachelor of Fine Arts in Film and Media Arts: Concentration in Directing .................................................. 363
Bachelor of Fine Arts in Film and Media Arts: Concentration in Media Arts .................................................. 367
Bachelor of Fine Arts in Film and Media Arts: Concentration in Screenwriting .................................................. 370
Bachelor of Fine Arts in Glass .................................................. 237
Bachelor of Fine Arts in Graphic & Interactive Design .................................................. 243
Bachelor of Fine Arts in Painting .................................................. 254
Bachelor of Fine Arts in Photography .................................................. 248
Bachelor of Fine Arts in Printmaking .................................................. 250
Bachelor of Fine Arts in Sculpture .................................................. 257
Bachelor of Fine of Arts in Metals/Jewelry/CAD-CAM .................................................. 240
Bachelor of Music in Composition .................................................. 330
Bachelor of Music in Jazz Studies/Composition .................................................. 332
Bachelor of Music in Jazz Studies/Performance, Instrumental Concentration .................................................. 298
Bachelor of Music in Jazz Studies/Performance, Jazz Voice Concentration .................................................. 340
Bachelor of Music in Music Education .................................................. 310
Bachelor of Music in Music Education/Jazz .................................................. 316
Bachelor of Music in Music History .......................................................... 334
Bachelor of Music in Music Therapy .......................................................... 324
Bachelor of Music in Music Therapy/Jazz .................................................... 327
Bachelor of Music in Performance, Classical Guitar Concentration .......... 299
Bachelor of Music in Performance, Harpsichord Concentration ............... 304
Bachelor of Music in Performance, Instrumental Concentration .............. 301
Bachelor of Music in Performance, Piano Concentration ......................... 306
Bachelor of Music in Performance, Voice Concentration ......................... 342
Bachelor of Music in Piano Pedagogy ....................................................... 307
Bachelor of Music in Theory ...................................................................... 336
Bachelor of Science in Architectural Preservation .................................... 203
Bachelor of Science in Architecture .......................................................... 206
Bachelor of Science in Athletic Training .................................................... 709
Bachelor of Science in Civil Engineering ................................................... 475
Bachelor of Science in Civil Engineering - Environmental Engineering Concentration .............................................................. 479
Bachelor of Science in Civil Engineering - Environmental Engineering Concentration with Co-op ................................................................. 482
Bachelor of Science in Civil Engineering with Co-op ............................... 486
Bachelor of Science in Community Development ...................................... 667
Bachelor of Science in Education in Art Education .................................... 216
Bachelor of Science in Education in Early Childhood-Elementary Education (PreK-4) ............................................................ 420
Bachelor of Science in Education in Early Childhood-Elementary Education (PreK-4): Special Education ................................................. 422
Bachelor of Science in Electrical Engineering .......................................... 502
Bachelor of Science in Electrical Engineering - Bioelectrical Engineering Concentration .............................................................. 506
Bachelor of Science in Electrical Engineering - Bioelectrical Engineering Concentration with Co-op ................................................................. 510
Bachelor of Science in Electrical Engineering - Computer Engineering Concentration .............................................................. 514
Bachelor of Science in Electrical Engineering - Computer Engineering Concentration with Co-op ................................................................. 518
Bachelor of Science in Electrical Engineering with Co-op .......................... 522
Bachelor of Science in Engineering Technology ....................................... 533
Bachelor of Science in Engineering Technology in Construction Management Technology .............................................................. 494
Bachelor of Science in Engineering Technology in Construction Management Technology with Co-op ................................................................. 497
Bachelor of Science in Engineering Technology with Co-op ............... 536
Bachelor of Science in Environmental Engineering .................................... 489
Bachelor of Science in Facilities Management ........................................... 209
Bachelor of Science in Horticulture ............................................................ 674
Bachelor of Science in Human Development and Community Engagement .............................................................. 424
Bachelor of Science in International Business Studies .................................. 175
Bachelor of Science in Kinesiology: Exercise & Sport Science Concentration .............................................................. 712
Bachelor of Science in Kinesiology: Physical & Health Education Teacher Education Concentration .............................................................. 714
Bachelor of Science in Kinesiology: Pre-Health Professions Concentration .............................................................. 717
Bachelor of Science in Kinesiology: Pre-Health Professions Concentration 3+3 Program .............................................................. 720
Bachelor of Science in Landscape Architecture ........................................... 679
Bachelor of Science in Mechanical Engineering ....................................... 540
Bachelor of Science in Mechanical Engineering - Biomechanics Concentration .............................................................. 543
Bachelor of Science in Mechanical Engineering - Biomechanics Concentration with Co-op .............................................................. 546
Bachelor of Science in Mechanical Engineering with Co-op ...................... 549
Bachelor of Science in Music ................................................................. 338
Bachelor of Science in Neuroscience: Systems, Behavior & Plasticity .883
Bachelor of Science in Nursing (B.S.N.) .................................................. 725
Bachelor of Science in Nursing (B.S.N.): Registered Nurse Option ....... 727
Bachelor of Science in Public Health .......................................................... 734
Bachelor of Science in Sport & Recreation Management ........................ 1208
Bachelor of Science in Therapeutic Recreation ........................................ 729
Bachelor of Science in Tourism & Hospitality Management .................. 1211
Bachelor of Social Work (B.S.W.) ............................................................. 743
Biochemistry, B.S. .................................................................................. 1082
Biochemistry, B.S. .................................................................................. 1082
Bioengineering ...................................................................................... 470
Bioengineering (BIOE) ........................................................................... 1324
Biology .................................................................................. 1058
Biology (BIOL) ................................................................................... 1332
Biology with Teaching, B.S. .............................................................. 1162
Biology with Teaching, B.S. .............................................................. 1162
Biology, B.A. .................................................................................. 1059
Biology, B.A./M.Ed. .............................................................................. 1030
Biology, B.A./M.Ed. .............................................................................. 1030
Biology, B.S. .................................................................................. 1063
Biology, B.S./M.Ed. ............................................................................ 1031
Biology, B.S./M.Ed. ............................................................................ 1031
Biological, Minor .................................................................................. 1067
Biophysics, B.S. .................................................................................. 1147
Biophysics, B.S. .................................................................................. 1147
Botany (BOT) ................................................................................... 1352
Boyer College of Music & Dance ......................................................... 265
Business Administration (BA) .............................................................. 1353
Certificate in Music Composition .......................................................... 571
Business Basics Certificate ................................................................. 571
Business Education (BSED) ................................................................. 1356
Business Management ........................................................................... 594
Business Minor ....................................................................................... 572
Business Plus Certificate ......................................................................... 572
Business, Computer, & Information Technology Education .................. 410

C

Campuses .................................................................................................. 104
Career & Technical Education ................................................................. 410
Career and Technical Education (CTE) .................................................. 1356
Center for the Performing and Cinematic Arts (CFCA) ................................ 1357
Center for the Performing and Cinematic Arts (Undergraduate) .............. 264
Certificate in Acting ................................................................................. 388
Certificate in Arts in Community ............................................................. 219
Certificate in Asian Business & Society .................................................... 800
Certificate in Chamber Music .................................................................. 286
Certificate in Classical Piano .................................................................... 286
Certificate in Classical Voice ..................................................................... 287
Certificate in Dance .................................................................................. 287
Certificate in Emergency Management with Special Populations ............. 737
Certificate in Entrepreneurship & Innovation Management ...................... 572
Certificate in Environmental Sustainability .............................................. 684
Certificate in Event Leadership ................................................................. 1216
Certificate in Film .................................................................................... 373
Certificate in French .................................................................................. 838
Certificate in Geographic Information Systems ........................................ 844
Certificate in German ............................................................................... 848
Certificate in Health Research ................................................................. 916
Certificate in Horticultural Therapy ......................................................... 683
Certificate in Italian ................................................................................... 867
Certificate in Jazz Arranging ..................................................................... 287
Certificate in Jazz Improvisation .............................................................. 288
Certificate in Jazz Piano ............................................................................ 288
Certificate in Jazz Studies Composition .................................................... 288
Certificate in Jazz Voice ............................................................................ 289
Certificate in Jewish Secular Studies ......................................................... 872
Certificate in Landscape Plants ................................................................. 683
Certificate in Leadership ........................................................................... 573
Certificate in Media Arts ............................................................................ 373
Certificate in Music .................................................................................... 289
Certificate in Music Composition ............................................................. 290
Certificate in Music History ...................................................................... 290
Certificate in Music Technology ............................................................... 290
Certificate in Music Theory (Jazz) ............................................................ 290
Certificate in Music Theory (Traditional) .................................................. 291
Certificate in National Park Service Management .................................... 1220
Certificate in Native Perennial Garden Design ......................................... 684
Certificate in Orchestral Music ................................................................. 291
Certificate in Performing Arts ................................................................. 291
Certificate in Political Economy .............................................................. 819
Certificate in Screen Studies ..................................................................... 374
Certificate in Sport Management ............................................................. 1216
Certificate in Sport Marketing ................................................................. 1217
Certificate in Stage Management ............................................................. 389
Certificate in Sustainability ....................................................................... 1222
Certificate in Sustainable Food Systems .................................................. 685
Certificate in Theater and Community Engagement .................................. 390
Certificate in Theater Education .............................................................. 389
Certificate in Tourism & Hospitality Management .................................... 1218
Certificate in Voice and Speech for the Actor .......................................... 390
Certificate in Women's Studies ................................................................. 933
Certificate in Writing ............................................................................... 827
Certificate of Specialization in Arabic ...................................................... 795
Certificate of Specialization in Chinese .................................................... 802
Certificate of Specialization in Japanese ................................................... 868
Certificate of Specialization in Spanish ..................................................... 928
Certificate of Specialization in Spanish and Latin American Studies for Business .......................................................... 928
Certificate of Specialization in Spanish and Latino Studies for the Health and Human Services Professions ................................................. 929
Certificates .............................................................................................. 285
Certification Programs .............................................................................. 418
Chemistry ................................................................................................ 1081
Chemistry (CHEM) ................................................................................ 1357
Chemistry with Teaching, B.S. ................................................................. 1167
Chemistry with Teaching, B.S. ................................................................. 1167
Chemistry, B.A. ....................................................................................... 1087
Chemistry, B.A./M.A. .............................................................................. 1032
Chemistry, B.A./M.A. .............................................................................. 1032
Chemistry, B.A./M.Ed. ............................................................................ 1032
Chemistry, B.A./M.Ed. ............................................................................ 1032
Chemistry, B.S. ...................................................................................... 1091
Chemistry, B.S./M.A. .............................................................................. 1033
Chemistry, B.S./M.A. .............................................................................. 1033
<table>
<thead>
<tr>
<th>Index</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry, B.S./M.Ed.</td>
<td>1033</td>
</tr>
<tr>
<td>Chemistry, B.S./M.Ed.</td>
<td>1033</td>
</tr>
<tr>
<td>Chinese</td>
<td>802</td>
</tr>
<tr>
<td>Chinese (CHI)</td>
<td>1371</td>
</tr>
<tr>
<td>Civil &amp; Environmental Engineering</td>
<td>475</td>
</tr>
<tr>
<td>Civil Engineering (CEE)</td>
<td>1373</td>
</tr>
<tr>
<td>Classics</td>
<td>803</td>
</tr>
<tr>
<td>Code of Conduct</td>
<td>89</td>
</tr>
<tr>
<td>Coll Health Prof &amp; Social Work (CHP)</td>
<td>1383</td>
</tr>
<tr>
<td>College of Education (COED)</td>
<td>1383</td>
</tr>
<tr>
<td>College of Education (Undergraduate)</td>
<td>393</td>
</tr>
<tr>
<td>College of Engineering (Undergraduate)</td>
<td>463</td>
</tr>
<tr>
<td>College of Liberal Arts (CLA)</td>
<td>1383</td>
</tr>
<tr>
<td>College of Liberal Arts (Undergraduate)</td>
<td>749</td>
</tr>
<tr>
<td>College of Public Health</td>
<td>689</td>
</tr>
<tr>
<td>College of Science &amp; Technology (Undergraduate)</td>
<td>1007</td>
</tr>
<tr>
<td>College of Science and Technology (SCTC)</td>
<td>1386</td>
</tr>
<tr>
<td>Communication Sciences &amp; Disorders</td>
<td>697</td>
</tr>
<tr>
<td>Communication Sciences &amp; Disorders Minor</td>
<td>703</td>
</tr>
<tr>
<td>Communication Sciences and Disorders (CSCD)</td>
<td>1390</td>
</tr>
<tr>
<td>Communication Studies</td>
<td>956</td>
</tr>
<tr>
<td>Communication Studies (CMST)</td>
<td>1394</td>
</tr>
<tr>
<td>Communications and Theater (COMM)</td>
<td>1394</td>
</tr>
<tr>
<td>Community &amp; Regional Planning</td>
<td>666</td>
</tr>
<tr>
<td>Community &amp; Regional Planning (CRP)</td>
<td>1395</td>
</tr>
<tr>
<td>Community Development (CDEV)</td>
<td>1399</td>
</tr>
<tr>
<td>Computer &amp; Information Science</td>
<td>1096</td>
</tr>
<tr>
<td>Computer &amp; Information Science (CIS)</td>
<td>1401</td>
</tr>
<tr>
<td>Computer Science, B.A.</td>
<td>1097</td>
</tr>
<tr>
<td>Computer Science, B.A./M.S.</td>
<td>1034</td>
</tr>
<tr>
<td>Computer Science, B.A./M.S.</td>
<td>1034</td>
</tr>
<tr>
<td>Computer Science, B.A./M.S. IST</td>
<td>1035</td>
</tr>
<tr>
<td>Computer Science, B.A./M.S. IST</td>
<td>1035</td>
</tr>
<tr>
<td>Computer Science, B.S.</td>
<td>1101</td>
</tr>
<tr>
<td>Computer Science, B.S./M.S.</td>
<td>1035</td>
</tr>
<tr>
<td>Computer Science, B.S./M.S.</td>
<td>1035</td>
</tr>
<tr>
<td>Computer Science, B.S./M.S. IST</td>
<td>1036</td>
</tr>
<tr>
<td>Computer Science, B.S./M.S. IST</td>
<td>1036</td>
</tr>
<tr>
<td>Computer Science, Minor</td>
<td>1105</td>
</tr>
<tr>
<td>Computer Security &amp; Digital Forensics, Certificate</td>
<td>1106</td>
</tr>
<tr>
<td>Construction Management Tech (CMT)</td>
<td>1420</td>
</tr>
<tr>
<td>Construction Management Technology</td>
<td>493</td>
</tr>
<tr>
<td>Continuing Degree Seeking Students</td>
<td>89</td>
</tr>
<tr>
<td>Corporate Social Responsibility Minor</td>
<td>574</td>
</tr>
<tr>
<td>Counseling Psychology (CPSY)</td>
<td>1422</td>
</tr>
<tr>
<td>Course Descriptions</td>
<td>1229</td>
</tr>
<tr>
<td>Course Numbering System</td>
<td>89</td>
</tr>
<tr>
<td>Courses Inapplicable to Graduation</td>
<td>90</td>
</tr>
<tr>
<td>Courses Over Ten Years Old</td>
<td>90</td>
</tr>
<tr>
<td>Crafts</td>
<td>231</td>
</tr>
<tr>
<td>Crafts (CRFT)</td>
<td>1423</td>
</tr>
<tr>
<td>Credit for Prior Learning</td>
<td>92</td>
</tr>
<tr>
<td>Credit Hours</td>
<td>90</td>
</tr>
<tr>
<td>Credit-Bearing Certificate Programs</td>
<td>29</td>
</tr>
<tr>
<td>Credit/No Credit Courses</td>
<td>92</td>
</tr>
<tr>
<td>Criminal Justice</td>
<td>810</td>
</tr>
<tr>
<td>Criminal Justice (CJ)</td>
<td>1439</td>
</tr>
<tr>
<td>Critical Languages Center (CRIT)</td>
<td>1447</td>
</tr>
</tbody>
</table>

**D**

<table>
<thead>
<tr>
<th>D</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dance</td>
<td>292</td>
</tr>
<tr>
<td>Dance (DANC)</td>
<td>1448</td>
</tr>
<tr>
<td>Dean's List</td>
<td>92</td>
</tr>
<tr>
<td>Declaration of Major</td>
<td>93</td>
</tr>
<tr>
<td>Dental, 3+4 Program</td>
<td>1036</td>
</tr>
<tr>
<td>Digital Marketing Minor</td>
<td>574</td>
</tr>
<tr>
<td>Digital Media Technologies</td>
<td>160</td>
</tr>
<tr>
<td>Digital Media Technologies</td>
<td>160</td>
</tr>
<tr>
<td>Digital Media Technologies</td>
<td>160</td>
</tr>
<tr>
<td>Disability Studies (DSST)</td>
<td>1459</td>
</tr>
<tr>
<td>Disciplinary Action</td>
<td>93</td>
</tr>
<tr>
<td>Division of University Studies</td>
<td>1225</td>
</tr>
<tr>
<td>Double Major Across Colleges</td>
<td>93</td>
</tr>
</tbody>
</table>

**E**

<table>
<thead>
<tr>
<th>E</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early Childhood Education (ECED)</td>
<td>1459</td>
</tr>
<tr>
<td>Early Childhood-Elementary Education (PreK-4)</td>
<td>419</td>
</tr>
<tr>
<td>Earth &amp; Environmental Science</td>
<td>1119</td>
</tr>
<tr>
<td>Earth &amp; Environmental Science (EES)</td>
<td>1464</td>
</tr>
<tr>
<td>Earth &amp; Space Science with Teaching, B.S.</td>
<td>1172</td>
</tr>
<tr>
<td>Earth &amp; Space Science with Teaching, B.S.</td>
<td>1172</td>
</tr>
<tr>
<td>Economics (CLA)</td>
<td>815</td>
</tr>
<tr>
<td>Economics (ECON)</td>
<td>1470</td>
</tr>
<tr>
<td>Economics (FSBM)</td>
<td>597</td>
</tr>
<tr>
<td>Economics Minor</td>
<td>576</td>
</tr>
<tr>
<td>Education (EDUC)</td>
<td>1483</td>
</tr>
<tr>
<td>Department/Program</td>
<td>Page</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Educational Administration (EDAD)</td>
<td>1491</td>
</tr>
<tr>
<td>Electrical Engineering</td>
<td>501</td>
</tr>
<tr>
<td>Electrical Engineering (ECE)</td>
<td>1491</td>
</tr>
<tr>
<td>Electrical Engineering Tech (EET)</td>
<td>1499</td>
</tr>
<tr>
<td>Elementary Education (ELED)</td>
<td>1500</td>
</tr>
<tr>
<td>Employee Benefits Track</td>
<td>648</td>
</tr>
<tr>
<td>Engineering</td>
<td>526</td>
</tr>
<tr>
<td>Engineering (ENGR)</td>
<td>1501</td>
</tr>
<tr>
<td>Engineering (General) (ENGG)</td>
<td>1508</td>
</tr>
<tr>
<td>Engineering (Undeclared)</td>
<td>532</td>
</tr>
<tr>
<td>Engineering Technology</td>
<td>533</td>
</tr>
<tr>
<td>Engineering Technology (ENGT)</td>
<td>1509</td>
</tr>
<tr>
<td>English</td>
<td>821</td>
</tr>
<tr>
<td>English (ENG)</td>
<td>1511</td>
</tr>
<tr>
<td>English Education (Elementary) (ENEE)</td>
<td>1532</td>
</tr>
<tr>
<td>English Education (Secondary) (ENES)</td>
<td>1533</td>
</tr>
<tr>
<td>Entertainment Law and Business Minor</td>
<td>577</td>
</tr>
<tr>
<td>Entrepreneurship &amp; Innovation Management</td>
<td>600</td>
</tr>
<tr>
<td>Entrepreneurship &amp; Innovation Management Minor</td>
<td>577</td>
</tr>
<tr>
<td>Environmental Engineering Tech (ENVT)</td>
<td>1533</td>
</tr>
<tr>
<td>Environmental Programs</td>
<td>161</td>
</tr>
<tr>
<td>Environmental Science (CST) (ENVS)</td>
<td>1535</td>
</tr>
<tr>
<td>Environmental Science, B.S.</td>
<td>1067</td>
</tr>
<tr>
<td>Environmental Science, B.S.</td>
<td>1067</td>
</tr>
<tr>
<td>Environmental Studies</td>
<td>828</td>
</tr>
<tr>
<td>Environmental Studies (CLA) (ENST)</td>
<td>1537</td>
</tr>
<tr>
<td><strong>F</strong></td>
<td></td>
</tr>
<tr>
<td>Faculty</td>
<td>2079</td>
</tr>
<tr>
<td>Family Educational Rights &amp; Privacy Act (FERPA)</td>
<td>93</td>
</tr>
<tr>
<td>Film &amp; Media Arts</td>
<td>348</td>
</tr>
<tr>
<td>Film and Media Arts (FMA)</td>
<td>1545</td>
</tr>
<tr>
<td>Final Examinations</td>
<td>93</td>
</tr>
<tr>
<td>Finance</td>
<td>605</td>
</tr>
<tr>
<td>Finance (FIN)</td>
<td>1558</td>
</tr>
<tr>
<td>Finance Minor</td>
<td>579</td>
</tr>
<tr>
<td>Financial Aid</td>
<td>137</td>
</tr>
<tr>
<td>Financial Planning</td>
<td>608</td>
</tr>
<tr>
<td>Fort Washington</td>
<td>116</td>
</tr>
<tr>
<td>Foundation Program (FDPR)</td>
<td>1565</td>
</tr>
<tr>
<td>Fox School of Business &amp; Management (Undergraduate)</td>
<td>553</td>
</tr>
<tr>
<td>French</td>
<td>835</td>
</tr>
<tr>
<td>French (FREN)</td>
<td>1566</td>
</tr>
<tr>
<td>Freshmen</td>
<td>19</td>
</tr>
<tr>
<td>Fundamentals of Programming, Certificate</td>
<td>1106</td>
</tr>
<tr>
<td><strong>G</strong></td>
<td></td>
</tr>
<tr>
<td>General Admissions Information (Undergraduate)</td>
<td>19</td>
</tr>
<tr>
<td>General Business Studies Minor</td>
<td>579</td>
</tr>
<tr>
<td>General Education</td>
<td>143</td>
</tr>
<tr>
<td>General Science with Teaching, B.S.</td>
<td>1176</td>
</tr>
<tr>
<td>General Science with Teaching, B.S.</td>
<td>1176</td>
</tr>
<tr>
<td>General Science with Teaching, B.S.</td>
<td>1176</td>
</tr>
<tr>
<td>General Science with Teaching, B.S.</td>
<td>1176</td>
</tr>
<tr>
<td>Geography &amp; Urban Studies</td>
<td>839</td>
</tr>
<tr>
<td>Geography and Urban Studies (GUS)</td>
<td>1571</td>
</tr>
<tr>
<td>Geology, B.A.</td>
<td>1125</td>
</tr>
<tr>
<td>Geology, B.A./M.Ed.</td>
<td>1039</td>
</tr>
<tr>
<td>Geology, B.A./M.Ed.</td>
<td>1039</td>
</tr>
<tr>
<td>Geology, B.S.</td>
<td>1129</td>
</tr>
<tr>
<td>Geology, B.S./M.Ed.</td>
<td>1039</td>
</tr>
<tr>
<td>Geology, Minor</td>
<td>1133</td>
</tr>
<tr>
<td>German</td>
<td>845</td>
</tr>
<tr>
<td>German (GER)</td>
<td>1584</td>
</tr>
<tr>
<td>Global Studies</td>
<td>849</td>
</tr>
<tr>
<td>Global Studies (GBST)</td>
<td>1589</td>
</tr>
<tr>
<td>Global/World Society (GG)</td>
<td>151</td>
</tr>
<tr>
<td>Grade Change</td>
<td>94</td>
</tr>
<tr>
<td>Grade Point Average (GPA)</td>
<td>94</td>
</tr>
<tr>
<td>Grades and Grading</td>
<td>94</td>
</tr>
<tr>
<td>Graduation Procedures</td>
<td>95</td>
</tr>
<tr>
<td>Graphic Arts &amp; Design</td>
<td>243</td>
</tr>
<tr>
<td>Graphic Arts and Design (GAD)</td>
<td>1590</td>
</tr>
<tr>
<td>Greek (Ancient) (GRKA)</td>
<td>1605</td>
</tr>
<tr>
<td>Greek (Modern) (GRKM)</td>
<td>1606</td>
</tr>
<tr>
<td>Greek and Roman Classics (GRC)</td>
<td>1607</td>
</tr>
<tr>
<td>Grievances</td>
<td>95</td>
</tr>
<tr>
<td><strong>H</strong></td>
<td></td>
</tr>
<tr>
<td>Health Information Management</td>
<td>703</td>
</tr>
<tr>
<td>Health Information Management (HIM)</td>
<td>1613</td>
</tr>
<tr>
<td>Health Related Professions (HRPR)</td>
<td>1618</td>
</tr>
<tr>
<td>Health Sciences Center</td>
<td>117</td>
</tr>
<tr>
<td>Healthcare Management (HCM)</td>
<td>1618</td>
</tr>
<tr>
<td>Healthcare Management Minor</td>
<td>581</td>
</tr>
<tr>
<td>Minor in Anthropology</td>
<td>794</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-----</td>
</tr>
<tr>
<td>Mathematics</td>
<td>1134</td>
</tr>
<tr>
<td>Mathematics &amp; Computer Science, B.S.</td>
<td>1115</td>
</tr>
<tr>
<td>Mathematics &amp; Computer Science, B.S.</td>
<td>1115</td>
</tr>
<tr>
<td>Mathematics &amp; Physics, B.S.</td>
<td>1151</td>
</tr>
<tr>
<td>Mathematics &amp; Physics, B.S.</td>
<td>1151</td>
</tr>
<tr>
<td>Mathematics &amp; Technology with Teaching, B.S.</td>
<td>1181</td>
</tr>
<tr>
<td>Mathematics &amp; Technology with Teaching, B.S.</td>
<td>1181</td>
</tr>
<tr>
<td>Mathematics (MATH)</td>
<td>1742</td>
</tr>
<tr>
<td>Mathematics and Language Arts Concentration</td>
<td>432</td>
</tr>
<tr>
<td>Mathematics and Science Concentration</td>
<td>435</td>
</tr>
<tr>
<td>Mathematics Concentration</td>
<td>430</td>
</tr>
<tr>
<td>Mathematics with Teaching, B.S.</td>
<td>1186</td>
</tr>
<tr>
<td>Mathematics, B.A.</td>
<td>1138</td>
</tr>
<tr>
<td>Mathematics, B.A./M.Ed.</td>
<td>1041</td>
</tr>
<tr>
<td>Mathematics, B.A./M.Ed.</td>
<td>1041</td>
</tr>
<tr>
<td>Mathematics, B.A./M.S.</td>
<td>1041</td>
</tr>
<tr>
<td>Mathematics, B.A./M.S.</td>
<td>1041</td>
</tr>
<tr>
<td>Mathematics, B.S.</td>
<td>1142</td>
</tr>
<tr>
<td>Mathematics, B.S./M.Ed.</td>
<td>1042</td>
</tr>
<tr>
<td>Mathematics, B.S./M.Ed.</td>
<td>1042</td>
</tr>
<tr>
<td>Mathematics, B.S./M.S.</td>
<td>1043</td>
</tr>
<tr>
<td>Mathematics, B.S./M.S.</td>
<td>1043</td>
</tr>
<tr>
<td>Mathematics, Minor</td>
<td>1145</td>
</tr>
<tr>
<td>Mathematics/Computer Science with Teaching, B.S.</td>
<td>1191</td>
</tr>
<tr>
<td>Mathematics/Computer Science with Teaching, B.S.</td>
<td>1191</td>
</tr>
<tr>
<td>Mathematics/Computer Science with Teaching, B.S.</td>
<td>1191</td>
</tr>
<tr>
<td>Mechanical Engineering</td>
<td>539</td>
</tr>
<tr>
<td>Mechanical Engineering (MEE)</td>
<td>1755</td>
</tr>
<tr>
<td>Mechanical Engineering Tech (MET)</td>
<td>1760</td>
</tr>
<tr>
<td>Media Studies &amp; Production</td>
<td>981</td>
</tr>
<tr>
<td>Media Studies &amp; Production (MSP)</td>
<td>1760</td>
</tr>
<tr>
<td>Medical, 3+N Program</td>
<td>1043</td>
</tr>
<tr>
<td>Medicine Undergraduate Courses (MEDU)</td>
<td>1772</td>
</tr>
<tr>
<td>Middle Grades Education</td>
<td>427</td>
</tr>
<tr>
<td>Middle Grades Education (MGRE)</td>
<td>1772</td>
</tr>
<tr>
<td>Military Science (MLSC)</td>
<td>1774</td>
</tr>
<tr>
<td>Minor in Adult &amp; Organizational Development</td>
<td>409</td>
</tr>
<tr>
<td>Minor in African American Studies</td>
<td>778</td>
</tr>
<tr>
<td>Minor in American Studies</td>
<td>783</td>
</tr>
<tr>
<td>Minor in Ancient Mediterranean Studies</td>
<td>809</td>
</tr>
<tr>
<td>Minor in Anthropology</td>
<td>794</td>
</tr>
<tr>
<td>Minor in Arabic</td>
<td>795</td>
</tr>
<tr>
<td>Minor in Asian American Studies</td>
<td>782</td>
</tr>
<tr>
<td>Minor in Asian American Studies</td>
<td>801</td>
</tr>
<tr>
<td>Minor in Asian Studies</td>
<td>802</td>
</tr>
<tr>
<td>Minor in Chinese</td>
<td>803</td>
</tr>
<tr>
<td>Minor in Classical Languages and Literature</td>
<td>810</td>
</tr>
<tr>
<td>Minor in Clinical and Health Psychology</td>
<td>904</td>
</tr>
<tr>
<td>Minor in Cognitive Neuroscience</td>
<td>905</td>
</tr>
<tr>
<td>Minor in Communication Studies</td>
<td>973</td>
</tr>
<tr>
<td>Minor in Community and Regional Planning</td>
<td>672</td>
</tr>
<tr>
<td>Minor in Community Development</td>
<td>672</td>
</tr>
<tr>
<td>Minor in Criminal Justice</td>
<td>814</td>
</tr>
<tr>
<td>Minor in Dance</td>
<td>296</td>
</tr>
<tr>
<td>Minor in Ecological Planning &amp; Design</td>
<td>686</td>
</tr>
<tr>
<td>Minor in Economics</td>
<td>821</td>
</tr>
<tr>
<td>Minor in Education</td>
<td>445</td>
</tr>
<tr>
<td>Minor in English</td>
<td>828</td>
</tr>
<tr>
<td>Minor in Environmental Engineering</td>
<td>492</td>
</tr>
<tr>
<td>Minor in Environmental Horticulture</td>
<td>681</td>
</tr>
<tr>
<td>Minor in Environmental Studies</td>
<td>835</td>
</tr>
<tr>
<td>Minor in French</td>
<td>838</td>
</tr>
<tr>
<td>Minor in Geography and Urban Studies</td>
<td>844</td>
</tr>
<tr>
<td>Minor in German</td>
<td>848</td>
</tr>
<tr>
<td>Minor in Global Studies</td>
<td>857</td>
</tr>
<tr>
<td>Minor in History</td>
<td>863</td>
</tr>
<tr>
<td>Minor in Italian</td>
<td>867</td>
</tr>
<tr>
<td>Minor in Japanese</td>
<td>868</td>
</tr>
<tr>
<td>Minor in Jewish Studies</td>
<td>872</td>
</tr>
<tr>
<td>Minor in Landscape Studies</td>
<td>682</td>
</tr>
<tr>
<td>Minor in Latin American Studies</td>
<td>877</td>
</tr>
<tr>
<td>Minor in Leadership</td>
<td>1005</td>
</tr>
<tr>
<td>Minor in Music</td>
<td>339</td>
</tr>
<tr>
<td>Minor in Neuroscience Research</td>
<td>887</td>
</tr>
<tr>
<td>Minor in Philosophy</td>
<td>892</td>
</tr>
<tr>
<td>Minor in Political Science</td>
<td>897</td>
</tr>
<tr>
<td>Minor in Portuguese</td>
<td>928</td>
</tr>
<tr>
<td>Minor in Psychology</td>
<td>905</td>
</tr>
<tr>
<td>Minor in Public Health</td>
<td>738</td>
</tr>
<tr>
<td>Minor in Public Relations</td>
<td>1006</td>
</tr>
<tr>
<td>Minor in Religion</td>
<td>910</td>
</tr>
<tr>
<td>Minor in Sociology</td>
<td>917</td>
</tr>
<tr>
<td>Minor in Sociology of Health</td>
<td>917</td>
</tr>
</tbody>
</table>
Minor in Spanish .......................................................... 927
Minor in Sport Management ............................................. 1218
Minor in Sustainable Food Systems ................................... 687
Minor in Tourism & Hospitality Management ....................... 1219
Minor in Visual Anthropology ......................................... 794
Minor in Women's Studies .............................................. 933
Mosaic (GY & GZ) ......................................................... 154
Music (MUSC) ................................................................ 1776
Music Education & Music Therapy .................................... 309
Music Education (MUED) ................................................ 1792
Music Studies .................................................................. 330
Music Studies (MUST) ...................................................... 1800

N
Natural Sciences, B.A. ...................................................... 1073
Natural Sciences, B.A. ...................................................... 1073
Natural Sciences, B.A. ...................................................... 1073
Naval Science - Navy ROTC (NAVS) ................................. 1812
Neuroscience - Cellular & Molecular, B.S. ......................... 1077
Neuroscience - CLA (NSCI) ............................................. 1813
Neuroscience: Systems, Behavior & Plasticity .................... 883
New Media Interdisciplinary (NMIC) .................................. 1816
Non-Credit Programs ..................................................... 30
Non-Degree Seeking Students .......................................... 97
Nursing ......................................................................... 724
Nursing (NURS) ............................................................. 1817

O
Occupational Therapy (OTHR) ........................................... 1824
Off-Campus/Corporate Programs ...................................... 31
Organizational Studies (ORG) .......................................... 1824

P
Painting, Drawing & Sculpture (PDS) ................................. 1828
Painting/Drawing/Sculpture ............................................. 253
Permission to Complete a Course at another Institution after Matriculation ......................................................... 98
Pharmaceutical Sciences, B.S. ......................................... 1046
Pharmacy, 3+3 Program .................................................. 1049
PHETE (PHTE) ............................................................... 1825
Philosophy .................................................................... 887
Philosophy (PHIL) ......................................................... 1839
Physical Therapy, 3+3 Program ........................................ 1052
Physics ......................................................................... 1146
Physics (PHYS) .............................................................. 1849

Physics with Teaching, B.S. .............................................. 1196
Physics with Teaching, B.S. .............................................. 1196
Physics, B.A. .................................................................. 1154
Physics, B.A./M.Ed. ......................................................... 1054
Physics, B.A./M.Ed. ......................................................... 1054
Physics, B.A./M.S. ......................................................... 1054
Physics, B.A./M.S. ......................................................... 1054
Physics, B.S. .................................................................. 1158
Physics, B.S./M.Ed. ......................................................... 1055
Physics, B.S./M.Ed. ......................................................... 1055
Physics, B.S./M.S. ......................................................... 1055
Physics, B.S./M.S. ......................................................... 1055
Physics, Minor ............................................................... 1161
Placement Testing .......................................................... 99
Plagiarism and Academic Cheating ................................ 99
Podiatry, 3+3 Program ..................................................... 1056
Political Science ............................................................ 892
Political Science (POLS) .................................................. 1857
Portuguese (PORT) ........................................................ 1871
Post-Baccalaureate Certificate in National Park Service Management .......................................................... 1221
Pre-Business ................................................................. 1214
Prerequisites and Co-requisites ........................................ 99
Probation and Dismissal .................................................. 99
Programs with Academic Credit ....................................... 31
Property-Liability/Corporate Risk Management Track ........ 652
ProRanger Program ....................................................... 1220
ProRanger Program (PRAN) ............................................ 1873
Psychology ................................................................. 898
Psychology (PSY) ........................................................... 1874
Public Health (PBHL) ..................................................... 1896

Q
Quantitative Literacy (QX) .............................................. 154

R
Race & Diversity (GD) .................................................... 155
Real Estate ................................................................. 645
Real Estate (RE) ............................................................ 1904
Registration .................................................................. 33
Registration ................................................................. 99
Rehabilitation Sciences .................................................... 728
Religion ...................................................................... 906
Religion (REL) ............................................................. 1805
Repeating a Course ........................................................ 99
<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reverse Transfer</td>
<td>101</td>
</tr>
<tr>
<td>Risk Management &amp; Insurance</td>
<td>647</td>
</tr>
<tr>
<td>Risk Management and Insurance (RMI)</td>
<td>1915</td>
</tr>
<tr>
<td>Russian (RUS)</td>
<td>1920</td>
</tr>
<tr>
<td>Satisfactory Academic Progress</td>
<td>101</td>
</tr>
<tr>
<td>Schedule Revision (Drop/Add)</td>
<td>101</td>
</tr>
<tr>
<td>School of Business and Mgmt (SBM)</td>
<td>1929</td>
</tr>
<tr>
<td>School of Environmental Design (SED)</td>
<td>1930</td>
</tr>
<tr>
<td>School of Environmental Design (Undergraduate)</td>
<td>658</td>
</tr>
<tr>
<td>School of Media &amp; Communication (Undergraduate)</td>
<td>935</td>
</tr>
<tr>
<td>School of Social Work</td>
<td>740</td>
</tr>
<tr>
<td>School of Theater, Film, &amp; Media Arts (Undergraduate)</td>
<td>344</td>
</tr>
<tr>
<td>School of Tourism &amp; Hosp Mgt (STHA)</td>
<td>1930</td>
</tr>
<tr>
<td>School Psychology (SPSY)</td>
<td>1201</td>
</tr>
<tr>
<td>Schools, Colleges, and Divisions (Undergraduate)</td>
<td>179</td>
</tr>
<tr>
<td>Science &amp; Technology (GS)</td>
<td>156</td>
</tr>
<tr>
<td>Science and Language Arts Concentration</td>
<td>440</td>
</tr>
<tr>
<td>Science Concentration</td>
<td>437</td>
</tr>
<tr>
<td>Science Education (Elementary) (SCEE)</td>
<td>1930</td>
</tr>
<tr>
<td>Science Education (Secondary) (SCES)</td>
<td>1930</td>
</tr>
<tr>
<td>Science, Secondary Education (SCSE)</td>
<td>1931</td>
</tr>
<tr>
<td>Screen Studies Minor</td>
<td>375</td>
</tr>
<tr>
<td>Second Degrees</td>
<td>101</td>
</tr>
<tr>
<td>Secondary Education</td>
<td>445</td>
</tr>
<tr>
<td>Secondary Education (SECE)</td>
<td>1932</td>
</tr>
<tr>
<td>Secondary Education/English Education</td>
<td>446</td>
</tr>
<tr>
<td>Secondary Education/Mathematics Education</td>
<td>448</td>
</tr>
<tr>
<td>Secondary Education/Science Education</td>
<td>451</td>
</tr>
<tr>
<td>Secondary Education/Social Studies Education</td>
<td>457</td>
</tr>
<tr>
<td>Secondary Education/World Languages Education</td>
<td>459</td>
</tr>
<tr>
<td>Simultaneous Enrollment</td>
<td>101</td>
</tr>
<tr>
<td>Slavic Languages &amp; Literature (SLVC)</td>
<td>1932</td>
</tr>
<tr>
<td>Social and Behavioral Sciences</td>
<td>734</td>
</tr>
<tr>
<td>Social Studies Concentration</td>
<td>442</td>
</tr>
<tr>
<td>Social Studies Ed (Elementary) (SSEE)</td>
<td>1933</td>
</tr>
<tr>
<td>Social Studies Ed (Secondary) (SSES)</td>
<td>1933</td>
</tr>
<tr>
<td>Social Work - Undergraduate (SSWU)</td>
<td>1933</td>
</tr>
<tr>
<td>Social Work Minor</td>
<td>748</td>
</tr>
<tr>
<td>Sociology</td>
<td>910</td>
</tr>
<tr>
<td>Sociology (SOC)</td>
<td>1940</td>
</tr>
<tr>
<td>Spanish &amp; Portuguese</td>
<td>918</td>
</tr>
<tr>
<td>Spanish (SPAN)</td>
<td>1956</td>
</tr>
<tr>
<td>Special Admissions Programs</td>
<td>21</td>
</tr>
<tr>
<td>Special Education (SPED)</td>
<td>1968</td>
</tr>
<tr>
<td>Special Programs</td>
<td>28</td>
</tr>
<tr>
<td>Statistics (STAT)</td>
<td>1971</td>
</tr>
<tr>
<td>Statistics Minor</td>
<td>586</td>
</tr>
<tr>
<td>Strategic Communication</td>
<td>996</td>
</tr>
<tr>
<td>Strategic Communication (STRC)</td>
<td>1978</td>
</tr>
<tr>
<td>Strategic Management (SGM)</td>
<td>1984</td>
</tr>
<tr>
<td>Student Leadership &amp; Development Opportunities</td>
<td>58</td>
</tr>
<tr>
<td>Student Responsibilities</td>
<td>36</td>
</tr>
<tr>
<td>Student Rights</td>
<td>39</td>
</tr>
<tr>
<td>Student Services</td>
<td>69</td>
</tr>
<tr>
<td>Study Abroad Approval Procedures for External Programs</td>
<td>101</td>
</tr>
<tr>
<td>Study Away Non-TU Program (STAW)</td>
<td>1987</td>
</tr>
<tr>
<td>Supply Chain Management</td>
<td>654</td>
</tr>
<tr>
<td>Supply Chain Management Minor</td>
<td>1987</td>
</tr>
<tr>
<td>Supply Chain Management Minor (SCM)</td>
<td>587</td>
</tr>
<tr>
<td>T</td>
<td></td>
</tr>
<tr>
<td>Temple Bulletins 2015-2016</td>
<td>12</td>
</tr>
<tr>
<td>Temple University Center City</td>
<td>121</td>
</tr>
<tr>
<td>Temple University Harrisburg</td>
<td>123</td>
</tr>
<tr>
<td>Temple University, Japan Campus</td>
<td>165</td>
</tr>
<tr>
<td>Theater</td>
<td>375</td>
</tr>
<tr>
<td>Theater (THTR)</td>
<td>1989</td>
</tr>
<tr>
<td>Theater Minor</td>
<td>391</td>
</tr>
<tr>
<td>Therapeutic Recreation (THRC)</td>
<td>2006</td>
</tr>
<tr>
<td>Topical Studies (TS)</td>
<td>2015</td>
</tr>
<tr>
<td>Tourism &amp; Hospitality Management (STHM)</td>
<td>2015</td>
</tr>
<tr>
<td>Transcripts</td>
<td>102</td>
</tr>
<tr>
<td>Transfer Between Schools/Colleges Within the University (Change of Program)</td>
<td>102</td>
</tr>
<tr>
<td>Transfer Credit</td>
<td>102</td>
</tr>
<tr>
<td>Transfer Students</td>
<td>23</td>
</tr>
<tr>
<td>Tuition and Fees (Undergraduate)</td>
<td>125</td>
</tr>
<tr>
<td>TUJ International Bus Studies (JIBS)</td>
<td>1988</td>
</tr>
<tr>
<td>TUtach Programs</td>
<td>1162</td>
</tr>
<tr>
<td>Tyler School of Art (TYLE)</td>
<td>2025</td>
</tr>
<tr>
<td>Tyler School of Art (Undergraduate)</td>
<td>180</td>
</tr>
<tr>
<td>U</td>
<td></td>
</tr>
<tr>
<td>U.S. Society (GU)</td>
<td>158</td>
</tr>
<tr>
<td>Undergraduate</td>
<td>13</td>
</tr>
</tbody>
</table>
Undergraduate Credit for Graduate Level Courses ........................................ 102
Undergraduate Studies Merit Scholar (USMS) ........................................ 2027
University College .................................................................................. 1220
University College (UC) ......................................................................... 2027
University Housing & Dining Services ................................................... 77
University Seminar (UNVS) .................................................................... 2028
University Services .................................................................................. 78
Upper Division Honors Program (HONS) ............................................... 2029
Urban Education (URBE) ........................................................................ 2030

V
Vietnamese (VTNM) ............................................................................ 2031
Visual Studies .......................................................................................... 261
Visual Studies (VS) ............................................................................. 2031
Voice & Opera ......................................................................................... 340

W
Withdrawal Policies ............................................................................... 102
Women's Studies .................................................................................... 930
Women's Studies (WMST) ................................................................... 2038
Writing Intensive Courses .................................................................... 142